



TEXAS DEPARTMENT OF WATER RESOURCES

REPORT 284

**WATER QUALITY OF LAKE GRANBURY
NORTH-CENTRAL TEXAS**

By

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

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ABSTRACT

During water years 1970-79, the concentrations of the major dissolved constituents in Lake Granbury on the Brazos River in north-central Texas averaged about 1,800 milligrams per liter of dissolved solids, 700 milligrams per liter of chloride, and 350 milligrams per liter of sulfate. The water was generally very hard (hardness as calcium carbonate greater than 180 milligrams per liter). The concentrations of principal dissolved constituents varied throughout the year in relation to releases from Possum Kingdom Lake and to runoff from the intervening drainage area.

Thermal stratification in Lake Granbury usually begins during April and persists until September or October. Stratification causes significant seasonal and areal variations in the concentration of dissolved oxygen, which in turn cause variations in the concentrations of dissolved iron and 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 30 to 40 feet (9 to 12 meters) usually contains less than 1.0 milligram per liter of dissolved oxygen. Variations in the concentrations of dissolved solids are associated with localized inflows.

During periods of summer stagnation, reducing conditions result in the dissolution of iron and manganese from the bottom deposits in the lake. At site A_C, a deep site near De Cordova Bend Dam, iron concentrations in water near the bottom during summer stagnation ranged from 50 to 700 micrograms per liter and averaged 230 micrograms per liter. Manganese concentrations ranged from 1,300 to 3,700 micrograms per liter and averaged 1,800 micrograms per liter. During periods of winter circulation and in water near the surface during summer stagnation, both iron and manganese concentrations averaged less than 100 micrograms per liter.

The concentrations of total inorganic nitrogen and total phosphorus are greatest during summer stagnation in water near the bottom at deep-water sites. At site A_C during the summer, the concentration of total inorganic nitrogen averaged 2.37 milligrams per liter and the concentration of total phosphorus averaged 0.19 milligram per liter. The concentrations of both these constituents in waters near the surface during the entire year and in bottom waters during the winter averaged 0.07 milligram per liter or less.

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

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WATER QUALITY OF LAKE GRANBURY NORTH-CENTRAL

By

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U.S. Geological Survey

INTRODUCTION

Purpose of This Report

The U.S. Geological Survey has made comprehensive water-quality surveys of selected lakes and reservoirs in Texas periodically since October 1961 as part of a continuing cooperative program with State, Federal, and local agencies to inventory the surface-water resources of the State. During the 1970 water year, the program was expanded in cooperation with the Brazos River Authority and the Texas Department of Water Resources (formerly the Texas Water Development Board) to include water-quality surveys, during the spring, summer, and winter, of Lake Granbury in north-central Texas. Data collection includes measurements of dissolved oxygen, specific conductance, pH, and temperature at selected sites. Water samples also are collected and analyzed for dissolved chemical constituents, nutrients, and minor elements. The purpose of this report is to summarize the water-quality records for Lake Granbury during the 1970-79 water years.

Description of Lake Granbury

Lake Granbury, which is impounded by De Cordova Bend Dam, is on the Brazos River about 8 miles (13 km) southeast of Granbury, Texas (Figure 1). The lake extends across Hood County and into Parker County. The drainage basin is a rural area of pastures and cultivated land.

Construction of De Cordova Bend Dam was started on December 15, 1966, and completed on August 30, 1969. Deliberate impoundment of water began on September 15, 1969, and by November 1, 1969, the lake had accumulated 150,000 acre-feet (185 hm³). Usable capacity is 151,300 acre-feet (187 hm³). The lake has a capacity of 153,500 acre-feet (189 hm³) at an elevation of 693 feet (211 m) NGVD of 1929. Other data as compiled by Dowell and Petty (1973) 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	706.5	—	—
Top of gates	693.0	153,500	8,700
Spillway crest	658.0	15,440	1,300
Streambed	622.5	—	—

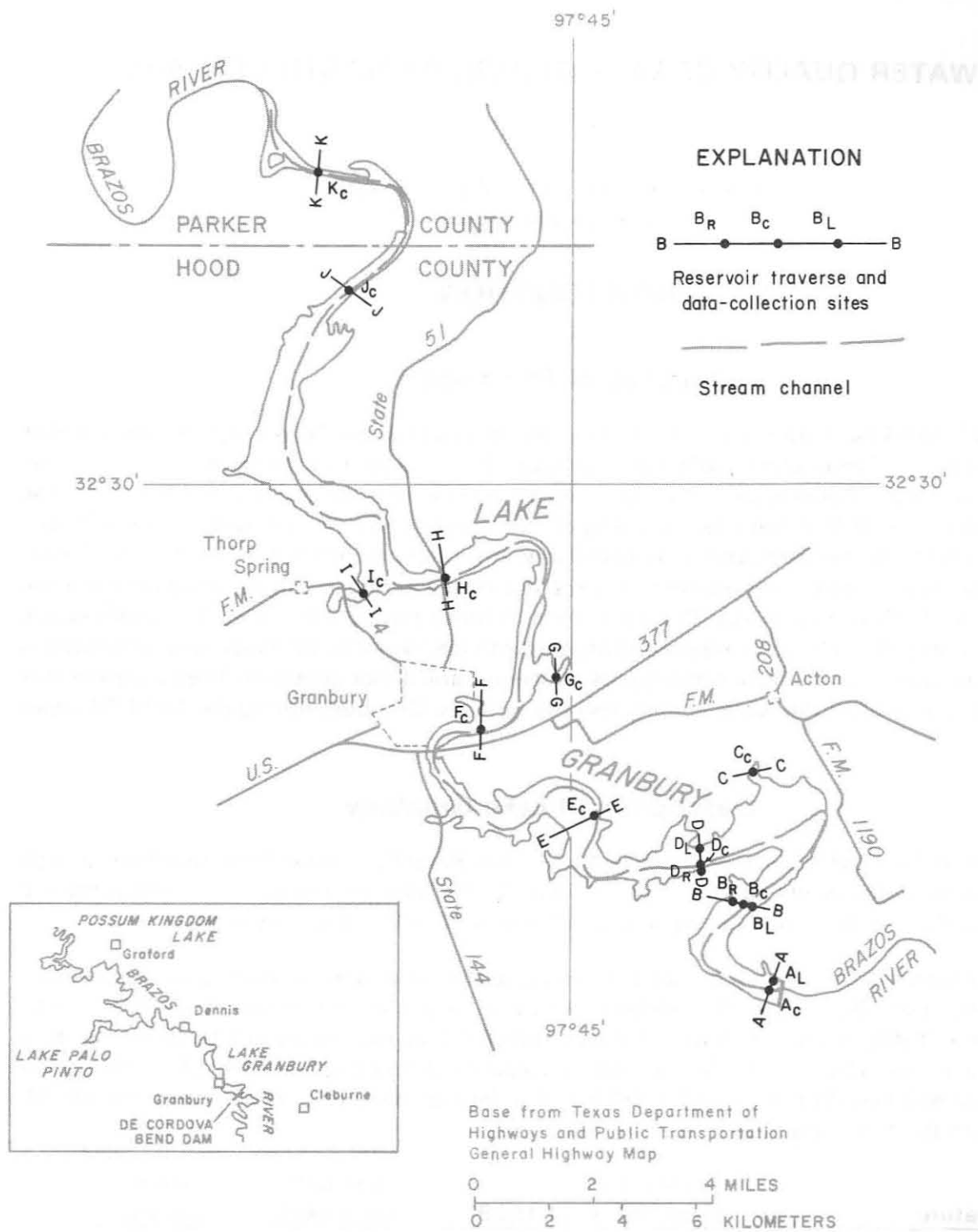


Figure 1
 Location of Water-Quality Data-Collection Sites on Lake Granbury

Lake Granbury is owned and operated by the Brazos River Authority for the conservation of water for industrial use, irrigation, and municipal supply. Since 1970, an average of approximately 22,700 acre-feet (28 hm³) of water has been withdrawn annually for these purposes. Approximately 66 percent of the water is withdrawn for industrial use and approximately 34 percent for irrigation. Less than 1 percent is withdrawn for municipal supply.

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)

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."

WATER-QUALITY DATA

Streamflow Records

Daily streamflow data have been collected for the Brazos River near Dennis, Texas (station 08090800), which is approximately 40 river miles (64 km) upstream from De Cordova Bend Dam, since May 1968. Flow at this station is largely regulated by releases from Possum Kingdom Lake and Lake Palo Pinto. Approximately 92 percent of the total drainage area of the Brazos River at Dennis is upstream from the dam at Possum Kingdom Lake; less than 2 percent of the drainage area is upstream from the dam at Lake Palo Pinto. Only 6.3 percent of the drainage area at Dennis is downstream from Possum Kingdom Lake and Lake Palo Pinto.

Approximately 12 water samples per year for chemical analysis have been collected from the Brazos River near Dennis since October 1970. The streamflow and water-quality records for the Brazos River near Dennis are published yearly in the U.S. Geological Survey series, Water Resources Data for Texas.

The monthly mean discharge and the discharge-weighted average dissolved-solids concentration for the Brazos River near Dennis are shown in Figure 2. The discharge-weighted dissolved-solids concentrations are about the same as the concentrations in releases from Possum Kingdom Lake (station 08088600, Brazos River at Possum Kingdom Dam near Graford, Texas). Exceptions do occur, however, and are noted for October 1973, May 1976, March 1977, April 1978, and April 1979. The dissolved-solids concentrations in the Brazos River near Dennis are generally lower than in water being released from Possum Kingdom Lake because less mineralized water is entering the river as runoff and from ground-water inflow.

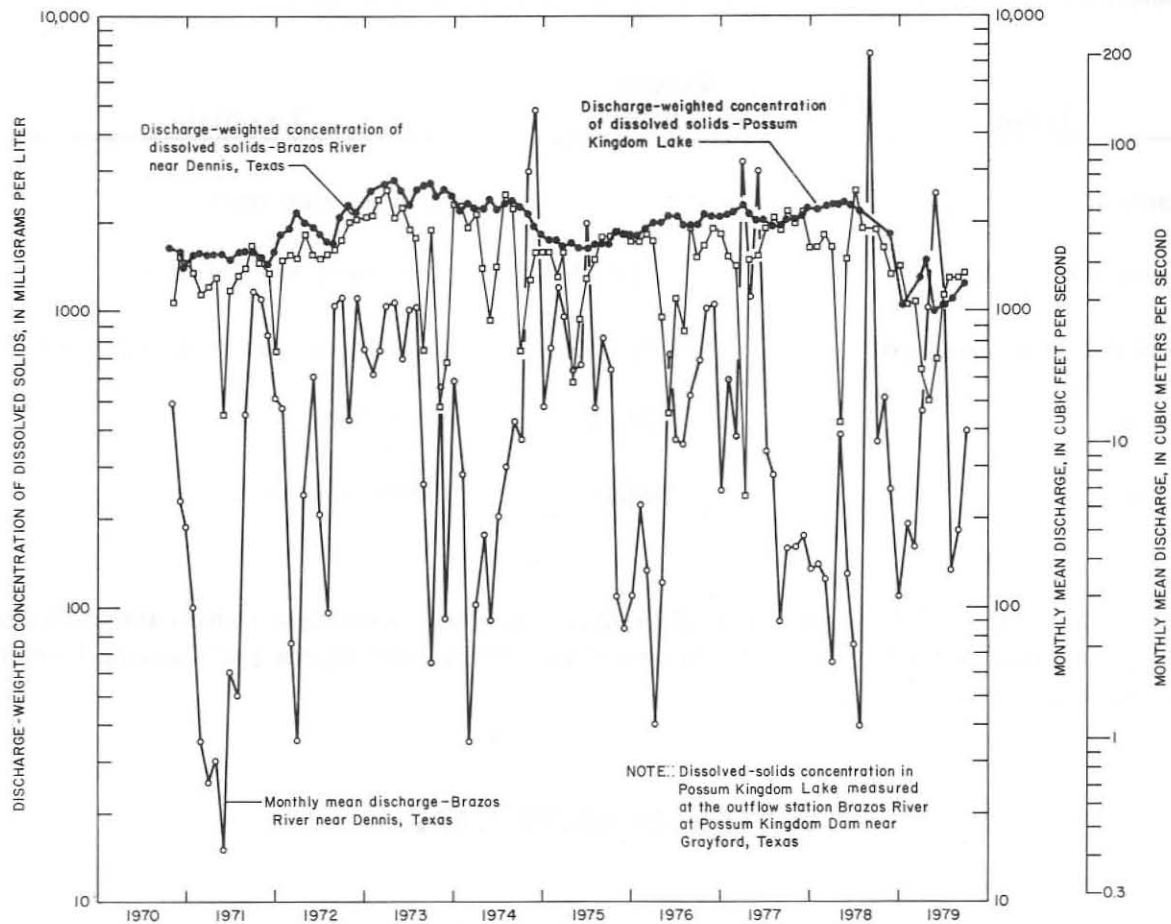


Figure 2.—Monthly Mean Discharge and Concentration of Dissolved Solids for the Brazos River Near Dennis, Texas and Concentration of Dissolved Solids in Possum Kingdom Lake, Water Years 1970-79

The dissolved-solids concentration in the Brazos River near Dennis exceeded 1,000 mg/l (milligrams per liter) approximately 70 percent of the time (Table 1). The dissolved-solids concentration at this station ranged from 183 to 3,090 mg/l and averaged 1,410 mg/l during water years 1970-79. Sodium and chloride are the major dissolved ions. The sodium concentration ranged from 25 to 700 mg/l and averaged 360 mg/l. The chloride concentration ranged from 22 to 1,200 mg/l and averaged 545 mg/l. The primary sources of sodium and chloride in the upper Brazos River basin are the natural dissolution of salt deposits and oil-field wastes. Rawson (1967) reported that much of the salinity in the upper Brazos River basin originates from naturally occurring salt springs.

Water in the Brazos River near Dennis may be classified usually as very hard according to a classification presented by Hem (1970).

<u>Hardness range (milligrams per liter of calcium carbonate)</u>	<u>Description</u>
0 - 60	soft
61 - 120	moderately hard
121 - 180	hard
greater than 180	very hard

The data given in Table 1 show that hardness concentrations, which ranged from 100 to 749 mg/l and averaged 427 mg/l, exceeded 160 mg/l 95 percent of the time. Hardness is calculated from the concentrations of calcium and magnesium and is reported as an equivalent concentration of calcium carbonate. Other ions, particularly the polyvalent metals, may contribute to the hardness of water, but they generally are present in insignificant concentrations in waters that are suitable for domestic use. Calcium concentrations in the Brazos River near Dennis ranged from 34 to 210 mg/l and averaged 121 mg/l. Magnesium concentrations were significantly lower, ranging from 4.4 to 57 mg/l and averaging 31 mg/l during the period of record.

Sulfate concentrations in the Brazos River near Dennis were relatively high, ranging from 84 to 840 mg/l and averaging 291 mg/l. The high concentrations of sulfate probably are due to the dissolution of gypsum, which is common in the upper part of the Brazos River basin (Rawson, 1967). Concentrations of bicarbonate were relatively low, ranging from 75 to 200 mg/l and averaging 136 mg/l. Bicarbonate is produced naturally from carbon dioxide being dissolved in water. The water temperature at the station near Dennis ranged from 0.0° to 35.0 °C (Celsius) and averaged 21.3 °C.

Water Quality of Lake Granbury

Thermal Stratification

Impoundment of water in a lake or reservoir may result in significant changes in the quality of the water. Some of the changes may be beneficial; other changes may be detrimental. Many of the detrimental changes can be related to thermal stratification—layering of the water due to temperature-induced density differences.

The following table (Weast, 1975, p. F-5) shows that pure water reaches its maximum density at a temperature of about 4 °C and that the difference in density per 1 °C is much greater at warmer temperatures than at cooler temperatures.

<u>Temperature (degrees Celsius)</u>	<u>Density (grams per milliliter)</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
35.0	.994063

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.

Thermal stratification may assume many patterns, depending upon the geographical location, climatological conditions, depth, surface area, and configuration of the lake or reservoir. During the winter, many deep lakes or reservoirs in the temperate zone are characteristically isothermal—that is, 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 floats on 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 commonly is separated into three fairly distinct strata:

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

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.

In its deepest areas in the drowned channel of the Brazos River, Lake Granbury is as much as 70 feet (21 m) deep. In the upper reaches of the lake and in areas beyond the river channel, the depths are much shallower. In these shallower areas, the three-layered stratification pattern is not as pronounced as in the deeper areas. Water-temperature data at stations A_c and F_c at the time of the surveys are shown in Figure 3. Air-temperature data for Cleburne, a nearby city, also

are shown in Figure 3. These data show that the fall overturn usually occurs during September or October. The water in the reservoir is nearly isothermal from October through March. During April and May, warming results in a gradual change in temperature throughout the lake. During June, July, and August, the surface waters of the lake usually are warm enough to produce three distinct layers in the deeper parts of the lake.

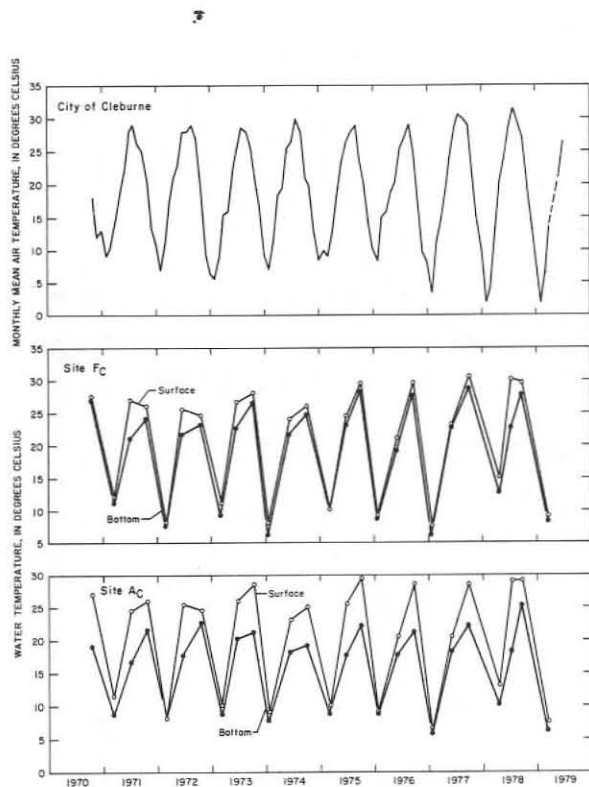


Figure 3.—Variations in Air and Water Temperature at Selected Sites, September 1970-February 1979

lake also is 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. Decaying trees, brush, and other oxidizable material within the area inundated by the lake and decaying algae and other organic material produced within the lake also exert an oxygen demand.

The distribution of dissolved oxygen in a reservoir is related to thermal stratification. During the period of winter circulation, the water 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 reduction 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 Granbury are given in Tables 2-29 and in Figures 4 and 5. These data show that the dissolved-oxygen gradient usually is steep at deep sites during periods of summer stagnation when algal growth in the near-surface stratum is prolific. The gradients at

Dissolved Oxygen

Dissolved-oxygen concentrations are of primary importance in any aquatic ecosystem. Fish and other aquatic life require adequate concentrations 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 is, therefore, 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

all sites decrease greatly during periods of winter circulation. The concentration of dissolved oxygen in the reservoir varies seasonally and areally. Although concentrations usually increase and the vertical gradient decreases at most sites during the winter, the water is seldom saturated with dissolved oxygen.

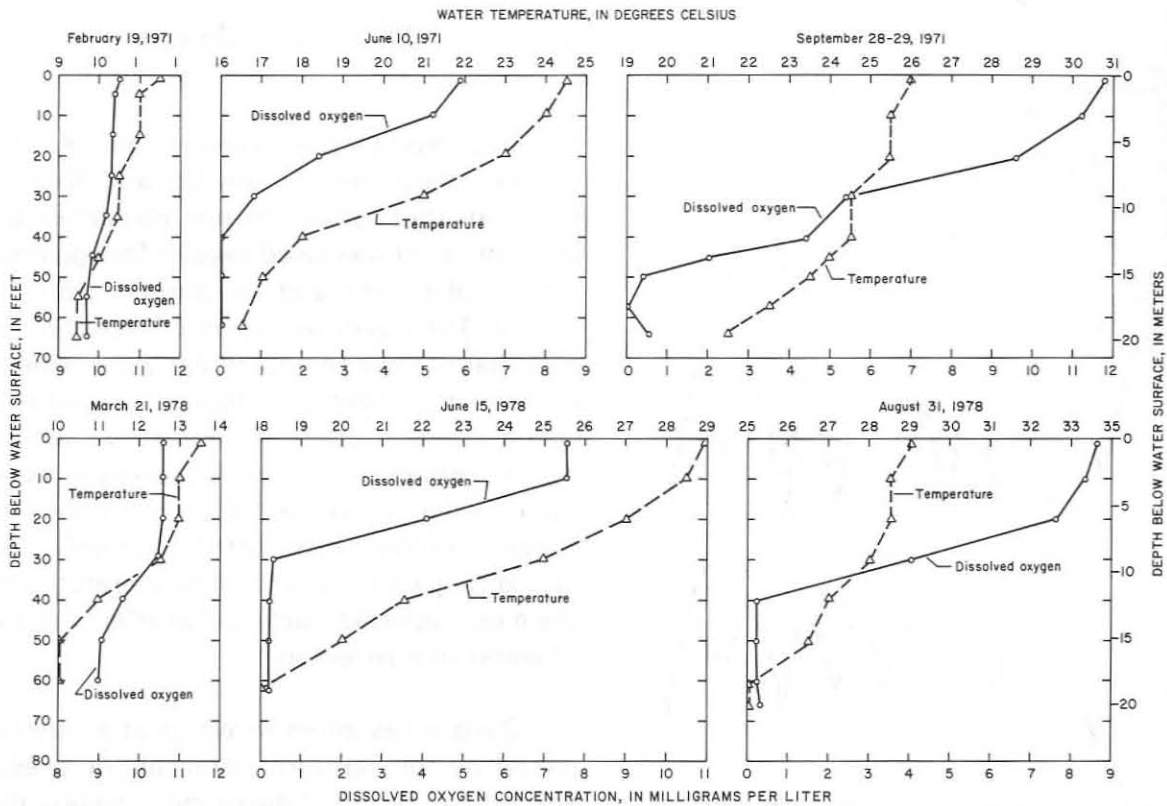


Figure 4.—Seasonal Variations in Water Temperature and Concentrations of Dissolved Oxygen at Site A_C

The depth-averaged concentration of dissolved oxygen at most sites in the downstream one-half of the reservoir averaged about 4.0 mg/l during periods of summer stagnation and about 10.0 mg/l during periods of winter circulation. The depth-averaged concentration of dissolved oxygen at most sites in the headwaters of the reservoir was greater than 5.0 mg/l during the summer and greater than 10.0 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 during periods of 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 and by decaying algae and by organic material along the bottom of the reservoir is not replaced during periods of summer stagnation; and water below depths of about 30-40 feet (9-12 m) usually contains less than 1.0 mg/l dissolved oxygen.

Dissolved Iron and Manganese

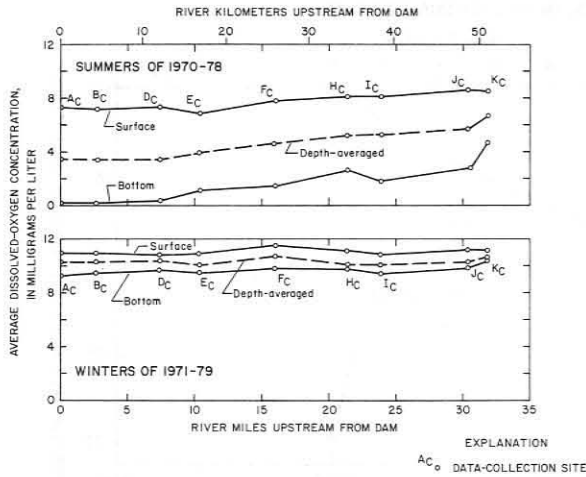


Figure 5.— Variations in Average Concentration of Dissolved Oxygen During Summer and Winter Surveys

throughout the depth of the lake, most of the iron and manganese is oxidized to less soluble forms that settle to the bottom of the lake.

During periods of winter circulation, water throughout the lake usually contained less than 100 $\mu\text{g/l}$ (micrograms per liter) of dissolved iron and manganese (Figures 7 and 8), and waters near the surface contained less than 50 $\mu\text{g/l}$ of both constituents throughout the year. During periods of 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.

Iron concentrations near the bottom at site K_C , a shallow site in the headwaters of the lake, ranged from 0 to 70 $\mu\text{g/l}$ during the summer, and averaged about 43 $\mu\text{g/l}$. Manganese concentrations near the bottom at this site during summer ranged from 0 to 1,700 $\mu\text{g/l}$ and averaged about 195 $\mu\text{g/l}$.

At site A_C , a deep site near De Cordova Bend Dam, the concentrations of iron in water near the bottom during the summer ranged from 80 to 700 $\mu\text{g/l}$ and averaged about 210 $\mu\text{g/l}$. The concentrations of manganese ranged from 1,300 to 3,700 $\mu\text{g/l}$ and averaged about 1,800 $\mu\text{g/l}$ (Figure 9).

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 the summer stagnation. The concentrations of dissolved manganese generally increased significantly by late spring when stratification had just begun, while the concentrations of iron generally did not increase until stratification was more complete. Manganese is dissolved more easily than iron; consequently, the concentrations of manganese increase earlier and generally become higher during summer than the concentrations of iron (Hutchinson, 1957, p. 808; Clarke, 1924, p. 541).

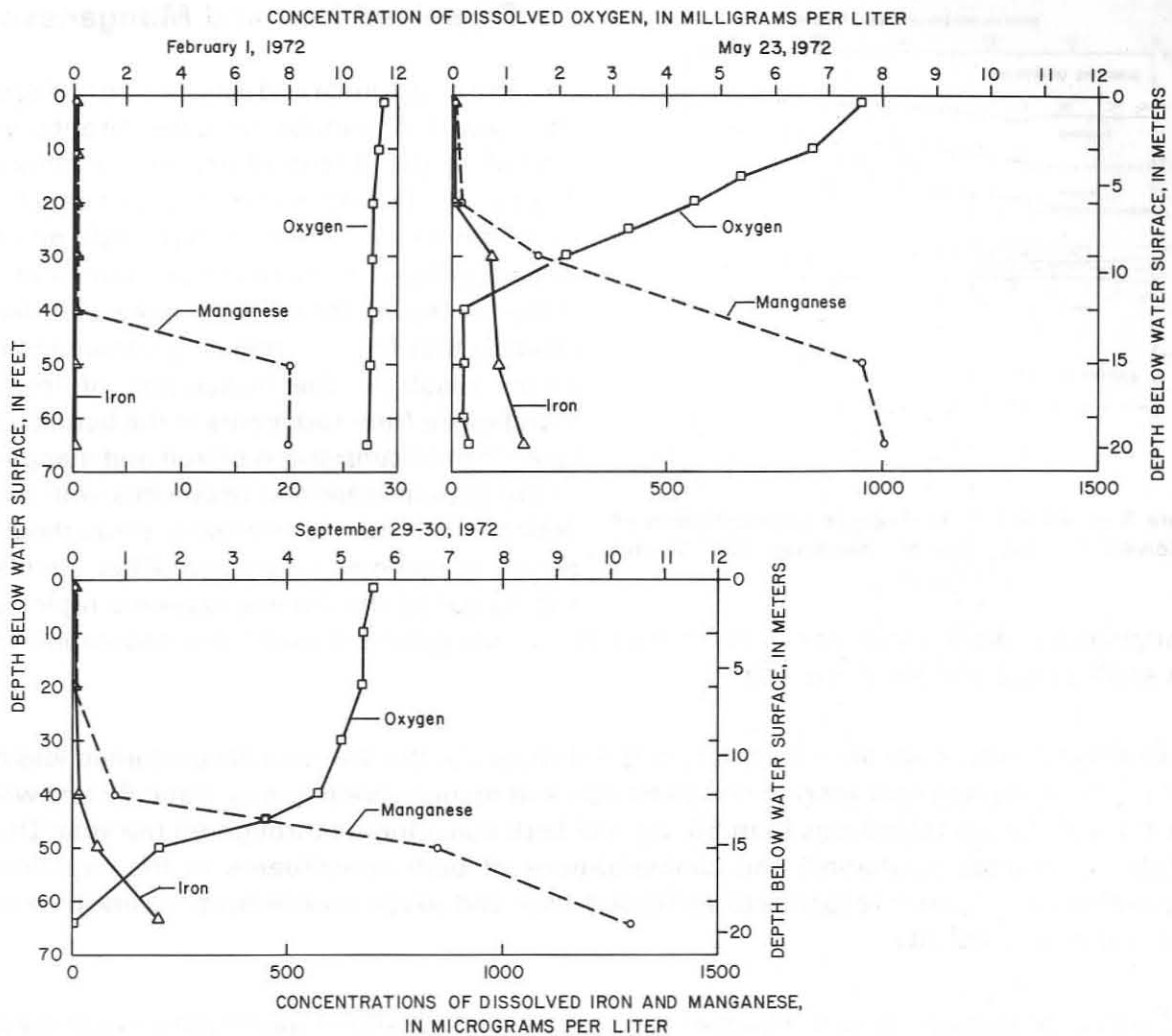


Figure 6.—Seasonal Variations in Concentrations of Dissolved Iron, Manganese, and Oxygen at Site A_C

Total Nitrogen and Phosphorus

A literature review by Greeson (1971, p. 75) showed that at least 21 elements in some chemical combinations are essential nutrients in the biological productivity in the waters of a lake or reservoir. Among these nutrients, dominant roles in controlling productivity in most lakes and reservoirs are assigned to nitrogen and phosphorus because their concentrations 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 settles to the bottom, but part of the dissolved fractions is utilized by algae and other aquatic organisms as primary sources of energy. Eventually, these organisms die, settle to the bottom of the reservoir, and carry their cellular nitrogen and phosphorus with them.

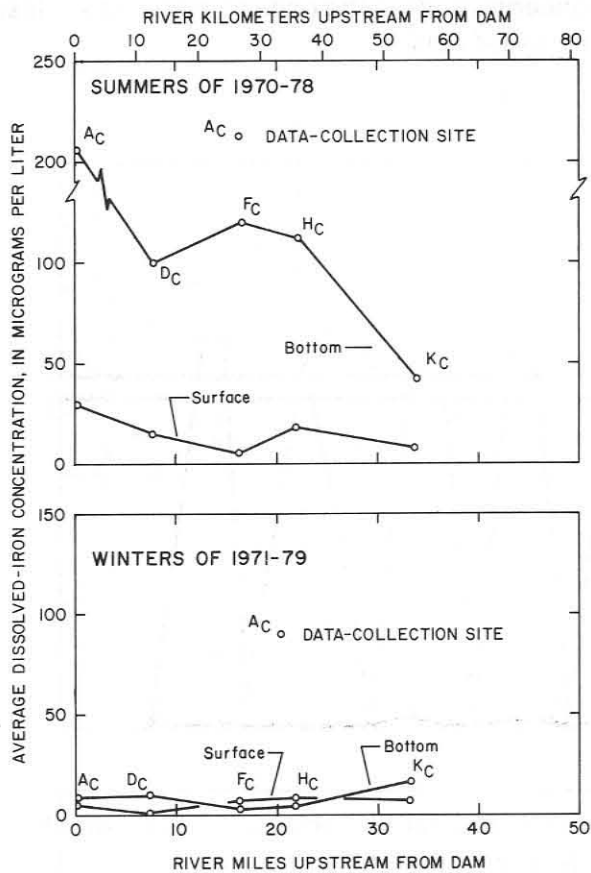


Figure 7.—Variations in Average Concentration of Dissolved Iron During Summer and Winter Surveys

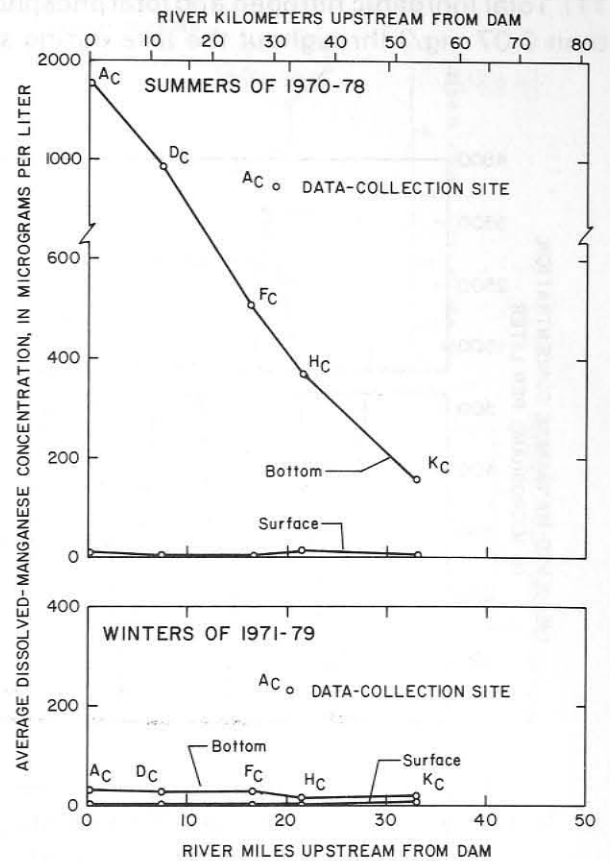


Figure 8.—Variations in Average Concentration of Dissolved Manganese During Summer and Winter Surveys

During periods of summer stagnation, decay of aquatic organisms and chemical reduction of bottom sediments reduce the concentration of dissolved oxygen and release nitrogen and phosphorus to the hypolimnion. They remain there until fall overturn, at which time they are recirculated throughout the water column.

The concentrations of total inorganic nitrogen (summation of ammonia, nitrite, and nitrate nitrogen) and total phosphorus in Lake Granbury varied seasonally and areally (Figures 10 and 11). During periods of winter circulation, the concentrations were relatively uniform throughout the lake. At site A_C, in the deepest part of the lake, the concentrations showed a slight exception to this general trend of well-mixed waters because at times, the water remained slightly stratified throughout the winter. The concentration of total inorganic nitrogen near the bottom at this site averaged 0.13 mg/l, while the concentration at the surface averaged 0.04 mg/l during the winter. The concentration of total phosphorus averaged about 0.05 mg/l throughout the lake during winter circulation.

When more complete stratification occurred during the summer, there was a trend for the concentrations of inorganic nitrogen and phosphorus to increase in the hypolimnion, while the concentrations in the epilimnion remained relatively low (Figure 10). For example, the concentrations of both total inorganic nitrogen and phosphorus in the hypolimnion at the headwaters site (K_C) averaged 0.06 mg/l, while the concentration of total inorganic nitrogen in the hypolimnion at

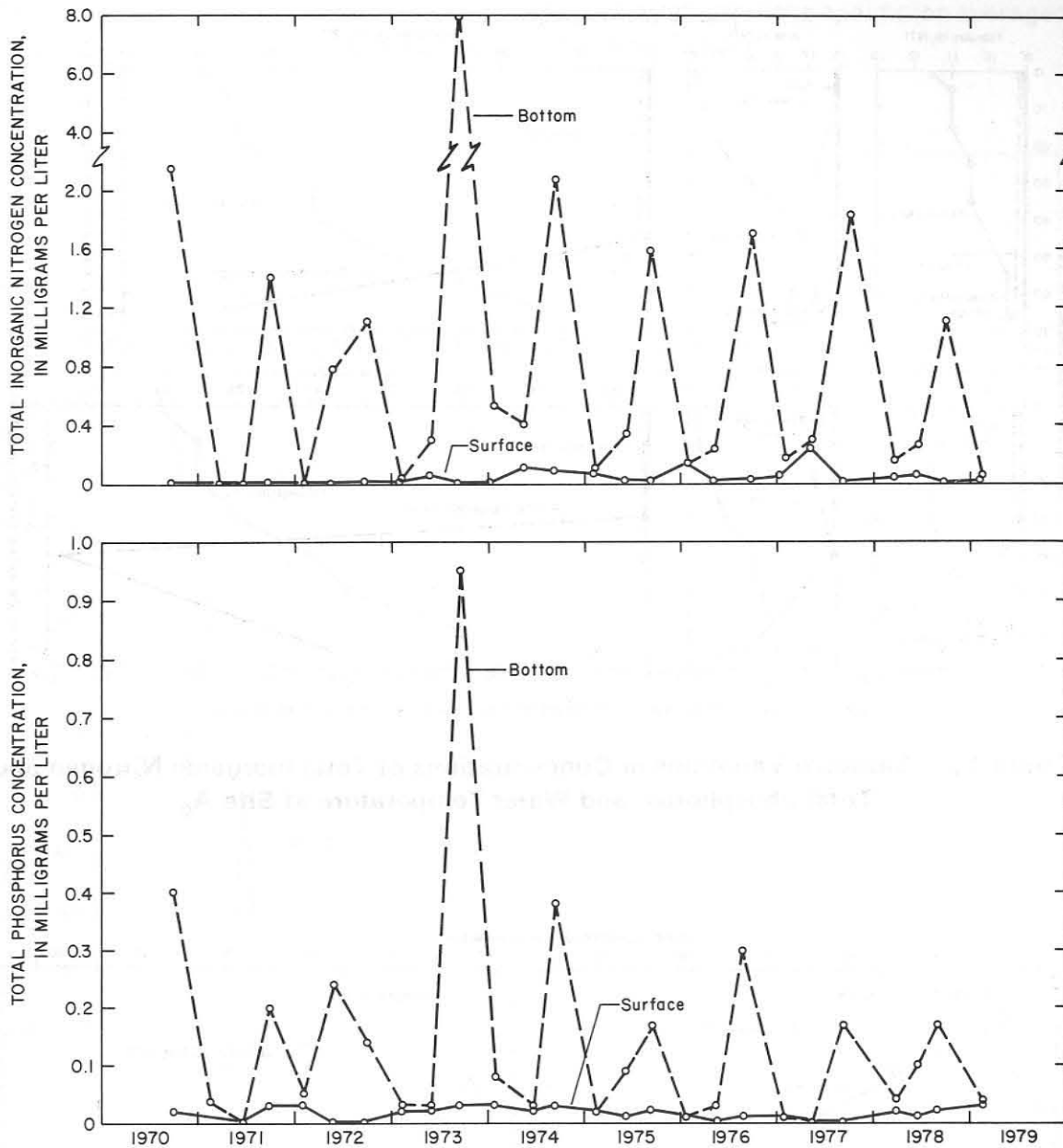


Figure 12.—Variations in Concentrations of Total Inorganic Nitrogen and Total Phosphorus at Site A_C, September 1970-February 1979

Dissolved Solids, Chloride, Sulfate, and Hardness

During each reservoir survey, the specific conductance of the water at each data-collection site was determined at depth intervals of 5 to 10 feet (1.5 to 3 m). Specific-conductance data and the results of analyses for dissolved solids, chloride, sulfate, and hardness in samples collected near the surface and near the bottom at selected sites were used to develop linear regression equations to estimate the concentrations of dissolved constituents. These concentrations are shown in Figure 13.

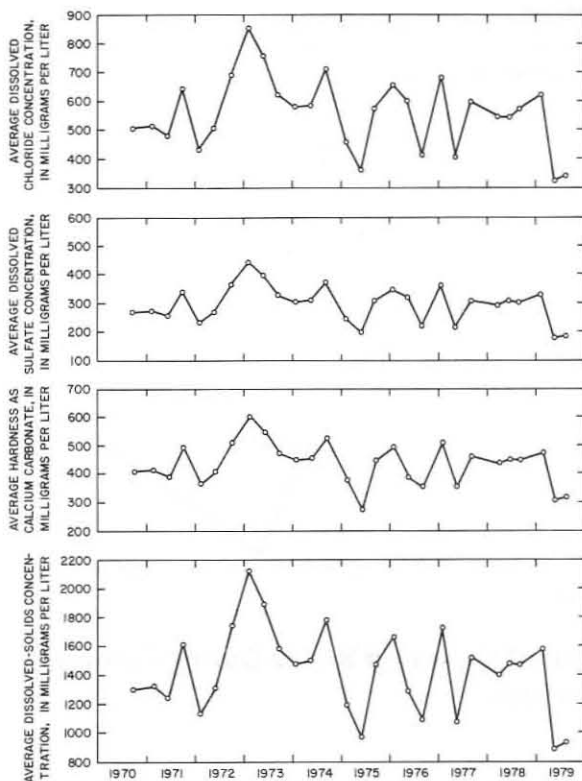


Figure 13.—Variations in Volume-Weighted Average Concentrations of Dissolved Solids, Chloride, Sulfate, and Hardness for Lake Granbury, September 1970-August 1979

oxygen deficit; and, (3) the metalimnion, a narrow middle layer in which temperature rapidly decreases with depth. The concentrations of dissolved oxygen, iron, and manganese and total inorganic nitrogen and total phosphorus are related to this pattern of thermal stratification.

The depth-averaged concentration of dissolved oxygen at the deep-water sites averaged about 4.0 mg/l during summer stratification and about 10.0 mg/l during winter circulation. In the headwaters, the depth-averaged concentration of dissolved oxygen is greater than 5.0 mg/l during the summer and greater than 10.0 mg/l during the winter. Below depths of 30 to 40 feet (9 to 12 m), the depth-averaged concentration of dissolved oxygen is usually less than 1.0 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 water near the surface during summer stagnation usually contained less than 100 $\mu\text{g/l}$ of both constituents. At site F_C , a shallow headwaters site, iron concentrations near the bottom in the summer ranged from 0 to 70 $\mu\text{g/l}$ and averaged 43 $\mu\text{g/l}$. Manganese concentrations near the bottom ranged from 0 to 1,700 $\mu\text{g/l}$ and averaged 195 $\mu\text{g/l}$. At site A_C , a deep-water site near De Cordova Bend Dam, iron concentrations near the bottom in the summer ranged from 80 to 700 $\mu\text{g/l}$ and averaged 210 $\mu\text{g/l}$. Manganese concentrations ranged from 1,300 to 3,700 $\mu\text{g/l}$ and averaged 1,800 $\mu\text{g/l}$.

The total inorganic nitrogen and total phosphorus concentrations in Lake Granbury varied seasonally and areally, being higher during summer stagnation when the decay of aquatic

The concentrations of dissolved solids, chloride, and sulfate usually average less than 1,800 mg/l of dissolved solids, 700 mg/l of chloride, and 350 mg/l of sulfate; the water in Lake Granbury is very hard (greater than 180 mg/l as calcium carbonate). The concentrations of these constituents varied throughout the year, however, in response to releases from Possum Kingdom Lake and runoff from the intervening area. At some sites in the middle of the lake, the dissolved-solids concentrations near the surface differed from the concentrations at the bottom by several hundred milligrams per liter (Figure 14). These sites are downstream from several small tributaries, and this partial stratification probably reflects localized inflows.

SUMMARY OF CONCLUSIONS

Thermal stratification in Lake Granbury, which usually begins to develop during April and persists until September or October, results in three distinct layers in the deeper waters: (1) the hypolimnion, a cold lower layer with very little dissolved oxygen; (2) the epilimnion, a warmer, freely circulating upper layer with no dissolved-

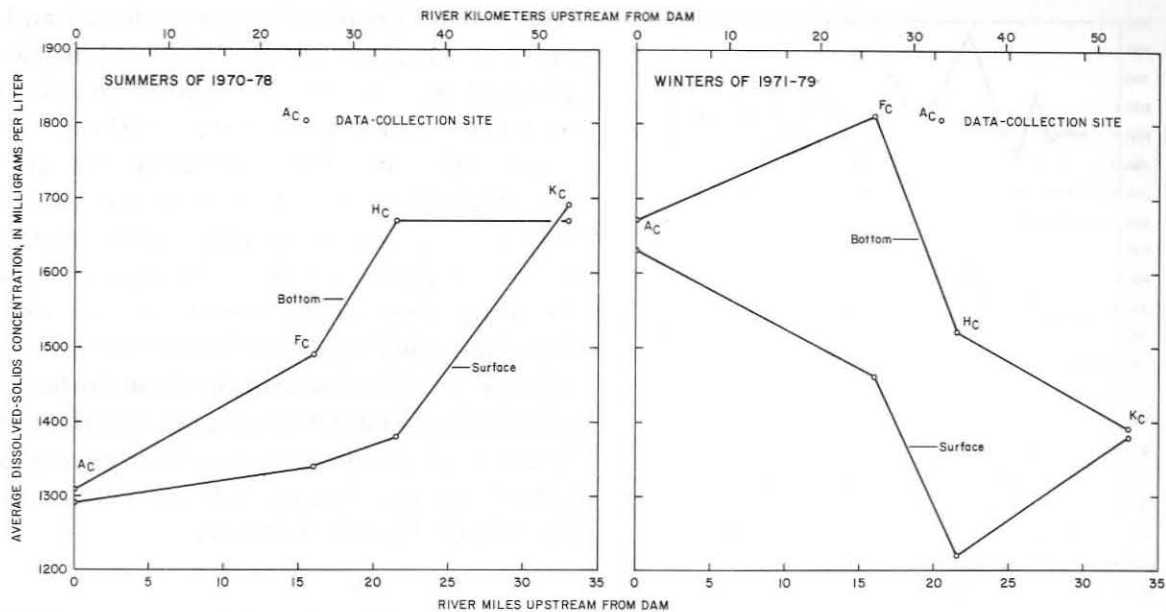


Figure 14.—Variations in Average Concentration of Dissolved Solids During Summer and Winter Surveys

organisms and the chemical reduction of bottom sediments create an oxygen deficit and release nutrients to the water column. The concentrations of total inorganic nitrogen and total phosphorus near the bottom at a deep-water site, A_C , during summer stagnation averaged 2.37 mg/l of nitrogen and 0.19 mg/l of phosphorus. The concentrations of both these nutrients in waters near the surface during the summer averaged less than 0.07 mg/l throughout the lake. During winter circulation, the concentrations of inorganic nitrogen ranged from 0.04 to 0.13 mg/l. The concentration of total phosphorus averaged 0.05 mg/l throughout the lake. Seasonal variations in temperature and dissolved oxygen resulted in significant quantities of dissolved iron and manganese, total inorganic nitrogen, and total phosphorus being released to the hypolimnion each summer; however, no significant accumulation of these constituents has occurred since impoundment.

The concentrations of dissolved solids, chloride, sulfate, and hardness varied areally and seasonally, but in an erratic pattern dependent upon releases from Possum Kingdom Lake and from runoff from the intervening drainage area. The concentrations of these constituents usually averaged less than 1,800 mg/l of dissolved solids, 700 mg/l of chloride, and 350 mg/l of sulfate. The water was generally very hard (hardness greater than 180 mg/l as calcium carbonate). Stratification of dissolved solids occurred in some areas in the middle part of the lake in conjunction with localized inflow.

SELECTED REFERENCES

- Britton, L. J., Averett, R. C., and Ferreira, R. F., 1975, An introduction to the processes, problems, and management of urban lakes: U.S. Geol. Survey Circ. 601-K, 22 p.
- Clarke, F. W., 1924, The data of geochemistry: U.S. Geol. Survey Bull. 770, 841 p.
- Dowell, C. L., and Petty, R. G., 1973, Engineering data on dams and reservoirs in Texas, part 2: Texas Water Devel. Board Rept. 126, 327 p.
- Greeson, P. E., 1971, The limnology of Oneida Lake with emphasis on factors contributing to algal blooms: U.S. Geol. Survey open-file report, 185 p.
- Hem, J. D., 1970, Study and interpretation of the chemical characteristics of natural water (2d ed.): U.S. Geol. Survey Water-Supply Paper 1473, 363 p.
- Hutchinson, G. E., 1957, A treatise on limnology; vol. I, Geography, physics, and chemistry: New York, John Wiley and Sons, 1015 p.
- Rawson, Jack, 1967, Study and interpretation of chemical quality of surface waters in the Brazos River basin, Texas: Texas Water Devel. Board Rept. 55, 118 p.
- _____ 1979, Water quality of Livingston Reservoir on the Trinity River, southeast Texas: Texas Dept. Water Resources Rept. 230, 46 p.
- Reid, G. K., 1961, Ecology of inland waters and estuaries: New York, D. Van Nostrand Company, 375 p.
- Weast, R. C., 1975, Handbook of chemistry and physics: Cleveland, Ohio, CRC Press, 2350 p.

Table 1.—Variations in Chemical and Physical Characteristics of Water From the Brazos River Near Dennis, Texas (Station 08090800), 1971-79 Water Years

(mg/l = milligrams per liter; micromhos = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; ft³/s = cubic feet per second)

Constituent	Range in concentration	Average concentration	Percentage of time values were equal to or less than those shown										
			95	90	80	70	60	50	40	30	20	10	5
Calcium (Ca), mg/l	34 - 210	121	180	170	160	150	120	115	105	95	82	65	48
Sodium (Na), mg/l	25 - 700	360	600	560	515	460	400	340	290	260	210	120	62
Magnesium (Mg), mg/l	4.4 - 57	31	49	47	42	38	34	31	27	24	19	12	8.2
Bicarbonate (HCO ₃), mg/l	75 - 200	136	179	170	152	144	140	135	130	122	117	108	96
Sulfate (SO ₄), mg/l	84 - 840	291	500	470	420	370	330	280	240	210	180	120	61
Chloride (Cl), mg/l	22 - 1,200	545	980	880	810	680	610	540	440	380	320	180	120
Hardness (CaCO ₃), mg/l	100 - 749	427	660	620	560	520	470	420	390	330	290	220	160
Dissolved solids, mg/l	183 - 3,090	1410	2400	2160	1960	1810	1600	1390	1170	1030	864	581	374
Specific conductance, micromhos	302 - 4,480	2407	4040	3650	3370	2940	2730	2410	2050	1840	1560	1010	693
Temperature, °C	0.0 - 35.0	21.3	32.5	31.5	29.0	28.0	25.5	22.5	19.0	15.0	11.0	9.0	8.5
Discharge, ft ³ /s	1.2 - 52,800	539	2500	1850	1100	550	320	200	110	80	58	35	25

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 22, 1970

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)
SEP												
22...	0800	1.0	2020	7.6	27.0	4.1	51	380	260	110	27	310
22...	0802	10	2020	7.6	27.0	4.0	49	--	--	--	--	--
22...	0804	20	2020	7.6	26.5	4.0	49	--	--	--	--	--
22...	0806	30	2020	7.6	26.5	3.8	46	--	--	--	--	--
22...	0808	40	2010	7.5	26.0	2.8	34	--	--	--	--	--
22...	0810	50	1600	7.1	22.5	.2	2	330	170	--	--	--
22...	0812	60	1300	7.1	19.5	.2	2	--	--	--	--	--
22...	0814	65	1380	7.1	19.0	.2	2	290	110	88	17	140

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	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, DIS- SOLVED (MG/L)	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												
22...	150	0	240	480	.3	4.7	1230	.00	.00	.020	10	0
22...	--	--	--	480	--	--	--	--	--	--	0	0
22...	--	--	--	480	--	--	--	--	--	--	0	0
22...	--	--	--	480	--	--	--	--	--	--	0	0
22...	--	--	--	480	--	--	--	.00	.00	.030	0	30
22...	190	0	160	340	--	--	--	--	--	--	150	1900
22...	--	--	--	240	--	--	--	--	--	--	70	1700
22...	220	0	100	230	.3	12	704	.00	2.4	.400	50	1700

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
SEP								
22...	0830	1.0	2010	7.6	27.0	4.3	53	--
22...	0832	10	2010	7.6	27.0	4.2	52	--
22...	0834	20	2010	7.7	27.0	4.2	52	--
22...	0836	30	2010	7.7	27.0	4.1	51	--
22...	0838	40	2000	7.6	27.0	4.0	49	480

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
22...	0920	1.0	2020	7.9	27.0	6.0	74
22...	0922	10	2020	7.9	27.0	5.8	72
22...	0924	20	2020	7.8	27.0	5.7	70
22...	0926	30	2080	7.5	27.0	2.1	26
22...	0928	40	2090	7.4	26.5	1.2	15
22...	0930	50	1700	7.3	23.0	.2	2
22...	0932	62	1300	7.2	19.5	.2	2

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	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						
22...	470	.00	.00	.020	10	0
22...	--	--	--	--	60	0
22...	--	--	--	--	10	0
22...	--	--	--	--	0	0
22...	--	.10	.00	.050	40	0
22...	--	--	--	--	170	2400
22...	240	.00	2.1	.360	60	1700

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 22, 1970--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
SEP								
22...	1000	1.0	2040	8.0	27.0	6.0	74	--
22...	1002	10	2050	7.9	27.0	5.9	73	--
22...	1004	20	2040	7.8	27.0	5.0	62	--
22...	1006	25	2060	7.6	27.0	3.3	41	480

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
SEP								
22...	0850	1.0	2030	7.6	27.0	4.2	52	470
22...	0852	10	2030	7.6	27.0	4.0	49	--
22...	0854	20	2020	7.6	27.0	4.0	49	--
22...	0856	32	2020	7.5	27.0	3.5	43	--

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
22...	1015	1.0	2040	8.3	28.0	7.8	99
22...	1017	10	2040	8.2	28.0	6.6	84
22...	1019	18	2050	8.1	28.0	5.8	73

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
SEP						
22...	--	--	--	--	40	0
22...	--	--	--	--	--	--
22...	140	0	230	470	0	50

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
22...	1030	1.0	2050	8.3	27.5	7.2	90
22...	1032	10	2050	8.2	27.5	6.5	81
22...	1034	20	2150	7.7	27.5	3.1	39
22...	1036	30	2200	7.6	27.0	1.4	17
22...	1038	40	2190	7.5	27.0	.5	6
22...	1040	50	1660	7.4	22.5	.2	2
22...	1042	55	1490	7.4	21.0	.2	2

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 22, 1970--Continued

322422097423901 SITE DC--Continued

DATE	HARD-NESS (MG/L AS CAC03)	HARD-NESS, NONCAR-BONATE (MG/L CAC03)	BICAR-BONATE (MG/L HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
SEP 22...	--	--	--	--	--	480
22...	--	--	--	--	--	--
22...	--	--	--	--	--	--
22...	--	--	--	--	--	--
22...	420	310	140	0	270	570
22...	--	--	--	--	--	--
22...	--	--	--	--	--	300

322458097443101 SITE EC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
SEP 22...	1100	1.0	2200	8.1	27.5	6.3	79	--
22...	1102	10	2200	8.1	27.5	6.3	79	--
22...	1104	20	2190	8.1	27.5	6.2	78	--
22...	1106	30	2200	8.0	27.5	5.9	74	--
22...	1108	40	2400	7.7	27.0	2.1	26	--
22...	1110	50	2550	7.5	27.0	.6	7	620

322619097463301 SITE FC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS (MG/L AS CAC03)	HARD-NESS, NONCAR-BONATE (MG/L CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)
SEP 22...	1130	1.0	2350	8.3	27.5	7.2	90	420	310	120	29	350
22...	1132	10	2350	8.3	27.5	7.0	88	--	--	--	--	--
22...	1134	20	2400	8.1	27.5	6.1	76	--	--	--	--	--
22...	1136	30	2590	7.5	27.0	1.4	18	--	--	--	--	--
22...	1138	40	2600	7.5	27.0	.9	11	460	340	130	32	400

DATE	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, 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 22...	130	0	270	560	.3	5.7	.00	.00	.040	30	0
22...	--	--	--	560	--	--	--	--	--	10	0
22...	--	--	--	570	--	--	.00	.00	.040	0	0
22...	--	--	--	640	--	--	--	--	--	0	190
22...	140	0	300	640	.4	6.1	.00	.00	.004	50	260

322703097451401 SITE GC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
SEP 22...	1200	1.0	2410	8.5	28.5	8.0	103
22...	1202	5.0	2400	8.5	28.0	6.8	86
22...	1204	10	2400	7.8	27.5	3.0	38
22...	1206	24	2380	7.3	27.0	.4	5

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 22, 1970--Continued

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)
SEP												
22...	1230	1.0	2580	8.5	28.0	8.2	104	--	--	--	--	--
22...	1232	10	2580	8.1	27.5	5.7	71	--	--	--	--	--
22...	1234	20	2600	8.0	27.0	4.4	55	--	--	--	--	--
22...	1236	32	2620	7.5	27.0	1.0	13	490	350	140	33	400

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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											
22...	--	--	--	620	--	--	.00	.00	.050	0	0
22...	--	--	--	630	--	--	--	--	--	0	0
22...	--	--	--	640	--	--	.00	.00	.040	--	--
22...	160	0	310	640	.4	6.5	.00	.00	.060	0	40

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
SEP								
22...	1300	1.0	2600	8.0	28.0	6.3	81	640
22...	1302	10	2600	7.7	27.0	3.9	49	--
22...	1304	20	2580	7.6	27.0	3.1	39	--
22...	1306	24	2580	7.6	27.0	2.7	34	--

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
SEP								
22...	1400	1.0	2600	8.4	28.5	8.1	105	--
22...	1402	10	2600	8.2	28.5	7.3	95	--
22...	1404	15	2590	8.1	28.0	6.1	78	--
22...	1406	20	2590	7.8	28.0	4.2	54	640

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)
SEP												
22...	1430	1.0	2600	8.4	29.5	8.9	117	--	--	--	--	--
22...	1432	5.0	2580	8.2	28.0	6.8	87	--	--	--	--	--
22...	1434	10	2560	8.1	27.5	6.3	81	--	--	--	--	--
22...	1436	13	2540	8.0	28.0	6.3	81	450	340	130	32	390

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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											
22...	130	0	--	630	--	--	.00	.00	.030	10	0
22...	--	--	--	630	--	--	.00	.00	.030	90	0
22...	--	--	--	630	--	--	--	--	--	0	0
22...	130	0	300	620	.4	4.0	.00	.00	.060	20	10

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 19, 1971

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
FEB										
19...	0900	1.0	2200	8.1	11.5	10.5	96	420	290	120
19...	0902	5.0	2250	8.1	11.0	10.4	95	--	--	--
19...	0904	15	2250	8.1	11.0	10.3	94	--	--	--
19...	0906	25	2300	8.0	10.5	10.3	93	--	--	--
19...	0908	35	2300	8.0	10.5	10.2	92	--	--	--
19...	0910	45	2350	8.0	10.0	9.9	88	--	--	--
19...	0912	55	2350	8.0	9.5	9.7	86	--	--	--
19...	0914	66	2400	7.9	9.5	9.7	86	420	300	120

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM, DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
FEB										
19...	28	340	150	0	260	540	.3	4.6	.00	.00
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	530	--	--	--	--
19...	--	--	--	--	--	540	--	--	--	--
19...	--	--	--	--	--	540	--	--	--	--
19...	--	--	--	--	--	540	--	--	--	--
19...	29	240	150	0	260	540	.4	4.4	.00	.00

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB										
19...	.020	20	10	0	0	0	4	0	<.5	24
19...	--	0	0	--	--	--	--	--	--	--
19...	--	0	0	--	--	--	--	--	--	--
19...	--	0	0	--	--	--	--	--	--	--
19...	--	0	0	--	--	--	--	--	--	--
19...	--	0	0	--	--	--	--	--	--	--
19...	.040	0	0	--	--	--	--	--	--	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
19...	0930	1.0	2150	8.1	11.0	10.5	95
19...	0932	5.0	2150	8.1	11.0	10.3	94
19...	0934	15	2200	8.0	11.0	10.3	94
19...	0936	25	2200	8.0	10.5	10.3	93
19...	0938	33	2250	8.0	10.5	10.4	94

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
FEB										
19...	1015	1.0	2300	8.0	11.0	10.2	93	.00	.00	.020
19...	1017	5.0	1900	8.0	11.0	10.1	92	--	--	--
19...	1019	15	1950	8.0	11.0	10.1	92	--	--	--
19...	1021	25	2100	8.0	11.0	9.9	90	--	--	--
19...	1023	35	2150	7.9	10.5	9.6	86	--	--	--
19...	1025	45	2200	7.9	10.0	9.5	85	--	--	--
19...	1027	55	2250	7.9	10.0	9.5	85	--	--	--
19...	1029	63	2300	7.8	10.0	9.4	84	.10	.00	.130

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 19, 1971--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
19...	1045	1.0	2200	8.0	11.0	10.2	93
19...	1047	10	2200	8.0	11.0	10.1	92
19...	1049	21	2250	8.0	11.0	10.2	93

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
19...	1000	1.0	2300	8.0	11.0	10.0	91
19...	1002	10	2300	8.0	11.0	10.1	92
19...	1004	20	2300	8.0	11.0	9.8	89
19...	1006	30	2250	8.1	12.0	9.4	88

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
FEB								
19...	1100	1.0	2400	8.0	13.0	9.9	94	--
19...	1102	5.0	2400	7.9	12.5	9.5	90	--
19...	1104	15	2400	7.9	12.5	9.6	91	--
19...	1106	23	2400	7.9	12.5	9.6	91	540

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
FEB										
19...	1115	1.0	2300	7.9	12.0	10.0	93	.00	.00	.020
19...	1117	5.0	2350	7.9	12.0	9.9	93	--	--	--
19...	1119	15	2350	7.9	11.5	9.9	91	--	--	--
19...	1121	25	2350	7.9	11.0	9.7	88	--	--	--
19...	1123	35	2400	7.8	10.0	9.3	83	--	--	--
19...	1125	45	2400	7.7	10.0	9.1	81	--	--	--
19...	1127	55	2400	7.7	9.5	8.9	79	.00	.09	.070

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
19...	1200	1.0	2350	7.9	12.5	9.7	92
19...	1202	10	2350	7.9	12.5	9.7	92
19...	1204	20	2350	7.9	11.5	9.5	87
19...	1206	30	2400	7.8	10.0	9.2	82
19...	1208	40	2400	7.8	10.0	9.1	81
19...	1210	52	2400	7.7	10.0	9.2	82

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 19, 1971--Continued

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)
FEB												
19...	1230	1.0	2250	8.0	12.0	10.1	94	--	--	--	--	--
19...	1232	10	2300	7.9	11.5	9.9	91	--	--	--	--	--
19...	1234	20	2300	7.9	11.5	9.6	88	--	--	--	--	--
19...	1236	30	2350	7.8	11.0	8.7	79	--	--	--	--	--
19...	1238	42	2350	7.7	11.0	8.3	75	450	320	130	30	340

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB											
19...	--	--	--	540	--	--	.00	.00	.030	0	0
19...	--	--	--	530	--	--	--	--	--	0	0
19...	--	--	--	540	--	--	--	--	--	0	0
19...	--	--	--	540	--	--	--	--	--	0	0
19...	160	0	270	540	.3	3.3	.00	.00	.080	0	10

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
FEB										
19...	1300	1.0	2250	7.9	14.5	10.0	98	--	--	--
19...	1302	10	2300	7.7	12.0	9.1	85	--	--	--
19...	1304	15	2300	7.6	12.0	8.8	82	.00	.00	.040
19...	1306	21	2350	7.5	11.5	7.5	69	--	--	--

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
19...	1330	1.0	2400	7.9	13.0	9.8	93
19...	1332	5.0	2400	7.9	12.5	9.6	91
19...	1334	15	2400	7.9	12.0	9.4	88
19...	1336	25	2350	7.8	11.0	9.2	84
19...	1338	33	2400	7.7	11.0	8.8	80

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	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)
FEB						
19...	540	.00	.00	.020	0	0
19...	--	--	--	--	--	--
19...	--	--	--	--	--	--
19...	--	--	--	--	--	--
19...	550	.00	.00	.050	0	0

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 19, 1971--Continued

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
FEB										
19...	1350	1.0	2050	7.8	14.5	9.3	91	--	--	--
19...	1352	5.0	2150	7.8	13.5	8.4	81	--	--	--
19...	1354	10	2200	7.7	12.5	9.1	86	.00	.00	.030
19...	1356	15	2300	7.5	10.0	7.1	63	--	--	--
19...	1358	25	2350	7.4	10.5	7.2	65	--	--	--

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
19...	1415	1.0	2200	7.9	15.0	9.2	91
19...	1417	10	2250	7.7	13.0	7.9	75
19...	1419	22	2250	7.6	12.0	7.9	74

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)
FEB												
19...	1430	1.0	2050	7.9	14.0	10.0	97	420	280	120	30	300
19...	1432	5.0	2200	7.7	12.0	8.5	79	--	--	--	--	--
19...	1434	14	2200	7.7	12.0	8.7	81	430	290	120	31	320

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB											
19...	170	0	250	480	.3	.5	.00	.00	.030	0	0
19...	--	--	--	480	--	--	--	--	--	0	0
19...	170	0	260	500	.3	.7	.00	.00	.080	0	0

TABLE 4--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 10, 1971

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
JUN										
10...	0900	1.0	2250	7.8	24.5	5.9	70	430	310	120
10...	0902	10	2250	7.6	24.0	5.2	61	--	--	--
10...	0904	20	2250	7.3	23.0	2.4	28	--	--	--
10...	0906	30	2250	7.2	21.0	.8	9	--	--	--
10...	0908	40	2250	7.1	18.0	.0	0	--	--	--
10...	0910	50	2250	7.1	17.0	.0	0	--	--	--
10...	0912	62	2250	7.1	16.5	.0	0	480	320	140

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
JUN										
10...	31	340	150	0	270	560	.3	3.2	.00	.00
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	560	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--
10...	30	340	190	0	270	560	.4	10	.00	.00

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUN										
10...	.000	0	0	0	0	1	3	--	--	0
10...	--	0	0	--	--	--	--	--	--	--
10...	--	10	10	--	--	--	--	--	--	--
10...	--	20	390	--	--	--	--	--	--	--
10...	--	50	890	--	--	--	--	--	--	--
10...	--	130	1100	--	--	--	--	--	--	--
10...	.160	700	1400	0	0	1	1	0	<.5	0

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
10...	0930	1.0	2250	7.8	25.0	6.4	76
10...	0932	10	2250	7.8	24.5	6.2	74
10...	0934	15	2250	7.5	24.0	4.2	50
10...	0936	20	2250	7.4	23.0	2.7	31
10...	0938	30	2250	7.2	22.0	1.8	20
10...	0940	35	2250	7.1	20.5	.4	4

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
10...	1015	1.0	2250	8.1	26.5	7.8	96
10...	1017	10	2250	8.0	26.0	7.6	93
10...	1019	20	2250	7.5	24.5	4.2	50
10...	1021	25	2250	7.2	24.0	2.0	24
10...	1023	30	2300	7.1	22.0	.4	5
10...	1025	40	2300	7.1	20.0	.0	0
10...	1027	50	2300	7.1	18.0	.0	0
10...	1029	60	2300	7.1	17.0	.1	1

TABLE 4--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 10, 1971--Continued

322341097420601 SITE BC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	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)
JUN						
10...	--	.00	.00	.020	0	0
10...	--	--	--	--	0	0
10...	--	--	--	--	0	10
10...	--	.04	.00	.020	--	--
10...	--	--	--	--	0	170
10...	--	--	--	--	0	610
10...	--	--	--	--	30	1100
10...	550	.00	.00	.090	0	970

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
10...	1045	1.0	2270	8.0	26.5	7.9	98
10...	1047	5.0	2270	8.0	26.5	7.8	96
10...	1049	10	2270	8.0	26.5	7.2	89
10...	1051	15	2270	7.9	26.5	6.8	84
10...	1053	19	2270	7.8	26.0	6.6	80

322345097421901 SITE BK

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
10...	1000	1.0	2260	8.1	26.5	8.0	99
10...	1002	5.0	2260	8.1	26.5	8.0	99
10...	1004	10	2260	8.0	26.5	8.0	99
10...	1006	15	2260	7.9	26.0	7.6	93
10...	1008	19	2260	7.7	25.5	5.0	60

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
10...	1100	1.0	2270	8.1	27.5	8.0	100
10...	1102	5.0	2270	8.1	27.5	8.0	100
10...	1104	10	2270	8.1	27.5	8.0	100
10...	1106	15	2270	8.0	27.0	7.4	91
10...	1108	20	2270	7.8	26.5	6.2	71

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM, DIS- SOLVED (MG/L AS NA)
JUN												
10...	1115	1.0	2300	8.1	27.0	8.0	99	--	--	--	--	--
10...	1117	10	2300	8.0	26.0	7.2	88	--	--	--	--	--
10...	1119	15	2300	7.7	26.0	5.6	68	--	--	--	--	--
10...	1121	20	2350	7.4	24.5	2.5	30	--	--	--	--	--
10...	1123	30	2350	7.1	23.0	.1	1	--	--	--	--	--
10...	1125	40	2350	7.1	19.0	.0	0	--	--	--	--	--
10...	1127	54	2350	7.1	17.5	.1	1	450	290	130	30	350

TABLE 4--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 10, 1971--Continued

322422097423901 SITE DC--Continued

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 10...	--	--	--	--	--	--	.00	.00	.030	0	0
10...	--	--	--	--	--	--	--	--	--	0	0
10...	--	--	--	--	--	--	.00	.00	.050	--	--
10...	--	--	--	--	--	--	--	--	--	0	40
10...	--	--	--	--	--	--	--	--	--	0	360
10...	--	--	--	--	--	--	--	--	--	20	1000
10...	190	0	270	550	.4	6.3	.00	.00	.150	0	1200

322458097443101 SITE EC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)
JUN 10...	1130	1.0	2250	8.1	26.5	7.9	98
10...	1132	10	2250	8.0	26.0	7.6	93
10...	1134	20	2300	8.0	26.0	7.0	85
10...	1136	30	2300	7.4	23.0	3.5	40
10...	1138	40	2300	7.3	19.0	.2	2
10...	1140	50	2300	7.3	18.5	.4	4

322619097463301 SITE FC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 10...	1200	1.0	2230	8.0	27.0	7.9	98	.00	.00	.110	0	0
10...	1202	10	2230	8.0	26.5	7.9	98	--	--	--	0	10
10...	1204	20	2230	7.7	26.0	4.8	59	--	--	--	0	110
10...	1206	30	2230	7.5	25.0	3.2	38	--	--	--	50	640
10...	1208	40	2250	7.2	21.0	.2	2	.00	.00	.550	0	2000

322703097451401 SITE GC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)
JUN 10...	1230	1.0	2300	8.0	27.5	7.5	94
10...	1232	5.0	2300	8.0	27.0	7.4	91
10...	1234	10	2300	7.7	26.5	4.8	59
10...	1236	15	2300	7.4	26.0	3.0	37
10...	1238	19	2300	7.2	26.0	.6	7

322834097470801 SITE HC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)	HARDNESS, AS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM, DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM+ POTASSIUM, DIS-SOLVED (MG/L AS Na)
JUN 10...	1300	1.0	2100	8.0	26.5	7.0	86	420	290	120	30	330
10...	1302	10	2100	7.9	26.0	6.0	73	--	--	--	--	--
10...	1304	20	2100	7.7	26.0	5.2	63	--	--	--	--	--
10...	1306	30	2000	7.4	25.0	1.0	12	--	--	--	--	--

TABLE 4---CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 10, 1971--Continued

322834097470801 SITE HC--Continued

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 10...	160	0	260	520	.4	1.7	.00	.00	.060	0	0
10...	--	--	--	--	--	--	--	--	--	0	10
10...	--	--	--	--	--	--	--	--	--	20	140
10...	--	--	--	470	--	--	--	.00	--	0	400

322819097483201 SITE IC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)
JUN 10...	1330	1.0	1850	7.9	26.0	6.2	78
10...	1332	5.0	1850	7.8	26.0	5.7	70
10...	1334	10	1850	7.7	25.5	4.5	54
10...	1336	15	1850	7.5	25.5	3.2	39
10...	1338	22	1850	7.0	25.5	.4	5

323318097480101 SITE JC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)
JUN 10...	1345	1.0	1220	7.9	28.0	5.8	73
10...	1347	5.0	1220	7.8	27.5	5.2	65
10...	1349	10	1200	7.6	27.0	4.4	54
10...	1351	15	1180	7.5	26.0	4.3	52
10...	1353	20	830	7.1	25.0	.4	5

323435097492001 SITE KC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)	HARDNESS (MG/L AS CaCO3)	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM, DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM+ POTASSIUM, DIS-SOLVED (MG/L AS Na)
JUN 10...	1400	1.0	1330	7.9	28.5	7.0	90	270	160	76	19	190
10...	1402	5.0	1350	7.7	28.0	5.6	71	--	--	--	--	--
10...	1404	11	1350	7.3	28.0	2.8	35	290	160	84	19	190

DATE	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 10...	130	0	150	300	.3	1.0	.00	.00	.140	30	0
10...	--	--	--	--	--	--	--	--	--	120	180
10...	160	0	150	300	.3	1.6	.00	.00	.360	20	420

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 28-29, 1971

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
SEP										
29...	0900	1.0	2650	26.0	11.8	144	460	360	130	33
29...	0902	10	2700	25.5	11.2	137	--	--	--	--
29...	0904	20	2700	25.5	9.6	117	--	--	--	--
29...	0906	30	2750	24.5	5.4	64	--	--	--	--
29...	0908	40	2800	24.5	4.4	52	--	--	--	--
29...	0910	45	2800	24.0	2.0	24	--	--	--	--
29...	0912	50	2800	23.5	.4	5	--	--	--	--
29...	0914	57	2700	22.5	.0	0	--	--	--	--
29...	0916	64	2500	21.5	.6	7	450	290	130	30

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
SEP										
29...	370	120	0	--	600	.4	4.6	.00	.00	.030
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	.00	.00	.040
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	340	190	0	240	540	.4	8.3	.00	1.4	.200

DATE	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
SEP									
29...	0	0	0	0	0	2	0	<.5	10
29...	0	0	--	--	--	--	--	--	--
29...	0	30	--	--	--	--	--	--	--
29...	0	80	--	--	--	--	--	--	--
29...	0	190	--	--	--	--	--	--	--
29...	0	650	--	--	--	--	--	--	--
29...	60	1800	--	--	--	--	--	--	--
29...	60	2600	--	--	--	--	--	--	--
29...	80	3700	10	0	0	0	0	<.5	20

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)
SEP						
29...	0930	1.0	2600	25.5	11.8	144
29...	0932	10	2650	25.5	11.4	139
29...	0934	20	2650	25.5	11.0	134
29...	0936	33	2650	25.0	6.6	79

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	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											
29...	1015	1.0	2650	25.5	10.6	129	.00	.00	.060	0	0
29...	1017	10	2650	25.5	10.0	122	--	--	--	0	0
29...	1019	20	2700	25.0	9.0	107	--	--	--	0	0
29...	1021	30	2800	24.0	5.2	62	--	--	--	0	10
29...	1023	40	2900	23.5	4.2	49	--	--	--	0	170
29...	1025	50	2950	23.5	3.0	35	--	--	--	0	650
29...	1027	62	2700	22.0	.7	7	.00	1.4	.200	20	2000

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 28-29, 1971--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP						
29...	1045	1.0	2700	26.0	11.2	137
29...	1047	5.0	2700	25.5	11.2	137
29...	1049	10	2700	25.5	11.0	134
29...	1051	17	2700	25.5	10.2	124
29...	1053	24	2700	25.0	6.2	74

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP						
29...	1000	1.0	2650	25.5	11.0	134
29...	1002	5.0	2650	25.5	10.8	132
29...	1004	10	2650	25.5	10.6	129
29...	1006	17	2650	25.5	10.2	124

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP						
28...	1100	1.0	2600	26.5	10.8	133
28...	1102	5.0	2600	26.5	10.6	131
28...	1104	10	2600	26.0	10.2	124
28...	1106	15	2600	26.0	10.4	127
28...	1108	20	2600	25.5	9.8	120
28...	1110	24	2600	25.0	9.2	110

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS Na)	
SEP												
28...	1130	1.0	2700	26.0	11.0	134	--	--	--	--	--	
28...	1132	10	2700	25.5	9.2	112	--	--	--	--	--	
28...	1134	20	2800	24.5	6.0	71	--	--	--	--	--	
28...	1136	30	2950	24.0	4.6	55	--	--	--	--	--	
28...	1138	40	3000	23.5	3.6	42	--	--	--	--	--	
28...	1140	48	3000	23.5	3.2	38	--	--	--	--	--	
28...	1142	56	3000	23.5	3.2	38	520	420	150	35	420	
DATE	TIME	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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												
28...		--	--	--	--	--	--	.00	.00	.030	0	0
28...		--	--	--	--	--	--	--	--	--	0	0
28...		--	--	--	--	--	--	--	--	--	0	0
28...		--	--	--	--	--	--	--	--	--	0	0
28...		--	--	--	--	--	--	--	--	--	0	40
28...		--	--	--	--	--	--	--	--	--	0	130
28...	120	0	0	360	670	.4	5.5	.00	.00	.040	0	130

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 28-29, 1971--Continued

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP						
28...	1230	1.0	2750	26.0	9.8	120
28...	1232	10	2750	25.5	9.4	115
28...	1234	20	2750	25.5	8.8	107
28...	1236	30	2800	25.0	6.4	76
28...	1238	40	2850	23.5	4.0	47
28...	1240	51	2900	23.5	4.6	53

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)
SEP											
28...	1230	1.0	2900	26.0	10.4	127	490	400	140	35	400
28...	1232	10	2900	25.5	10.0	122	--	--	--	--	--
28...	1234	20	2900	24.5	6.4	76	--	--	--	--	--
28...	1236	30	2900	23.5	3.6	42	--	--	--	--	--
28...	1238	41	2900	23.5	4.0	47	--	--	--	--	--

DATE	TIME	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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												
28...	110	0	340	640	.4	4.6	.00	.00	.030	0	0	
28...	--	--	--	--	--	--	--	--	--	--	--	
28...	--	--	--	--	--	--	.00	.00	.040	0	10	
28...	--	--	--	--	--	--	--	--	--	0	30	
28...	--	--	--	--	--	--	.00	.00	.040	0	40	

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP						
28...	1300	1.0	2800	27.0	10.0	125
28...	1302	5.0	2850	26.5	9.0	111
28...	1304	10	2900	25.5	7.8	95
28...	1306	15	2900	25.5	6.4	78
28...	1308	21	2900	25.0	3.2	38

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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											
28...	1330	1.0	2900	26.0	9.8	120	.00	.00	.040	--	--
28...	1332	10	2900	24.5	8.2	98	--	--	--	0	0
28...	1334	15	2900	23.0	3.0	35	--	--	--	--	--
28...	1336	20	2900	23.5	3.6	42	.00	.00	.040	0	40
28...	1338	25	2900	23.0	3.2	37	--	--	--	--	--
28...	1340	31	2900	23.0	3.4	40	.00	.00	.050	0	130

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 28-29, 1971--Continued

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP						
28...	1345	1.0	2800	25.5	9.2	112
28...	1347	5.0	2800	25.0	7.2	86
28...	1349	10	2800	24.0	4.6	55
28...	1351	15	2800	23.5	3.8	44
28...	1353	23	2800	23.5	2.0	23

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP						
28...	1400	1.0	2800	26.5	9.8	121
28...	1402	5.0	2800	26.0	9.4	115
28...	1404	10	2800	26.0	9.2	112
28...	1406	15	2800	25.5	8.8	107
28...	1408	20	2800	25.5	5.8	69

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS Na)
SEP												
28...	1430	1.0	1950	27.5	1.30	9.2	115	380	270	110	26	270
28...	1432	5.0	2000	27.0	--	8.5	105	--	--	--	--	--
28...	1434	10	2200	26.5	--	7.2	88	--	--	--	--	--
28...	1436	13	2400	25.5	--	6.8	82	450	340	130	31	320

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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											
28...	140	0	230	440	.4	4.8	.00	.00	.060	0	0
28...	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	.00	.00	.060	0	0
28...	140	0	280	530	.4	4.7	.00	.00	.060	0	0

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 1, 1972

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
FEB												
01...	1200	1.0	2070	8.1	8.0	1.30	11.3	95	400	290	120	24
01...	1202	10	2080	8.1	8.0	--	11.2	94	--	--	--	--
01...	1204	20	2090	8.1	8.0	--	11.1	93	--	--	--	--
01...	1206	30	2080	8.0	8.0	--	11.1	93	--	--	--	--
01...	1208	40	2080	8.0	8.0	--	11.1	93	--	--	--	--
01...	1210	50	2080	7.9	8.0	--	11.1	93	--	--	--	--
01...	1212	65	2080	7.6	8.0	--	11.0	92	400	290	120	24

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB												
01...	280	130	0	280	440	.3	1.8	.00	.00	.030	0	0
01...	--	--	--	--	--	--	--	--	--	--	0	0
01...	--	--	--	--	--	--	--	--	--	--	0	0
01...	--	--	--	--	--	--	--	--	--	--	0	0
01...	--	--	--	--	--	--	--	--	--	--	0	0
01...	--	--	--	--	--	--	--	--	--	--	0	20
01...	280	130	0	280	440	.3	2.0	.01	.00	.050	0	20

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
01...	1230	1.0	2060	8.1	8.0	11.3	95
01...	1232	10	2080	8.1	8.0	11.3	95
01...	1234	20	2080	8.1	8.0	11.3	95
01...	1236	32	2080	8.1	8.0	11.4	96

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
FEB							
01...	1330	1.0	2060	8.1	8.0	1.50	11.2
01...	1332	10	2070	8.1	8.0	--	11.2
01...	1334	20	2070	8.1	8.0	--	11.1
01...	1336	30	2070	8.1	8.0	--	11.1
01...	1338	40	2070	8.1	8.0	--	11.1
01...	1340	50	2060	8.1	8.0	--	11.2
01...	1342	64	2060	8.1	8.0	--	11.0

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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)
FEB						
01...	94	.00	.00	.040	0	0
01...	94	--	--	--	0	0
01...	93	--	--	--	0	0
01...	93	--	--	--	0	0
01...	93	--	--	--	0	0
01...	94	--	--	--	0	0
01...	92	.00	.00	.040	0	30

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 1, 1972--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
01...	1400	1.0	2070	8.1	8.0	11.4	96
01...	1402	10	2070	8.1	8.0	11.2	94
01...	1404	22	2070	8.1	8.0	11.2	94

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
01...	1300	1.0	2060	8.1	8.0	11.2	94
01...	1302	10	2060	8.1	8.5	11.2	95
01...	1304	23	2060	8.1	8.0	11.2	94

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
01...	1430	1.0	2030	8.1	8.0	11.4	96
01...	1432	10	2030	8.1	8.0	11.4	96
01...	1434	20	2030	8.1	8.0	11.4	96
01...	1436	27	2030	8.1	8.0	11.4	96

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
FEB												
01...	1500	1.0	1880	8.1	8.0	1.40	11.2	94	390	280	120	22
01...	1502	10	1900	8.1	8.0	--	11.2	94	380	280	120	23
01...	1504	20	1960	8.0	8.0	--	11.0	92	--	--	--	--
01...	1506	30	1980	8.0	8.0	--	11.0	92	--	--	--	--
01...	1508	40	1990	8.0	8.0	--	10.8	91	--	--	--	--
01...	1510	50	2010	7.9	8.0	--	10.8	91	--	--	--	--
01...	1512	57	2010	7.9	8.0	--	10.5	88	400	290	120	24

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB												
01...	250	130	0	250	390	.3	2.0	.00	.00	.030	0	0
01...	250	128	0	250	390	.3	2.0	--	--	--	0	0
01...	--	--	--	--	--	--	--	--	--	--	0	0
01...	--	--	--	--	--	--	--	--	--	--	0	10
01...	--	--	--	--	--	--	--	--	--	--	0	10
01...	--	--	--	--	--	--	--	--	--	--	0	10
01...	270	130	0	270	420	.3	2.0	.00	.00	.080	0	20

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 1, 1972--Continued

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
01...	1530	1.0	1860	8.2	8.0	11.9	100
01...	1532	10	1860	8.2	8.0	11.0	92
01...	1534	20	1960	8.1	8.0	11.7	98
01...	1536	30	1960	8.1	8.0	11.0	92
01...	1538	40	1960	7.9	8.0	10.4	87
01...	1540	52	2020	7.6	8.0	7.6	64

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
FEB							
01...	0900	1.0	1860	8.1	7.5	1.20	11.9
01...	0902	10	1860	8.1	7.5	--	11.6
01...	0904	20	1960	7.8	7.5	--	8.9
01...	0906	30	2020	7.6	7.5	--	8.6
01...	0908	43	2060	7.5	8.0	--	7.9

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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)
FEB						
01...	99	.03	.00	.040	0	0
01...	97	--	--	--	--	--
01...	74	--	--	--	--	--
01...	72	--	--	--	--	--
01...	66	.00	.00	.060	0	20

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
01...	0930	1.0	1640	8.1	7.5	11.9	99
01...	0932	10	1640	8.1	7.5	11.6	97
01...	0934	23	1740	7.8	7.5	8.9	74

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
FEB												
01...	0945	1.0	1690	8.2	7.5	1.00	12.1	101	360	250	110	21
01...	0947	10	1730	8.1	7.0	--	11.5	94	--	--	--	--
01...	0949	20	1880	8.0	7.0	--	10.8	89	--	--	--	--
01...	0951	33	2280	7.7	8.5	--	8.2	69	440	330	130	28

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 1, 1972--Continued

322834097470801 SITE HC--Continued

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB												
01...	210	140	0	220	330	.2	2.1	.00	.00	.040	0	0
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	310	140	0	300	480	.3	2.1	.01	.00	.040	0	0

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)
FEB							
01...	1000	1.0	1720	8.1	7.5	12.1	101
01...	1002	10	1800	8.0	7.0	11.2	92
01...	1004	24	1910	7.9	7.0	10.4	85

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)
FEB							
01...	1045	1.0	2150	8.1	8.0	12.2	103
01...	1047	10	2500	8.1	8.0	11.0	92
01...	1049	23	2710	8.1	8.5	10.6	90

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)	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+ POTAS- SIUM, DIS- SOLVED (MG/L AS Na)
FEB												
01...	1100	1.0	2590	8.1	7.5	12.0	100	480	370	140	32	360
01...	1102	5.0	2600	8.1	7.5	11.7	98	--	--	--	--	--
01...	1104	13	2610	8.0	7.5	10.9	91	--	--	--	--	--

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB											
01...	140	0	350	560	.3	1.4	.02	.00	.040	0	20
01...	--	--	--	--	--	--	--	--	--	0	20
01...	--	--	--	--	--	--	.00	.00	--	0	20

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 23, 1972

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
MAY											
23...	0900	1.0	2010	8.1	25.5	2.20	7.6	92	400	290	120
23...	0902	10	2010	7.9	23.5	--	6.7	78	--	--	--
23...	0904	15	2010	7.6	23.0	--	5.4	62	--	--	--
23...	0906	20	2010	7.5	22.5	--	4.5	51	--	--	--
23...	0908	25	2010	7.4	22.0	--	3.3	38	--	--	--
23...	0910	30	2010	7.3	21.5	--	2.1	24	--	--	--
23...	0912	40	2010	7.1	20.5	--	.2	2	--	--	--
23...	0914	50	2010	7.1	18.0	--	.2	2	--	--	--
23...	0916	60	2000	7.1	17.5	--	.2	2	--	--	--
23...	0918	65	2000	7.1	17.5	--	.3	3	400	280	120

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
MAY										
23...	24	280	140	0	250	430	.3	4.0	.00	.00
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	<.01	.00
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	.01	.00
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	<.01	.22
23...	--	--	--	--	--	--	--	--	--	--
23...	24	260	150	0	250	410	.3	7.8	.00	.78

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY										
23...	.000	0	0	0	0	0	2	0	<.2	70
23...	--	--	--	--	--	--	--	--	--	--
23...	.020	--	--	--	--	--	--	--	--	--
23...	--	0	20	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	.010	90	200	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	.020	110	950	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	.240	160	1000	--	--	--	--	--	--	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)
MAY							
23...	0930	1.0	2010	8.0	25.0	7.6	90
23...	0932	10	2010	7.9	24.0	7.2	85
23...	0934	20	2010	7.5	22.5	4.1	47
23...	0936	30	2010	7.3	21.5	2.1	24
23...	0938	40	2010	7.2	20.5	.3	3
23...	0940	47	2010	7.2	20.0	.2	2

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 23, 1972--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
23...	1030	1.0	2010	8.1	26.0	8.3	101
23...	1032	10	2010	8.1	25.5	8.1	98
23...	1034	15	2010	7.8	24.5	6.6	79
23...	1036	20	2010	7.3	23.0	2.5	29
23...	1038	25	2010	7.1	22.5	1.1	12
23...	1040	30	2010	7.1	22.0	.9	10
23...	1042	40	2010	7.1	21.0	.2	2
23...	1044	50	2010	7.1	19.5	.2	2
23...	1046	63	2010	7.1	19.0	.3	3

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
23...	1100	1.0	2010	8.1	26.0	8.2	100
23...	1102	10	2010	8.1	25.0	8.0	95
23...	1104	15	2010	7.9	25.0	6.8	81
23...	1106	22	2010	7.3	23.5	1.9	22

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
23...	1000	1.0	2010	8.1	26.0	8.3	101
23...	1002	10	2010	8.1	25.5	8.3	100
23...	1004	15	2010	7.8	24.5	6.3	75
23...	1006	20	2010	7.3	23.5	2.4	28
23...	1008	25	2010	7.3	23.5	1.5	17

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
23...	1115	1.0	2010	8.1	27.5	8.0	100
23...	1117	10	2010	8.1	27.0	7.9	98
23...	1119	21	2010	7.8	26.0	6.3	77

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 23, 1972--Continued

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
MAY											
23...	1130	1.0	2030	8.1	26.5	1.40	8.8	107	400	290	120
23...	1132	10	2030	8.1	25.5	--	8.3	100	--	--	--
23...	1134	15	2120	7.5	24.5	--	5.2	62	--	--	--
23...	1136	20	2270	7.2	23.5	--	1.6	19	440	320	130
23...	1138	25	2270	7.1	23.0	--	.6	7	--	--	--
23...	1140	30	2350	7.1	22.5	--	.3	3	--	--	--
23...	1142	40	2350	7.1	21.5	--	.3	3	--	--	--
23...	1144	50	2040	7.1	19.0	--	.3	3	--	--	--
23...	1146	56	2040	7.1	18.5	--	.3	3	400	270	120

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
MAY												
23...	270	130	0	270	420	.3	2.9	.00	.00	.010	0	10
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	300	150	0	290	480	.3	2.3	.00	.00	.010	0	20
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	120	830
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	270	160	0	250	420	.3	6.8	.00	.54	.120	260	1400

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY						
23...	1200	1.0	2080	8.0	26.0	8.0
23...	1202	10	2080	8.0	25.5	8.0
23...	1204	20	2080	7.8	25.0	6.4
23...	1206	22	2180	7.2	24.5	3.0
23...	1208	25	2270	7.1	23.5	1.0
23...	1210	30	2350	7.1	23.0	.4
23...	1212	40	2350	7.1	22.5	.4
23...	1214	51	2150	7.1	19.5	.4

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
MAY							
23...	1230	1.0	2150	7.8	25.5	1.30	8.1
23...	1232	10	2150	7.8	25.0	--	8.0
23...	1234	20	2350	7.1	24.5	--	4.3
23...	1236	25	2420	7.0	24.0	--	2.5
23...	1238	30	2580	6.9	23.5	--	1.6
23...	1240	40	2400	6.9	21.5	--	.4

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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)
MAY						
23...	98	.00	.00	.010	0	10
23...	95	--	--	--	--	--
23...	51	.00	.00	.040	0	100
23...	29	--	--	--	--	--
23...	19	--	--	--	--	--
23...	4	.00	.31	.010	20	1000

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 23, 1972--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
23...	1300	1.0	2170	7.9	26.0	8.0	98
23...	1302	10	2170	7.7	25.5	7.6	92
23...	1304	15	2170	7.3	24.5	4.4	52
23...	1306	18	2170	7.1	24.5	1.8	21
23...	1308	20	2020	7.0	24.5	.4	5
23...	1310	25	2020	6.9	24.0	.4	5

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
MAY												
23...	1330	1.0	2460	7.9	26.0	.70	6.5	79	450	340	130	30
23...	1332	10	2460	7.9	26.0	--	6.5	79	--	--	--	--
23...	1334	20	2460	7.8	26.0	--	6.5	79	--	--	--	--
23...	1336	25	2680	7.4	25.5	--	3.6	43	--	--	--	--
23...	1338	30	2730	7.1	24.5	--	1.2	14	--	--	--	--
23...	1340	33	2730	7.0	24.0	--	.7	8	520	400	150	34

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
MAY												
23...	340	130	0	320	540	.3	2.9	.00	.00	.040	0	10
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	.00	.00	.040	20	380
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	380	140	0	370	600	.3	5.8	.00	.20	.110	10	890

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
23...	1400	1.0	2200	7.9	25.5	7.3	88
23...	1402	10	2200	7.5	25.5	5.7	69
23...	1404	15	2200	7.4	25.5	4.3	52
23...	1406	20	2070	7.1	24.5	1.1	13
23...	1408	22	2070	7.1	24.5	.8	10

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 23, 1972--Continued

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
23...	1500	1.0	2850	8.1	27.5	7.3	92
23...	1502	10	2900	8.0	27.0	7.1	89
23...	1504	15	2900	8.0	27.0	6.7	84
23...	1506	22	2920	7.8	26.5	4.9	60

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
MAY												
23...	1530	1.0	2930	8.1	27.0	.30	6.9	86	550	440	160	36
23...	1532	5.0	2930	8.0	27.0	--	6.6	82	--	--	--	--
23...	1534	10	2930	8.0	26.5	--	6.5	80	--	--	--	--
23...	1536	13	2930	8.0	26.5	--	6.5	80	--	--	--	--

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
MAY												
23...	410	130	0	400	640	.3	3.9	.00	.00	.030	0	10
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	10	40
23...	--	--	--	--	--	--	--	.00	.00	.040	0	10

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 30, 1972

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
SEP											
30...	0900	1.0	2790	7.8	24.5	1.20	5.6	67	490	390	140
30...	0902	10	2790	7.8	24.5	--	5.4	64	--	--	--
30...	0904	20	2790	7.8	24.5	--	5.4	64	--	--	--
30...	0906	30	2790	7.8	24.5	--	5.0	60	--	--	--
30...	0908	40	2790	7.7	24.5	--	4.6	55	--	--	--
30...	0910	45	2800	7.6	24.5	--	3.6	43	--	--	--
30...	0912	50	2800	7.4	24.0	--	1.6	19	--	--	--
30...	0914	64	2650	7.2	22.5	--	.0	0	480	350	140

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
SEP										
30...	34	400	120	0	380	620	.4	5.5	.00	.19
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	32	370	160	0	340	580	.4	7.8	.00	1.1

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
SEP										
30...	.000	0	0	0	0	0	3	0	<.2	30
30...	--	--	--	--	--	--	--	--	--	--
30...	--	0	0	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	20	100	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	60	850	--	--	--	--	--	--	--
30...	.140	210	1300	10	1	0	1	0	<.2	20

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)
SEP							
30...	0930	1.0	2790	7.9	25.0	5.8	69
30...	0932	10	2790	7.8	25.0	5.8	69
30...	0934	20	2790	7.8	24.5	5.4	64
30...	0936	30	2790	7.8	24.5	5.0	60
30...	0938	40	2790	7.7	24.5	4.8	57
30...	0940	52	2790	7.4	24.5	1.6	19

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
SEP							
30...	1000	1.0	2820	7.8	24.5	1.20	5.8
30...	1002	10	2820	7.8	24.5	--	5.4
30...	1004	20	2820	7.8	24.5	--	5.4
30...	1006	30	2820	7.7	24.5	--	5.2
30...	1008	40	2830	7.5	24.0	--	3.4
30...	1010	50	2880	7.3	23.5	--	.2
30...	1012	64	2640	7.1	20.5	--	.0

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 30, 1972--Continued

322341097420601 SITE BC--Continued

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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						
30...	69	.00	.15	.030	0	0
30...	64	--	--	--	--	--
30...	64	--	--	--	0	40
30...	62	--	--	--	--	--
30...	40	.00	.10	.040	20	130
30...	2	--	--	--	--	--
30...	0	.06	.90	.140	190	1500

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
30...	1030	1.0	2800	8.1	24.5	7.2	86
30...	1032	10	2800	8.1	24.5	7.2	86
30...	1034	20	2800	8.1	24.5	7.4	88

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
30...	0950	1.0	2810	9.0	25.0	5.7	68
30...	0952	10	2810	7.9	25.0	5.8	69
30...	0954	24	2810	7.9	24.5	6.0	71

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
30...	1100	1.0	2810	7.9	24.5	5.6	67
30...	1102	10	2810	7.9	24.5	5.6	67
30...	1104	22	2810	7.9	23.5	5.6	65

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
SEP												
30...	1130	1.0	2810	8.1	24.5	1.10	7.0	83	--	--	--	--
30...	1132	10	2810	8.1	24.5	--	7.0	83	--	--	--	--
30...	1134	20	2810	8.1	24.5	--	7.0	83	--	--	--	--
30...	1136	30	2810	8.1	24.0	--	7.0	83	--	--	--	--
30...	1138	35	2810	8.1	24.0	--	7.0	83	--	--	--	--
30...	1140	40	3070	7.7	24.0	--	4.6	55	--	--	--	--
30...	1142	50	3240	7.5	24.0	--	1.9	23	--	--	--	--
30...	1144	56	3270	7.5	23.5	--	2.0	24	600	500	180	36

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 30, 1972--Continued

322422097423901 SITE DC--Continued

DATE	SODIUM+ POTASSIUM DIS-SOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
SEP 30...	--	--	--	--	--	--	--	.00	.23	.030	0	0
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	0	0
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	.00	.11	.030	20	30
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	480	120	0	470	740	.5	6.6	.02	.19	.050	20	150

322458097443101 SITE EC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)
SEP 30...	1200	1.0	2970	8.0	24.5	6.4	76
30...	1202	10	2970	8.0	24.5	6.4	76
30...	1204	20	3000	8.0	24.0	6.2	74
30...	1206	30	3040	7.7	24.0	4.8	57
30...	1208	35	3240	7.5	24.0	2.8	33
30...	1210	40	3300	7.5	23.5	2.4	28
30...	1212	52	3300	7.5	23.5	2.0	24

322619097463301 SITE FC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)
SEP 30...	1230	1.0	3040	8.0	24.5	.80	7.2
30...	1232	10	3040	8.0	24.5	--	7.2
30...	1234	20	3040	8.0	24.0	--	7.2
30...	1236	25	3040	8.0	24.0	--	7.2
30...	1238	30	3190	7.4	23.5	--	4.3
30...	1240	40	3310	7.3	23.0	--	2.3

DATE	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
SEP 30...	86	.00	.01	.030	0	0
30...	86	--	--	--	--	--
30...	86	.00	.06	.030	0	0
30...	86	.00	.06	.030	0	0
30...	51	--	--	--	--	--
30...	27	.00	.14	.030	20	180

322703097451401 SITE GC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)
SEP 29...	1300	1.0	2940	8.2	27.0	9.2	115
29...	1302	10	2880	8.0	26.0	7.4	90
29...	1304	15	2880	7.4	26.0	3.8	46
29...	1306	20	2810	6.9	25.5	.0	0
29...	1308	27	2810	7.0	25.5	.0	0

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 30, 1972--Continued

322834097470801 SITE HC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
SEP 29...	1330	1.0	3150	8.1	26.5	.80	7.7	95	570	470	170	36
29...	1332	10	3150	8.0	26.5	--	7.2	89	--	--	--	--
29...	1334	20	3190	7.6	25.5	--	4.9	60	--	--	--	--
29...	1336	34	3310	7.3	25.0	--	3.4	41	600	500	180	36

DATE	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, 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 29...	460	120	0	460	700	.4	6.2	.00	.11	.040	0	30
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	50	220
29...	480	120	0	480	740	.5	7.0	.00	.16	.050	20	216

322819097483201 SITE IC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)
SEP 29...	1400	1.0	2720	8.0	27.5	7.6	95
29...	1402	10	2990	7.8	26.5	6.2	76
29...	1404	15	3000	7.3	25.5	3.1	38
29...	1406	24	3140	7.1	25.5	.8	10

323318097480101 SITE JC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)
SEP 29...	1430	1.0	2640	8.1	27.5	8.5	106
29...	1432	5.0	2300	8.0	26.5	8.2	100
29...	1434	10	2130	7.8	26.0	6.5	79
29...	1436	15	2140	7.6	25.5	5.5	66
29...	1438	23	2670	7.2	26.0	2.6	32

323435097492001 SITE KC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PER-CENT SATUR-ATION)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
SEP 29...	1500	1.0	2700	8.5	28.5	.50	9.6	123	470	380	140	29
29...	1502	5.0	3220	8.0	28.0	--	7.1	91	--	--	--	--
29...	1504	10	3220	7.9	28.0	--	6.4	82	--	--	--	--
29...	1506	14	3150	7.7	28.0	--	6.2	79	--	--	--	--

DATE	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, 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 29...	380	110	0	380	580	.4	6.0	.00	.00	.050	0	0
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	.00	.17	.080	30	50

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 6-7, 1973

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
FEB											
07...	0900	1.0	3540	8.0	10.0	2.00	11.5	103	640	540	190
07...	0902	5.0	3540	8.0	10.0	--	11.5	103	--	--	--
07...	0904	10	3540	8.0	9.5	--	11.5	102	--	--	--
07...	0906	20	3540	8.0	9.0	--	11.3	98	--	--	--
07...	0908	30	3540	8.0	8.5	--	10.9	93	--	--	--
07...	0910	40	3540	7.9	8.5	--	10.7	91	--	--	--
07...	0912	50	3540	7.9	8.5	--	10.4	89	--	--	--
07...	0914	65	3540	7.9	8.5	--	10.3	88	630	530	190

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
FEB										
07...	38	530	120	0	500	810	.4	6.0	.01	.02
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	.02	.00
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	38	520	120	0	510	800	.4	6.2	.01	.00

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
07...	0930	1.0	3540	8.0	10.0	11.5	103
07...	0932	10	3540	8.0	9.5	11.5	102
07...	0934	20	3540	8.0	9.0	11.3	98
07...	0936	30	3540	8.0	8.0	10.4	88
07...	0938	40	3540	8.0	8.0	10.3	87
07...	0940	50	3540	7.9	8.0	10.2	86
07...	0942	62	3550	7.9	8.0	10.1	86

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
07...	1000	1.0	3540	8.1	10.0	11.8	105
07...	1002	10	3540	8.0	10.0	11.5	103
07...	1004	21	3550	7.8	10.0	10.3	92

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 6-7, 1973--Continued

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVLD (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
FEB												
06...	1015	1.0	3550	8.0	11.0	1.60	11.0	100	630	520	190	37
06...	1017	5.0	3570	8.0	10.0	--	11.1	99	--	--	--	--
06...	1019	10	3580	8.0	9.5	--	10.9	96	--	--	--	--
06...	1021	20	3600	8.0	8.5	--	10.5	90	--	--	--	--
06...	1023	30	3600	7.9	8.5	--	10.1	86	--	--	--	--
06...	1025	40	3600	7.9	8.5	--	9.8	84	--	--	--	--
06...	1027	55	3620	7.7	8.5	--	9.6	82	630	520	190	38

DATE	TIME	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS Na)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB													
06...	540	130	0	510	820	.4	5.7	.00	.00	.030	0	0	
06...	--	--	--	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	.00	.00	.030	0	0	
06...	--	--	--	--	--	--	--	--	--	--	--	--	
06...	550	130	0	510	840	.4	5.9	.01	.14	.040	0	20	

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
06...	1045	1.0	3620	8.1	10.5	10.8	97
06...	1047	10	3650	8.1	8.5	10.6	91
06...	1049	20	3650	7.9	8.5	9.7	83
06...	1051	30	3650	7.9	8.5	9.5	81
06...	1053	40	3650	7.8	8.5	9.4	80
06...	1055	51	3690	7.8	9.0	9.4	82

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
FEB							
06...	1115	1.0	3680	8.1	11.0	1.30	12.8
06...	1117	10	3730	8.0	9.5	--	12.2
06...	1119	20	3770	7.9	9.0	--	11.1
06...	1121	30	3820	7.8	9.0	--	10.5
06...	1123	40	3830	7.7	9.0	--	10.1

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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)
FEB							
06...	116	.00	.00	.070	0	0	
06...	108	--	--	--	--	--	
06...	97	.00	.00	.020	0	0	
06...	91	--	--	--	--	--	
06...	88	.00	.00	.040	10	30	

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 6-7, 1973--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
06...	1145	1.0	3480	8.0	12.5	11.0	104
06...	1147	10	3750	8.0	9.5	10.6	94
06...	1149	15	3750	7.9	9.0	10.5	91
06...	1151	20	3750	7.7	9.0	8.7	76
06...	1153	25	3750	7.6	9.5	8.5	75

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)
FEB												
06...	1215	1.0	3780	8.0	11.0	11.5	105	640	530	190	40	580
06...	1217	10	3780	8.0	10.0	11.5	104	--	--	--	--	--
06...	1219	20	3840	8.0	9.5	10.9	96	--	--	--	--	--
06...	1221	32	3840	7.8	9.0	9.7	84	640	530	190--	41--	590

DATE	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB											
06...	130	0	500	900	.4	4.2	.00	.00	.020	0	0
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	.00	.00	.030	0	0
06...	130	0	510	910--	.3	4.8	.01	.05	.050	10	0

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
06...	1230	1.0	3710	8.0	11.5	11.4	105
06...	1232	10	3790	8.0	9.5	10.7	95
06...	1234	22	3790	7.6	8.5	8.8	75

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
FEB									
06...	1300	1.0	2920	8.3	11.0	12.5	114	500	370
06...	1302	10	3600	8.0	9.5	10.7	95	--	--
06...	1304	22	3600	7.9	9.0	10.1	88	--	--

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)
FEB									
06...	150	31	450	160	0	370	690	.3	6.4
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 6-7, 1973--Continued

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	
FEB													
06...	1330	1.0	3530	8.3	13.5	.70	12.5	120	580	450	170	37	
06...	1332	12	3550	8.0	11.5	--	11.3	104	--	--	--	--	
DATE		SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
FEB													
06...	540		150	0	440	830	.3	5.2	.00	.00	.030	0	10
06...	--	--	--	--	--	--	--	--	.03	.02	.050	10	20

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 29, 1973

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
MAY											
29...	0900	1.0	3200	8.0	26.0	2.10	8.4	104	540	420	150
29...	0902	10	3200	8.0	24.5	--	8.4	101	--	--	--
29...	0904	20	3200	8.0	23.5	--	7.6	89	--	--	--
29...	0906	30	3200	7.9	23.5	--	7.0	82	--	--	--
29...	0908	35	3240	7.4	22.5	--	3.8	44	--	--	--
29...	0910	40	3360	7.1	21.0	--	1.5	17	--	--	--
29...	0912	55	3760	7.0	20.0	--	.1	1	610	490	170

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM, DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
MAY										
29...	39	470	140	0	390	730	.2	4.4	.01	.04
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	.02	.03
29...	--	--	--	--	--	--	--	--	--	--
29...	44	570	140	--	460	880	.3	6.2	.20	.09

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HC)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY										
29...	.020	0	0	0	0	0	3	0	<.2	20
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	.010	0	20	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	10	50	--	--	--	--	--	--	--
29...	.030	10	600	--	--	--	--	--	--	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION
MAY							
29...	0930	1.0	3190	8.0	26.0	8.4	104
29...	0932	10	3190	8.0	24.5	8.4	101
29...	0934	20	3190	7.9	24.0	7.6	90

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION
MAY							
29...	1000	1.0	3130	8.1	26.0	8.3	102
29...	1002	10	3130	8.1	24.0	8.1	96
29...	1004	20	3130	8.0	24.0	7.3	87
29...	1006	30	3130	7.6	23.0	4.7	55
29...	1008	35	3180	7.3	22.5	3.1	36
29...	1010	40	3300	7.1	21.5	.9	10
29...	1012	50	3460	7.0	20.5	.2	2
29...	1014	62	4010	7.0	19.0	.2	2

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 29, 1973--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
29...	1030	1.0	3130	8.1	26.5	8.5	105
29...	1032	10	3130	8.0	24.5	7.9	96
29...	1034	18	3160	8.0	24.5	7.3	88

322345097421901 SITE Bk

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
29...	0945	1.0	3130	8.1	26.5	8.3	102
29...	0947	10	3130	8.0	24.5	8.0	96
29...	0949	20	3130	8.0	24.5	7.5	90

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
29...	1100	1.0	3110	8.0	27.0	8.6	108
29...	1102	10	3130	8.0	24.5	8.0	96
29...	1104	17	3130	7.9	25.0	7.4	89

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
MAY												
29...	1115	1.0	3110	8.0	27.5	1.30	8.3	105	510	390	140	38
29...	1117	10	3110	7.9	24.5	--	7.6	92	--	--	--	--
29...	1119	20	3120	7.7	23.5	--	6.1	72	--	--	--	--
29...	1121	25	3120	7.7	23.5	--	6.1	72	--	--	--	--
29...	1123	30	3230	7.1	22.5	--	1.2	14	--	--	--	--
29...	1125	40	3280	7.0	21.5	--	.3	3	--	--	--	--
29...	1127	55	3750	7.0	20.0	--	.2	2	610	470	170	44

DATE	TIME	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
MAY													
29...	460	140	0	390	710	.3	4.5	.03	.05	.020	0	0	
29...	--	--	--	--	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	.01	.04	.030	0	0	
29...	--	--	--	--	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	--	--	--	--	--	
29...	570	160	0	460	880	.3	9.0	.30	.19	.300	330	1400	

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 29, 1973--Continued

322458097443101 SITE EC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
MAY							
29...	1145	1.0	3180	8.0	26.0	9.2	114
29...	1147	10	3180	7.8	24.0	7.4	88
29...	1149	20	3180	7.7	24.0	6.2	74
29...	1151	25	3200	7.5	23.5	5.5	65
29...	1153	30	3270	7.2	22.5	2.1	24
29...	1155	40	3430	7.0	21.5	.1	1
29...	1157	50	3630	7.0	20.5	.2	2

322619097463301 SITE FC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (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)	HARD-NESS-NONCAR-BONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)
MAY												
29...	1215	1.0	3260	8.1	26.5	.70	8.6	106	540	400	150	39
29...	1217	10	3260	7.9	25.0	--	6.8	82	--	--	--	--
29...	1219	15	3260	7.8	25.0	--	6.3	76	--	--	--	--
29...	1221	20	3340	7.3	23.5	--	1.9	22	--	--	--	--
29...	1223	30	3510	7.1	22.5	--	.0	0	--	--	--	--
29...	1225	40	3570	7.0	22.5	--	.1	1	600	470	170	43

DATE	TIME	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS Na)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, 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)
MAY													
29...	490	160	0	410	740	.3	5.2	.01	.01	.000	0	0	0
29...	--	--	--	--	--	--	--	.02	.03	.080	0	0	0
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	550	160	0	450	840	.3	7.2	.20	.27	.110	50	970	

322703097451401 SITE GC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
MAY							
29...	1245	1.0	3040	8.2	27.0	9.0	112
29...	1247	5.0	3160	7.9	26.0	7.6	94
29...	1249	10	3160	7.7	25.0	5.1	61
29...	1251	20	3350	7.2	24.0	1.4	17
29...	1253	25	3530	7.1	23.5	.2	2

322834097470801 SITE HC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (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)	HARD-NESS-NONCAR-BONATE (MG/L AS CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)
MAY												
29...	1315	1.0	3440	8.0	26.0	.50	9.4	116	570	440	160	42
29...	1317	5.0	3440	8.0	25.5	--	9.2	112	--	--	--	--
29...	1319	10	3440	7.6	24.0	--	6.7	80	--	--	--	--
29...	1321	20	3510	7.5	24.0	--	5.2	62	--	--	--	--
29...	1323	25	3510	7.0	23.0	--	.2	2	--	--	--	--
29...	1325	31	3510	7.0	23.0	--	.2	2	--	--	--	--

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 29, 1973--Continued

322834097470801 SITE HC--Continued

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
MAY 29...	520	160	0	440	800	.3	5.0	.02	.06	.060	40	10
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	.02	.08	.040	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	.09	.32	.070	50	960

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY 29...	1345	1.0	3330	8.0	27.0	9.4	118
29...	1347	5.0	3330	7.8	25.0	8.1	98
29...	1349	10	3330	7.6	24.0	6.0	71
29...	1351	22	3330	7.3	24.0	3.9	46

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY 29...	1400	1.0	3210	8.1	27.0	9.6	120
29...	1402	5.0	3210	7.6	26.0	6.2	77
29...	1404	10	3390	7.6	24.5	6.1	73
29...	1406	21	3390	7.4	24.5	5.0	60

323318097480101 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
MAY 29...	1415	1.0	1750	7.6	24.5	.10	7.4	88	320	210	94	21
29...	1417	5.0	2340	7.6	23.5	--	7.2	84	--	--	--	--
29...	1419	10	3360	7.5	24.5	--	5.5	65	570	450	160	42

DATE	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
MAY 29...	240	140	0	210	360	.3	5.7	.22	.06	.060	10	30
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	510	150	0	440	780	.3	5.3	.07	.14	.120	10	50

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 14, 1973

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS NONCAL- MONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
SEP											
14...	0900	1.0	3380	8.4	28.5	1.50	8.0	104	520	430	140
14...	0902	10	3380	8.3	28.5	--	7.6	97	--	--	--
14...	0904	20	3380	8.2	27.5	--	7.1	90	--	--	--
14...	0906	30	3380	7.3	26.5	--	3.2	40	--	--	--
14...	0908	40	3380	7.2	26.5	--	2.5	31	--	--	--
14...	0912	55	3500	7.2	25.0	--	1.0	12	--	--	--
14...	0914	64	3660	7.0	21.0	--	.1	1	600	400	170

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
SEP										
14...	40	510	110	0	420	790	.3	4.5	.01	.00
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	.03	.00
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	42	540	250	0	350	860	.3	17	.06	7.9

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
SEP										
14...	.030	0	20	0	0	0	0	0	<.2	20
14...	--	--	--	--	--	--	--	--	--	--
14...	.030	0	0	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	.950	110	2100	10	0	0	0	0	<.2	20

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
14...	0930	1.0	3380	8.4	28.5	8.0	104
14...	0932	10	3380	8.4	28.5	7.5	97
14...	0934	20	3380	8.3	28.0	6.9	88
14...	0936	32	3380	7.5	27.0	3.3	41

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
14...	1015	1.0	3270	8.4	28.0	7.7	99
14...	1017	10	3300	8.3	28.0	7.5	96
14...	1019	20	3300	8.2	27.5	6.5	82
14...	1021	30	3360	7.4	27.0	3.1	39
14...	1023	40	3360	7.3	26.5	2.1	26
14...	1025	50	3400	7.3	26.0	1.7	21
14...	1027	62	3580	7.0	22.5	.1	1

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 14, 1973--Continued

322337097415401 SITE BL

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
SEP							
14...	1045	1.0	3270	8.4	28.0	7.6	97
14...	1047	10	3270	8.3	28.0	7.2	92
14...	1049	20	3300	8.1	27.5	6.0	76
14...	1051	27	3370	7.7	27.5	4.9	62

322345097421901 SITE BR

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
SEP							
14...	1000	1.0	3270	8.4	28.0	7.5	96
14...	1002	10	3300	8.4	27.5	7.3	92
14...	1004	20	3300	8.3	27.5	6.8	86
14...	1006	29	3340	7.6	27.5	4.5	57

322537097414501 SITE CC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
SEP							
14...	1115	1.0	3150	8.3	28.0	6.9	88
14...	1117	10	3290	7.7	27.5	4.2	53
14...	1119	16	3290	7.3	27.5	2.7	34

322422097423901 SITE DC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (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)	HARD-NESS, NONCAR-BONATE (MG/L CaCO3)	CALCIUM DIS-SOLVED (MG/L AS Ca)	MANGA-NIUM, DIS-SOLVED (MG/L AS Mg)	
SEP													
14...	1130	1.0	2370	8.6	28.5	1.50	7.9	101	370	280	100	28	
14...	1132	10	2370	8.6	28.0	--	7.4	94	--	--	--	--	
14...	1134	20	3370	7.7	27.0	--	4.5	56	--	--	--	--	
14...	1136	30	3370	7.3	26.5	--	2.7	33	--	--	--	--	
14...	1138	40	3370	7.2	26.5	--	2.3	28	--	--	--	--	
14...	1140	50	3370	7.2	26.5	--	1.5	19	--	--	--	--	
14...	1142	55	3380	7.2	26.0	--	.1	1	540	450	150	41	
DATE	TIME	SODIUM+ POTAS-SIUM DIS-SOLVED (MG/L AS NA)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, 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													
14...	340	100	0	280	530	.3	5.0	.01	.00	.030	0	0	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	.02	.00	.030	0	0	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	--	--	--	10	0	
14...	--	--	--	--	--	--	--	.05	.31	.040	--	--	
14...	510	120	0	410	790	.3	7.0	.02	1.0	.150	130	1800	

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 14, 1973--Continued

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
14...	1200	1.0	2080	8.6	28.5	7.2	92
14...	1202	10	2300	8.3	28.0	6.1	77
14...	1204	20	3230	7.5	27.0	3.5	44
14...	1206	30	3360	7.3	26.5	2.3	28
14...	1208	40	3360	7.3	26.5	2.3	28
14...	1210	49	3360	7.3	26.5	2.3	28

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
SEP												
14...	1230	1.0	1900	8.6	28.0	1.20	7.3	92	320	220	90	22
14...	1232	10	1950	8.3	27.5	--	6.0	75	--	--	--	--
14...	1234	20	2990	7.2	26.5	--	3.5	44	--	--	--	--
14...	1236	30	3330	7.2	26.5	--	2.0	25	--	--	--	--
14...	1238	35	3360	7.2	26.5	--	1.0	12	--	--	--	--
14...	1240	40	3360	7.2	26.5	--	.5	6	540	450	150	41

DATE	TIME	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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													
14...	260	120	0	210	400	.2	5.7	.03	.01	.030	0	0	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	.01	.18	.030	0	0	
14...	500	120	0	410	780	.3	5.5	.03	.42	.150	20	10	

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
SEP												
14...	1300	1.0	1540	8.4	28.0	1.00	6.4	81	260	170	76	18
14...	1302	10	1540	8.4	28.0	--	6.4	81	--	--	--	--
14...	1304	20	3030	7.1	26.5	--	.9	11	--	--	--	--
14...	1306	25	3120	7.1	26.5	--	.1	1	--	--	--	--
14...	1308	32	3120	7.1	26.5	--	.1	1	480	380	130	38

DATE	TIME	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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													
14...	210	120	0	170	320	.2	6.2	.03	.00	.040	0	0	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	.05	.66	.100	210	50	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	470	120	0	370	720	.3	8.0	.07	.70	.080	520	1500	

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 14, 1973--Continued

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP						
14...	1330	1.0	1510	8.5	7.5	96
14...	1332	10	1510	8.4	6.8	87
14...	1334	22	2390	7.1	.2	2

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
14...	1345	1.0	1980	8.3	28.0	7.0	89
14...	1347	10	2000	7.2	26.0	.2	2
14...	1349	20	3300	7.1	26.0	.1	1

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	
SEP													
14...	1400	1.0	2850	8.6	20.5	.40	8.9	117	450	380	120	36	
14...	1402	5.0	2850	8.1	28.5	--	6.9	90	--	--	--	--	
14...	1404	10	2850	7.3	28.0	--	4.3	55	440	370	120	35	
DATE		SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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													
14...	430	90	0	350	670	.2	5.7	.01	.00	.090	0	0	
14...	--	--	--	--	--	--	--	--	--	--	--	--	
14...	420	94	0	350	660	.2	7.3	.03	.07	.080	10	30	

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 21, 1974

FEET = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BORATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
JAN											
21...	1500	1.0	2350	8.0	9.0	1.60	11.0	96	400	280	110
21...	1503	10	2350	8.0	8.5	--	11.0	94	--	--	--
21...	1506	20	2350	7.9	8.5	--	10.9	93	--	--	--
21...	1509	35	2350	7.9	8.5	--	10.7	91	--	--	--
21...	1512	30	2350	7.9	8.5	--	10.7	91	--	--	--
21...	1515	40	2750	7.4	7.5	--	6.7	56	--	--	--
21...	1518	45	2900	7.4	7.5	--	6.1	51	--	--	--
21...	1521	50	3100	7.4	7.5	--	5.6	47	--	--	--
21...	1524	64	3140	7.3	7.5	--	5.3	45	540	410	150

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
JAN										
21...	29	350	140	0	280	530	.3	3.5	.01	.00
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	.02	.00
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	40	470	160	0	380	730	.3	5.7	.09	.44

322227097412101 SITE AC

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
JAN										
21...	.030	0	0	0	0	0	2	0	<.2	40
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	.030	0	0	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	.080	10	180	--	--	--	--	--	--	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)
JAN							
21...	1530	1.0	2350	8.0	9.0	11.0	97
21...	1533	10	2350	8.0	9.0	11.0	96
21...	1536	20	2350	8.0	9.0	11.0	96
21...	1539	32	2350	8.0	9.0	10.9	95

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 21, 1974--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
21...	1415	1.0	2350	8.1	9.0	11.2	97
21...	1417	10	2350	8.1	9.0	11.2	97
21...	1419	20	2350	8.1	9.0	10.9	95
21...	1421	30	2350	8.0	8.5	10.4	88
21...	1423	40	2460	7.8	8.0	9.3	78
21...	1425	50	3060	7.5	7.0	6.9	57
21...	1427	60	3060	7.5	7.0	6.9	57

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
21...	1430	1.0	2350	8.1	9.5	11.2	97
21...	1432	10	2350	8.1	9.5	10.9	96

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
21...	1435	1.0	2350	8.0	9.5	11.1	98
21...	1438	10	2350	8.0	9.0	11.1	96
21...	1441	20	2350	8.0	9.0	10.8	94
21...	1444	25	2350	8.0	9.0	10.6	92

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
21...	1400	1.0	2330	8.0	9.0	10.9	95
21...	1402	10	2330	8.0	9.0	10.9	95
21...	1404	17	2330	8.0	9.0	10.8	94

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JAN									
21...	1335	1.0	2290	8.0	9.0	1.00	11.1	97	360
21...	1337	10	2290	8.0	8.5	--	11.0	94	--
21...	1339	20	2300	7.9	8.0	--	10.7	91	--
21...	1341	30	2350	7.8	7.5	--	9.8	82	--
21...	1343	35	2550	7.7	7.0	--	9.5	79	--
21...	1345	40	3000	7.7	6.0	--	9.5	77	--
21...	1347	54	3280	7.7	6.0	--	9.5	77	550

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE GRANBUKY JANUARY 21, 1974--Continued

322422097423901 SITE DC

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+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
JAN									
21...	240	97	28	350	350	8.1	140	0	370
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	420	150	42	500	500	9.3	160	0	410

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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 (MG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN									
21...	520	.3	3.5	1440	.30	.00	.030	0	0
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	.02	.09	.050	0	0
21...	--	--	--	--	--	--	--	--	--
21...	770	.3	4.6	1960	.02	.18	.060	0	40

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
21...	1315	1.0	2260	8.0	8.5	11.2	95
21...	1317	10	2260	8.0	8.5	11.2	95
21...	1319	20	2260	8.0	8.5	10.9	92
21...	1321	30	2360	7.8	7.5	10.1	84
21...	1323	40	3200	7.7	7.0	10.1	83
21...	1325	50	3460	7.7	7.0	9.7	79

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
JAN										
21...	1000	1.0	2190	8.1	8.0	1.40	11.6	97	390	250
21...	1002	10	2200	8.1	7.5	--	11.6	97	--	--
21...	1004	20	2280	8.0	7.0	--	11.2	92	--	--
21...	1006	25	2400	8.0	7.0	--	10.8	88	--	--
21...	1008	30	3140	7.8	6.0	--	10.3	82	--	--
21...	1010	40	3630	7.7	6.0	--	10.0	80	610	480

DATE	CALCIUM DIS- SOLVED (MG/L 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 RATIO	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
JAN									
21...	110	28	320	320	7.1	170	0	250	490
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	170	46	560	560	9.8	160	0	460	870

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 21, 1974--Continued

322619097463301 SITE FC--Continued

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	LEAD, DIS-SOLVED (UG/L AS PB)
JAN 21...	.3	4.2	1290	.00	.12	.060	0	0	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	.00	.09	.040	0	0	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	.3	4.7	2190	.01	.22	.060	0	40	40

322703097451401 SITE GC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)
JAN 21...	1045	1.0	2090	8.0	8.5	10.7	91
21...	1047	10	2200	8.0	8.0	10.4	87
21...	1049	24	2260	7.8	7.5	8.9	74

322834097470801 SITE HC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)
JAN 21...	1100	1.0	2340	8.1	9.0	1.00	11.0	96	420	290	120	29
21...	1102	10	2400	8.1	9.0	--	10.8	94	--	--	--	--
21...	1104	20	2530	8.0	9.0	--	10.5	91	--	--	--	--
21...	1106	25	3200	7.8	8.0	--	10.1	86	--	--	--	--
21...	1108	30	3630	7.7	7.5	--	9.7	82	610	490	170	46

DATE	SODIUM+ POTASSIUM, DIS-SOLVED (MG/L AS NA)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JAN 21...	340	160	0	280	520	.3	4.2	.00	.11	.400	0	0
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--
21...	560	150	0	460	860	.3	4.4	.10	.08	.080	0	20

322819097483201 SITE IC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, (PERCENT SATURATION)
JAN 21...	1130	1.0	2270	8.0	9.0	10.4	90
21...	1132	10	2270	8.0	9.0	10.2	88
21...	1134	20	2670	7.6	8.0	8.0	68

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 21, 1974--Continued

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
21...	1155	1.0	3170	8.1	9.5	10.9	96
21...	1157	10	3500	8.0	9.5	10.9	96
21...	1159	20	3800	7.7	9.5	8.9	79

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PEK- CENT SATUR- ATION)	HARD- NESS (MG/L CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVED (MG/L Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L Mg)	
JAN													
21...	1210	1.0	3860	8.1	11.0	.60	10.6	96	650	520	180	48	
21...	1212	10	3860	8.0	11.0	--	9.9	90	--	--	--	--	
DATE	TIME	SODIUM+ POTAS- SIUM DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, 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)
JAN													
21...	600	150	0	490	930	.3	2.5	.00	.17	.070	0	20	
21...	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 15, 1974

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
32227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
MAY											
15...	1535	1.0	2530	8.1	23.0	1.30	8.5	98	430	310	120
15...	1537	10	2530	8.0	22.5	--	8.1	92	--	--	--
15...	1539	20	2530	7.8	21.0	--	6.6	74	--	--	--
15...	1541	30	2530	7.4	19.0	--	3.3	35	--	--	--
15...	1543	40	2530	7.2	18.5	--	1.3	14	--	--	--
15...	1545	50	2530	7.2	18.0	--	.2	2	--	--	--
15...	1547	64	2530	7.1	18.0	--	.2	2	430	300	120

DATE	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)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
MAY											
15...	31	360	7.6	6.9	150	0	310	540	3.4	1450	.02
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	.01
15...	--	--	--	--	--	--	--	--	--	--	.08
15...	--	--	--	--	--	--	--	--	--	--	--
15...	31	360	7.6	7.0	150	0	310	540	4.5	1450	.23

DATE	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY											
15...	.08	.020	10	10	1	1	0	5	3	.3	20
15...	--	--	--	--	--	--	--	--	--	--	--
15...	.07	.030	10	10	--	--	--	--	--	--	--
15...	.12	.030	10	10	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	.17	.030	10	310	--	--	--	--	--	--	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
15...	1610	1.0	2530	8.1	23.0	8.7	100
15...	1612	10	2530	8.1	22.5	8.6	98
15...	1614	20	2530	7.8	21.0	6.6	74
15...	1616	30	2530	7.3	19.0	2.9	31
15...	1618	40	2530	7.2	18.5	1.6	17
15...	1620	48	2530	7.2	18.5	1.3	14

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
15...	1445	1.0	2530	8.1	23.5	8.4	98
15...	1447	10	2530	8.1	23.5	8.4	98
15...	1449	20	2530	8.0	22.5	7.7	88
15...	1451	30	2530	7.4	20.0	3.6	40
15...	1453	40	2530	7.2	19.0	1.0	11
15...	1455	50	2530	7.2	18.5	.4	4
15...	1457	62	2530	7.1	18.5	.2	2

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 15, 1974--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
15...	1515	1.0	2530	8.1	24.0	8.5	100
15...	1517	10	2530	8.1	23.5	8.4	98
15...	1519	20	2530	7.9	23.0	7.5	86
15...	1521	29	2530	7.6	22.5	5.4	61

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
15...	1505	1.0	2530	8.1	24.0	8.5	100
15...	1507	10	2530	8.1	24.0	8.4	99
15...	1509	15	2530	8.1	24.0	8.4	99

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
15...	1430	1.0	2530	8.1	26.0	8.0	98
15...	1432	10	2530	8.1	25.5	8.1	98
15...	1434	21	2530	8.1	25.5	7.9	95

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
15...	1410	1.0	2530	8.1	24.0	1.10	8.2	96	430
15...	1412	10	2530	8.1	23.5	--	7.8	91	--
15...	1414	20	2540	7.8	22.5	--	5.2	59	--
15...	1416	30	2540	7.3	20.5	--	1.5	17	--
15...	1418	40	2540	7.2	18.5	--	.1	1	--
15...	1420	55	2620	7.2	18.5	--	.1	1	460

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)
MAY									
15...	310	120	31	360	7.6	7.1	140	0	310
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	330	130	32	370	7.5	7.3	160	0	310

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 15, 1974--Continued

322422097423901 SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
MAY								
15...	550	3.2	1450	.01	.05	.020	20	0
15...	--	--	--	--	--	--	--	--
15...	--	--	--	.01	.05	.020	20	10
15...	--	--	--	.06	.13	.020	20	30
15...	--	--	--	--	--	--	--	--
15...	560	4.4	1490	.10	.26	.040	180	570

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)
MAY							
15...	1350	1.0	2590	8.1	25.0	8.3	99
15...	1352	10	2590	8.1	24.5	8.0	95
15...	1354	20	2600	8.0	24.0	7.5	88
15...	1356	30	2700	7.4	22.5	2.8	32
15...	1358	40	2700	7.2	21.0	.4	4
15...	1400	50	2790	7.2	20.0	.1	1

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS (MG/L AS CACO3)
MAY									
15...	1020	1.0	2670	8.1	24.0	1.20	7.7	91	440
15...	1022	10	2670	8.1	24.0	--	7.6	89	--
15...	1024	20	2720	7.9	23.5	--	6.7	78	--
15...	1026	30	2840	7.7	22.5	--	4.2	48	--
15...	1028	40	2840	7.4	21.5	--	1.5	17	500

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)
MAY									
15...	330	120	34	380	7.9	7.6	140	0	320
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	370	140	37	400	7.8	7.6	160	0	350

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
MAY								
15...	580	2.2	1510	.00	.11	.050	20	0
15...	--	--	--	--	--	--	--	--
15...	--	--	--	.00	.08	.040	20	20
15...	--	--	--	.00	.10	.040	130	60
15...	620	2.9	1640	.05	.21	.050	170	350

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 15, 1974--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
15...	1050	1.0	2840	8.2	25.0	7.9	95
15...	1052	10	2840	8.1	24.0	7.1	85
15...	1054	20	2840	7.7	24.0	5.2	62
15...	1056	25	2840	7.6	24.0	3.4	40

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
15...	1115	1.0	2840	8.1	24.5	.70	7.3	88	500
15...	1117	10	2840	8.0	24.0	--	6.8	81	--
15...	1119	20	2840	7.9	24.0	--	6.4	76	--
15...	1121	32	2860	7.4	23.0	--	2.2	26	480

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)
MAY									
15...	380	140	36	380	7.4	5.1	150	0	350
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	350	130	37	400	8.0	7.8	160	0	350

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
MAY								
15...	610	1.7	1600	.00	.10	.050	10	0
15...	--	--	--	--	--	--	--	--
15...	--	--	--	.01	.14	.040	20	0
15...	640	2.8	1650	.01	.20	.050	20	400

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
15...	1130	1.0	2840	8.1	24.5	6.7	81
15...	1132	10	2840	7.7	24.0	4.6	55
15...	1134	22	2840	7.3	23.5	1.9	22

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
15...	1150	1.0	2050	7.8	25.5	6.5	78
15...	1152	10	2050	7.7	25.5	5.9	71
15...	1154	22	2050	7.5	25.0	4.1	49

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 15, 1974--Continued

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
15...	1215	1.0	1060	8.2	27.5	.40	8.2	102	220
15...	1217	11	1060	7.3	25.0	--	2.5	30	220

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)
MAY									
15...	100	63	15	130	3.8	5.0	140	0	120
15...	100	65	15	130	3.8	5.5	150	0	110

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
MAY								
15...	200	3.4	605	.00	.05	.060	20	0
15...	200	3.7	603	.00	.17	.070	20	0

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 8, 1974

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
SEP											
08...	1000	1.0	2820	8.3	25.0	1.70	8.1	98	500	400	130
08...	1002	10	2820	8.3	25.0	--	8.1	98	--	--	--
08...	1004	20	2820	8.0	24.5	--	6.2	75	--	--	--
08...	1006	30	2820	7.7	24.5	--	4.6	55	--	--	--
08...	1008	35	2890	7.4	24.0	--	1.5	18	--	--	--
08...	1010	40	2960	7.4	24.0	--	.0	0	--	--	--
08...	1012	50	2680	7.2	21.0	--	.0	0	--	--	--
08...	1014	63	2610	7.1	19.0	--	.0	0	440	250	120

DATE	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)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
SEP											
08...	41	390	7.6	11	120	0	320	660	3.1	1620	.00
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	.00
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	.00
08...	--	--	--	--	--	--	--	--	--	--	--
08...	33	390	8.1	11	230	0	270	590	9.5	1540	.01

DATE	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
SEP											
08...	.08	.030	40	10	0	0	0	2	0	.1	20
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	.09	.040	50	370	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	.91	.060	180	1800	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	2.2	.380	150	1300	4	0	0	0	0	.2	10

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
08...	1100	1.0	2820	8.4	25.5	8.3	101
08...	1102	10	2820	8.3	25.0	8.1	98
08...	1104	20	2820	8.0	24.5	6.1	73
08...	1106	32	2820	7.7	24.5	4.6	55

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
08...	1130	1.0	2870	8.1	25.5	6.6	80
08...	1132	10	2870	8.1	25.0	6.5	78
08...	1134	20	2870	7.7	25.0	4.5	54
08...	1136	24	2960	7.5	25.0	3.1	37

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 8, 1974--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
08...	1120	1.0	2870	8.0	25.0	6.1	73
08...	1122	10	2870	8.0	25.0	5.9	71
08...	1124	20	2940	7.6	24.5	3.5	42
08...	1126	30	2940	7.7	24.5	4.4	53
08...	1128	40	2940	7.4	24.5	.0	0
08...	1130	50	2990	7.2	23.0	.0	0
08...	1132	61	2640	7.1	20.5	.0	0

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
08...	1110	1.0	2870	8.0	25.0	6.2	75
08...	1112	10	2870	7.9	25.0	5.9	71
08...	1114	20	2940	7.7	25.0	4.7	55
08...	1116	33	2940	7.6	25.0	4.6	55

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
08...	1145	1.0	2910	8.1	25.5	6.9	84
08...	1147	10	2910	8.1	25.0	6.7	81
08...	1149	14	2910	7.8	25.0	6.1	73

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
SEP									
08...	1200	1.0	2960	8.3	25.5	1.60	7.7	94	460
08...	1202	10	3000	8.2	25.0	--	7.5	90	--
08...	1204	20	3000	7.8	25.0	--	5.1	61	--
08...	1206	30	3070	7.5	25.0	--	2.5	30	--
08...	1208	35	3140	7.3	24.5	--	.0	0	--
08...	1210	40	3180	7.3	24.5	--	.0	0	--
08...	1212	54	2870	7.0	21.5	--	.0	0	470

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)
SEP									
08...	360	120	39	440	8.9	11	120	0	330
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	280	130	34	410	8.3	11	220	0	290

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 8, 1974--Continued

322422097423901 SITE DC--Continued

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
SEP 08...	670	3.4	1670	.00	.08	.040	50	10
08...	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--
08...	--	--	--	.00	.25	.040	70	160
08...	--	--	--	--	--	--	--	--
08...	--	--	--	.00	.67	.060	150	960
08...	630	8.5	1620	.00	2.1	.350	100	1100

322458097443101 SITE EC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATURATION (PERCENT)
SEP 08...	1240	1.0	3060	7.9	25.5	6.3	77
08...	1242	10	3100	7.9	25.0	5.9	71
08...	1244	20	3100	7.8	25.0	5.6	67
08...	1246	30	3120	7.7	25.0	4.9	59
08...	1248	40	3400	7.3	24.5	.0	0

322619097463301 SITE FC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK (M))	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATURATION (PERCENT)	HARDNESS (MG/L AS CaCO3)
SEP 08...	1300	1.0	3160	8.4	26.0	1.80	7.9	98	500
08...	1302	10	3160	8.4	25.5	--	7.5	91	--
08...	1304	20	3160	7.8	25.5	--	4.7	57	--
08...	1306	30	3390	7.7	24.5	--	3.7	45	--
08...	1308	36	3390	7.7	24.5	--	3.4	41	560

DATE	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	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 HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
SEP 08...	410	130	43	480	9.3	11	110	0	360
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	470	140	50	500	9.2	11	110	0	390

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
SEP 08...	760	4.0	1840	.00	.06	.060	20	0
08...	--	--	--	--	--	--	--	--
08...	--	--	--	.00	.10	.040	30	0
08...	--	--	--	--	--	--	--	--
08...	810	4.9	1960	.00	.22	.060	40	30

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 8, 1974--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
08...	1320	1.0	3140	8.5	26.5	9.0	111
08...	1322	10	3140	8.3	25.5	7.7	94
08...	1324	20	3140	7.7	25.0	4.4	53
08...	1326	23	3140	7.7	25.0	3.9	47

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
SEP									
08...	1345	1.0	3300	8.7	25.0	.90	8.8	106	530
08...	1347	10	3300	8.6	25.0	--	8.7	105	--
08...	1349	20	3300	8.5	24.5	--	7.9	95	--
08...	1351	31	3380	7.7	24.0	--	3.6	43	540

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)
SEP									
08...	440	130	50	490	9.3	11	110	0	380
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	450	140	45	490	9.2	12	110	0	380

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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								
08...	780	4.4	1900	.02	.06	.060	40	0
08...	--	--	--	--	--	--	--	--
08...	--	--	--	.00	.07	.060	20	10
08...	770	5.1	1900	.00	.19	.070	30	120

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
08...	1400	1.0	3370	8.7	26.0	8.8	109
08...	1402	10	3370	8.6	26.0	8.5	105
08...	1404	21	3370	7.5	24.5	.9	11

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
08...	1430	1.0	2810	8.4	25.5	7.9	96
08...	1432	10	3060	7.9	24.5	4.9	59
08...	1434	21	3320	7.4	24.5	.7	8

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 8, 1974--Continued

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
SEP									
08...	1445	1.0	2080	8.8	27.0	1.00	9.9	122	320
08...	1447	5.0	2190	8.6	26.0	--	8.8	107	--
08...	1449	11	3350	7.4	25.0	--	.9	11	530

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)
SEP									
08...	240	89	24	300	7.3	10	100	0	220
08...	--	--	--	--	--	--	--	--	--
08...	440	140	43	500	9.5	12	110	0	380

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 4, 1975

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
FEB												
04...	1215	1.0	2610	7.8	10.0	1.10	9.8	88	480	360	140	32
04...	1217	10	2620	7.8	9.5	--	10.0	88	--	--	--	--
04...	1219	20	2620	7.7	9.5	--	10.0	88	--	--	--	--
04...	1221	30	2620	7.7	9.5	--	9.7	86	--	--	--	--
04...	1223	40	2620	7.7	9.5	--	9.4	83	--	--	--	--
04...	1225	50	2620	7.6	9.0	--	9.2	80	--	--	--	--
04...	1227	60	2620	7.6	8.5	--	9.0	77	490	360	140	33

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SOKP- 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)	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, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
FEB											
04...	360	7.1	6.5	150	0	340	580	.3	4.8	1540	.03
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	.05
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	360	7.1	6.5	150	0	330	600	.3	5.4	1550	.05

DATE	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
FEB											
04...	.03	.020	10	0	0	0	0	1	1	.0	30
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	.28	.010	30	0	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--	--	--
04...	.04	.020	10	10	--	--	--	--	--	--	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
04...	1255	1.0	2600	7.8	10.0	9.9	88
04...	1257	10	2600	7.7	9.5	10.0	88
04...	1259	20	2600	7.7	9.5	9.9	88
04...	1301	31	2600	7.7	9.5	9.7	86

322337097415401 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
04...	1130	1.0	2580	7.8	10.0	9.7	87
04...	1132	10	2580	7.8	9.5	9.9	88
04...	1134	20	2580	7.8	9.5	9.9	88
04...	1136	30	2580	7.7	9.5	9.5	84
04...	1138	40	2580	7.7	9.5	9.5	84
04...	1140	50	2680	7.6	9.0	9.7	84
04...	1142	58	2680	7.6	9.0	9.7	84

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 4, 1975--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
04...	1200	1.0	2580	7.7	10.0	9.2	82
04...	1202	10	2580	7.7	9.5	9.4	83
04...	1204	20	2580	7.7	9.5	9.4	83
04...	1206	25	2580	7.7	9.5	9.4	83

322345097421901 SITE BK

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
04...	1145	1.0	2580	7.8	10.0	9.9	88
04...	1147	10	2580	7.8	9.5	9.4	83
04...	1149	20	2580	7.8	9.5	9.4	83
04...	1151	31	2580	7.7	9.5	9.4	83

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
04...	1110	1.0	1040	7.7	9.5	9.6	84
04...	1112	5.0	2440	7.7	9.5	9.5	84
04...	1114	10	2570	7.7	9.5	9.5	84
04...	1116	15	2570	7.6	9.5	9.5	84

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
FEB									
04...	1040	1.0	2560	7.7	10.0	.90	9.7	87	480
04...	1042	10	2560	7.6	9.5	--	9.7	86	--
04...	1044	20	2560	7.6	9.5	--	9.7	86	--
04...	1046	30	2570	7.6	9.5	--	9.7	86	--
04...	1048	40	2570	7.6	9.5	--	9.7	86	--
04...	1050	50	2570	7.6	9.5	--	9.7	86	--
04...	1052	55	2570	7.6	9.5	--	9.7	86	490

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)
FEB									
04...	340	140	32	360	7.1	6.4	170	0	340
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	350	140	33	350	6.9	6.3	170	0	320

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 4, 1975--Continued

322422097423901 SITE DC--Continued

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
FEB									
04...	560	.3	4.6	1530	.01	.03	.020	10	0
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	.02	.03	.020	10	0
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	560	.3	4.5	1500	.02	.06	.030	10	0

322458097443101 SITE EC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)
FEB							
04...	1020	1.0	2600	7.6	10.5	9.5	86
04...	1022	10	2580	7.8	10.0	9.6	86
04...	1024	20	2600	7.8	10.0	9.6	86
04...	1026	30	2600	7.6	10.0	9.6	86
04...	1028	40	2600	7.6	10.0	9.6	86
04...	1030	46	2600	7.6	10.0	9.6	86

322619097463301 SITE FC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	HARDNESS (MG/L AS CaCO3)
FEB									
04...	1415	1.0	1470	7.6	10.0	.50	10.4	92	290
04...	1417	10	2000	7.7	10.0	--	10.5	93	--
04...	1419	20	2440	7.8	10.0	--	10.4	93	--
04...	1421	30	2510	7.8	10.0	--	10.3	92	--
04...	1423	38	2580	7.7	10.0	--	10.1	90	480

DATE	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	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 HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
FEB									
04...	180	86	19	360	.5	5.0	140	0	180
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	360	140	32	360	7.1	6.5	150	0	320

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
FEB									
04...	290	.2	5.2	673	.08	.06	.080	50	0
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	.03	.02	.030	20	0
04...	--	--	--	--	--	--	--	--	--
04...	580	.3	4.7	1520	.02	.03	.030	10	10

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 4, 1975--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
04...	1450	1.0	1190	7.8	10.5	9.8	88
04...	1452	10	2140	7.8	10.0	9.4	83
04...	1454	20	2570	7.5	10.0	9.1	81
04...	1456	25	2570	7.5	10.0	9.1	81

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
FEB									
04...	1610	1.0	802	7.6	9.5	.30	9.4	82	190
04...	1612	10	870	7.6	9.0	--	9.5	82	--
04...	1614	20	1200	7.6	9.5	--	9.6	84	--
04...	1616	30	2300	7.7	10.5	--	9.4	85	420

DATE	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)
FEB									
04...	87	56	11	86	2.8	3.9	120	0	90
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	--	--	--	--	--
04...	300	120	30	310	6.6	6.2	150	0	270

DATE	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, DIS- SOLVED (MG/L)	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)
FEB									
04...	130	.2	5.5	442	.13	.13	.100	30	0
04...	--	--	--	--	--	--	--	--	--
04...	--	--	--	--	.12	.04	.080	30	0
04...	490	.3	4.7	1310	.03	.10	.060	10	0

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
04...	1535	1.0	690	7.4	9.5	9.0	79
04...	1537	10	920	7.5	9.0	9.2	79
04...	1539	22	1630	7.4	10.0	9.0	80

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 4, 1975--Continued

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
04...	1600	1.0	570	7.5	9.0	9.4	81
04...	1602	10	570	7.6	9.0	9.4	81
04...	1604	20	570	7.6	9.0	9.2	79

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
FEB									
04...	1618	1.0	900	7.6	9.5	.20	9.6	84	210
04...	1620	5.0	904	7.6	9.5	--	9.6	84	--
04...	1622	11	904	7.6	9.5	--	9.4	82	210

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)
FEB									
04...	110	67	11	96	2.9	4.3	130	0	100
04...	--	--	--	--	--	--	--	--	--
04...	110	67	11	96	2.9	3.9	130	0	93

DATE	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, DIS- SOLVED (MG/L)	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)
FEB									
04...	160	.2	6.3	509	.17	.03	.120	40	0
04...	--	--	--	--	--	--	--	--	--
04...	160	.2	6.3	501	.17	.02	.140	50	0

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 1, 1975

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JUN									
01...	1530	1.0	1920	7.7	25.5	1.40	8.2	99	360
01...	1532	10	1920	7.7	25.0	--	8.2	98	--
01...	1534	20	1920	7.6	24.5	--	7.2	86	--
01...	1536	30	2050	7.6	24.5	--	6.7	80	--
01...	1538	35	2160	7.5	23.5	--	5.2	60	--
01...	1540	40	2210	7.2	21.5	--	--	0	--
01...	1542	50	2420	7.2	17.5	--	.2	2	--
01...	1544	63	2420	7.2	17.5	--	.2	2	430

DATE	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)	CAK- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
JUN									
01...	240	99	27	260	6.0	6.1	150	0	220
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	290	120	32	340	7.1	6.3	170	0	270

DATE	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, DIS- SOLVED (MG/L)	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)
JUN									
01...	390	.3	3.2	1080	.01	.00	.010	10	10
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	.01	.00	.010	60	30
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	.08	.00	.010	180	380
01...	--	--	--	--	--	--	--	--	--
01...	510	.3	5.6	1370	.02	.31	.090	840	1200

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
01...	1600	1.0	1920	8.2	26.0	8.2	100
01...	1602	10	1920	8.2	25.0	8.1	96
01...	1604	20	1960	8.1	24.5	7.2	86
01...	1606	29	2010	8.1	24.5	7.0	83

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
01...	1510	1.0	1700	7.9	25.5	7.9	95
01...	1512	10	1700	7.8	25.0	7.8	93
01...	1514	20	1930	7.8	25.0	6.3	75
01...	1516	30	2010	7.6	24.5	6.2	74

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 1, 1975--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
01...	1445	1.0	1680	8.2	25.5	8.0	96
01...	1447	10	1680	8.2	25.0	7.9	94
01...	1449	20	1830	8.0	24.5	6.3	75
01...	1451	30	2050	8.0	24.5	5.9	70
01...	1453	35	2140	7.7	23.5	3.4	40
01...	1455	40	2140	7.4	21.0	.2	2
01...	1457	50	2210	7.4	19.0	.2	2
01...	1459	60	2360	7.4	17.5	.2	2

322345097421901 SITE BK

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
01...	1500	1.0	1680	8.2	25.5	8.0	96
01...	1502	10	1690	7.7	25.5	7.8	94
01...	1504	20	1880	7.6	24.5	6.3	75
01...	1506	30	2060	7.6	24.5	5.8	69
01...	1508	39	2200	7.3	23.5	2.4	28

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
01...	1430	1.0	1790	8.1	26.5	8.5	104
01...	1432	10	1710	8.1	26.0	8.4	102
01...	1434	18	1900	8.1	25.5	8.2	99

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JUN									
01...	1345	1.0	1400	8.1	25.5	.70	7.8	94	290
01...	1347	10	1470	7.9	24.5	--	6.4	76	--
01...	1349	20	1540	7.9	24.5	--	6.4	76	--
01...	1351	30	1600	7.8	24.0	--	5.6	66	--
01...	1353	35	1600	7.8	23.5	--	5.5	64	--
01...	1355	40	1690	7.3	22.0	--	.2	2	--
01...	1357	50	2230	7.2	18.5	--	.2	2	--
01...	1359	53	2230	7.2	18.5	--	.2	2	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)
JUN									
01...	150	81	21	180	4.6	5.2	170	0	160
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	250	110	29	310	6.8	6.2	180	0	250

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 1, 1975--Continued

322422097423901 SITE DC--Continued

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN									
01...	250	.3	3.1	784	.01	.00	.030	40	20
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	.02	.00	.020	20	50
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	.11	.07	.020	30	450
01...	--	--	--	--	--	--	--	--	--
01...	460	.3	6.0	1260	.02	.41	.060	360	1700

322437097423901 SITE DL

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER- CENT SATUR- ATION)
JUN							
01...	1410	1.0	1330	8.0	25.5	7.6	92
01...	1412	10	1370	7.9	24.5	7.1	85
01...	1414	20	1470	7.9	24.5	6.3	75
01...	1416	30	1530	7.9	24.5	6.3	75

322417097423801 SITE DR

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER- CENT SATUR- ATION)
JUN							
01...	1400	1.0	1380	8.1	25.5	8.0	96
01...	1402	10	1420	7.9	24.5	6.5	77
01...	1404	20	1540	7.9	24.5	6.4	76
01...	1406	30	1590	7.9	24.5	6.4	76

322458097443101 SITE EC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER- CENT SATUR- ATION)
JUN							
01...	1315	1.0	1330	7.8	25.0	7.0	83
01...	1317	10	1330	7.7	25.0	6.8	81
01...	1319	20	1330	7.6	24.5	6.3	75
01...	1321	30	1330	7.6	24.5	5.2	62
01...	1323	45	1870	7.2	21.0	.2	2

32261997463301 SITE FC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JUN									
01...	0955	1.0	1340	7.8	24.5	.50	7.2	86	280
01...	0957	10	1340	7.7	24.0	--	6.4	75	--
01...	0959	20	1340	7.7	24.0	--	6.4	75	--
01...	1001	30	1340	7.7	24.0	--	6.3	74	--
01...	1003	41	1440	7.5	23.0	--	4.0	46	290

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 1, 1975--Continued

32261997463301 SITE FC--Continued

DATE	HARD-NESS, NONCARBONATE (MG/L CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
JUN 01...	140	78	20	160	4.2	5.4	170	0	150
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	150	83	20	180	4.6	5.5	170	0	160

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2·NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 01...	250	.3	3.8	751	.01	.04	.060	0	10
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	.02	.02	.050	20	70
01...	270	.3	4.6	808	.02	.19	.050	20	500

322703097451401 SITE GC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATURATION (%)
JUN 01...	1030	1.0	1150	7.6	24.5	7.9	94
01...	1032	10	1210	7.4	24.0	4.8	56
01...	1034	15	1130	7.3	23.5	4.4	51
01...	1036	23	780	7.2	23.0	3.8	44

322834097470801 SITE HC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATURATION (%)	HARDNESS (MG/L AS CAC03)
JUN 01...	1100	1.0	1710	7.4	23.0	.30	6.6	76	310
01...	1102	10	1740	7.4	22.5	--	6.5	74	--
01...	1104	20	1830	7.4	22.5	--	6.5	74	--
01...	1106	30	1830	7.4	22.5	--	6.4	73	370

DATE	HARD-NESS, NONCARBONATE (MG/L CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
JUN 01...	200	87	22	230	5.7	6.4	130	0	190
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	260	90	34	230	5.2	6.1	130	0	200

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 1, 1975--Continued

322834097470801 SITE HC--Continued

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 01...	350	.3	5.1	955	.09	.00	.040	60	10
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	.09	.01	.060	10	10
01...	380	.3	5.1	1010	.10	.05	.060	100	20

322819097483201 SITE IC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)
JUN 01...	1120	1.0	1250	7.4	24.0	6.2	73
01...	1122	10	1740	7.3	23.0	6.2	71
01...	1124	20	1740	7.3	23.0	6.2	71

323318097480101 SITE JC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARANCY (SECCHI DISK (M))	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	HARDNESS (MG/L AS CaCO3)
JUN 01...	1200	1.0	2560	7.3	20.5	.20	5.7	63	430
01...	1202	10	2560	7.3	20.0	--	5.7	63	--
01...	1204	20	2540	7.3	20.0	--	5.7	63	430

DATE	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	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 HCO3)	CARBONATE (MG/L AS CO3)	SULFATE, DIS-SOLVED (MG/L AS SO4)
JUN 01...	320	120	31	360	7.6	7.1	130	0	290
01...	--	--	--	--	--	--	--	--	--
01...	330	120	32	340	7.1	7.1	130	0	280

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 01...	540	.3	5.3	1420	.06	.06	.050	60	20
01...	--	--	--	--	--	--	--	--	--
01...	580	.3	5.3	1430	.08	.13	.150	40	10

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 7, 1975

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

32227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
SEP												
07...	1200	1.0	2440	8.3	29.5	1.60	7.8	101	380	280	100	32
07...	1202	10	2440	8.2	29.0	--	7.7	99	--	--	--	--
07...	1204	20	2440	8.2	29.0	--	7.4	95	--	--	--	--
07...	1206	30	2490	7.4	28.0	--	2.0	25	--	--	--	--
07...	1208	35	2620	7.3	28.0	--	.2	3	--	--	--	--
07...	1210	40	2790	7.2	27.5	--	.2	2	--	--	--	--
07...	1212	50	2790	7.2	26.0	--	.2	2	--	--	--	--
07...	1214	60	2020	7.1	22.5	--	.2	2	--	--	--	--
07...	1216	63	1960	7.1	22.0	--	.2	2	350	170	99	25

DATE	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)	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, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
SEP											
07...	350	7.8	5.5	130	0	260	560	.3	4.9	1380	.00
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	.00
07...	--	--	--	--	--	--	--	--	--	--	.00
07...	--	--	--	--	--	--	--	--	--	--	.00
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	260	6.0	6.6	220	0	180	420	.3	10	1110	.00

DATE	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CK)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
SEP											
07...	.00	.020	0	10	1	0	10	1	0	.0	10
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	.00	.010	70	140	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	.07	.010	140	550	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
07...	1.6	.170	170	1500	5	0	10	0	0	.0	10

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1230	1.0	2440	8.3	29.5	8.0	104
07...	1232	10	2440	8.3	29.0	8.1	104
07...	1234	20	2440	8.2	29.0	7.8	100
07...	1236	30	2440	7.4	28.0	1.8	23

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 7, 1975--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1125	1.0	2440	8.2	29.0	7.0	90
07...	1127	10	2440	7.9	28.5	5.3	68
07...	1129	20	2440	7.9	28.5	5.2	67
07...	1131	30	2530	7.5	28.0	2.0	25
07...	1133	40	2790	7.3	28.0	.2	3
07...	1135	50	2790	7.2	27.5	.2	2
07...	1137	60	2090	7.1	22.5	.2	2

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1135	1.0	2440	8.2	29.0	7.0	90
07...	1137	10	2440	7.9	28.5	5.6	72
07...	1139	20	2440	7.9	28.5	5.2	67
07...	1141	29	2440	7.5	28.5	2.5	32

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1110	1.0	2460	8.0	28.5	6.1	78
07...	1112	10	2510	7.6	28.0	3.3	42
07...	1114	19	2530	7.4	27.5	1.6	20

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
SEP									
07...	1045	1.0	2460	8.1	30.5	1.60	6.8	89	410
07...	1047	10	2460	8.1	29.5	--	6.5	84	--
07...	1049	15	2460	7.4	28.5	--	1.1	14	--
07...	1051	20	2510	7.3	28.0	--	.2	3	--
07...	1053	30	2570	7.3	28.0	--	.2	3	--
07...	1055	40	2620	7.3	28.0	--	.2	3	--
07...	1057	50	2740	7.2	27.0	--	.2	2	--
07...	1059	55	2460	7.1	25.0	--	.2	2	430

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)
SEP									
07...	310	110	32	350	7.6	7.2	120	0	280
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	230	120	32	350	7.3	73	250	0	230

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 7, 1975--Continued

322422097423901 SITE DC--Continued

DATE	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, DIS- SOLVED (MG/L)	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 MH)
SEP									
07...	570	.3	5.0	1410	.00	.00	.010	30	10
07...	--	--	--	--	.00	.00	.010	30	60
07...	--	--	--	--	.00	.03	.010	90	3300
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	560	.3	9.8	1500	.03	1.9	.240	160	1700

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1025	1.0	2460	8.1	30.5	6.7	88
07...	1027	10	2460	8.1	29.5	6.5	84
07...	1029	20	2500	7.3	28.5	.2	3
07...	1031	27	2550	7.3	28.0	.2	3

322417097423801 SITE DK

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1035	1.0	2460	8.1	30.5	6.7	88
07...	1037	10	2460	8.1	29.5	6.7	87
07...	1039	20	2500	7.3	28.5	.2	3
07...	1041	29	2550	7.3	28.0	.2	3

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1010	1.0	2440	8.2	29.0	7.1	91
07...	1012	10	2440	8.1	29.0	6.9	88
07...	1014	20	2440	8.1	29.0	6.6	85
07...	1016	30	2500	7.3	28.5	.6	8
07...	1018	40	2600	7.3	27.5	.2	2
07...	1020	46	2680	7.2	27.0	.2	2

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
SEP									
07...	1310	1.0	2440	8.2	29.5	1.00	7.6	99	410
07...	1312	10	2440	8.0	29.0	--	6.8	87	--
07...	1314	20	2440	8.0	29.0	--	6.2	79	--
07...	1315	25	2440	8.0	29.0	--	6.0	77	--
07...	1317	30	2530	7.4	28.5	--	1.1	14	--
07...	1319	42	2620	7.2	28.0	--	.2	3	440

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 7, 1975--Continued

322619097463301 SITE FC--Continued

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)
SEP 07...	310	110	32	350	7.6	7.1	120	0	260
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	330	120	34	370	7.7	7.2	140	0	260

DATE	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, DIS- SOLVED (MG/L)	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 07...	560	.3	5.0	1380	.00	.00	.020	0	10
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	.01	.00	.030	0	30
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	.01	.04	.020	10	230
07...	600	.3	6.4	1490	.00	.08	.020	310	970

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP 07...	1330	1.0	2380	8.1	29.5	6.9	90
07...	1332	10	2380	7.8	28.5	5.0	64
07...	1334	20	2380	7.8	28.5	4.6	59
07...	1336	23	2280	7.7	28.5	3.8	49

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
SEP 07...	1400	1.0	2510	8.0	29.0	.50	7.6	97	410
07...	1402	10	2510	7.9	29.0	--	7.2	97	--
07...	1404	20	2490	7.9	28.5	--	7.0	90	--
07...	1406	31	2490	7.9	28.5	--	6.8	87	410

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)
SEP 07...	310	110	33	350	7.5	7.6	120	0	280
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
07...	310	110	33	360	7.7	7.3	120	0	270

DATE	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, DIS- SOLVED (MG/L)	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 07...	280	.3	5.7	1130	.01	.03	.030	80	30
07...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	.00	.03	.030	0	40
07...	580	.3	5.4	1430	.01	.00	.030	10	60

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 7, 1975--Continued

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1415	1.0	2520	8.4	29.5	8.6	112
07...	1417	10	2520	7.8	28.5	5.8	74
07...	1419	21	2520	7.8	28.0	5.2	66

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
07...	1445	1.0	3000	8.3	30.0	8.0	107
07...	1447	10	3000	8.0	29.0	5.6	73
07...	1449	20	3000	7.9	29.0	4.6	60

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
SEP									
07...	1515	1.0	3080	8.3	30.0	.50	7.7	103	510
07...	1517	5.0	3080	8.2	29.0	--	7.0	91	--
07...	1519	11	3080	7.9	28.0	--	4.9	63	510

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)
SEP									
07...	390	140	39	450	8.7	7.6	150	0	340
07...	--	--	--	--	--	--	--	--	--
07...	390	140	40	440	8.4	7.9	150	0	340

DATE	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, DIS- SOLVED (MG/L)	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									
07...	730	.3	5.2	1700	.00	.03	.100	0	10
07...	--	--	--	--	--	--	--	--	--
07...	720	.3	5.3	1770	.00	.00	.020	20	40

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 25-26 1976

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
32227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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)
JAN											
25...	1430	1.0	2740	7.9	9.0	10.3	90	320	200	120	36
25...	1432	10	2740	7.9	9.0	10.3	90	--	--	--	--
25...	1434	20	2740	7.9	8.5	10.2	87	--	--	--	--
25...	1436	30	2740	7.9	8.5	10.1	86	--	--	--	--
25...	1438	40	2740	7.9	8.5	10.1	86	--	--	--	--
25...	1440	50	2740	7.9	8.5	9.9	85	--	--	--	--
25...	1442	65	2740	7.9	8.5	8.9	76	450	330	120	36

DATE	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)	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, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
JAN											
25...	390	9.6	6.6	140	0	300	620	.4	3.6	1520	.03
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	.03
25...	--	--	--	--	--	--	--	--	--	--	--
25...	390	8.0	7.0	140	0	300	620	.4	3.7	1610	.03

DATE	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
JAN											
25...	.10	.010	10	0	0	0	0	1	0	.0	10
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	.11	.010	10	0	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--
25...	.11	.010	10	0	--	--	--	--	--	--	--

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
25...	1215	1.0	2740	8.0	9.5	10.3	91
25...	1217	10	2740	8.0	9.5	10.3	91
25...	1219	20	2740	8.0	9.5	10.3	91
25...	1221	30	2740	7.9	9.0	9.9	86
25...	1223	40	2740	7.8	8.5	8.9	76
25...	1225	50	2740	7.7	8.5	8.5	73
25...	1227	60	2740	7.6	8.5	7.7	66

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
25...	1155	1.0	2740	8.0	10.5	10.7	96
25...	1157	10	2740	8.0	10.5	10.3	93
25...	1159	18	2740	7.9	10.5	9.5	86

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 25-26 1976--Continued

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
JAN									
25...	1110	1.0	2760	8.0	9.5	10.4	92	450	330
25...	1112	10	2760	8.0	9.5	10.4	92	--	--
25...	1114	20	2760	8.0	9.5	10.0	88	--	--
25...	1116	30	2760	7.9	9.0	9.8	85	--	--
25...	1118	40	2790	7.7	8.0	8.9	75	--	--
25...	1120	50	2840	7.7	8.0	8.3	70	--	--
25...	1122	55	2840	7.7	8.0	8.1	69	500	380

DATE	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 HCO3)	CAR- BONATE AS (MG/L AS CO3)	SULFATE SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
JAN									
25...	120	36	400	8.2	6.5	140	0	300	640
25...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
25...	140	37	400	7.8	6.6	150	0	300	660

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 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)
JAN								
25...	.4	3.4	1580	.04	.09	.010	0	0
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	--	--	--	.04	.09	.010	10	0
25...	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--
25...	.3	4.1	1620	.04	.24	.020	10	70

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
25...	1140	1.0	2760	8.0	9.5	10.2	90
25...	1142	10	2760	7.9	9.5	10.1	89
25...	1144	20	2760	7.9	9.0	9.7	84
25...	1146	30	2760	7.8	9.0	9.1	79

322417097423801 SITE DR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
25...	1125	1.0	2760	8.0	9.5	10.3	91
25...	1127	10	2760	8.0	9.5	10.3	91
25...	1129	20	2760	8.0	9.5	10.3	91
25...	1131	29	2760	8.0	9.5	10.3	91

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 25-26, 1976--Continued

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
25...	1100	1.0	2790	8.1	10.5	10.9	98
25...	1102	10	2860	8.1	10.0	10.9	97
25...	1104	20	2860	7.9	9.0	9.9	86
25...	1106	30	2860	7.8	8.0	9.1	77
25...	1108	40	2860	7.8	8.0	8.9	75
25...	1110	48	2860	7.8	8.0	8.9	75

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JAN									
25...	1030	1.0	2860	8.0	9.0	1.70	10.9	95	480
25...	1032	10	2860	8.0	9.0	--	10.9	95	--
25...	1034	20	2930	8.0	9.0	--	10.7	93	--
25...	1036	30	2930	8.0	8.5	--	10.4	59	--
25...	1038	43	2930	7.9	8.5	--	10.1	86	510

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)
JAN									
25...	350	130	37	410	8.2	6.5	150	0	310
25...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
25...	380	140	38	410	7.9	6.6	150	0	320

DATE	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, DIS- SOLVED (MG/L)	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)
JAN									
25...	660	.4	3.5	1630	.04	.09	.030	0	0
25...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	.04	.08	.020	0	0
25...	--	--	--	--	--	--	--	--	--
25...	680	.4	3.7	1670	.03	.10	.050	0	30

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
26...	1100	1.0	2970	8.0	8.5	10.5	90
26...	1102	10	2970	8.0	8.5	10.5	90
26...	1104	23	2970	8.0	8.5	10.1	86

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 25-26, 1976--Continued

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JAN									
26...	1035	1.0	2970	8.0	8.0	1.10	10.5	89	510
26...	1037	10	2970	8.0	8.0	--	10.5	89	--
26...	1039	20	2970	8.0	8.0	--	10.5	89	--
26...	1041	31	2970	8.0	8.0	--	10.2	86	510

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)
JAN									
26...	380	140	39	430	8.3	65	160	0	330
26...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--
26...	380	140	39	430	8.3	6.5	160	0	330

DATE	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, DIS- SOLVED (MG/L)	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)
JAN									
26...	690	.3	2.6	1780	.01	.05	.030	10	0
26...	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	.00	.03	.030	10	0
26...	680	.3	2.6	1710	.00	.06	.020	10	0

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
26...	1020	1.0	2990	8.0	7.5	10.3	87
26...	1022	10	2990	8.0	7.5	10.3	87
26...	1024	21	2990	8.0	7.0	10.1	83

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
26...	1130	1.0	3060	7.9	9.0	10.0	87
26...	1132	10	3060	7.9	9.0	10.0	87
26...	1134	20	3060	8.0	8.5	10.0	85

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 25-26, 1976--Continued

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JAN 26...	1200	1.0	3060	7.9	9.5	1.00	9.7	86	530
26...	1202	10	3060	7.9	9.5	--	9.7	86	530

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)
JAN 26...	420	150	38	450	8.5	6.8	140	0	360
26...	420	150	38	450	8.5	7.0	140	0	360

DATE	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, DIS- SOLVED (MG/L)	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)
JAN 26...	700	.4	1.7	1780	.00	.06	.050	10	0
26...	710	.4	1.7	1790	.00	.05	.060	0	0

TABLE 19--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 8, 1976

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS (MG/L AS CACO3)
MAY									
08...	1245	1.0	2820	8.1	20.5	1.60	8.5	94	480
08...	1247	10	2820	8.1	20.5	--	8.3	94	--
08...	1249	20	2820	8.1	20.0	--	8.2	90	--
08...	1251	30	2820	8.0	20.0	--	8.1	89	--
08...	1253	40	2850	7.9	19.5	--	7.5	82	--
08...	1255	50	2850	7.3	18.5	--	3.0	32	--
08...	1257	55	2850	7.1	17.5	--	.8	8	--
08...	1259	60	2850	7.1	17.5	--	.0	0	--
08...	1301	64	2850	7.1	17.5	--	.0	0	510

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)
MAY									
08...	370	130	38	400	7.9	7.0	140	0	320
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	380	140	38	400	7.7	7.5	150	0	320

DATE	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, DIS- SOLVED (MG/L)	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)
MAY									
08...	670	.4	2.6	1640	.00	.01	.000	40	0
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	.01	.02	.010	0	0
08...	--	--	--	--	.10	.02	.010	0	90
08...	--	--	--	--	--	--	--	--	--
08...	690	.4	4.2	1680	.17	.06	.030	10	900

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
08...	1330	1.0	2820	8.1	20.5	8.5	94
08...	1332	10	2820	8.1	20.0	8.3	91
08...	1334	20	2820	8.1	20.0	8.2	90
08...	1336	30	2820	8.0	20.0	8.0	88
08...	1338	36	2820	8.0	20.0	7.7	85

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
08...	1205	1.0	2820	8.1	20.0	8.2	90
08...	1207	10	2820	8.0	19.5	8.0	87
08...	1209	20	2820	8.0	19.5	7.9	86
08...	1211	30	2820	8.0	19.5	7.9	86
08...	1213	40	2820	8.0	19.5	7.8	85
08...	1215	50	2820	7.9	19.0	7.4	80
08...	1217	62	2850	7.1	17.5	.5	5

TABLE 19--CHEMICAL QUALITY SURVEY OF LAKE GRANBURY MAY 8, 1976--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
08...	1230	1.0	2820	8.1	20.0	8.2	90
08...	1232	10	2820	8.1	20.0	8.1	89
08...	1234	20	2820	8.1	19.5	8.0	87
08...	1236	30	2820	8.0	19.5	7.9	86
08...	1238	37	2820	8.0	19.5	7.9	86

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
08...	1215	1.0	2820	8.0	20.0	8.2	90
08...	1217	10	2820	8.0	20.0	8.0	88
08...	1219	20	2820	8.0	19.5	7.7	84
08...	1221	30	2820	7.9	19.5	7.6	83
08...	1223	40	2820	7.9	19.5	7.6	83

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
08...	1145	1.0	2820	7.9	19.5	7.5	82
08...	1147	10	2820	7.8	19.0	7.0	75
08...	1149	19	2820	7.8	19.0	7.0	75

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
08...	1105	1.0	2810	8.1	20.0	1.20	8.3	91	470
08...	1107	10	2810	8.1	20.0	--	8.2	90	--
08...	1109	20	2810	8.0	19.5	--	7.5	82	--
08...	1111	30	2810	7.8	19.5	--	6.6	72	--
08...	1113	40	2840	7.3	18.5	--	2.6	28	--
08...	1115	50	2870	7.1	18.0	--	.4	4	--
08...	1117	55	2870	7.2	18.0	--	.0	0	510

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)
MAY									
08...	360	130	36	400	8.0	7.0	140	0	330
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	380	140	38	410	7.9	7.0	150	0	350

TABLE 19--CHEMICAL QUALITY SURVEY OF LAKE GRANBURY MAY 8, 1976--Continued

322422097423901 SITE DC--Continued

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
MAY									
08...	680	.4	2.2	1660	.00	.00	.010	10	0
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	.01	.02	.010	0	10
08...	--	--	--	--	.11	.02	.010	10	10
08...	--	--	--	--	--	--	--	--	--
08...	710	.4	4.1	1730	.23	.07	.030	50	900

322437097423901 SITE DL

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)
MAY							
08...	1135	1.0	2810	8.1	20.0	8.3	91
08...	1137	10	2810	8.1	20.0	8.1	89
08...	1139	20	2810	8.1	20.0	8.1	89
08...	1141	31	2810	7.9	19.5	7.4	80

322417097423801 SITE DR

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)
MAY							
08...	1125	1.0	2810	8.1	20.0	8.3	91
08...	1127	10	2810	8.1	20.0	8.1	89
08...	1129	20	2810	8.0	20.0	7.7	85
08...	1131	29	2810	7.9	19.5	7.2	78

322458097443101 SITE EC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)
MAY							
08...	1050	1.0	2810	8.0	20.0	7.9	87
08...	1052	10	2810	8.0	19.5	7.5	82
08...	1054	20	2810	7.9	19.5	7.3	79
08...	1056	30	2810	7.7	19.5	6.4	70
08...	1058	40	2830	7.3	19.0	2.6	28
08...	1100	50	2870	7.2	18.0	.0	0

322619097463301 SITE FC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPAR- ENCY (SECCHI DISK (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	HARD- NESS (MG/L AS CaCO3)
MAY									
08...	1420	1.0	2730	7.9	21.0	.80	8.0	90	470
08...	1422	10	2730	7.9	20.0	--	7.4	81	--
08...	1424	20	2730	7.8	20.0	--	6.5	71	--
08...	1426	30	2840	7.6	19.5	--	5.7	62	--
08...	1428	35	2840	7.3	19.0	--	2.4	26	--
08...	1430	42	2840	7.1	19.0	--	.8	9	500

TABLE 19--CHEMICAL QUALITY SURVEY OF LAKE GRANBURY MAY 8, 1976--Continued

322619097463301 SITE FC--Continued

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)
MAY									
08...	360	130	36	390	7.8	7.5	140	0	300
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	380	140	37	400	7.8	7.5	150	0	330

DATE	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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	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)
MAY									
08...	650	.4	2.0	1590	.00	.01	.040	40	0
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	.01	.01	.030	0	0
08...	--	--	--	--	.01	.02	.040	0	10
08...	--	--	--	--	--	--	--	--	--
08...	700	.4	3.6	1690	.11	.05	.040	0	620

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED PER- CENT SATUR- ATION)
MAY							
08...	1500	1.0	2660	7.9	22.5	8.0	91
08...	1502	10	2700	7.9	20.0	7.5	82
08...	1504	24	2700	7.8	20.0	6.9	76

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
08...	1530	1.0	2320	8.1	20.5	.60	9.1	100	430
08...	1532	10	2320	8.0	19.5	--	7.9	85	--
08...	1534	20	2320	7.9	19.5	--	7.6	82	--
08...	1536	32	2520	7.6	20.0	--	4.8	52	470

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)
MAY									
08...	310	120	31	330	6.9	7.5	140	0	260
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--
08...	340	130	34	360	7.3	7.5	150	0	280

DATE	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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	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)
MAY									
08...	530	.4	2.4	1350	.00	.02	.030	110	10
08...	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	.00	.03	.040	40	10
08...	590	.4	2.8	1480	.00	.11	.050	10	60

TABLE 19--CHEMICAL QUALITY SURVEY OF LAKE GRANBURY MAY 8, 1976--Continued

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
08...	1600	1.0	2090	8.1	21.0	9.6	107
08...	1602	10	2190	7.7	19.5	7.3	78
08...	1604	20	2190	7.7	19.5	6.7	72

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
08...	1630	1.0	1370	7.9	22.0	8.2	93
08...	1632	10	1700	7.7	19.5	7.0	75
08...	1634	21	1800	7.7	19.0	7.0	74

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
08...	1700	1.0	498	7.6	21.0	.20	6.7	74	120
08...	1702	5.0	532	7.5	20.0	--	6.5	71	--
08...	1704	10	639	7.5	19.0	--	6.5	69	140

DATE	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)
MAY									
08...	43	34	8.1	48	1.9	4.0	92	0	52
08...	--	--	--	--	--	--	--	--	--
08...	64	41	9.9	68	2.5	4.0	96	0	63

DATE	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, DIS- SOLVED (MG/L)	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)
MAY									
08...	74	.3	3.6	269	.09	.06	.130	180	0
08...	--	--	--	--	--	--	--	--	--
08...	100	.3	3.4	337	.05	.04	.110	30	0

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 29, 1976
 FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
AUG												
29...	1115	1.0	1660	8.3	28.5	2.00	6.1	79	300	200	82	22
29...	1117	10	1660	8.3	28.5	--	5.8	75	--	--	--	--
29...	1119	20	1660	8.2	28.0	--	5.5	71	--	--	--	--
29...	1121	30	1660	8.2	28.0	--	5.3	69	--	--	--	--
29...	1123	35	1660	7.5	26.5	--	.2	3	--	--	--	--
29...	1125	40	1700	7.4	24.0	--	.2	2	--	--	--	--
29...	1127	50	2150	7.4	22.5	--	.2	2	--	--	--	--
29...	1129	60	2700	7.3	21.0	--	.2	2	--	--	--	--
29...	1131	64	2700	7.3	21.0	--	.2	2	480	300	130	37

DATE	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)	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, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
AUG											
29...	230	5.8	6.5	120	0	170	360	.3	3.4	935	.00
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	.01
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	400	8.0	7.5	220	0	250	630	.4	8.0	1580	.00

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANCA- NESE, DIS- SOLVED (UG/L AS MN)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	ZINC, DIS- SOLVED (UG/L AS ZN)
AUG											
29...	.02	.010	30	20	2	0	1	4	7	.0	30
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	.33	.000	230	600	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	1.7	.300	300	1300	5	1	2	6	8	.0	10

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	1210	1.0	1660	8.3	29.0	6.3	83
29...	1212	10	1660	8.2	28.5	6.0	78
29...	1214	20	1660	8.2	28.5	5.8	75
29...	1216	30	1660	8.1	28.5	5.6	73
29...	1218	35	1660	7.4	28.0	.2	3

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	1045	1.0	1660	8.3	29.0	6.2	82
29...	1047	10	1660	8.2	28.5	5.8	75
29...	1049	20	1660	8.1	28.5	5.2	68
29...	1051	30	1660	7.5	27.0	.2	3
29...	1053	40	1660	7.5	25.0	.2	2
29...	1055	50	2000	7.4	23.0	.2	2
29...	1057	60	2600	7.2	21.0	.2	2

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 29, 1976--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	1100	1.0	1660	8.3	29.0	6.2	82
29...	1102	10	1660	8.2	28.5	5.9	77
29...	1104	20	1660	8.1	28.5	5.2	68
29...	1106	31	1660	7.5	27.5	.2	3

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	1030	1.0	1660	8.3	28.5	6.5	84
29...	1032	10	1660	8.2	28.5	6.0	78
29...	1034	20	1660	8.1	28.5	6.0	78
29...	1036	30	1660	7.6	27.5	.2	3
29...	1038	40	1660	7.6	26.5	.2	3

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	1235	1.0	1770	8.0	29.5	4.8	64
29...	1237	10	1770	7.9	29.0	4.5	59
29...	1239	17	1770	7.8	29.0	4.2	55

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	1000	1.0	1820	8.0	30.0	5.0	67
29...	1002	10	1820	7.9	29.5	4.2	56
29...	1004	20	2010	7.5	28.5	.2	3
29...	1006	30	2010	7.5	28.0	.2	3
29...	1008	40	2010	7.4	26.0	.2	2
29...	1010	50	2020	7.4	23.0	.2	2
29...	1012	55	2380	7.3	21.5	.2	2

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	0935	1.0	1820	8.1	29.0	5.7	75
29...	0937	10	1820	8.0	29.0	5.4	71
29...	0939	20	2010	7.6	28.5	1.3	17
29...	0941	30	2040	7.5	27.5	.2	3
29...	0943	40	2080	7.5	25.5	.2	2
29...	0945	50	2380	7.3	23.0	.2	2

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 29, 1976--Continued

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
AUG									
29...	1305	1.0	1820	8.5	29.5	1.40	7.7	103	310
29...	1307	10	1820	8.3	29.0	--	6.5	96	--
29...	1309	20	2010	7.6	28.5	--	1.6	21	--
29...	1311	25	2170	7.4	28.5	--	.2	3	--
29...	1313	30	2230	7.4	28.5	--	.2	3	--
29...	1315	41	2320	7.4	27.5	--	.2	3	390

DATE	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)
AUG									
29...	220	87	23	240	5.9	5.8	110	0	200
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	260	110	29	320	7.0	7.6	160	0	230

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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								
29...	400	4.0	1010	.00	.02	.020	0	20
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--
29...	--	--	--	.00	.09	.030	20	250
29...	520	7.5	1300	.00	1.1	.160	160	1400

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	1345	1.0	1820	7.8	30.5	6.6	89
29...	1347	10	1820	7.5	29.0	4.2	55
29...	1349	20	1970	7.3	29.0	.2	3
29...	1351	24	2280	7.3	29.0	.2	3

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
AUG									
29...	1410	1.0	1810	8.7	29.0	.80	8.6	113	300
29...	1412	10	1810	8.5	28.5	--	7.2	94	--
29...	1414	20	1940	8.1	28.5	--	5.2	68	--
29...	1416	25	1810	7.6	28.5	--	2.4	31	--
29...	1418	31	3050	7.4	28.5	--	.2	3	480

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 29, 1976--Continued

322834097470801 SITE HC--Continued

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)
AUG									
29...	210	82	23	240	6.0	6.5	110	0	200
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	370	130	38	450	8.9	8.5	140	0	370

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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								
29...	400	4.1	1010	.00	.01	.030	10	10
29...	--	--	--	--	--	--	--	--
29...	--	--	--	.00	.01	.030	0	40
29...	--	--	--	--	--	--	--	--
29...	710	6.0	1780	.00	.18	.050	390	870

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
29...	1445	1.0	1850	8.6	29.5	8.4	112
29...	1447	10	1850	8.0	27.5	5.2	67
29...	1449	19	1850	7.9	27.5	3.8	49

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE GRANBUKY JANUARY 27, 1977

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

322227097412101 SITE AC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED SATUR-ATION	HARD-NESS (MG/L AS CaCO3)	HARD-NESS, NONCAR-BONATE (MG/L CaCO3)
JAN										
27...	1145	1.0	2820	8.3	6.5	2.70	11.8	100	480	380
27...	1147	10	2820	8.3	6.5	--	11.7	99	--	--
27...	1149	20	2860	8.2	5.5	--	11.1	92	--	--
27...	1151	30	2870	8.1	5.5	--	10.8	89	--	--
27...	1153	40	2890	8.1	5.5	--	10.5	87	--	--
27...	1155	50	2920	8.0	5.5	--	9.7	80	--	--
27...	1157	62	2920	8.0	5.5	--	9.6	79	510	400

DATE	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)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
JAN									
27...	130	38	420	8.3	7.0	130	0	350	650
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	140	39	440	8.5	7.2	140	0	350	690

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 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)	ARSENIC DIS-SOLVED (UG/L AS AS)
JAN									
27...	.4	3.8	1660	.03	.02	.010	0	0	1
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	.05	.07	.010	0	10	--
27...	--	--	--	--	--	--	--	--	--
27...	.4	3.9	1740	.05	.12	.010	10	30	--

DATE	BARIIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LLAD, DIS-SOLVED (UG/L AS PB)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
JAN									
27...	200	0	0	2	0	.0	2	0	10
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--

322231097412001 SITE AL

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED SATUR-ATION
JAN							
27...	1210	1.0	2820	8.3	7.0	11.7	101
27...	1212	10	2820	8.3	6.5	11.7	99
27...	1214	20	2820	8.2	6.0	10.9	92
27...	1216	30	2870	8.1	6.0	10.5	88
27...	1218	40	2870	8.0	6.0	10.3	87

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 27, 1977--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	1100	1.0	2850	8.3	7.5	11.8	103
27...	1102	10	2850	8.3	7.0	11.7	101
27...	1104	20	2850	8.3	6.5	11.7	99
27...	1106	30	2850	8.3	6.5	11.4	97
27...	1108	40	2880	8.2	6.0	10.6	89
27...	1110	50	2970	8.1	5.5	10.2	84
27...	1112	62	2970	8.0	5.5	10.1	83

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	1120	1.0	2850	8.3	6.5	11.8	100
27...	1122	10	2850	8.3	6.5	11.8	100
27...	1124	21	2850	8.2	6.5	11.7	99

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	1055	1.0	2850	8.3	7.5	11.8	103
27...	1057	10	2850	8.3	6.5	11.8	100
27...	1059	20	2850	8.3	6.5	11.8	100
27...	1101	29	2850	8.3	6.5	11.5	97

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	1040	1.0	2870	8.3	8.0	11.6	102
27...	1042	10	2870	8.3	7.5	11.5	100
27...	1044	24	2870	8.1	7.0	10.7	92

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN								
27...	1005	1.0	2860	8.3	8.0	2.50	11.6	102
27...	1007	10	2860	8.3	7.5	--	11.6	101
27...	1009	20	2860	8.3	6.5	--	11.5	97
27...	1011	30	2920	8.2	5.5	--	10.9	90
27...	1013	40	3010	8.2	5.0	--	11.0	90
27...	1015	56	3010	8.1	5.0	--	10.9	89

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 27, 1977--Continued

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	1025	1.0	2860	8.3	8.0	11.6	102
27...	1027	10	2860	8.2	7.0	11.4	101
27...	1029	23	2860	8.2	7.0	11.4	98

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	0945	1.0	2870	8.3	8.0	11.6	102
27...	0947	10	2870	8.3	7.5	11.6	101
27...	0949	20	2870	8.3	5.5	11.6	94
27...	0951	30	2980	8.2	5.5	11.3	93
27...	0953	40	3020	8.2	5.0	11.2	92
27...	0955	51	3020	8.2	5.0	11.2	92

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)
JAN								
27...	1250	1.0	2990	8.3	7.5	2.00	12.3	107
27...	1252	10	2990	8.3	7.0	--	12.3	106
27...	1254	20	3150	8.3	6.0	--	12.5	105
27...	1258	42	3180	8.2	6.0	--	11.7	98

DATE	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)
JAN									
27...	400	140	41	440	8.4	7.2	140	0	360
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	430	150	44	480	8.9	7.6	150	0	380

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
JAN								
27...	700	3.5	1760	.01	.03	.020	0	10
27...	--	--	--	--	--	--	--	--
27...	--	--	--	.00	.01	.020	0	10
27...	750	3.3	1890	.00	.02	.010	0	10

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	1315	1.0	3020	8.4	8.5	12.7	113
27...	1317	10	3060	8.4	7.0	12.8	110
27...	1319	24	3100	8.2	6.5	11.7	99

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JANUARY 27, 1977--Continued

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
JAN							
27...	1330	1.0	3140	8.4	7.5	1.80	13.1
27...	1332	10	3140	8.4	7.5	--	13.1
27...	1334	20	3180	8.3	7.0	--	12.7
27...	1336	32	3230	8.1	6.0	--	11.2

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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)
JAN						
27...	114	.00	.01	.010	0	10
27...	114	--	--	--	--	--
27...	109	--	--	--	--	--
27...	94	.00	.02	.020	10	40

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	1350	1.0	2720	8.3	8.0	12.5	103
27...	1352	10	3150	8.3	8.0	12.9	113
27...	1354	22	3290	8.1	7.0	11.9	110

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JAN							
27...	1415	1.0	2710	8.4	9.0	12.8	115
27...	1417	10	3060	8.2	6.5	12.1	103
27...	1419	21	3150	8.0	6.0	11.2	94

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JAN									
29...	1430	1.0	2640	8.2	9.5	.80	11.4	105	510
29...	1432	12	2700	8.2	9.5	--	11.0	101	510

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE GRANBUKY JANUARY 27, 1977--Continued

323435097492001 SITE KC--Continued

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)
JAN									
29...	360	140	38	380	7.4	6.2	180	0	320
29...	370	140	38	400	7.7	6.2	170	0	330

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
JAN								
29...	590	3.6	1570	.01	.01	.010	0	50
29...	610	3.4	1610	.01	.01	.010	0	50

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 5, 1977

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

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
05...	0951	1.0	859	7.5	20.5	.40	6.6	75	190
05...	0953	10	859	7.5	20.5	--	6.4	73	--
05...	0955	20	1180	7.4	20.0	--	5.0	57	--
05...	0957	30	1840	7.3	20.0	--	4.6	52	--
05...	0959	40	2530	7.3	20.0	--	4.2	48	--
05...	1001	50	2650	7.3	20.0	--	3.8	43	--
05...	1003	62	2120	7.1	18.0	--	1.0	11	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)
MAY									
05...	79	58	12	89	2.8	4.3	140	0	82
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	250	110	27	290	6.4	5.5	170	0	240

DATE	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, DIS- SOLVED (MG/L)	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 (MG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAY									
05...	140	.2	5.8	460	.29	.00	.000	10	0
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	.15	.01	.000	20	0
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	.09	.10	.010	--	--
05...	440	.3	6.0	1200	.18	.05	.000	10	330

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1031	1.0	859	7.5	20.5	6.3	72
05...	1033	10	859	7.4	20.0	5.6	64
05...	1035	20	1200	7.3	20.0	4.4	50
05...	1037	34	1880	7.2	19.5	3.6	40

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1110	1.0	720	7.6	21.5	7.0	81
05...	1112	10	720	7.6	21.5	6.8	79
05...	1114	20	720	7.6	21.5	6.8	79
05...	1116	30	2120	7.4	21.0	4.4	51
05...	1118	40	2520	7.4	21.0	4.4	51
05...	1120	50	2790	7.3	20.5	4.2	48
05...	1122	61	2510	7.1	20.0	2.3	26

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 5, 1977--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1104	1.0	720	7.6	22.0	6.9	81
05...	1106	10	720	7.6	21.5	6.9	80
05...	1108	20	820	7.5	21.5	6.6	77

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1054	1.0	720	7.6	22.0	7.5	88
05...	1056	10	720	7.6	21.5	7.4	86
05...	1058	20	720	7.6	21.5	6.6	77

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1134	1.0	620	7.9	23.5	7.2	87
05...	1136	10	620	7.8	23.0	7.2	86
05...	1138	20	620	7.8	23.0	6.8	81

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1154	1.0	800	7.6	22.0	6.8	80
05...	1156	10	820	7.6	22.0	6.8	80
05...	1158	20	1360	7.5	21.5	5.2	60
05...	1200	30	2360	7.5	21.5	5.1	60
05...	1202	40	2650	7.5	21.5	4.8	56
05...	1204	54	2830	7.4	21.5	4.7	55

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1215	1.0	800	7.7	22.5	6.9	81
05...	1217	10	800	7.7	22.5	6.9	81
05...	1219	21	1350	7.5	21.5	5.5	64

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 5, 1977--Continued

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	0912	1.0	902	7.9	22.5	7.7	91
05...	0914	10	902	7.9	22.5	7.4	87
05...	0916	20	2040	7.8	22.0	6.1	72
05...	0918	30	2860	7.7	22.0	5.3	63
05...	0920	40	2890	7.6	21.5	5.0	59
05...	0922	50	2890	7.5	21.5	4.6	54

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
05...	1246	1.0	1470	8.0	23.0	.40	7.1	85	300
05...	1248	10	1520	8.0	23.0	--	6.9	82	--
05...	1250	20	2000	7.9	23.0	--	6.5	78	--
05...	1252	30	2650	7.8	23.0	--	5.6	67	--
05...	1254	40	2720	7.6	22.5	--	4.7	56	460

DATE	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)
MAY									
05...	160	87	19	180	4.6	5.0	160	0	170
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	330	130	33	380	7.7	6.3	160	0	310

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
MAY								
05...	280	5.3	825	.10	.04	.000	10	0
05...	--	--	--	.04	.00	.000	--	--
05...	--	--	--	.05	.02	.000	20	0
05...	--	--	--	--	--	--	--	--
05...	590	4.8	1530	.02	.07	.000	20	30

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1317	1.0	1330	8.0	23.5	7.3	88
05...	1319	10	1600	7.9	23.0	6.5	78
05...	1321	22	1260	7.2	22.5	1.8	21

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 5, 1977--Continued

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAK- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
MAY							
05...	1343	1.0	2760	7.9	23.5	.30	7.0
05...	1345	10	2800	7.9	23.0	--	6.7
05...	1347	20	2800	7.7	23.0	--	6.5
05...	1349	31	2990	7.3	22.5	--	3.8

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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)
MAY						
05...	85	.02	.00	.000	20	0
05...	81	--	--	--	--	--
05...	78	--	--	--	--	--
05...	45	.02	.15	.010	20	280

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1403	1.0	2700	7.9	23.0	6.8	82
05...	1405	10	2810	7.7	23.0	5.1	61
05...	1407	20	2850	7.4	22.0	2.7	32

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
05...	1428	1.0	2930	7.9	23.0	8.1	98
05...	1430	10	2930	7.8	23.0	8.1	98
05...	1432	21	2930	7.7	24.0	8.2	100

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 5, 1977--Continued

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY 05...	1448	1.0	2590	7.8	22.5	.20	7.5	89	430
05...	1450	12	2640	7.7	22.5	--	7.5	89	430
DATE	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)
MAY 05...	320	120	31	370	7.8	6.1	130	0	310
05...	330	120	32	380	8.0	6.3	130	0	320
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)	
MAY 05...	570	4.5	1480	.09	.00	.00	10	20	
05...	580	4.4	1510	.08	.00	.00	20	30	

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 1, 1977
 FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
 322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS (MG/L AS CACO3)
SEP									
01...	1155	1.0	2510	7.5	28.5	1.50	5.6	72	430
01...	1157	10	2510	7.5	28.5	--	5.3	68	--
01...	1159	20	2510	7.5	28.5	--	5.2	67	--
01...	1201	30	2510	7.5	28.0	--	5.2	66	--
01...	1203	40	2400	7.2	26.0	--	.2	3	--
01...	1205	50	2400	7.1	24.0	--	.2	2	--
01...	1207	64	2400	7.1	22.0	--	.2	2	440

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)
SEP									
01...	320	120	31	350	7.4	6.8	130	0	280
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	260	130	29	320	6.6	6.1	230	0	220

DATE	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, DIS- SOLVED (MG/L)	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 (MG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
SEP									
01...	600	.4	6.5	1460	.00	.00	.000	10	0
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	.00	.00	.000	20	30
01...	--	--	--	--	.00	.49	.010	210	1900
01...	--	--	--	--	--	--	--	--	--
01...	560	.3	9.8	1390	.03	1.8	.220	190	1400

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)
SEP							
01...	1220	1.0	2510	7.5	28.5	5.7	75
01...	1222	10	2510	7.5	28.5	5.3	70
01...	1224	20	2510	7.5	28.5	5.3	70
01...	1226	32	2510	7.5	28.5	5.3	70

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)
SEP							
01...	1120	1.0	2510	7.8	30.0	8.2	109
01...	1122	10	2510	7.8	30.0	8.2	109
01...	1124	20	2510	7.5	29.0	5.2	68
01...	1126	30	2490	7.3	28.5	2.7	36
01...	1128	40	2460	7.1	27.0	.2	3
01...	1130	50	2400	7.1	24.5	.2	2
01...	1132	61	2400	7.1	23.5	.2	2

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 1, 1977--Continued

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1140	1.0	2510	7.8	30.0	8.0	107
01...	1142	10	2510	7.6	29.0	6.5	86
01...	1144	20	2510	7.4	29.0	3.7	49
01...	1146	26	2510	7.3	29.0	3.6	47

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1110	1.0	2510	7.8	30.0	8.1	108
01...	1112	15	2510	7.7	30.0	7.0	93

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1050	1.0	2510	7.8	31.0	7.7	105
01...	1052	9.0	2510	7.8	31.0	7.6	104

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1020	1.0	2560	7.7	30.0	7.2	96
01...	1022	10	2560	7.7	30.0	7.0	93
01...	1024	20	2560	7.3	29.5	2.4	32
01...	1026	30	2590	7.2	29.0	.2	3
01...	1028	40	2630	7.1	27.0	.2	3
01...	1030	55	2410	7.1	24.0	.2	2

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1030	1.0	2560	7.7	30.0	7.4	99
01...	1032	13	2560	7.7	30.0	7.2	96

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 1, 1977--Continued

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1000	1.0	2560	7.7	31.0	7.1	97
01...	1002	10	2560	7.6	30.5	6.7	91
01...	1004	20	2570	7.4	29.5	3.1	41
01...	1006	30	2590	7.3	29.0	1.4	18
01...	1008	40	2590	7.2	27.5	.2	3
01...	1010	51	2430	7.1	24.5	.2	2

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (H)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CaCO3)
SEP									
01...	1300	1.0	2580	7.8	30.5	1.20	8.3	112	430
01...	1302	10	2580	7.8	30.5	--	8.3	112	--
01...	1304	20	2610	7.5	29.0	--	4.7	62	--
01...	1306	30	2690	7.3	28.5	--	2.3	30	--
01...	1308	41	2700	7.3	28.5	--	1.7	22	440

DATE	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)
SEP									
01...	330	120	32	370	7.8	7.0	120	0	290
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	350	120	33	390	8.1	7.2	100	0	300

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	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								
01...	570	6.5	1460	.00	.01	.010	10	0
01...	--	--	--	--	--	--	--	--
01...	--	--	--	.00	.00	.020	30	0
01...	--	--	--	.00	.10	.030	10	70
01...	660	7.6	1570	.00	.14	.040	10	200

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1345	1.0	2590	8.5	30.5	8.3	112
01...	1347	10	2590	8.3	30.0	7.3	97
01...	1349	24	2590	7.9	30.0	4.6	61

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 1, 1977--Continued

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (HG/L)
SEP							
01...	1400	1.0	2660	8.4	29.5	.60	7.6
01...	1402	10	2680	8.1	29.0	--	6.9
01...	1404	20	2730	7.5	29.0	--	3.0
01...	1406	31	2730	7.4	29.0	--	2.2

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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						
01...	101	.03	.01	.030	20	10
01...	91	--	--	--	--	--
01...	39	.00	.01	.040	10	150
01...	29	.01	.06	.050	40	230

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1420	1.0	2600	8.5	30.0	8.6	115
01...	1422	10	2600	7.9	29.0	5.2	68
01...	1424	20	2600	7.3	29.0	.4	5

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
SEP							
01...	1445	1.0	3000	8.9	32.5	12.0	167
01...	1447	10	3000	7.5	30.0	3.6	48
01...	1449	20	3000	7.3	30.0	1.0	13

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
SEP									
01...	1500	1.0	3600	8.2	30.5	.50	6.1	82	580
01...	1502	10	3590	7.7	30.0	--	3.8	51	530

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY SEPTEMBER 1, 1977--Continued

323435097492001 SITE KC--Continued

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)
SEP 01...	500	160	43	530	9.6	8.4	88	0	410
01...	450	140	43	530	10	8.4	94	0	420

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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 01...	910	6.3	2110	.00	.01	.090	10	30
01...	900	6.3	2090	.00	.01	.080	10	10

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MARCH 21, 1978

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

32227097412101 SITE AC

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (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 GACO3)	HARD-NESS, NONCAR-BONATE (MG/L GACO3)
MAR										
21...	0950	1.0	2910	8.1	13.0	1.80	9.7	96	470	360
21...	0951	3.0	--	--	--	--	--	--	--	--
21...	0952	10	2910	8.0	12.5	--	9.6	94	--	--
21...	0954	20	2910	7.9	12.0	--	9.5	92	--	--
21...	0956	30	2910	7.9	12.0	--	9.5	92	--	--
21...	0959	40	2910	7.9	11.0	--	9.2	87	--	--
21...	1001	50	2910	7.8	10.0	--	8.5	79	--	--
21...	1004	60	2910	7.7	10.0	--	8.3	77	470	360

DATE	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)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
MAR										
21...	130	36	440	8.8	7.8	140	0	340	680	.3
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	130	36	440	8.8	7.8	140	0	350	650	.4

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	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, SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	ARSENIC, DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)
MAR									
21...	3.7	1710	.03	.01	.020	0	0	1	100
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	.02	.01	.020	0	10	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	3.9	1690	.05	.10	.040	10	50	1	100

DATE	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY, SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)
MAR									
21...	0	0	3	0	.0	0	0	10	--
21...	--	--	--	--	--	--	--	--	7100
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	0	0	4	0	.0	0	0	20	--

322231097412001 SITE AL

DATE	TIME	SAMP-LING DEPTH (FT)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
MAR							
21...	1030	1.0	2910	8.2	13.0	9.6	95
21...	1032	10	2910	8.2	12.5	9.6	94
21...	1035	20	2910	8.1	12.5	9.6	94
21...	1037	30	2910	8.1	12.0	9.5	92
21...	1040	40	2910	8.0	11.0	8.9	84

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MARCH 21, 1978--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	0915	1.0	2910	8.0	13.5	9.6	96
21...	0917	10	2910	8.0	13.0	9.6	95
21...	0920	20	2910	8.0	13.0	9.6	95
21...	0925	40	2910	7.9	11.0	8.6	81
21...	0927	50	2910	7.8	10.0	8.1	75
21...	0930	60	2910	7.8	10.0	8.0	74

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	0935	1.0	2910	8.2	13.5	9.6	96
21...	0937	10	2910	8.0	13.0	9.6	95
21...	0940	21	2910	8.0	13.0	9.4	93

322345097421901 SITE BK

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	0905	1.0	2910	8.0	13.5	9.6	96
21...	0907	10	2910	8.0	13.0	9.6	95
21...	0910	21	2910	8.0	13.0	9.3	92

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	1100	1.0	2910	8.2	17.0	8.7	94
21...	1102	6.0	2910	8.2	15.5	8.9	93

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	0835	1.0	2950	8.0	13.5	9.6	96
21...	0837	10	2950	8.0	13.5	9.6	96
21...	0839	20	2950	8.0	13.0	9.6	95
21...	0841	30	2950	8.0	12.5	9.5	93
21...	0843	40	2950	8.0	11.5	8.9	86
21...	0845	54	2950	7.7	10.5	7.3	68

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MARCH 21, 1978--Continued

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	0850	1.0	2950	8.0	13.5	9.6	96
21...	0852	10	2950	8.0	13.5	9.6	96
21...	0854	20	2950	8.0	13.5	9.5	95

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	0815	1.0	2990	8.1	14.0	9.4	95
21...	0817	10	2990	8.1	13.5	9.4	94
21...	0819	20	2990	8.0	13.0	9.4	93
21...	0821	30	2990	7.9	11.5	8.5	82
21...	0823	40	2990	7.8	11.0	8.1	76
21...	0825	50	2990	7.8	11.0	7.3	69

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAR									
21...	1125	1.0	3050	8.2	15.0	.90	9.9	102	510
21...	1128	10	3050	8.1	14.0	--	9.5	96	--
21...	1130	20	3050	8.1	13.5	--	9.3	93	--
21...	1132	30	3090	8.0	13.5	--	8.6	86	--
21...	1135	39	3110	7.8	12.5	--	7.2	71	550

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									
21...	380	140	38	460	8.9	7.8	150	0	350
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--
21...	420	150	42	470	8.7	7.7	150	0	320

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
MAR								
21...	710	3.0	1780	.03	.01	.080	0	0
21...	--	--	--	--	--	--	--	--
21...	--	--	--	.02	.01	.040	0	10
21...	--	--	--	--	--	--	--	--
21...	840	3.2	1910	.02	.10	.120	0	90

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MARCH 21, 1978--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	1150	1.0	3120	8.1	17.5	8.9	97
21...	1152	10	3120	8.1	14.5	8.7	89
21...	1154	20	3120	7.8	14.0	6.7	68

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
MAR							
21...	1210	1.0	3200	8.2	16.0	.90	8.7
21...	1212	10	3200	8.2	16.0	--	8.7
21...	1214	20	3200	8.2	15.5	--	8.5
21...	1216	29	3200	7.9	13.5	--	7.1

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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)
MAR						
21...	92	.01	.01	.030	10	0
21...	92	--	--	--	--	--
21...	89	--	--	--	--	--
21...	71	.01	.06	.050	10	60

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	1225	1.0	3200	8.2	17.0	8.9	96
21...	1227	10	3200	8.1	15.5	8.3	86
21...	1230	18	3200	7.7	14.0	6.6	67

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR							
21...	1245	1.0	3210	8.3	18.0	8.7	96
21...	1247	10	3210	8.3	17.0	8.5	91
21...	1250	18	3210	8.1	16.5	7.4	79

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MARCH 21, 1978--Continued

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAR									
21...	1305	1.0	3340	8.2	19.5	.80	9.1	103	570
21...	1306	1.3	--	--	--	--	--	--	--
21...	1308	9.0	3340	8.0	17.5	--	7.2	78	590

DATE	HARD- NESS, NONCAR- BONATE (MG/L AS CO3)	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									
21...	450	160	42	500	9.1	7.8	150	0	360
21...	--	--	--	--	--	--	--	--	--
21...	470	160	46	510	9.1	7.8	150	0	370

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
MAR									
21...	880	.9	2020	.00	.00	.030	0	20	--
21...	--	--	--	--	--	--	--	--	19000
21...	880	.9	2050	.00	.00	.050	110	60	--

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 15, 1978

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
32227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
JUN									
15...	1255	1.0	2930	7.9	29.0	1.40	7.5	101	460
15...	1256	2.2	--	--	--	--	--	--	--
15...	1257	10	2930	7.9	28.5	--	7.5	101	--
15...	1259	20	2930	7.4	27.0	--	4.1	54	--
15...	1301	30	2930	7.0	25.0	--	.3	4	--
15...	1303	40	3070	7.0	21.5	--	.2	2	--
15...	1305	50	3070	7.0	20.0	--	.2	2	--
15...	1307	62	3070	6.9	18.0	--	.2	2	510

DATE	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)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
JUN										
15...	120	38	430	8.8	8.3	120	0	290	690	.3
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	140	39	420	8.1	8.4	170	0	290	710	.4

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
JUN									
15...	3.6	1640	.05	.00	.010	20	5	1	300
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	.08	.00	.010	20	30	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	.01	.00	.010	50	510	--	--
15...	--	--	--	--	--	--	--	--	--
15...	7.5	1700	.06	.20	.100	980	1700	5	300

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
JUN									
15...	0	0	1	5	.0	0	0	10	--
15...	--	--	--	--	--	--	--	--	9300
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	0	5	0	6	.0	0	0	10	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1330	1.0	2930	7.9	28.5	7.4	100
15...	1332	10	2930	7.9	28.5	7.5	101
15...	1334	20	2930	7.4	27.5	3.9	52
15...	1336	32	2930	7.0	25.5	.3	4

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 15, 1978--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1143	1.0	2860	8.0	29.5	7.7	104
15...	1145	10	2860	8.0	29.0	7.8	105
15...	1147	20	2860	7.5	27.5	4.8	64
15...	1149	30	2860	7.0	26.0	.2	3
15...	1151	40	2860	7.0	22.0	.2	2
15...	1153	50	2920	6.9	20.0	.2	2
15...	1155	60	2950	6.9	19.5	.2	2

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1215	1.0	2860	8.0	29.0	7.6	103
15...	1217	10	2860	8.0	29.0	7.6	103
15...	1219	20	2860	7.8	28.0	6.6	88
15...	1221	30	2860	6.9	25.0	.2	3
15...	1223	37	2860	6.9	24.0	.3	4

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1200	1.0	2860	8.0	29.0	7.7	104
15...	1202	10	2860	8.0	29.0	7.7	104
15...	1204	20	2860	7.5	27.5	5.0	67
15...	1206	30	2860	7.0	25.0	.2	3
15...	1208	40	2860	6.9	23.0	.2	2

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1121	1.0	2830	7.9	30.0	7.1	96
15...	1123	10	2830	7.9	30.0	7.3	99
15...	1125	15	2830	7.9	30.0	6.9	93

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 15, 1978--Continued

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1032	1.0	2720	7.8	30.0	7.2	97
15...	1034	10	2720	7.7	28.5	5.6	76
15...	1036	20	2720	7.3	27.0	3.1	41
15...	1038	30	2720	6.9	25.0	.2	3
15...	1040	40	2720	6.9	25.0	.3	4
15...	1042	50	3000	6.9	20.0	.2	2
15...	1044	54	3070	6.9	21.0	.4	5

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1055	1.0	2720	7.9	29.0	7.3	99
15...	1057	10	2720	7.8	28.5	6.8	92
15...	1059	20	2720	7.3	27.0	3.5	46
15...	1101	30	2720	6.9	26.5	.3	4

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1001	1.0	2700	7.9	30.0	7.3	99
15...	1003	10	2700	7.9	29.5	7.3	99
15...	1005	20	2700	7.6	28.5	5.9	80
15...	1007	30	2700	6.9	24.5	.2	3
15...	1009	40	2700	6.8	22.0	.2	2
15...	1011	48	2830	6.8	21.0	.2	2

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JUN									
15...	1413	1.0	2310	8.0	30.0	.90	114	114	400
15...	1415	10	2310	8.0	29.0	--	8.4	114	--
15...	1417	20	2310	7.3	27.5	--	3.2	43	--
15...	1419	30	2310	7.0	27.0	--	.7	9	--
15...	1421	40	2660	6.9	22.5	--	.3	4	490

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)
JUN									
15...	300	110	31	330	7.2	7.0	120	0	250
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	350	140	35	370	7.2	7.1	180	0	260

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 15, 1978--Continued

322619097463301 SITE FC--Continued

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 15...	520	2.3	1310	.01	.00	.020	10	0
15...	--	--	--	--	--	--	--	--
15...	--	--	--	.02	.00	.040	20	10
15...	--	--	--	.04	.01	.030	20	170
15...	610	5.7	1520	.02	.44	.080	680	2300

322703097451401 SITE GC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATURATION (%)
JUN 15...	1444	1.0	1920	8.1	30.5	8.9	122
15...	1446	10	1920	7.9	29.0	7.5	101
15...	1448	22	1920	7.2	28.5	1.9	26

322834097470801 SITE HC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK (M))	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, SATURATION (%)	HARDNESS (MG/L AS CaCO3)
JUN 15...	1515	1.0	1970	8.1	30.0	.50	8.7	118	340
15...	1517	10	1970	7.6	28.0	--	5.5	73	--
15...	1519	20	2160	7.1	28.0	--	2.2	29	--
15...	1521	28	2160	7.0	27.5	--	.2	3	360

DATE	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	CALCIUM, DIS-SOLVED (MG/L AS Ca)	MAGNESIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO3)	CARBONATE (MG/L AS CO3)	SULFATE, DIS-SOLVED (MG/L AS SO4)
JUN 15...	230	94	25	280	6.6	7.2	130	0	200
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	240	96	28	300	6.9	6.9	140	0	230

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
JUN 15...	430	3.8	1100	.02	.00	.040	10	20
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	460	3.7	1190	.02	.09	.070	50	700

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY JUNE 15, 1978--Continued

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1700	1.0	1980	7.8	29.0	7.2	97
15...	1702	10	1980	7.4	28.0	4.2	56
15...	1704	17	1980	7.2	28.5	3.0	40

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
JUN							
15...	1556	1.0	2270	7.9	30.0	8.3	112
15...	1558	10	2310	7.6	29.0	6.5	88
15...	1600	17	2380	7.0	29.0	2.5	34

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
JUN									
15...	1620	1.0	2510	8.0	31.0	.60	9.0	125	410
15...	1621	.9	--	--	--	--	--	--	--
15...	1622	8.0	2580	7.7	31.0	--	7.3	101	440

DATE	TIME	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)
JUN										
15...	300	110	32	370	8.0	8.2	130	0	270	
15...	--	--	--	--	--	--	--	--	--	
15...	330	120	33	370	7.7	8.3	130	0	270	

DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	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)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
JUN										
15...	570	2.6	1430	.00	.00	.050	10	40	--	
15...	--	--	--	--	--	--	--	--	140000	
15...	610	2.7	1480	.02	.00	.040	10	110	--	

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 31, 1978
 FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter

322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)
AUG										
31...	1255	1.0	2630	8.6	29.0	1.00	8.6	113	410	320
31...	1256	1.7	--	--	--	--	--	--	--	--
31...	1257	10	2630	8.6	28.5	--	8.3	109	--	--
31...	1259	20	2640	8.5	28.5	--	7.6	100	--	--
31...	1301	30	2690	7.7	28.0	--	4.0	52	--	--
31...	1303	40	2860	7.2	27.0	--	.2	3	--	--
31...	1305	50	3020	7.2	26.5	--	.2	3	--	--
31...	1307	60	3400	7.2	25.0	--	.2	2	--	--
31...	1309	66	3460	7.2	25.0	--	.3	4	560	450

DATE	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)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUG- RIDE, DIS- SOLVED (MG/L AS F)
AUG										
31...	110	32	390	8.4	7.8	92	5	310	640	.4
31...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--	--
31...	150	45	510	9.4	9.1	140	0	380	870	.4

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	BAKRIUM, DIS- SOLVED (UG/L AS BA)
AUG									
31...	6.0	1550	.00	.00	.020	170	0	2	100
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	--	--	.01	.01	.020	20	0	--	--
31...	--	--	1.9	.01	.020	20	90	--	--
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	8.9	2040	.01	1.1	.170	70	1700	5	200

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
AUG									
31...	0	0	3	0	.0	0	0	0	--
31...	--	--	--	--	--	--	--	--	410000
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	0	10	0	0	.0	1	0	10	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1330	1.0	2630	8.6	29.0	8.8	116
31...	1332	10	2630	8.6	28.5	8.3	109
31...	1334	20	2630	8.5	28.5	7.8	103
31...	1336	30	2690	7.7	28.0	3.6	47
31...	1338	39	2790	7.3	28.0	1.2	16

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 31, 1978--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1200	1.0	2570	8.3	28.0	6.8	88
31...	1202	10	2570	8.2	28.0	6.4	83
31...	1204	20	2580	8.0	28.0	5.2	68
31...	1206	30	2630	7.4	27.5	2.6	34
31...	1208	40	2690	7.2	27.0	.3	4
31...	1210	50	2930	7.2	26.5	.3	4
31...	1212	63	3300	7.2	25.5	.4	5

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1235	1.0	2570	8.3	28.0	6.9	90
31...	1237	10	2570	8.1	28.0	6.1	79
31...	1239	20	2590	8.1	28.0	5.8	75
31...	1241	30	2610	7.8	28.0	4.2	55
31...	1243	42	2700	7.3	27.5	.4	5

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1220	1.0	2570	8.3	28.0	6.8	88
31...	1222	10	2570	8.2	28.0	6.3	82
31...	1224	20	2580	8.0	28.0	5.2	68
31...	1226	30	2610	7.5	28.0	2.7	35
31...	1228	40	2670	7.3	28.0	1.2	16

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1140	1.0	2540	8.3	28.0	7.0	91
31...	1142	10	2540	8.2	27.5	6.5	84
31...	1144	20	2540	8.2	27.5	6.3	82

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1106	1.0	2590	8.0	29.5	5.8	77
31...	1108	10	2580	7.8	29.0	5.0	66
31...	1110	20	2540	7.3	28.0	1.6	21
31...	1112	30	2540	7.2	27.5	.3	4
31...	1114	40	2590	7.2	26.5	.3	4
31...	1116	50	2930	7.2	26.0	.3	4
31...	1118	57	3040	7.2	26.0	.6	8

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 31, 1978--Continued

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1051	1.0	2590	8.0	29.5	5.8	77
31...	1053	10	2590	8.0	29.0	5.9	78
31...	1055	20	2540	7.3	28.0	1.2	16
31...	1057	31	2540	7.2	27.5	.6	8

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1023	1.0	2540	8.2	28.5	6.4	84
31...	1025	10	2540	8.2	28.5	6.2	82
31...	1027	20	2550	8.1	28.5	5.9	78
31...	1029	30	2560	7.9	28.0	5.7	74
31...	1031	40	2660	7.2	27.0	.2	3
31...	1033	51	2830	7.2	26.0	.3	4

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
AUG									
31...	1420	1.0	2510	8.4	29.5	.60	7.2	96	400
31...	1422	10	2510	8.3	29.0	--	6.5	86	--
31...	1424	20	2510	8.1	29.0	--	5.7	75	--
31...	1426	30	2750	7.3	28.5	--	.3	4	--
31...	1428	43	2780	7.3	27.5	--	.3	4	470

DATE	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)
AUG									
31...	310	110	31	360	7.8	7.5	110	0	300
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	--	--	--	--	--	--	--	--	--
31...	350	130	35	400	8.0	7.7	140	0	310

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	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								
31...	590	6.5	1460	.00	.00	.030	20	0
31...	--	--	--	.00	.00	.030	20	10
31...	--	--	--	.00	.00	.030	20	50
31...	--	--	--	--	--	--	--	--
31...	670	8.3	1630	.00	.31	.060	470	1500

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 31, 1978--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1500	1.0	2420	8.3	28.5	6.8	89
31...	1502	10	2440	8.1	28.5	5.7	75
31...	1504	20	2440	8.0	28.0	5.0	65
31...	1506	25	2440	7.9	28.0	4.1	53

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
AUG									
31...	1540	1.0	2510	8.2	28.5	.50	6.8	89	420
31...	1542	10	2570	8.0	28.0	--	5.3	69	--
31...	1546	33	2710	7.7	28.0	--	3.8	49	440

DATE	TIME	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)
AUG										
31...	330	120	30	360	7.6	7.5	110	0	290	--
31...	--	--	--	--	--	--	--	--	--	--
31...	340	120	34	390	8.1	7.7	120	0	310	--

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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								
31...	600	6.4	1470	.01	.01	.030	30	10
31...	--	--	--	.00	.00	.030	20	0
31...	640	6.9	1570	.00	.02	.040	20	110

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
31...	1601	1.0	2560	8.6	29.0	8.6	113
31...	1603	10	2590	7.6	28.0	3.3	43
31...	1605	22	2640	7.5	28.0	2.0	26

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 14, 1979

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
FEB										
14...	1230	1.0	2920	8.2	7.5	1.80	11.5	102	470	360
14...	1231	3.0	--	--	--	--	--	--	--	--
14...	1232	10	2920	8.2	7.5	--	11.5	101	--	--
14...	1234	20	2920	8.2	7.0	--	11.4	100	--	--
14...	1236	30	2920	8.2	7.0	--	11.4	100	--	--
14...	1238	40	2920	8.2	7.0	--	11.3	99	--	--
14...	1240	50	2910	8.2	6.5	--	11.3	97	--	--
14...	1242	60	2900	8.1	6.5	--	11.0	95	--	--
14...	1244	68	2900	8.1	6.0	--	10.7	91	480	370

DATE	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)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
FEB										
14...	130	35	430	8.6	10	130	0	350	700	.3
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--
14...	130	37	430	8.6	10	130	0	340	720	--

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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 MH)	ARSENIC DIS- SOLVED (UG/L AS AS)	BAKIUM, DIS- SOLVED (UG/L AS BA)
FEB									
14...	5.1	1720	.03	.01	.030	10	10	1	100
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	.05	.02	.030	10	10	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	5.1	1740	.03	.02	.040	0	20	1	0

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
FEB									
14...	0	10	2	0	.0	0	0	20	--
14...	--	--	--	--	--	--	--	--	630
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	0	10	2	0	.0	0	0	20	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1300	1.0	2920	8.2	8.0	11.6	104
14...	1302	10	2920	8.2	7.5	11.6	103
14...	1304	20	2920	8.2	7.5	11.5	102
14...	1306	30	2920	8.2	7.5	11.5	102
14...	1308	35	2920	8.2	7.5	11.4	101

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 14, 1979--Continued

322341097420601 SITE BC							
DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1130	1.0	2920	8.3	9.0	11.8	108
14...	1132	10	2920	8.3	8.5	11.8	107
14...	1134	20	2910	8.3	8.0	11.5	103
14...	1136	30	2910	8.2	7.0	11.4	100
14...	1138	40	2900	8.2	7.0	11.3	99
14...	1140	50	2900	8.2	7.0	11.3	99
14...	1142	60	2900	8.2	6.5	10.9	94
14...	1144	64	2890	8.2	6.5	10.8	93

322337097415401 SITE BL							
DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1205	1.0	2920	8.3	8.5	11.8	107
14...	1207	10	2920	8.3	8.5	11.9	108
14...	1209	20	2910	8.3	8.0	11.7	104
14...	1211	30	2910	8.2	7.5	11.5	102
14...	1213	43	2910	8.2	7.0	11.2	98

322345097421901 SITE BK							
DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1150	1.0	2920	8.3	9.0	11.7	107
14...	1152	10	2920	8.3	8.5	11.6	105
14...	1154	20	2910	8.3	8.0	11.3	101
14...	1156	30	2910	8.2	7.0	11.2	98
14...	1158	44	2910	8.2	7.0	10.9	96

322537097414501 SITE CC							
DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1110	1.0	2920	8.3	9.5	11.3	106
14...	1112	10	2920	8.3	9.0	11.4	105
14...	1114	19	2910	8.2	10.0	10.9	103

322422097423901 SITE DC							
DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1040	1.0	2920	8.3	9.5	11.4	107
14...	1042	10	2920	8.3	9.0	11.4	105
14...	1044	20	2910	8.3	8.0	11.3	101
14...	1046	30	2910	8.2	7.5	11.1	98
14...	1048	40	2910	8.2	7.0	10.8	95
14...	1050	50	2900	8.1	6.5	10.7	92
14...	1052	58	2900	8.1	6.5	10.7	92

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 14, 1979--Continued

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1025	1.0	2920	8.3	9.5	11.3	106
14...	1027	10	2920	8.2	9.0	11.3	104
14...	1029	21	2920	8.2	8.5	11.3	103

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1000	1.0	2880	8.3	8.5	11.6	105
14...	1002	10	2880	8.3	8.0	11.7	104
14...	1004	20	2880	8.3	7.5	11.6	103
14...	1006	30	2840	8.2	7.0	11.4	100
14...	1008	40	2840	8.0	7.0	10.8	95
14...	1010	52	2810	8.0	7.0	10.5	92

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
FEB									
14...	1350	1.0	2660	8.4	9.0	1.20	11.9	109	460
14...	1352	10	2660	8.4	8.5	--	11.9	108	--
14...	1354	20	2660	8.4	8.5	--	11.7	106	--
14...	1356	30	2770	8.3	7.5	--	11.4	101	--
14...	1358	35	2810	8.2	7.0	--	10.8	95	--
14...	1400	43	2830	8.1	8.0	--	10.3	92	470

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)
FEB									
14...	340	130	34	390	7.9	9.2	150	0	300
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	360	130	36	420	8.4	9.7	140	0	340

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)
FEB								
14...	670	4.1	1610	.01	.01	.040	10	10
14...	--	--	--	--	--	--	--	--
14...	--	--	--	.00	.02	.040	0	10
14...	--	--	--	--	--	--	--	--
14...	650	4.7	1660	.01	.03	.040	10	30

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 14, 1979--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1430	1.0	2630	8.3	10.0	11.5	108
14...	1432	10	2640	8.4	8.5	11.6	105
14...	1434	20	2640	8.3	7.5	10.9	96
14...	1436	25	2640	8.2	8.0	10.6	95

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
FEB									
14...	1500	1.0	2420	8.4	9.0	1.20	11.8	108	420
14...	1502	10	2420	8.4	7.5	--	11.4	101	--
14...	1504	20	2580	8.3	7.0	--	10.7	94	--
14...	1506	33	2620	8.2	7.5	--	10.8	96	460

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)
FEB									
14...	300	120	30	350	7.4	8.6	150	0	270
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	340	130	33	380	7.7	9.1	150	0	310

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	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)
FEB								
14...	570	3.5	1430	.01	.01	.040	10	20
14...	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--
14...	590	4.0	1530	.00	.01	.040	10	20

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1530	1.0	2340	8.3	10.0	11.2	105
14...	1532	10	2340	8.3	8.0	10.7	96
14...	1534	21	2370	8.2	8.5	10.1	92

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
FEB							
14...	1640	1.0	2000	8.5	10.0	12.6	118
14...	1642	10	2000	8.4	9.0	12.3	113
14...	1644	23	2200	8.2	8.5	10.9	98

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY FEBRUARY 14, 1979--Continued

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	
FEB										
14...	1610	1.0	1740	8.6	10.5	.82	14.0	135	340	
14...	1611	1.4	--	--	--	--	--	--	--	
14...	1612	5.0	1740	8.5	9.5	--	13.6	126	--	
14...	1614	13	1790	8.4	9.5	--	12.2	113	350	
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)
FEB										
14...	210	98	24	220	5.2	6.7	150	4	200	
14...	--	--	--	--	--	--	--	--	--	
14...	--	--	--	--	--	--	--	--	--	
14...	230	100	25	230	5.3	6.7	150	2	200	
DATE		CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
FEB										
14...	370	3.8	1000	.01	.04	.050	10	20	--	--
14...	--	--	--	--	--	--	--	--	--	5800
14...	--	--	--	--	--	--	--	--	--	--
14...	370	3.8	1010	.01	.07	.070	0	20	--	--

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE GRANBUKY MAY 17, 1979

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

32227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
MAY										
17...	1219	.9	--	--	--	--	--	--	--	--
17...	1220	1.0	918	8.0	22.0	.60	7.7	90	190	91
17...	1222	10	918	8.0	21.5	--	7.7	89	--	--
17...	1224	20	930	7.8	20.5	--	6.8	76	--	--
17...	1226	30	970	7.8	20.5	--	6.9	78	--	--
17...	1228	40	990	7.6	20.0	--	5.2	58	--	--
17...	1230	50	970	7.5	19.0	--	2.8	30	--	--
17...	1232	55	1420	7.4	18.5	--	1.7	18	--	--
17...	1234	60	2120	7.3	17.0	--	.2	2	--	--
17...	1236	66	2430	7.3	16.0	--	.2	2	430	290

DATE	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)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
MAY										
17...	--	--	--	--	--	--	--	--	--	--
17...	56	12	110	3.5	4.8	120	0	83	170	.2
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	120	31	350	7.4	6.9	170	0	260	550	--

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
MAY									
17...	--	--	--	--	--	--	--	--	--
17...	5.1	500	.26	.01	.030	90	10	1	100
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	.25	.03	.030	310	20	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	.28	.03	.040	540	270	--	--
17...	--	--	--	--	--	--	--	--	--
17...	5.5	1410	.10	.43	.040	410	2800	1	200

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
MAY									
17...	--	--	--	--	--	--	--	--	1800
17...	1	0	0	0	.2	0	0	10	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	1	0	0	0	.1	0	0	20	--

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 17, 1979--Continued

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1300	1.0	918	7.8	22.0	7.4	86
17...	1302	10	918	7.8	21.5	7.4	85
17...	1304	20	930	7.7	21.0	6.6	75
17...	1306	30	980	7.7	20.5	6.7	75
17...	1308	40	980	7.5	20.0	4.8	53
17...	1310	45	980	7.4	19.5	3.2	36

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1140	1.0	888	8.1	22.5	8.4	98
17...	1142	10	888	8.1	22.5	8.4	98
17...	1144	20	770	7.6	20.5	5.7	64
17...	1146	30	810	7.5	20.0	5.0	56
17...	1148	40	790	7.5	19.5	3.6	39
17...	1150	50	840	7.4	19.0	2.6	28
17...	1152	62	2380	7.3	16.5	.2	2

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1205	1.0	888	8.1	23.0	8.3	99
17...	1207	10	920	7.9	22.0	7.6	88
17...	1209	20	790	7.5	20.5	5.7	64
17...	1211	30	830	7.5	20.5	5.2	58
17...	1213	35	830	7.5	20.0	4.6	51

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1155	1.0	888	8.1	23.0	8.5	101
17...	1157	10	888	8.1	22.5	8.4	98
17...	1159	20	770	7.5	20.5	5.7	64
17...	1201	30	830	7.5	20.5	5.4	61

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1120	1.0	813	8.6	25.5	10.7	132
17...	1122	10	813	7.9	24.0	7.1	86
17...	1124	15	813	7.5	23.0	4.8	57

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 17, 1979--Continued

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1040	1.0	832	8.4	24.0	9.4	113
17...	1042	10	832	8.0	23.0	8.1	96
17...	1044	20	800	7.4	20.5	4.8	54
17...	1046	30	960	7.5	20.5	4.4	49
17...	1048	40	1070	7.5	20.0	4.5	50
17...	1050	50	1110	7.4	19.5	2.8	31
17...	1052	56	1660	7.2	18.0	.2	2

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1100	1.0	832	8.3	24.0	9.3	112
17...	1102	10	832	7.9	23.0	7.8	93
17...	1104	20	800	7.4	21.0	4.9	56
17...	1106	30	890	7.4	20.5	4.3	48
17...	1108	35	1080	7.5	20.5	4.2	47

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1015	1.0	819	7.8	23.5	7.4	88
17...	1017	10	819	7.8	23.0	7.2	86
17...	1019	20	850	7.5	21.0	5.2	59
17...	1021	30	1110	7.5	20.5	5.0	56
17...	1023	40	1530	7.6	20.5	5.2	58
17...	1025	50	1560	7.6	20.5	4.9	55
17...	1027	53	1560	7.5	20.5	4.7	53

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	
MAY										
17...	1345	1.0	758	8.0	23.5	.50	8.0	95	170	
17...	1347	10	758	8.1	23.0	--	8.0	95	--	
17...	1349	20	980	7.7	21.5	--	5.9	68	--	
17...	1351	30	1660	7.8	21.0	--	5.7	65	--	
17...	1353	40	1800	7.7	20.5	--	5.3	60	--	
17...	1355	42	1800	7.6	20.5	--	5.0	56	320	
DATE	TIME	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)
MAY										
17...	70	51	10	84	2.8	4.4	120	0	68	
17...	--	--	--	--	--	--	--	--	--	
17...	--	--	--	--	--	--	--	--	--	
17...	--	--	--	--	--	--	--	--	--	
17...	190	92	21	240	5.9	5.8	150	0	190	

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 17, 1979--Continued

322619097463301 SITE FC--Continued

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
MAY 17...	130	5.8	412	.28	.03	.050	0	0
17...	--	--	--	--	--	--	--	--
17...	--	--	--	.25	.07	.050	280	30
17...	--	--	--	.08	.07	.030	10	20
17...	--	--	--	--	--	--	--	--
17...	390	4.8	1020	.07	.12	.050	10	50

322703097451401 SITE GC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)
MAY 17...	1545	1.0	751	7.9	24.0	7.7	93
17...	1547	10	800	7.7	22.5	6.9	80
17...	1549	23	670	7.2	21.0	1.7	19

322834097470801 SITE HC

DATE	TIME	SAMPLING DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PERCENT SATURATION)	HARDNESS (MG/L AS CaCO3)
MAY 17...	1510	1.0	1040	8.0	23.5	.30	7.7	92	220
17...	1512	10	1610	8.2	23.0	--	7.5	89	--
17...	1514	20	1880	7.9	22.5	--	6.2	72	--
17...	1516	30	1890	7.7	21.5	--	4.9	56	--
17...	1518	32	1890	7.5	21.5	--	3.4	39	340

DATE	HARDNESS, NONCARBONATE (MG/L AS CaCO3)	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 HCO3)	CARBONATE (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
MAY 17...	100	65	13	120	3.6	4.9	140	0	94
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	210	98	23	260	6.1	6.1	160	0	200

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
MAY 17...	200	6.1	572	.16	.05	.050	0	0
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--
17...	410	5.0	1080	.06	.19	.060	10	110

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY MAY 17, 1979--Continued

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1445	1.0	1360	8.2	24.0	8.3	100
17...	1447	10	1450	8.0	22.5	6.8	79
17...	1449	20	1300	7.4	21.5	2.5	29

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
17...	1630	1.0	1940	8.4	24.5	9.1	111
17...	1632	10	2000	8.4	24.0	9.2	111
17...	1634	20	2020	8.0	23.0	7.2	86
17...	1636	23	2020	8.0	23.0	7.0	83

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
MAY									
17...	1659	.8	--	--	--	--	--	--	--
17...	1700	1.0	2020	8.4	24.5	.50	8.9	109	360
17...	1702	5.0	2020	8.3	24.5	--	8.8	107	--
17...	1704	10	2020	8.2	24.0	--	7.9	95	--
17...	1706	13	2020	8.2	24.0	--	7.9	95	350

DATE	HARD- NESS, NONCAR- BOHATE (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- BOHATE (MG/L AS HCO3)	CAR- BOHATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
MAY									
17...	--	--	--	--	--	--	--	--	--
17...	240	98	27	290	6.7	6.6	140	0	230
17...	--	--	--	--	--	--	--	--	--
17...	230	98	25	270	6.3	6.5	140	0	200

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
MAY									
17...	--	--	--	--	--	--	--	--	7900
17...	460	3.8	1180	.06	.03	.030	0	10	--
17...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
17...	450	3.7	1120	.06	.01	.040	0	20	--

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 9, 1979
 FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius; MG/L = milligrams per liter; UG/L = micrograms per liter
 322227097412101 SITE AC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
AUG										
09...	1440	1.0	1520	8.2	29.5	2.00	7.1	94	290	170
09...	1441	3.2	--	--	--	--	--	--	--	--
09...	1442	10	1520	8.2	29.0	--	7.1	93	--	--
09...	1444	20	1520	8.0	29.0	--	6.5	86	--	--
09...	1446	30	1520	7.4	28.5	--	1.4	18	--	--
09...	1448	40	1460	7.2	26.5	--	.0	0	--	--
09...	1450	50	1460	7.2	25.0	--	.0	0	--	--
09...	1452	60	1420	7.2	23.5	--	.0	0	--	--
09...	1454	66	1420	7.2	22.0	--	.1	1	280	120

DATE	CALCIUM DIS- SOLVED (MG/L 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 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)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
AUG										
09...	79	22	210	220	5.4	5.5	140	0	150	330
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	78	20	180	190	4.7	5.0	190	0	120	290

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 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)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)
AUG										
09...	.3	5.6	871	.01	.01	.010	0	0	1	0
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	.00	.00	.020	0	40	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	10	799	.00	.82	.270	770	1800	6	0

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)	PHYTO- PLANK- TON TOTAL (CELLS PER ML)
AUG									
09...	0	10	1	0	.0	0	0	7	--
09...	--	--	--	--	--	--	--	500000	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	0	0	0	0	.0	0	0	6	--

322231097412001 SITE AL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED SATUR- ATION)
AUG							
09...	1520	1.0	1520	8.2	29.5	7.1	94
09...	1522	10	1520	8.2	29.5	7.1	94
09...	1524	23	1520	8.0	29.0	6.2	82

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 9, 1979--Continued

322341097420601 SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1355	1.0	1590	8.2	30.5	7.2	97
09...	1357	10	1590	8.1	30.0	7.0	93
09...	1359	20	1590	7.4	29.0	1.2	16
09...	1401	30	1590	7.2	28.0	.0	0
09...	1403	40	1590	7.2	27.0	.1	1
09...	1405	50	1440	7.2	26.0	.1	1
09...	1407	63	1400	7.2	24.0	.1	1

322337097415401 SITE BL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1345	1.0	1590	8.2	30.5	7.1	95
09...	1347	10	1590	8.1	30.0	6.7	89
09...	1349	23	1590	7.4	30.0	2.2	29

322345097421901 SITE BR

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1410	1.0	1590	8.2	29.5	7.1	94
09...	1412	10	1590	8.2	29.5	7.0	93
09...	1414	18	1590	7.4	29.5	1.9	25

322537097414501 SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1315	1.0	1560	8.2	31.5	7.2	98
09...	1317	10	1560	8.1	30.5	6.2	83
09...	1319	16	1560	7.8	31.0	5.2	70

322422097423901 SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1235	1.0	1590	8.2	31.0	7.4	100
09...	1237	10	1590	8.2	30.0	7.1	95
09...	1239	20	1650	7.5	29.0	2.5	33
09...	1241	30	1690	7.3	28.5	.4	5
09...	1243	40	1690	7.2	27.5	.1	1
09...	1245	50	1690	7.1	26.0	.1	1
09...	1247	56	1690	7.1	24.5	.1	1

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 9, 1979--Continued

322437097423901 SITE DL

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1255	1.0	1590	8.2	31.5	7.0	95
09...	1257	10	1590	8.2	30.5	7.2	97
09...	1259	21	1590	7.4	30.0	2.2	29

322458097443101 SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1210	1.0	1590	8.0	31.5	6.8	93
09...	1212	10	1590	8.1	31.0	6.8	92
09...	1214	20	1640	7.7	29.5	4.4	58
09...	1216	30	1740	7.4	28.5	1.4	18
09...	1218	40	1750	7.3	28.0	.8	10
09...	1220	52	1750	7.1	26.0	.1	1

322619097463301 SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)
AUG									
09...	1600	1.0	1570	8.4	30.5	.90	8.1	109	300
09...	1602	10	1570	8.3	30.5	--	8.1	109	--
09...	1604	20	1610	7.8	29.5	--	5.0	66	--
09...	1606	30	1750	7.3	28.5	--	1.0	13	--
09...	1608	40	1750	7.3	28.0	--	.3	4	320

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+ 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 HCO3)	CAR- BONATE (MG/L AS CO3)
AUG									
09...	190	81	23	210	220	5.3	5.5	130	2
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	210	87	26	240	250	5.8	6.0	140	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	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									
09...	150	340	5.5	881	.00	.00	.040	0	0
09...	--	--	--	--	.00	.01	.040	0	10
09...	--	--	--	--	.01	.06	.030	0	20
09...	--	--	--	--	--	--	--	--	--
09...	180	390	6.5	1000	.00	.07	.060	0	190

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 9, 1979--Continued

322703097451401 SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1635	1.0	1600	8.3	31.0	8.4	114
09...	1637	10	1600	8.2	30.0	6.9	92
09...	1639	22	1600	7.8	29.5	5.1	68

322834097470801 SITE HC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
AUG							
09...	1655	1.0	1680	8.3	29.5	.50	7.9
09...	1657	10	1720	7.9	29.0	--	5.9
09...	1659	20	1730	7.8	29.0	--	4.8
09...	1701	33	1780	7.2	28.5	--	.0

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	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						
09...	105	.00	.01	.030	0	10
09...	78	--	--	--	--	--
09...	63	.01	.04	.120	0	50
09...	0	.00	.05	.100	60	870

322819097483201 SITE IC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1715	1.0	1750	8.2	30.0	8.2	109
09...	1717	10	1720	7.8	29.0	5.4	71
09...	1719	20	1720	7.5	28.5	3.4	44

323318097480101 SITE JC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG							
09...	1735	1.0	1790	8.3	30.5	8.8	117
09...	1737	10	1790	7.8	29.5	6.3	85
09...	1739	24	1470	7.2	27.0	.1	1

323435097492001 SITE KC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (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)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
AUG										
09...	1754	.8	--	--	--	--	--	--	--	--
09...	1755	1.0	1790	8.6	32.5	.50	12.0	166	310	220
09...	1757	10	1790	8.0	30.0	--	7.0	93	--	--
09...	1759	18	1570	7.1	27.5	--	.0	0	290	160

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE GRANBURY AUGUST 9, 1979--Continued

323435097492001 SITE KC--Continued

DATE	CALCIUM DIS- SOLVED (MG/L 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 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)
AUG									
09...	--	--	--	--	--	--	--	--	--
09...	78	27	260	270	6.5	6.3	100	2	180
09...	--	--	--	--	--	--	--	--	--
09...	77	23	220	230	5.7	5.8	150	0	150

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	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)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
AUG									
09...	--	--	--	--	--	--	--	--	850000
09...	400	5.8	1010	.00	.00	.070	0	20	--
09...	--	--	--	--	--	--	--	--	--
09...	340	7.2	898	.01	.17	.060	210	1300	--

