TEXAS WATER DEVELOPMENT BOARD

REPORT 85

QUALITY OF WATER AND STRATIFICATION OF POSSUM KINGDOM, WHITNEY, HUBBARD CREEK, PROCTOR AND BELTON RESERVOIRS

By

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Prepared by the U.S. Geological Survey in cooperation with the Texas Water Development Board and the Brazos River Authority

October 1968

TEXAS WATER DEVELOPMENT BOARD

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TABLE OF CONTENTS

	Page
ABSTRACT	1
INTRODUCTION	3
Purpose and Scope	3
Previous Investigations	3
METHODS OF INVESTIGATION	3
Field Data-Collection Procedures	3
Field Equipment	3
Laboratory Procedures	4
Data Treatment	4
DESCRIPTION OF RESERVOIRS STUDIED	4
Possum Kingdom Reservoir	4
Whitney Reservoir	7
Hubbard Creek Reservoir	7
Proctor Reservoir	7
Belton Reservoir	8
GENERAL PRINCIPLES AND THEORY OF CHEMICAL AND	
THERMAL STRATIFICATION IN ARTIFICIAL RESERVOIRS	8
RESERVOIR SURVEYS	8
Possum Kingdom Reservoir	8
Survey of March 8-10, 1962	8
Survey of June 19-20, 1962	13
Survey of November 13-14, 1962	13
Survey of March 6, 1963	13
Survey of June 7-8, 1963	13
Survey of August 19-20, 1963	13

TABLE OF CONTENTS (Cont'd.)

Page

	Surveys of October 1, November 15, and December 17, 1963;	
	and January 29 and March 4, 1964	13
	Survey of April 29, 1964	13
	Survey of July 1, 1964	13
	Survey of November 2-4, 1964	14
	Survey of May 15-16, 1965	14
Whitn	ney Reservoir	14
	Survey of November 8-9, 1961	14
	Survey of March 6-7, 1962	14
	Survey of June 21, 1962	14
	Survey of August 15, 1962	16
	Survey of November 15, 1962	16
	Survey of March 7-8, 1963	16
	Survey of June 9, 1963	16
	Survey of August 21, 1963	16
	Survey of November 14, 1963	16
;	Survey of March 3, 1964	16
:	Survey of May 27, 1964	16
5	Survey of November 5, 1964	20
Hubba	ard Creek Reservoir	20
5	Survey of September 30, 1963	20
S	Survey of December 16, 1963	20
5	Survey of April 29, 1964	20
S	Survey of September 24, 1964	20
S	Surveys of November 20 and 21, 1964	20
S	Survey of December 10, 1964	23
Proctor	r Reservoir	23
S	Survey of January 30, 1964	23
S	Survey of June 30, 1964	23

TABLE OF CONTENTS (Cont'd.)

	Page
Survey of November 4, 1964	23
Belton Reservoir	23
Survey of October 25, 1961	23
Survey of August 14, 1962	23
Survey of May 26, 1964	23
Survey of November 6, 1964	26
CONCLUSIONS OF THE INVESTIGATION	26
Possum Kingdom Reservoir	26
Spring	26
Summer	26
Fall	26
Winter	26
Whitney Reservoir	31
Hubbard Creek Reservoir	31
Proctor Reservoir	31
Belton Reservoir	31
QUALITY-CONTROL PROCEDURES	32
NEED FOR ADDITIONAL STUDIES	32
REFERENCES	33

TABLES OF FIELD AND LABORATORY DATA

1.	Temperature, Specific Conductance, and Chloride Content of Water, Possum Kingdom Reservoir	37
2.	Temperature, Specific Conductance, and Chloride Content of Water, Whitney Reservoir	73
3.	Temperature, Specific Conductance, and Chloride Content of Water, Hubbard Creek Reservoir	103
4.	Temperature, Specific Conductance, and Chloride Content of Water, Proctor Reservoir	109
5.	Temperature, Specific Conductance, and Chloride Content of Water, Belton Reservoir	111

TABLE OF CONTENTS (Cont'd.)

Page

FIGURES

1.	Map of Texas Showing Brazos River Basin	4
2.	Map of Brazos River Basin Showing Reservoirs Studied	5
3.	Graph of Density of Water of Different Salinities (Dissolved Solids) at Various Temperatures	9
4.	Map of Possum Kingdom Reservoir Showing Location of Sampling Sites and Traverses	10
5.	Longitudinal Profiles of Possum Kingdom Reservoir Showing Distribution of Chloride Content	11
6.	Map of Whitney Reservoir Showing Location of Sampling Sites and Traverses	15
7.	Longitudinal Profiles of Whitney Reservoir Showing Distribution of Chloride Content	17
8.	Graphs Showing Temperature and Chloride Content at Selected Sites on Whitney Reservoir on June 21, 1962	19
9.	Map of Hubbard Creek Reservoir Showing Location of Sampling Sites	21
10.	Longitudinal Profiles of Hubbard Creek Reservoir Showing Distribution of Chloride Content	22
11.	Map of Proctor Reservoir Showing Location of Sampling Sites	24
12.	Map of Belton Reservoir Showing Location of Sampling Traverses	25
13.	Graph Showing Quantity and Quality of Inflow to Possum Kingdom Reservoir, January 1962 to May 1965	27
14.	Longitudinal Profiles of Possum Kingdom Reservoir Showing Average Seasonal Distribution of Chloride Content	28
15.	Graphs Showing Average Seasonal Temperature and Chloride Content at Selected Sites on Possum Kingdom Reservoir	29
16	Graph Showing Seasonal Temperature Variations at Different Depths in Possum Kingdom Reservoir	30

QUALITY OF WATER AND STRATIFICATION OF POSSUM KINGDOM, WHITNEY, HUBBARD CREEK, PROCTOR AND BELTON RESERVOIRS

ABSTRACT

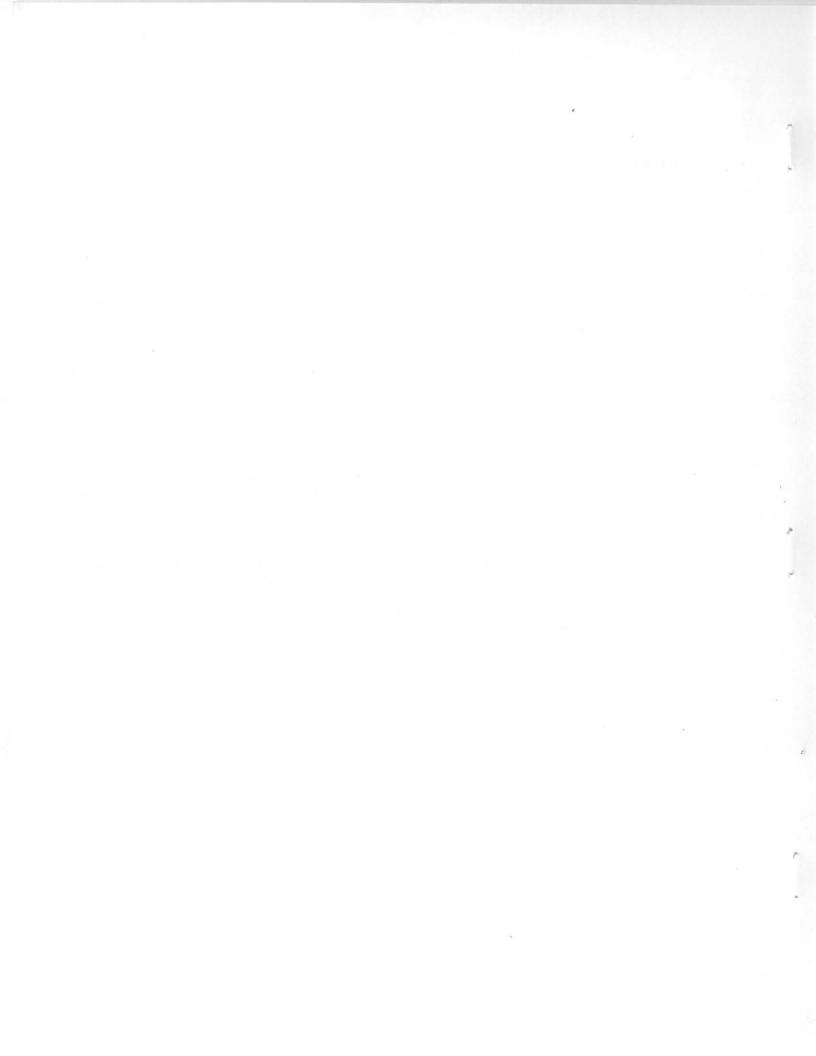
This report presents the results of an investigation to obtain information concerning the chemical quality and stratification of Possum Kingdom, Whitney, Hubbard Creek, Proctor, and Belton Reservoirs. Results of the reservoir studies made between September 1961 and May 1965 are reported.

The water in Possum Kingdom Reservoir generally contains between 1,050 and 1,600 ppm (parts per million) dissolved solids. Inflow varies considerably in salinity and is seldom similar to the water in storage. The low-flow of winter brings highly-saline water to the reservoir; the higher flows of spring usually are of much better quality. The reservoir exhibits an orderly sequence of thermal and chemical stratification that is related to the seasonal changes in weather and river inflow.

The water in Whitney Reservoir generally contains between 650 and 1,200 ppm dissolved solids. About two-thirds of the inflow is water released from Possum Kingdom Reservoir. The remaining one-third is runoff from the area below Possum Kingdom Reservoir. The dissolved-solids concentration of this runoff is estimated to average about 160 ppm, with chloride content averaging about 25 ppm; but flood flows probably contain less than 10 ppm chloride. The salinity and temperature of the inflow, compared to the salinity and temperature of the stored water, are the main controls of mixing. Seasonal stratification patterns usually develop only during the winter months when local runoff is small and inflow consists mostly of releases from Possum Kingdom Reservoir.

The dissolved-solids concentration of the water stored in Hubbard Creek Reservoir is generally less than 500 ppm. When inflow is small or non-existent, the concentration increases because of evaporation. Storm flows are usually of excellent quality, although sometimes the early flow may be saline. Thermal and chemical stratification usually develops during storm inflow but is usually of short duration.

Proctor and Belton Reservoirs impound water of good quality; dissolved-solids concentration is usually less than 300 ppm. The quality of the inflow is usually similar to that of the stored water and mixing is rapid and complete. During the summer, some chemical precipitation occurs in the upper layer of warmer water.



QUALITY OF WATER AND STRATIFICATION OF POSSUM KINGDOM, WHITNEY, HUBBARD CREEK, PROCTOR AND BELTON RESERVOIRS

INTRODUCTION

Purpose and Scope

The chemical quality of the surface water of the Brazos River basin is being studied as part of a basin-wide investigation by the U.S. Geological Survey in cooperation with the Texas Water Development Board and the Brazos River Authority.

To insure proper development, control, and use of the water resources of an area, reliable information on the chemical quality of the water is essential. The purpose of this study was to supplement the information available on the chemical quality of the streams and rivers in the Brazos River basin, and to obtain additional information concerning the stratification of Possum Kingdom, Whitney, Hubbard Creek, Proctor, and Belton Reservoirs. The specific goals of the study are: (1) to define the seasonal changes in the quality of the water and (2) to determine the major factors controlling mixing and stratification.

Previous Investigations

Evidence of chemical stratification in Possum Kingdom Reservoir was noted in 1942 by W. W. Hastings while reviewing the chemical-quality data collected during the first 9 months of operation of the reservoir.

A sampling program made by the U.S. Army Corps of Engineers (May to October 1956) showed stratification in Whitney Reservoir (written communication, 1960). Chloride concentrations were determined on samples taken from vertical profiles at the dam and at three stations upstream from the dam. Though this sampling was not sufficiently detailed to delineate the stratification, the changes in the patterns of layering and mixing could be determined.

METHODS OF INVESTIGATION

Field Data-Collection Procedures

Sampling surveys of 1- to 3-day duration were made of each reservoir to obtain the information considered necessary. Each reservoir was surveyed at least three times. Possum Kingdom was surveyed 15 times. Sampling was at three types of sampling stations. These were: (1) stations that were aligned across the reservoir, (2) intermediate sampling stations along the deepest part of the reservoir, and (3) stations on arms of the reservoir extending up the principal tributaries.

Landmarks in the area were used to relocate the sampling points on each subsequent sampling trip; and the deepest point along each traverse, usually the old stream channel, was located with a fathometer.

Field Equipment

The measurement of conductance and temperature through vertical profiles in a reservoir requires special portable equipment.

A Solu-Bridge direct-reading conductivity meter with two conductivity cells and a thermistor thermometer on a 150-foot conductor cable was used because of its portability and speed of operation. The instrument compensates automatically for the effect of temperature variation on conductance. An additional thermistor thermometer probe was attached to the side of the conductivity cell for simultaneous temperature readings. The thermistor probe adjusts very rapidly to changes in temperature, and readings could be made within a few seconds.

Water samples were collected at selected depths in each profile with a Foerst sampler. The Foerst sampler consists of a brass cylinder with rubber stoppers at both ends. The sampler is lowered to the desired depth with both ends open, then a brass weight is dropped down the suspension cable to activate a spring that closes the stoppers. In May 1965, new sampling equipment was used. This equipment consisted of a pump, hose, and a small chamber that contained probes for measuring temperature, conductance, and dissolved oxygen. Water is pumped from the desired depth through the hose, and into the chamber where the measurements are made.

Laboratory Procedures

Each sample collected from the reservoir was taken to the U.S. Geological Survey laboratory in Austin. Specific conductance was determined on each sample, and chloride and dissolved-solids concentrations were determined on a sufficient number of samples to establish conductance-dissolved solids and conductancechloride ratios. From these ratios chloride and dissolvedsolids concentrations could be calculated for every observation of conductance.

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Figure 1.--Map of Texas Showing Brazos River Basin

Data Treatment

Chloride concentrations at selected depths were obtained at each observation point. These chloride values were plotted against reservoir reach to obtain a longitudinal profile of the reservoir. Temperature values were plotted to obtain the isothermal profile. Conductance and temperature values obtained in each vertical section were plotted against depth to give the temperature-salinity relation at each observation site.

DESCRIPTION OF RESERVOIRS STUDIED

The Brazos River basin makes up about 16 percent of the area of Texas and drains more Texas area than any other stream except the Rio Grande (Figure 1).

The lower basin lacks sufficient storage of water, and despite its heavy rainfall, is largely dependent on the reservoirs in the upper basin for irrigation and industrial supplies. Figure 2 is a map of the Brazos River basin showing the reservoirs studied.

Possum Kingdom Reservoir

Possum Kingdom Reservoir is on the Brazos River in Jack, Palo Pinto, Stephens, and Young Counties. The dam, in Palo Pinto County, is 11 miles southwest of Graford and 18 miles northwest of Mineral Wells. Construction of the dam began in May 1938, and work was completed in March 1941. Enough water filled the reservoir by April 17, 1941, to start power generation, and water was discharged over the spillway for the first time on May 5, 1941. The reservoir was constructed to store water for municipal, industrial, mining, irrigational, recreational, and power generation uses. Records of inflow, outflow, and reservoir content have been collected since 1941. Reservoir content records are computed from capacity curves based on surveys made in 1935-38. Data regarding the dam and the reservoir are given in the following table.

FEATURE	ELEVATION (FEET)	CAPACITY (ACRE-FEET)
Maximum design level (crest of roof-weir gates, gates raised)	1,000.00	724,700
Crest of roof-weir gates (gates lowered)	987.00	504,100
Sill of powerhouse penstock	911.5	25,810
Invert of 54-inch horizontal cylinder valve (high pressure outlet)	874.8	236

Whitney Reservoir is on the Brazos River in Bosque, Hill, and Johnson Counties, 7 miles southwest of Whitney. The reservoir was built for flood control, power generation, and recreation. The dam was completed in April 1951, and reservoir content records have been collected since December 1951. The reservoir capacity between an elevation of 520.0 and 571.0 feet is reserved for flood-control storage. Other data regarding the dam and reservoir are given in the table below. Capacities are based on reservoir resurvey in 1959 by U.S. Army Corps of Engineers.

FEATURE	ELEVATION (FEET)	CAPACITY (ACRE-FEET)
Top of seventeen 40- by 38-foot		
Tainter gates	571.0	1,999,500
Crest of spillway	533.0	627,100
Top of designed power storage	520.0	379,100
Invert of two 16-foot diameter penstocks	476.0	39,570
Invert of sixteen 5- by 9-foot		
flood-control outlet conduits	448.83	4,270

Hubbard Creek Reservoir

Hubbard Creek Reservoir is on Hubbard Creek, a tributary of Clear Fork Brazos River. The dam, in Stephens County and 6 miles northwest of Breckenridge, was built by the West Central Texas Municipal Water District to Provide a municipal supply for Abilene, Albany, Anson, and Breckenridge. Construction began in May 1961, and impoundment of water began in December 1962. Records of inflow, outflow, and reservoir content have been obtained since October 1962. Data regarding the dam and reservoir are given in the following table.

ELEVATION (FEET)	CAPACITY (ACRE-FEET)
1,194.0	515,800
1,185.0	349,200
1,183.0	317,800
1,176.5	227,400
1,138.0	5,580
1,133.8	1,720
	(FEET) 1,194.0 1,185.0 1,183.0 1,176.5 1,138.0

Proctor Reservoir

Proctor Reservoir is on the Leon River in Comanche County, 9 miles northeast of Comanche. Construction of the dam began in June 1960, and work was completed in July 1963. The reservoir provides flood

control, conservation storage, and recreational facilities. Reservoir content records have been collected since January 1963. Other information about the dam and reservoir is given in the following table.

, FEATURE	ELEVATION (FEET)	CAPACITY (ACRE-FEET)
Top of dam	1,206.0	्वन्त् :
Top of gates	1,197.0	374,200
Top of conservation storage (Crest of spillway)	1,162.0	59,400
Invert of two 36-inch diameter outlets	1,128.0	68

- 7 -

Belton Reservoir

Belton Reservoir, in Bell and Coryell Counties and 4 miles north of Belton, impounds the water of Leon River and Cowhouse Creek. Construction of the dam began in July 1949, and impoundment of water began on March 8, 1954. The purpose of the reservoir is to provide facilities for flood control, water conservation, and recreation. Reservoir content records have been collected since March 1954. Other information is given in the following table.

FEATURE	ELEVATION (FEET)	CAPACITY (ACRE-FEET)
Crest of spillway	631.0	1,097,600
Top of conservation storage	569.0	210,600
Invert of lowest intake	483.0	278

GENERAL PRINCIPLES AND THEORY OF CHEMICAL AND THERMAL STRATIFICA-TION IN ARTIFICIAL RESERVOIRS

The density of water in lakes and rivers is not quite the same in different places and at different times. Although the differences that occur are generally small, they are of great importance in the study of stratification. The differences in density are brought about through variations in temperature and salinity (dissolved solids).

Figure 3 is a graph showing the density of water of different salinities at various temperatures. It can be shown from Figure 3 that water at 70°F containing 1,000 ppm (parts per million) dissolved solids would have a density of 0.9987 g/ml (grams per milliliter), and water at the same temperature but containing 3,000 ppm dissolved solids would have a density of 1.0003 g/ml. The change in density resulting from tripling the salinity is 0.0016 g/ml. The same change in density can be attained by cooling the water to about 53°F. Stratification of impounded bodies of water is generally classified as thermal, chemical, or both. Thermal stratification is a layering of water based on temperatureinduced density differences. Chemical stratification is a layering caused by salinity-induced density differences. Thermal stratification is usually accompanied by chemical stratification; chemical stratification can occur without thermal stratification. For example, when a highly mineralized, therefore denser, influent flows along the bottom of a large impoundment, chemical stratification takes place. Thermal stratification and usually the accompanying chemical stratification follow a fairly definite pattern. In late winter or early spring the impoundment water is cold, is easily mixed by wind action, and has a uniform temperature from top to bottom. As spring approaches and the atmospheric temperature becomes higher, both the influent water and the surface water in the impoundment get warmer and become more resistant to mixing. Finally the resistance to mixing because of the temperature differences in the upper stratum becomes great enough to

over-balance the ability of the wind to accomplish circulation, and stable stratification is established.

Summer stratification lasts until fall when the influent water and the surface water in the impoundment become cooler. As cooling extends to greater depths, the temperatures approach uniformity. When this happens, mixing is easier and the fall overturn occurs.

RESERVOIR SURVEYS

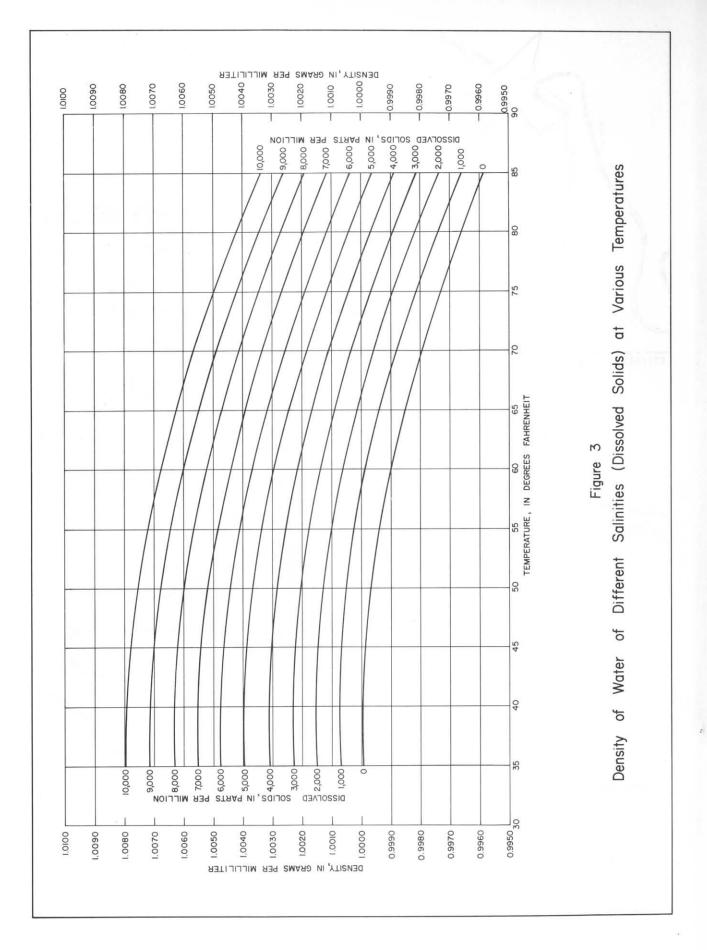
Possum Kingdom Reservoir

The results of 15 surveys made in Possum Kingdom Reservoir between March 1962 and May 1965 are presented in this report. Figure 4 is a map of the reservoir showing the sites and lines of sampling. Specific conductances, temperatures, and calculated chloride concentrations at all stations are given in Table 1. The distribution of chloride content, volume-weightedaverage chloride and dissolved-solids concentration, and reservoir contents for each survey are given in Figure 5. The averages are given to the nearest 50 ppm.

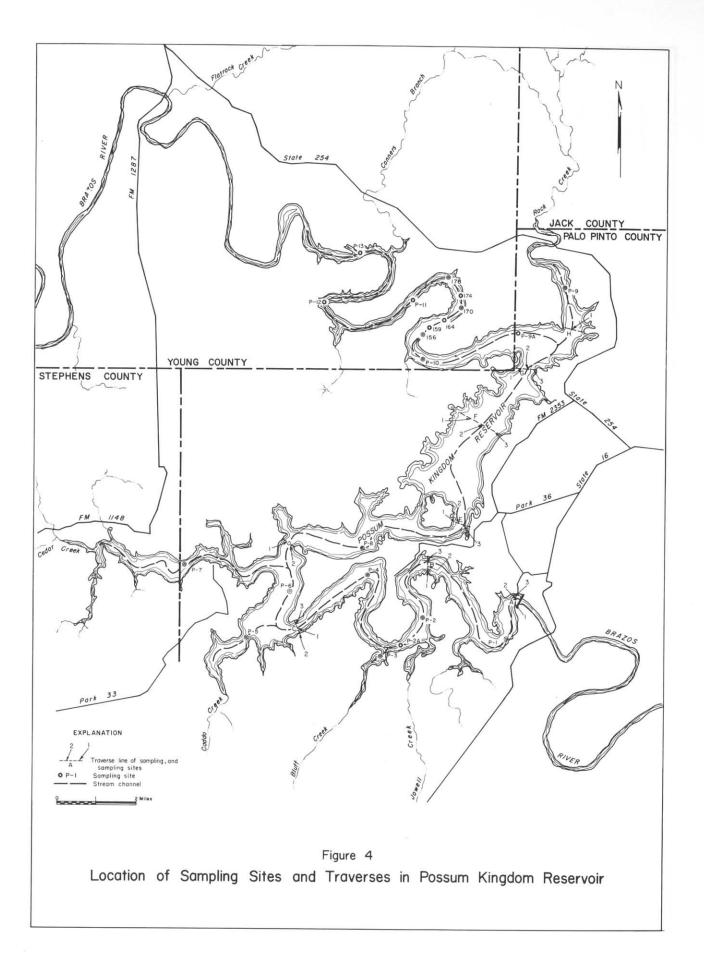
Survey of March 8-10, 1962

The first sampling survey on Possum Kingdom Reservoir was made on March 8-10, 1962. Storage in the reservoir during this period was 545,400 acre-feet at a reservoir elevation of 989.83 feet above mean sea level. Vertical profiles were run on 2 traverses of the reservoir, 15 stations on the river channel, and 6 stations on tributary channels (Figure 4).

All the water in the reservoir was found to be saline (over 1,000 ppm dissolved solids). Specific conductances ranged from 2,200 to 6,000 micromhos. Areally, chloride concentrations ranged from 470 to 1,680 ppm, and the temperature ranged from 44.0 to



- 9 -



 59.5° F. Usually the temperature difference between the top and bottom at a station was less than 2° F. Some chemical stratification was present near the dam; and at all stations except the inflow stations, salinity was greatest near the bottom. The volume-weighted average concentration of dissolved solids was 1,400 ppm. The inflow water was much more concentrated than the stored water, but in general, the upper 50 feet of water in the reservoir was uniform in quality. A longitudinal profile of salinity is shown in Figure 5A.

Survey of June 19-20, 1962

Storage in the reservoir during this period was 685,200 acre-feet. Chemical and thermal stratification was present throughout most of the reservoir. Chloride concentration at some sites varied from less than 200 ppm at the surface to over 600 ppm at the bottom (Figure 5B), and temperatures were more than 20° lower at the bottom than at the surface. The volume-weighted average concentration of dissolved solids was about 1,100 ppm.

Survey of November 13-14, 1962

Storage in the reservoir was 670,800 acre-feet on November 13. Chloride concentrations ranged areally from 265 to 2,060 ppm and temperatures ranged from 56.0 to 67.0°F. From the dam to site G-2, chloride concentrations from the surface to a depth of about 60 feet were near 300 ppm (Figure 5C). Water along the bottom near the dam contained about 500 ppm chloride while water in the upper end of the reservoir contained over 1,000 ppm chloride. Temperatures were generally about $66.5^{\circ}F$ at the surface and about $64.5^{\circ}F$ at the bottom. The weighted-average concentration of dissolved solids was about 1,050 ppm.

Survey of March 6, 1963

Storage in the reservoir had decreased to 586,800 acre-feet on March 6, 1963. Chloride concentration at the dam ranged from about 400 ppm at the surface to over 1,000 ppm at the bottom (Figure 5D). Temperatures were fairly uniform from top to bottom; the maximum difference was 4.5° F. The weighted-average concentration of dissolved solids was 1,350 ppm.

Survey of June 7-8, 1963

Storage on June 7 was 713,300 acre-feet, 126,500 acre-feet more than in March. Most of the increase in storage occurred during April. Chloride concentrations were generally about 500 ppm, except for a region of more saline water along the bottom extending from site P-2 to site E-3 and an area of less saline water in the upper end of the reservoir (Figure 5E). Temperatures

were generally more than 20° F lower at the bottom than at the surface; at site A-3 temperature varied from 77.5° F at the top to 50.0° F at the bottom. The weighted-average dissolved-solids concentration was 1,300 ppm.

Survey of August 19-20, 1963

Releases from the reservoir during June, July, and August exceeded the inflow, causing a decline in storage to 591,900 acre-feet on August 19. Chloride concentrations in all areas of the reservoir, except at the extreme inflow reach, ranged from about 450 to about 550 ppm (Figure 5F). Temperatures were generally about 85° F at the surface and 10 to 15° lower at the bottom. The weighted-average concentration of dissolved solids was 1,300 ppm.

Surveys of October 1, November 15, and December 17, 1963; and January 29 and March 4, 1964

These surveys are grouped together for discussion because the conditions were very similar.

During the period October 1963 to March 1964, very little stratification was noted (Figures 5H, 5I, 5J, 5K). The water throughout the reservoir was saline, with slightly more saline water near the bottom and in the uppermost end. Temperature was uniform from top to bottom during each survey except the October 1963 and March 1964 surveys, when the water was slightly colder at the bottom. The weighted-average dissolved-solids concentration was 1,300 ppm during each survey.

Survey of April 29, 1964

Storage in the reservoir on April 29, 1964 was 613,200 acre-feet. Chloride concentrations were generally between 500 and 550 ppm, except in the upper end of the reservoir where concentrations exceeded 1,500 ppm (Figure 5L). Temperatures were uniform at about 66° F from the surface to depths of about 20 feet. Temperature at the bottom in the deeper parts of the reservoir was near 50° F. The weighted-average concentration of dissolved solids was 1,300 ppm.

Survey of July 1, 1964

The conditions on July 1, 1964, with 609,600 acre-feet of water in storage, indicated only minor changes since April (Figure 5M). Chemical stratification was found only in the upper end of the reservoir; at site G-2 the chloride concentration varied from 605 ppm at the top to 1,215 ppm at the bottom. Thermal stratification was found throughout the reservoir. At site A-2 the water temperature varied 28° F from top to bottom. The weighted-average concentration of dissolved solids was 1,350 ppm.

Survey of November 2-4, 1964

During the sampling survey of November 2-4, with 533,700 acre-feet of water in storage, chloride concentrations varied from 515 to 990 ppm (Figure 5N). Some chemical stratification was found near the dam where chloride concentration varied from 585 ppm at the surface to 515 ppm near the bottom. From the dam to sampling site P-4, the water was slightly less saline near the bottom and temperatures at the bottom were as much as 10.5° F lower. Upstream from sampling site P-4, chloride concentrations were slightly higher and temperatures were almost uniform from top to bottom. The weighted-average concentration of dissolved solids was 1,500 ppm.

Survey of May 15-16, 1965

Storage in the reservoir increased from 633,000 acre-feet to 698,200 acre-feet during this survey. Chloride concentrations in different regions of the reservoir varied from 102 to 690 ppm (Figure 5-0). Chloride concentration and temperatures did not vary greatly from top to bottom at any site. The weighted-average dissolved-solids concentration was 1,350 ppm.

Whitney Reservoir

Twelve sampling surveys were made on Whitney Reservoir between November 1961 and November 1964. Observations of temperature and specific conductance were made at stations along three traverses of the reservoir, at seven stations on the reservoir, and at seven stations on tributary channels. Figure 6 is a map of the reservoir showing the sampling sites.

Specific conductances, temperatures, and calculated chloride concentrations are given in Table 2. The distribution of chloride content along the old Brazos River channel, the average chloride and dissolved-solids concentration of the reservoir, and the contents of the reservoir on each sampling survey are shown by the diagrams in Figure 7.

Survey of November 8-9, 1961

On November 8-9, 1961, the reservoir had 376,200 acre-feet of water in storage. Chloride concentrations ranged from 190 to 518 ppm and temperatures ranged from 54.5 to 63.0° F. Temperature differentials at most stations were less than 1.0° F, and the maximum temperature difference for a single station was 2.5° F.

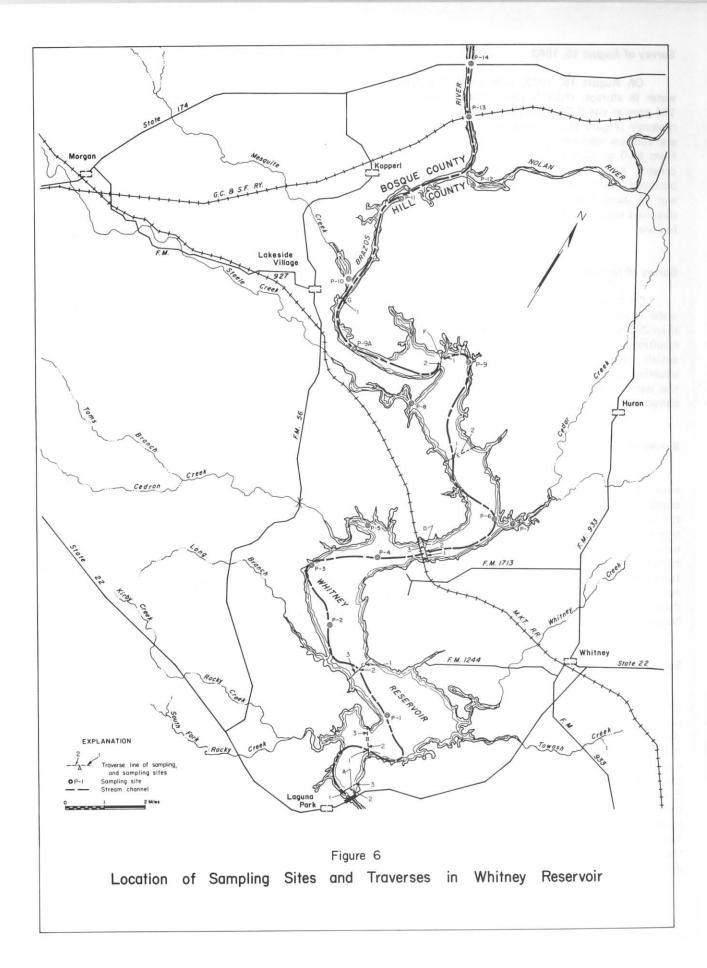
Although there was little distinct chemical or thermal stratification, there was a difference in the concentration of the water in different areas of the reservoir (Figure 7A). A zone extending from the dam to about 5 miles upstream had the most concentrated water, with maximum chloride concentrations slightly over 500 ppm. At sampling site P-6, 14.8 river miles from the dam, the vertical variation in chloride content was from 368 ppm at the surface to 364 ppm near the bottom. Farther upstream the chloride concentration was greater, being over 400 ppm at the three uppermost stations. The weighted-average dissolved-solids concentration was 1,200 ppm.

Survey of March 6-7, 1962

The quality of the water in the reservoir was almost uniform on March 6-7, 1962 (Figure 7B) when 369,000 acre-feet of water was in storage. Chloride concentrations ranged from 356 to 480 ppm and temperatures ranged from 51.0 to 56.5°F. Chloride content varied only slightly with depth. The most concentrated water was in the upper end of the reservoir. Temperature differentials at most stations were less than 2.0°F, except at stations near inflow channels. The small temperature differentials observed in November and again in March indicate that temperatures were probably uniform during the cold winter months. The weighted-average dissolved-solids concentration was 1,100 ppm.

Survey of June 21, 1962

Chemical and thermal stratification was evident throughout the reservoir on June 21, 1962, with 378,600 acre-feet of water in storage. Chloride content ranged from less than 200 ppm to over 550 ppm, and vertical variations were as much as 200 ppm. The weighted-average dissolved-solids concentration was 950 ppm. The vertical differences in chloride content and temperature were greatest at the stations near the mouths of the inflow channels that are downstream from the Nolands River. Temperature and chloride content at eight sampling sites are plotted against depth on Figure 8. Four of the sites, P-3, P-4, P-6, and E-1, are near the mouths of inflow channels, and the other four are some distance from the mouths of these channels. Exact information on the quantity and quality of the runoff from the area below Possum Kingdom Reservoir is not available, but Irelan and Mendieta (1964) estimated that the runoff from this area would contain an average of about 164 ppm dissolved solids and that storm runoff would be of much better quality. Rainfall of 2.7 inches was measured at Whitney Dam on June 9th; runoff from a rain of this magnitude would be extensive, low in dissolved solids, and would probably be colder than the reservoir water. As the less concentrated but colder inflow enters the reservoir, it could flow under, over, or through the stored water, depending on the salinity and temperature of the water near the mouths of the inflow channels.



Survey of August 15, 1962

On August 15, 1962, with 379,100 acre-feet of water in storage, chloride concentrations ranged from 151 ppm at site B-3 to 560 ppm in the upper end of the reservoir (Figure 7D). Temperature differentials at several stations were nearly 10° F and at station A-1 ranged from 85.0 to 63.5° F. Some chemical stratification was present near the dam, but generally, mixing had occurred and the reservoir water was less saline than it was in June. The weighted-average concentration of dissolved solids was 650 ppm-300 ppm less than it was in June.

Survey of November 15, 1962

On November 15, 1962, with 375,700 acre-feet of water in storage, chloride concentration varied from less than 200 ppm to 300 ppm reflecting fall cooling and the resulting uniformity (Figure 7E), and temperature differentials were less than 1.0° F. This was a typical fall situation caused by surface cooling extending deep into the water. The weighted-average concentration of dissolved solids was 650 ppm.

Survey of March 7-8, 1963

During the sampling survey of March 7-8, 1963, with 371,800 acre-feet of water in storage, chloride concentrations were almost uniform at near 300 ppm in the lower portion of the reservoir. Chemical stratification was present only in the upper reach of the reservoir where chloride concentrations were about 50 ppmhigher near the bottom than at the surface. Temperatures were also fairly uniform; vertical differentials were not over 3°F. The weighted-average concentration of dissolved solids was 950 ppm-300 ppm higher than in November.

Survey of June 9, 1963

Chloride concentrations on June 9, 1963, with 378,800 acre-feet of water in storage, were almost uniform at about 300 ppm in the downstream portion of the reservoir. In the upstream portion of the reservoir chloride concentrations were slightly higher and the water was more concentrated along the bottom than it was at the surface. Conditions were very similar to those found on the March survey except that a pool of less concentrated water was overriding the more concentrated water in the area from site D-2 to site F-2. Temperatures in the reservoir ranged from near 80° F at the surface to 61° F at the deepest point. The weighted average concentration of dissolved solids was 800 ppm.

Survey of August 21, 1963

On August 21, 1963, with 350,800 acre-feet of water in storage, chloride concentrations in the reservoir ranged from 340 to 562 ppm (Figure 7H), a marked increase over the concentrations found in June. Chloride concentrations were generally uniform from top to bottom with the exception of the area near the dam where the water along the bottom was less concentrated than the water at the surface. Temperatures were slightly higher than in June. During June and July, 289,080 acre-feet of water was released from Whitney Reservoir. but storage decreased only 28,000 acre-feet because water was also being released from Possum Kingdom Reservoir. The water released from Possum Kingdom was more concentrated than the water released from Whitney, and the weighted-average concentration of dissolved solids increased from 800 ppm on June 9 to 1,200 ppm on August 21.

Survey of November 14, 1963

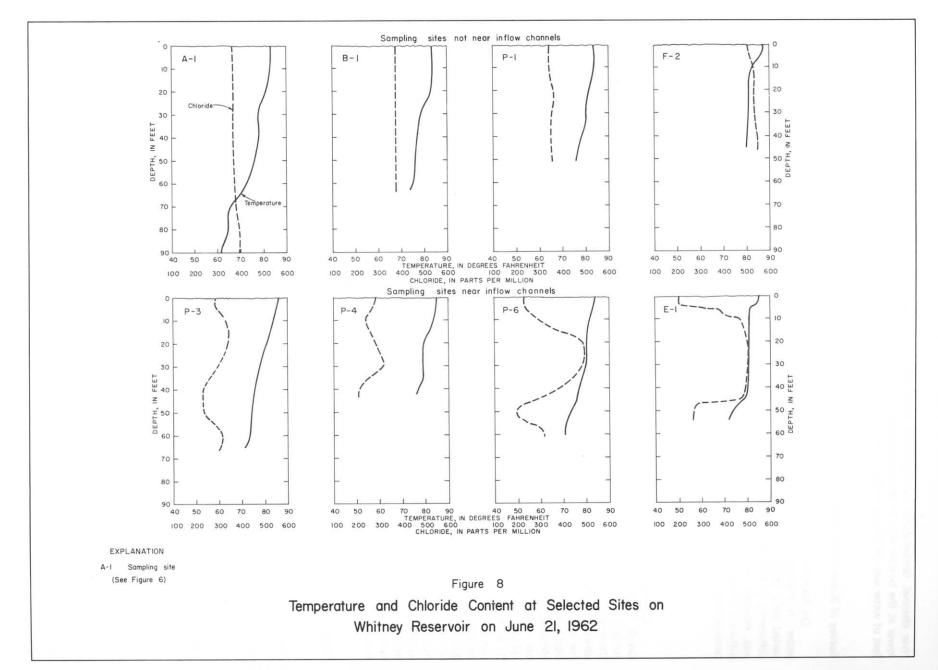
On November 14, 1963, with 285,900 acre-feet of water in storage, almost complete uniformity of chemical concentration and temperature was found (Figure 7I). Chloride concentration ranged from 460 to 510 ppm and temperatures ranged from 64.5 to 67.0° F. This was a typical fall situation caused by surface cooling extending deep into the water. The weighted-average concentration of dissolved solids was 1,200 ppm.

Survey of March 3, 1964

On March 3, 1964, the reservoir had 290,300 acre-feet of water in storage. Although there was little distinct stratification during this survey, there was considerable difference in the quality of the water in different areas of the reservoir (Figure 7J). The area from the dam to sampling point C-2 had water containing about 450 ppm chloride. Farther upstream, chloride decreased to a minimum of 178 ppm at sampling point P-14. Temperatures were generally near 50°F and the differential at all stations was less than 4°F. The weighted-average concentration of dissolved solids was 1,100 ppm.

Survey of May 27, 1964

On May 27, 1964, with 324,600 acre-feet of water in storage, only minor chemical stratification was found; the water was slightly more concentrated along the bottom (Figure 7K). Areally, chloride concentrations varied from less than 150 ppm in the upper end of the reservoir to 405 ppm near the dam. The weightedaverage concentration of dissolved solids was 800 ppm, a decrease of 300 ppm since March. Temperature stratification was evident throughout the reservoir. In the old



- 19 -

river channel, temperatures were generally about 15° F lower at the bottom than at the surface, and the top 20 feet of water was uniform at surface temperature.

Survey of November 5, 1964

On November 5, 1964, with 321,100 acre-feet of water in storage, chloride content and temperature varied only slightly with depth. Vertical temperature differences at all sites were usually less than 2° F. There was, however, a difference in chloride concentration in different areas of the reservoir. The weighted-average concentration of dissolved solids was 800 ppm.

Hubbard Creek Reservoir

The results of seven sampling surveys on Hubbard Creek Reservoir are included in this report. These surveys were made between September 30, 1963, and December 10, 1964. Conductance and temperature observations were usually made at 12 sampling sites in the reservoir and in the inflow channels. The sampling sites are shown on Figure 9 and longitudinal profiles showing the distribution of chloride content are plotted on Figure 10. Conductance, temperature, and calculated-chloride values for all sites are given in Table 3. In addition to the data gathered on the sampling surveys, the records obtained from a multiple-cell conductivity recorder, operated since April 1964, have been reviewed. The recorder makes a continuous record of conductivity (at site A on Figure 9) at points 2 feet from the bottom, 25 feet from the bottom, and at the surface in front of the entrance to the bottom-outlet tube in the reservoir. These conductivity records have been related to chloride concentration and thus a continuous chloride record has been obtained.

Survey of September 30, 1963

On September 30, 1963, the reservoir contained only 7,820 acre-feet of water at a reservoir elevation of 1,139.71 feet above mean sea level. Observations of specific conductance and temperature were made at only five sites because of the small amount of water impounded. The temperature of the water was near 70°F and varied only about 3°F from top to bottom. The chloride content of the water in the reservoir was uniform at about 136 ppm (Figure 10A).

Survey of December 16, 1963

During the period from September 30 to December 16, 1963, reservoir storage increased to a maximum of over 20,000 acre-feet and stood at 14,240 acre-feet on December 16. Most of the inflow during this period was runoff from rains on November 8 and 19. The chloride content of the reservoir water on December 16 was uniform at about 90 ppm (Figure 10B). The results of the temperature observations were discarded because the equipment was not operating properly.

Survey of April 29, 1964

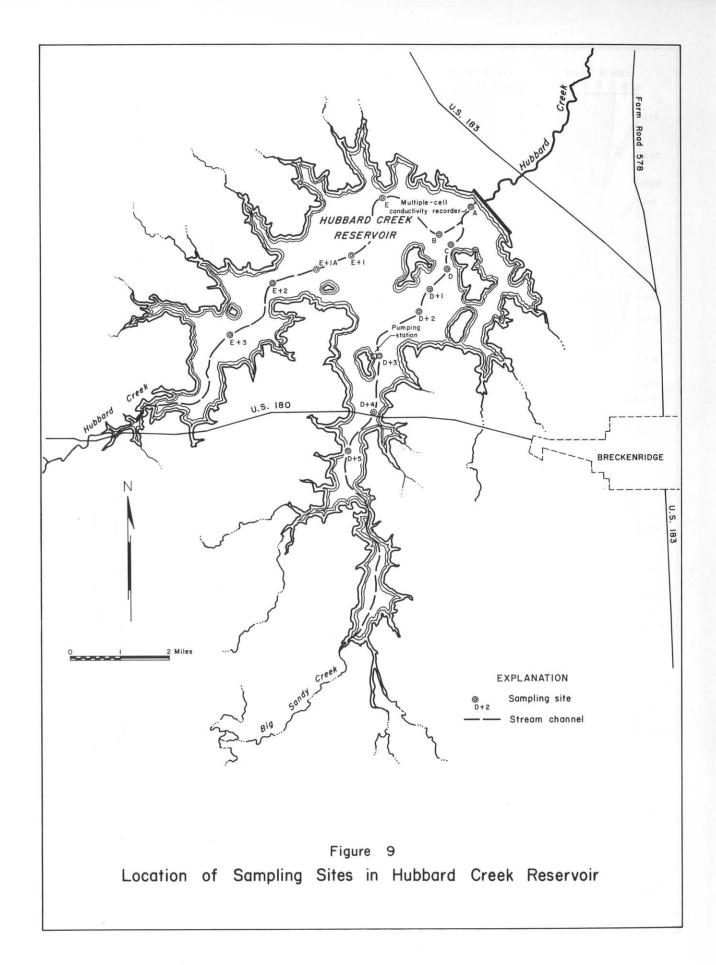
On April 29, 1964, the reservoir contained 16,020 acre-feet of water at a reservoir elevation of 1,144.19 feet above mean sea level. Chloride content was uniform at about 144 ppm, and temperatures were near 70° F, varying less than 3.0° F in most verticals (Figure 10C).

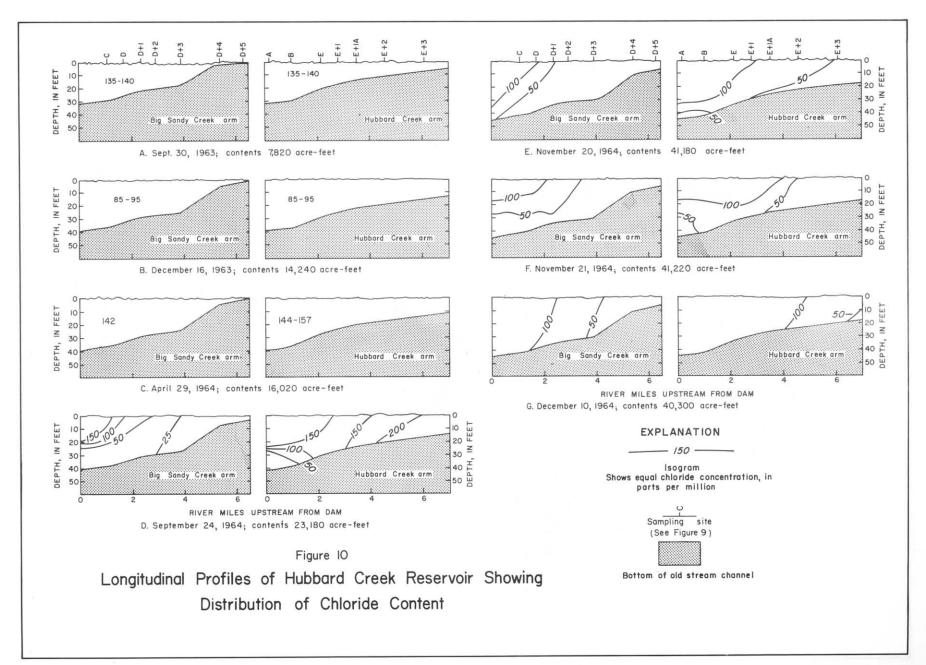
Survey of September 24, 1964

Between April 29 and September 24, 1964, reservoir storage increased from 16,020 to 23,180 acre-feet. Outflow was less than 200 acre-feet. Most of the inflow occurred during August and September with about 7,000 acre-feet entering the reservoir during the 5-day period immediately preceding the sampling survey of September 24. On September 24, chloride content of the reservoir ranged from 10 ppm in the upper reaches of the Big Sandy Creek arm to 209 ppm in the Hubbard Creek arm, with the best-quality water at the bottom (Figure 10D). Temperatures were slightly lower at the bottom, but differentials were less than 2.0°F. Chemical stratification was evident near the dam. The temperature observations indicated that the bottom layer was already beginning to gain heat, and subsequent records from the conductivity recorder indicate that chemical uniformity at site A was attained within 3 days, with chloride content at about 152 ppm.

Surveys of November 20 and 21, 1964

Inflow to the reservoir during October and the first 16 days in November was minor, and the chloride content of the reservoir remained uniform at about 150 ppm. Rainfall on November 17-18 produced inflow of about 18,000 acre-feet that increased the amount of water in storage to 41,180 acre-feet on November 20. Sampling surveys made on November 20 and 21 (Figures 10E and 10F) showed chemical stratification similar to that found in the Big Sandy Creek area on September 24. On November 20, chloride concentration in different areas of the reservoir ranged from 21 to 140 ppm. Temperatures varied as much as 5°F from top to bottom. On November 21, chloride concentrations ranged from 24 to 127 ppm and temperature differentials were less than 3°F. The lowest chloride concentrations were found in the Big Sandy Creek arm of the reservoir. The temperatures observed on November 21 showed that the mass of water in the reservoir was being cooled by the colder inflow. Records of conductances from the continuous conductivity recorder showed that complete mixing was accomplished at sampling site A by November 24.





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Survey of December 10, 1964

Although no distinct stratification was found on December 10, there was considerable difference in chloride content in different areas of the reservoir. Chloride concentration ranged from 42 to 119 ppm. Chloride concentrations were constant at each sampling site and the better-quality water was in the upper reaches of the reservoir (Figure 10G). Temperature differentials were small, with temperatures about 50° F near the dam and about 45° F in the upper reaches of the reservoir. Reservoir storage on December 10 was 40,300 acre-feet.

Proctor Reservoir

Three sampling surveys were run on Proctor Reservoir between January and November 1964. Observations of temperature and conductance were made at six sampling sites. The results of the temperature and conductance observations and calculated-chloride concentrations are given in Table 4. Locations of the sampling sites are shown on Figure 11.

Survey of January 30, 1964

On January 30, 1964, the reservoir contained 35,680 acre-feet of water. All conductance determinations and all the analyses of samples collected indicated that the water was of good quality. Chloride concentrations ranged from 74 to 81 ppm. Chloride concentrations were uniform from top to bottom, and temperatures varied only $0.5^{\circ}F$ in any vertical.

Survey of June 30, 1964

On June 30, 1964, 30,020 acre-feet of water was in storage. Chloride concentrations were uniform at about 100 ppm. Temperature stratification was present throughout the reservoir with temperature differentials usually about 8° F.

Survey of November 4, 1964

The chloride content of the reservoir was about 35 ppm on November 4, a decrease of 65 ppm since June. Chloride concentrations were uniform with respect to depth and were slightly higher in the Copperas Creek arm. Temperatures were uniform from top to bottom in all sections of the reservoir. Inflow of over 60,000 acre-feet on September 20-24 was more than twice as much water as was in storage on September 19th. Reservoir storage on November 4 was 43,050 acre-feet. Very little information is available on the quality of storm runoff from above Proctor Reservoir, but very low chloride concentrations would be required to lower the chloride content of the reservoir to the 35 ppm observed on November 4.

Belton Reservoir

Four sampling surveys were made on Belton Reservoir between October 1961 and November 1964. Measurements of temperature and conductance were made through two or three vertical profiles along each of seven sampling traverses. Specific conductance and temperature determinations and the calculated-chloride concentrations at all sampling sites are given in Table 5. Figure 12 is a map of the reservoir showing the location of the lines of sampling sites.

Survey of October 25, 1961

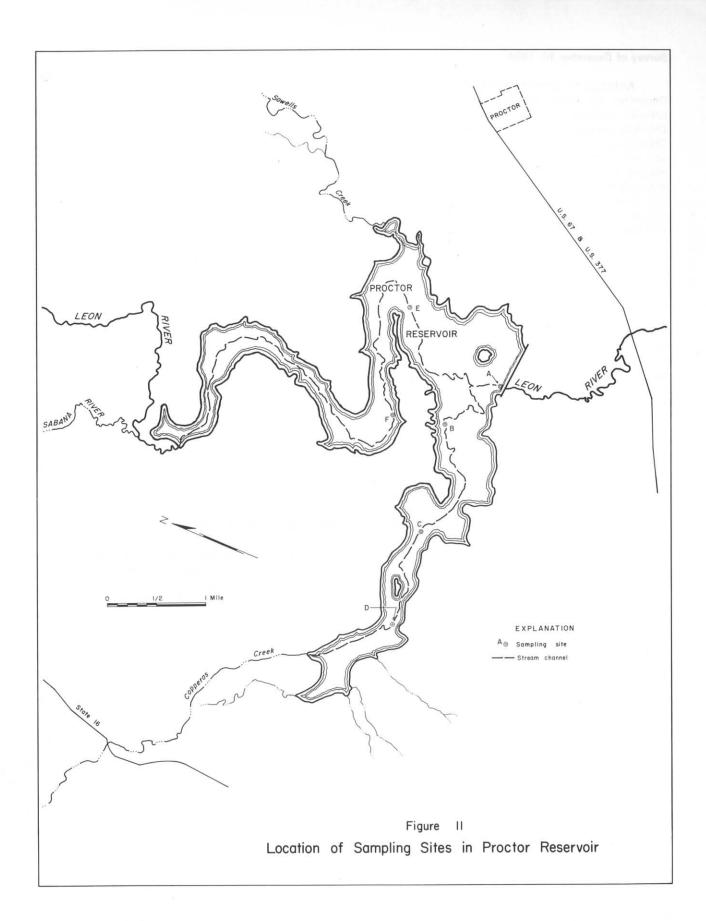
On October 25, 1961, with 209,500 acre-feet in storage, the water was of excellent quality. Chloride concentrations ranged from 13 ppm in the Leon River arm to 36 ppm in the Cowhouse Creek arm. The concentrations in the vertical profiles were almost uniform except at sampling sites E-1 and E-2, where water from the Cowhouse Creek arm was overriding the Leon River water, and at sampling sites G-1 and G-2 where the more concentrated water was on the bottom. Temperature differentials in the vertical profiles were generally less than $2^{\circ}F$.

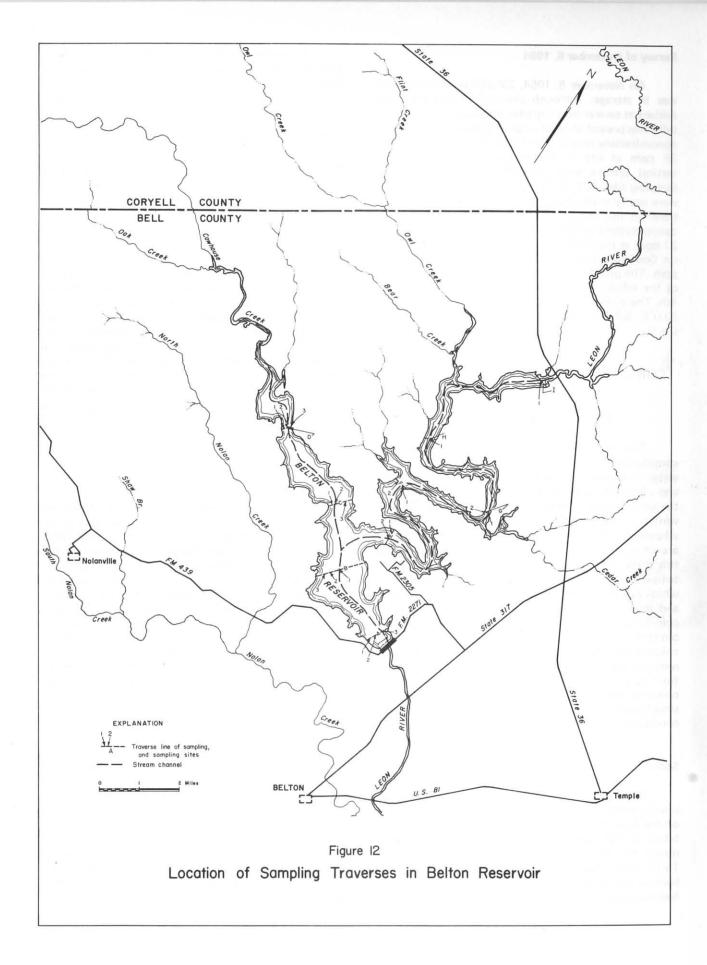
Survey of August 14, 1962

On August 14, 1962, 206,200 acre-feet of water was in storage. Only slight differences in chemical concentration were noted during this survey. Chloride concentrations were uniform with depth in the upper reaches of the reservoir, and were higher along the bottom in the other parts of the reservoir. Near the dam the chloride concentration was 40 ppm at the surface and 32 ppm at the bottom. Although the chloride concentration was lower at the bottom, the specific conductance was higher there. Temperatures were usually about $86^{\circ}F$ at the surface and were uniform through the top 20 feet. Temperature differentials in the deepest parts of the reservoir were near $25^{\circ}F$.

Survey of May 26, 1964

On May 26, 1964, 210,400 acre-feet of water was in storage. Dissolved-solids concentrations in the reservoir were generally slightly less than 300 ppm. Chloride concentrations were uniform in all areas of the reservoir except near the dam where the water was slightly more concentrated along the bottom. At sampling site A-1, chloride concentration ranged from 48 to 56 ppm. Concentrations were slightly less in the upper reaches of the reservoir. Temperatures were generally near 80° F at the surface and reached a minimum of 58° F in the deepest part of the reservoir.





Survey of November 6, 1964

On November 6, 1964, 236,000 acre-feet of water was in storage. Although chemical stratification was evident at several sampling sites, almost complete uniformity was present in other areas of the reservoir. Chloride concentrations ranged from 3 ppm at sampling site D to 36 ppm at site E. Temperature differentials in the vertical profiles were generally less than 3.0°F. At sampling sites A, B, E, F, and G, chloride concentrations were nearly uniform with only slightly higher concentrations on the bottom, but at sampling site C, chloride concentrations ranged from 3.8 ppm on the bottom to 27 ppm at the surface. At site D, the most upstream site on Cowhouse Creek, the chloride concentration was 3 ppm. The quality of the water at site D is representative of the inflow resulting from heavy rains on November 4th. The surface temperature of the water at site D was 63.0°F, 5.0°F colder than the water near the surface at site C.

CONCLUSIONS OF THE INVESTIGATION

Possum Kingdom Reservoir

The inflow to Possum Kingdom Reservoir varies considerably in salinity and is seldom similar to the water in storage. Figure 13 gives the monthly quantity and dissolved-solids concentration of the inflow during the period January 1962 to May 1965. The low-flow of winter brings highly-saline water to the reservoir, whereas the higher flows of spring and summer usually are of much better quality. The data collected during this study show an orderly seasonal sequence of water temperature and accompanying chemical stratification which can be related to the seasonal changes in weather and river inflow. The average seasonal distribution of chloride content is shown on longitudinal profiles of the old river channel in Figure 14, and the average seasonal chloride content and temperature at selected sites in the reservoir are shown on Figure 15. These patterns are not from any particular survey, but are composites of the observed data. The progressive nature of the changes in stratification is best presented by starting with spring conditions.

Spring

Conditions characteristic of the spring season usually prevail during May and June. The data collected on the June 19-20, 1962, survey are the most representative of this season. Two other surveys were made during the spring season (June 7-8, 1963, and May 15-16, 1965), but are not representative of the season because very large inflows immediately before the survey had temporarily disrupted the usual spring pattern. The spring runoff is usually the best quality water that enters the reservoir. Inflow from Clear Fork Brazos River sometimes contains less than 50 ppm chloride. The temperature of the inflowing water is nearly the same temperature as the surface lake water, but the density is lower because of its lower salinity. The inflowing water, therefore, spreads downlake along the surface, overriding the reservoir water of higher salinity and density. A typical spring stratification pattern is shown on Figure 14A. The lines of equal chloride concentration fan out horizontally downlake almost to the dam.

Summer

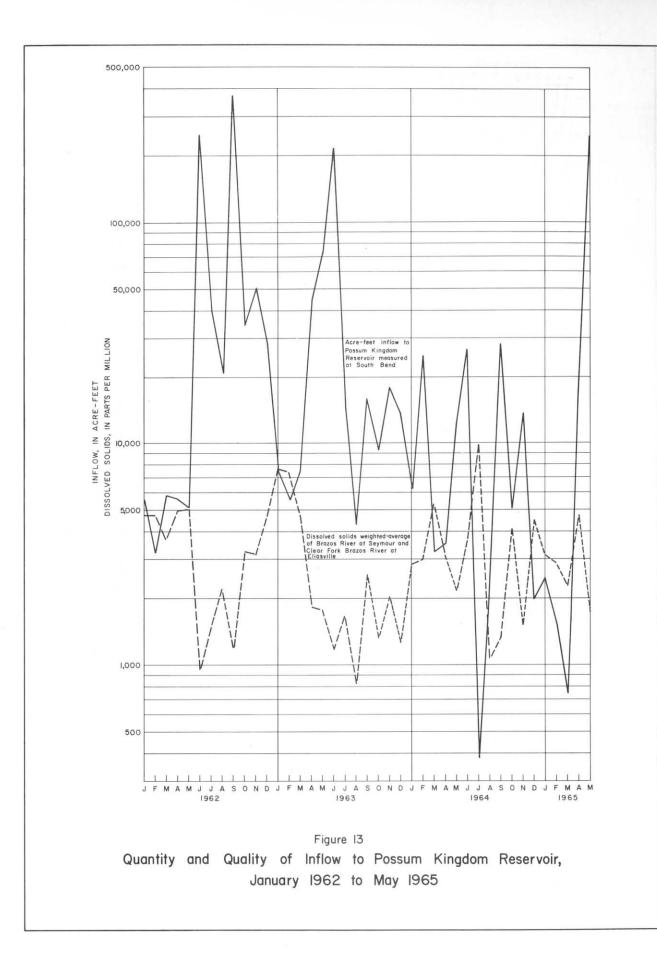
Composites of data collected during the months of July and August illustrate summer conditions in Possum Kingdom Reservoir (Figure 14B). Inflow during the summer months is usually more saline than the upper strata of water in the reservoir. Inasmuch as the temperature of the inflow and the temperature of the upper strata of reservoir water are nearly the same, the higher salinity results in a higher density, causing the inflowing water to flow under the stored water (Figure 14B). The better quality spring inflow remains on top and is discharged as it reaches the dam, and the total salinity of the reservoir is increased.

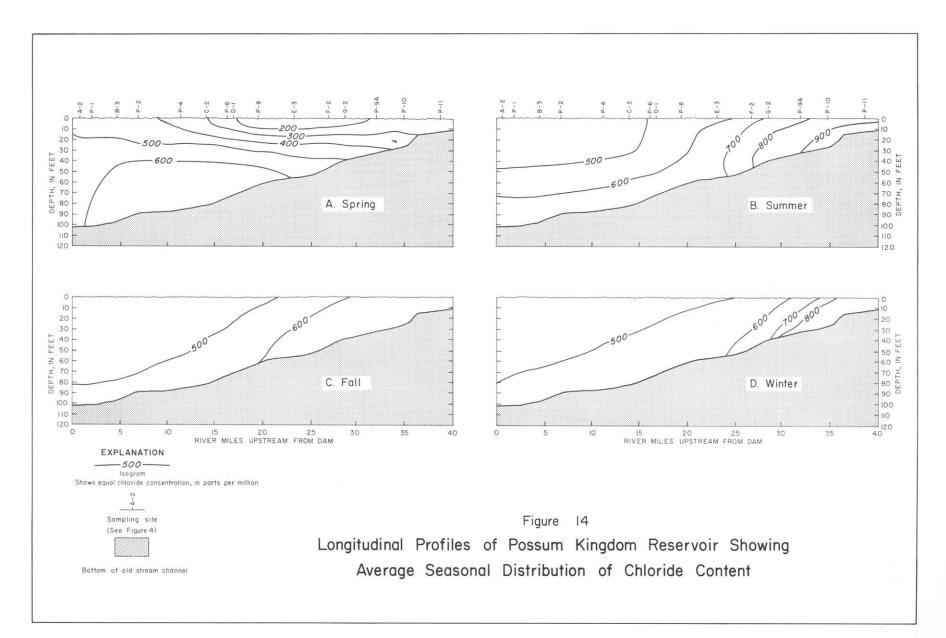
Fall

Reservoir conditions during the fall season are illustrated by composites of data collected during the months of October and November (Figure 14C). With fall cooling, the reservoir begins to lose heat and the temperature of the inflow is lower than in the summer. With the reduction in temperature difference between the surface and bottom, the stability of the stratification is reduced, and wind induced currents accomplish effective mixing. This circulation leads gradually to a uniform temperature (Figure 15C) and the reservoir enters the state called the fall turnover. During the survey of November 13-14, 1962, (Figure 5C) the fall turnover was being partially retarded by the extremely large inflow during September.

Winter

Composites of data collected during the months of December, January, and February best illustrate waterquality conditions during the winter season. Inflow is small during this season and is more saline than during any other part of the year. The inflow is also much colder than the reservoir water, therefore increasing the difference in density. This winter inflow enters a reservoir that has almost complete uniformity of temperature. Figure 16 is plot of temperature at various depths, and shows that temperature uniformity is almost complete throughout the winter. Temperature uniformity allows wind-generated currents to travel to relatively



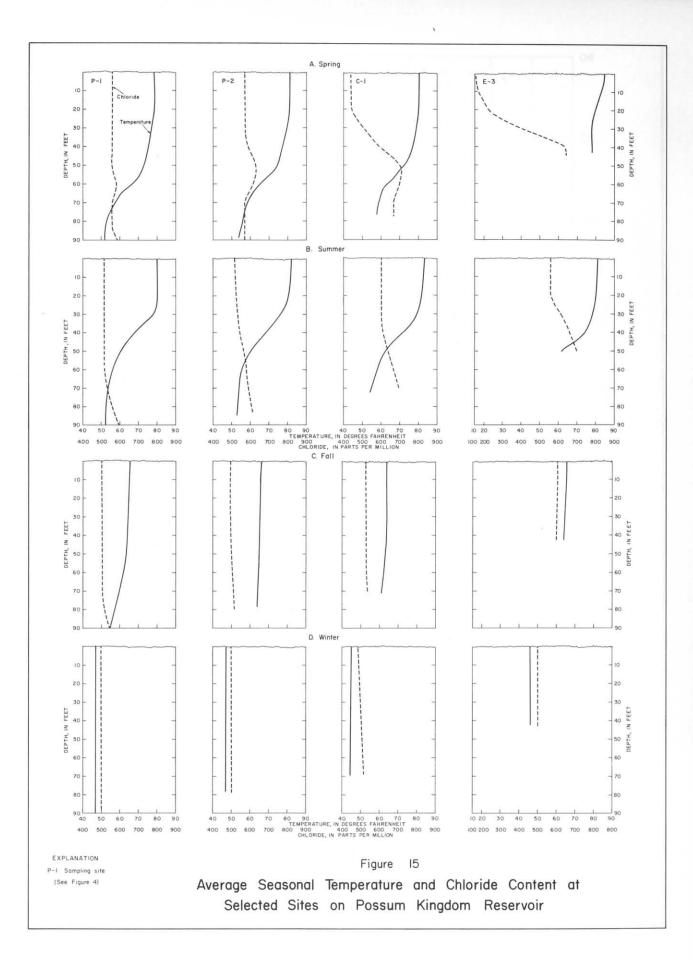


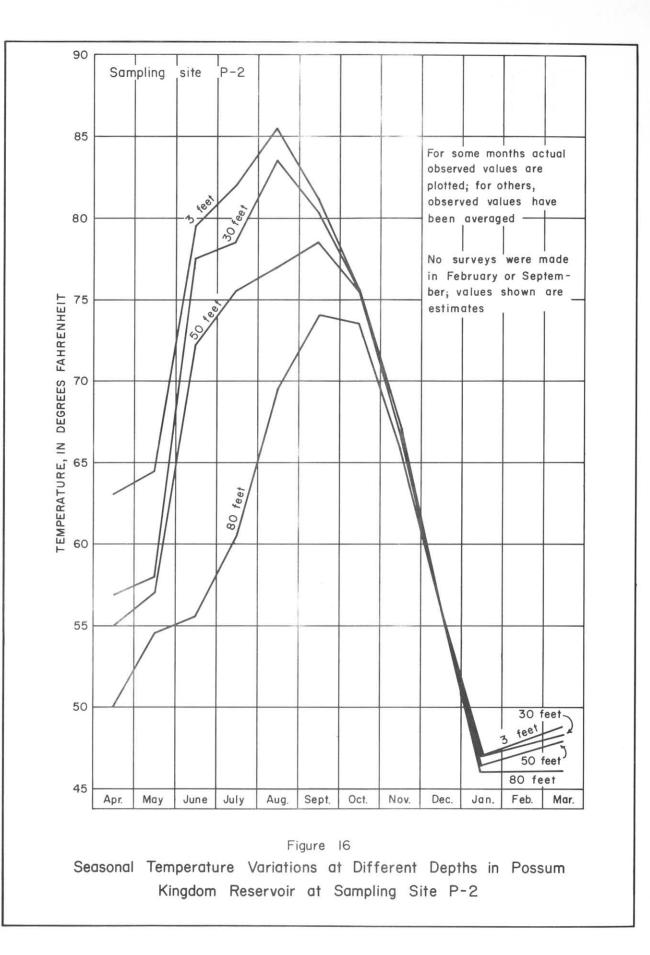
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great depths, thereby mixing the inflow as it enters the reservoir. Chemical stratification is not achieved, but the water in the upper end of the reservoir is more concentrated. Uniformity of temperature and chemical content is more likely to occur during the winter months than any other time of the year.

Whitney Reservoir

The quality of the influent to Whitney Reservoir is subject to extensive variations. About two-thirds of the inflow is water from Possum Kingdom Reservoir. The dissolved-solids concentration of the releases from Possum Kingdom Reservoir is usually between 1,050 and 1,600 ppm, and chloride concentrations are seldom less than 400 ppm or more than 600 ppm. The remaining one-third of the inflow is runoff from the area below Possum Kingdom Reservoir. The dissolved-solids concentration of this local runoff has been estimated to average about 160 ppm, with chloride content averaging about 25 ppm; but flood flows probably contain less than 10 ppm chloride.

The salinity and temperature of the inflow, in contrast to the salinity and temperature of the stored water, are the main controls of mixing. Seasonal patterns usually develop only during the winter months when local runoff is small and the inflow is mostly releases from Possum Kingdom Reservoir. The winter pattern is almost complete uniformity because the inflow and stored water are of similar salinity and the reservoir is of uniform temperature, thereby eliminating temperature barriers to circulation. During the spring and fall seasons, water quality varies in different areas of the reservoir because of inflow from local streams and temporary stratification near the mouths of the streams. The stratification stability, usually correlated with summer when temperature differences within the stored water are greatest, is seldom reached in Whitney Reservoir because the widely fluctuating volumes of inflow create varied current actions.

Hubbard Creek Reservoir

The quality of the water in Hubbard Creek Reservoir is moderately variable. During dry periods evaporation losses are greater than the usually saline inflow, resulting in increased concentrations of dissolved constituents in the stored water. Storm flows are usually of excellent quality, although sometimes the first flows may be saline. Storm flows are usually colder than the stored water and carry more sediment than lower flows. The increased sediment load and lower temperature make the inflow heavier than the stored water, and the heavier water will flow along the bottom. Stratification of this type is temporary and the water containing less dissolved materials will begin to rise as the sediment begins to drop out and as the upper mass of water is cooled. Therefore, stratification in Hubbard Creek Reservoir is expected to be of short duration, but mixing will probably be slower when the reservoir has filled to operating level.

Proctor Reservoir

Proctor Reservoir impounds water of good quality; dissolved-solids concentrations have been less than 300 ppm. The quality of the inflow is usually similar to that of the stored water, and mixing is usually rapid and complete. The temperature stratification found on the June 30, 1964, survey is a normal summer situation and is not expected to create any water-use problems. During the summer months some calcium carbonate precipitation seems to be occurring in the top layer of warmer water, but the data are not complete enough to define the areal of vertical boundaries of the precipitation.

Belton Reservoir

The water in Belton Reservoir is always of good quality. Dissolved-solids concentrations will probably always be less than 300 ppm. The inflow to the reservoir is always of good quality and storm flows contain very low concentrations of dissolved solids. Temperature stratification in the reservoir is distinct in the spring and summer and great enough to cause slight chemical stratification. Data from the survey of August 14, 1962, indicated that summer inflow is more concentrated than the water in storage, but is warm enough to be lighter than the stored water and therefore remains on top. Tabulated below are the results of partial chemical analyses of samples collected from the top and bottom of the reservoir at sites A-3, B-1, C-3, and E-2. At each site the chloride concentration is greater at the top, indicating that the water at the top was more concentrated. The specific conductance, hardness, and bicarbonate ion concentration are all greater at the bottom, indicating that chemical precipitation has occurred in the top layer of water. Sufficient analyses are not available to determine the exact depth limit of the precipitation.

DEPTH (FT)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM)	HARDNESS (PPM AS CaCO ₃)	BICARBONATE (HCO ₃)
		Site A-3 (August 14, 1962))	
3 70	430 474	40 32	76 96	144 204
		Site B-1 (August 14, 1962))	
3 40	431 476	40 36	76 94	146 193
		Site C-3 (August 14, 1962))	
3 50	422 495	38 33	74 100	146 227
		Site E-2 (August 14, 1962))	
3 70	448 514	43 39	78 104	147 217

QUALITY-CONTROL PROCEDURES

Section 2(b)(1-2) of Public Law 660 as amended July 20, 1961, states that Federal agencies constructing impoundments must give consideration, but not necessary approval, to the inclusion of storage capacity for the purpose of water-quality control. The purpose of the pertinent sections of Public Law 660, as amended, was to establish streamflow regulation systems that would provide for impounding water during times of high streamflow and releasing water at times of low natural streamflow. Such releases would supply additional water downstream and would serve to alleviate downstream water-quality problems. If such a system is to be successful, the quality of impoundment releases must be predictable and managed to insure that the downstream influence is beneficial.

One prerequisite for reservoir management for quality control is outlet facilities designed to release water from varying depths in the reservoir. Such facilities would be essential in compensating for, or taking advantage of, the normal biologic, physical, and chemical processes that cause changes in water quality during impoundment.

Thermal and chemical stratification is one phenomenon of impoundment that must be considered in any system of reservoir management for quality control.

The data collected during this study indicate that the dissolved-solids content of water in Possum Kingdom Reservoir could probably be lowered by releasing water only during the winter months—by holding the spring flows until the time of fall and winter mixing. This procedure would initially increase the concentration of the water being released. Possum Kingdom and Whitney Reservoirs would have to be operated as a system and current stratification data would have to be available for system analysis. Also, facilities to release water from any desired depth would greatly improve the system.

The chemical precipitation that occurs during the summer in Proctor and Belton Reservoirs creates a zone of water on the surface of the reservoir that contains a lower concentration of dissolved solids and is softer than the deeper water. Withdrawing or releasing water from this zone could result in lower treatment costs at the point of use.

Movement of water across the State in a series of canals, reservoirs, and existing stream channels is being considered in the development of a State Water Plan for Texas. Reservoir design and operation will be critical to the success of this plan, and the data collected during this study point out that multiple-outlet structures are important to the efficient operation of reservoirs.

NEED FOR ADDITIONAL STUDIES

The data that have been collected have been adequate to describe the general stratification patterns of the reservoirs studied. Analysis of the data has shown that one or two surveys a year for several more years would be necessary to supplement the data already collected. One of these surveys should always be made during July or August. Additional information that would be necessary for a detailed stratification analysis and for the most efficient reservoir operation are: (1) wind and evaporation data, (2) records of quantity and quality of all inflow streams, (3) current reservoir topographic maps, (4) continuous water-quality monitoring systems, and (5) data on circulation and currents.

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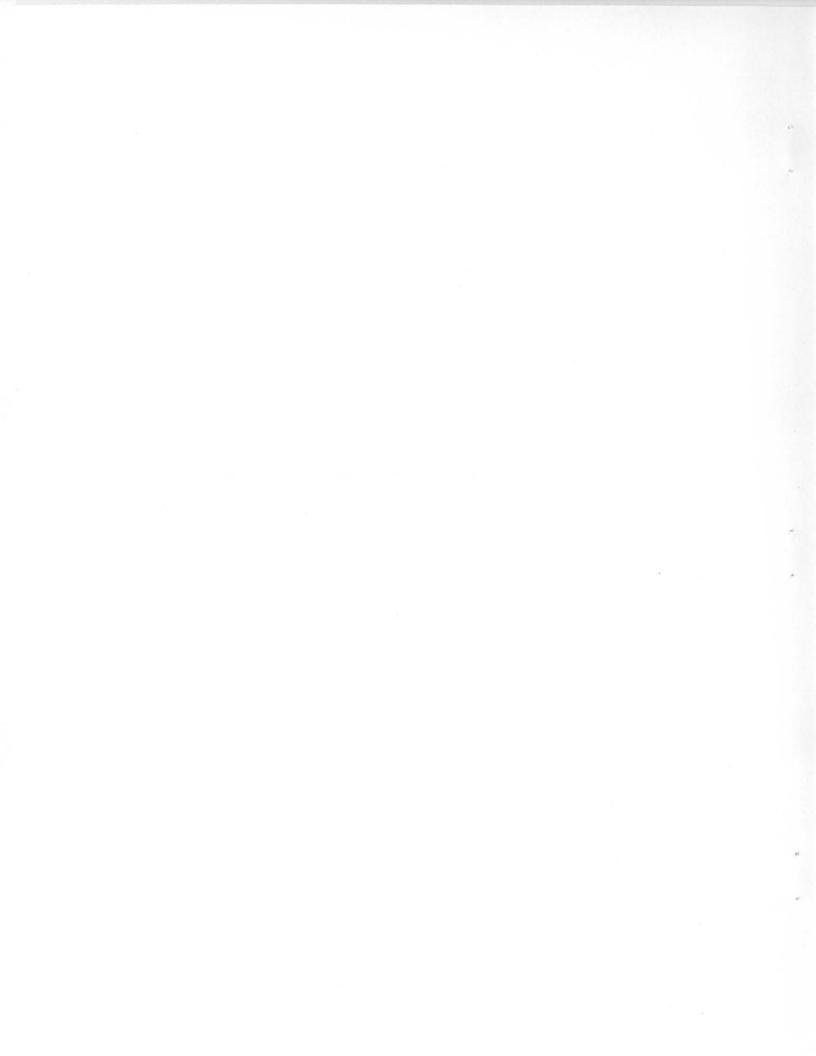
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Make J. S. Song and S. Song

TABLES OF FIELD AND LABORATORY DATA



DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
			RESULTS OF SURVEY,	MARCH	8-10, 1962		
			Site	A-1			
3 10 20 30	49.0 49.0 49.0 49.0	2.350 2,350 2,350 2,350 2,350	520 520 520 520	40 50 60	49.0 49.0 49.0	2,350 2,400 2,400	520 530 530
			Site	A-2			
3 20 30 40 50	49.0 49.0 49.0 49.0 48.5 48.5 48.0	2,350 2,350 2,350 2,390 2,400 2,400 2,400 2,400	a520 520 520 520 530 530 530	64 65 70 80 90 100	47.0 46.0 45.0 45.0 45.0 45.0	2,600 2,700 3,100 3,000	600 630 750 730
			Site	P-1			
3 10 20 30 40 50	48.5 48.5 48.5 48.0 48.0	2,300 2,300 2,350 2,400 2,400 2,400	500 500 520 530 530 530	60 70 73 80 90	46.5 46.0 46.0 44.0 44.0	2,400 2,450 2,600 3,000	530 550 600 730
			Site	B-3			
3 10 20 30 40	49.0 48.5 48.5 48.5 48.5	2,300 2,300 2,350 2,350 2,350 2,350	500 500 520 520 520	50 60 70 80 90	48.5 48.0 46.0 45.0 45.0	2,350 2,350 2,500 2,800 2,900	520 520 560 660 690
			Site	P-2			
3 10 20 30 40	49.5 49.5 49.5 49.0 48.0	2,300 2,300 2,300 2,300 2,300 2,300	500 500 500 500 500	50 60 70 75 80	48.0 48.0 47.0 47.0 46.0	2,300 2,300 2,400 2,500 2,600	500 500 530 560 600
			Site	P-3			
3 10 20	50.0 49.0 49.0	2,300 2,300 2,300	500 500 500	30 40 42	49.0 49.0 49.0	2,300 2,300 2,300	500 500 500
			Site	P-4			
3 10 20 30 40	50.0 50.0 49.5 49.0 48.0	2,300 2,300 2,300 2,300 2,300 2,300	500 500 500 500 500	50 60 70 74	47.0 46.0 46.0 46.0	2,300 2,300 2,500 2,500	500 500 560 560
			Site	C - 1			
3 10 20 30	49.0 49.0 49.0 48.0	2,300 2,300 2,300 2,300	a500 500 500 500	40 50 69	47.5 47.0 47.0 47.0	2,300 2,300 2,400 2,450	500 500 530 550
			Site	P-5			
3 10	51.0 50.0	2,250 2,250	480 480	15	50.0	2,250	480

		(Locarion					
DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, MARCI	H 8-10,	1962Contin	ued	
			Site				
	50.0		500	40	48.0	2,300	500
3 10	50.0 49.0	2,300 2,300	500	50	48.0	2,400	530
20 30	49.0 48.0	2,300 2,300	500 500	60 63	48.0 48.0	2,500 2,900	560 690
1.00			Site	P-7			
3	50.0	2,200	470	30	49.5	2,200	470
10	50.0	2,200	470	40	48.5	2,200	470
20	50.0	2,200	Site	D=1			
					10.0	2,300	500
3	50.0 50.0	2,300 2,300	500 500	40 50	49.0 49.0	2,300	500
20 30	50.0 49.0	2,300 2,300	500 500	60	48.0	2,500	560
			Site	D-2			
2	50.0	2,300	500	40	49.0	2,300	500
3 10	50.0	2,300	500	50 57	48.0	2,350 2,500	520 560
20 30	50.0 49.0	2,300 2,300	500 500	27	47.5	2,500	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			Site	P-8			
3	50.0	2,300	500	40	48.0	2,350	250
10 20	50.0 49.0	2,300 2,300	500 500	50 53	48.0 48.0	2,450 2,700	550 630
30	49.0	2,300	500	56	48.0	2,950	710
			Site	E-3			
3	50.0	2,350	520 520	30 40	49.5	2,350 2,400	520 530
10 20	49.5 49.5	2,350 2,350	520	50	49.0	2,650	610
			Site	F-2			
3	51.0	2,400	530	30	49.5	2,400	530
10 20	50.5	2,400 2,400	530 530	40 41	49.5 49.5	2,500 2,500	560 560
			Site	G-2			
3	52.0	2,450	550	30	50.5	2,600	600
10	51.0	2,450	550 550	32 34	50.0	2,650 2,700	610 630
20	50.5	2,450		н-1	50.0	-,,	
					50.0	2 (00	600
3	51.0 50.5	2,600 2,600	600 600	18	50.0	2,600	800
	0.5502-02550	-	Site	e P-9			
3	52.0	2,600	a620	20	51.0	2,600	600
10	52.0	2,600	600	26	50.0	2,600	600
			Site	e P-10			
3 10	53.0	2,900	690	13	53.0	2,900	690
10	53.0	2,900	690				

(Location of Data-Collection Sites are Shown on Figure 4)

		(Location	of Data-Collection	Sites a	are Shown on	Figure 4)	
DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, MARCH	8-10,	1962Contin	ued	
			Site	156			
Top 3	55.5 55.5	3,300 3,300	820 820	9	55.5	3,400	850
			Site	170			
Тор 3	56.0 56.0	3,850 3,900	1,000 1,010	6	56.0	3,900	1,010
			Site	178			
3	57.0	4,000	al,080	6	57.0	4,000	1,080
			Site	P-11			
1	59.5	6,000	a1,680	3	59.5	6,000	1,680
			RESULTS OF SURVEY,	, JUNE 1	9-20, 1962		
			Site	A-1			
3 10 20	78.0 79.0 79.0	a2,470 2,470 2,470	a550 550 550	30 40 44	78.0 77.0 77.0	2,470 2,470 2,470	550 550 550
20	75.0	2,470	Site				
3	79.0	2,470	550	60	59.0	2,470	550
10 20	79.0 79.0	2,470 2,470	550	70 80	54.5	2.470 2,470	550 550
30 40 50	79.0 76.0 72.5	2,470 2,470 2,470	550 550 550	90 100 110	51.5 51.0 51.0	a2,470 2,470 2,470	a550 550 550
			Site	A-3			
3	78.0	2,470	550	50	74.0	2,470	550
10 20	79.0 79.0	2,470 2,470	550 550	51 52	71.0 68.0	2,470 2,470	550 550
30 40	78.0 76.0 -	2,470 2,470	550 550	55 60	67.0 59.0	2,470 2,470	550 550
			Site	A-4			
3	79.0	2,470	550	57	68.0	2,470	550
10 20	78.5 78.5	2,470 2,470	550 550	59 60	63.5 58.0	2,470 2,470	550 550
30 40	78.5 76.0	2,470 2,470	550 550	65 70	56.0 55.0	2,470 2,470	550 550
50 55	72.0 70.0	2,470 2,470	550 550	72	55.0	2,470	550
			Site	P-1			
3	78.5	a2,480	a560	65	60.5	2,550 2,480	575 560
10 20	79.0 79.0	2,480	560 560	70 75	55.5	2,480 2,480 2,480	560 560
30 40	77.0 75.5	2,480 2,480	560 560	80 85	53.0 53.0	2,480	560
50 55 60	73.0 71.0 64.0	2,480 2,480 2,580	560 560 585	90 95	52.0 51.5	2,580 2,580	585 585
		1517	Site	B-1			
3	80.5	2,490	550	19.	5 79.5	2,490	550
10	80.5	2,490	550				

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, JUNE	19-20,	1962Contin	ued	
			Site	B-2			
3 10 20 30	80.5 80.0 79.5 77.5	2,490 2,490 2,490 2,520	550 550 550 570	40 50 52	76.0 74.0 73.5	2,580 2,630 2,630	585 600 600
			Site	B-3			
3 10 20 30 40 50	81.0 80.5 80.0 79.0 77.0 74.5	a2,490 2,490 2,490 2,490 2,580 2,580 2,630	a550 550 550 550 550 585 600	60 70 80 90 93	63.0 57.5 55.0 53.5 53.5	2,690 2,580 2,580 2,630 2,630	615 585 585 600 600
			Site	P-2			
3 10 20 30 40 50	81.5 81.0 81.0 79.5 77.0 74.5	a2,520 2,520 2,520 2,520 2,520 2,580 2,740	a570 570 570 570 570 585 630	55 60 70 80 89	71.5 65.5 58.5 56.0 54.0	a2,740 2,600 2,540 a2,540 2,540	a630 615 570 a570 570
			Site	P-3			
3 10 20 30	82.0 81.5 81.0 79.0	a2,530 2,530 2,530 2,470	a570 570 570 555	40 50 60 63	76.0 74.0 68.5 67.0	2,420 2,530 2,470 2,470	545 570 555 555
			Site	e P-4			
3 10 20 30	82.0 82.0 80.0 79.5	a2,280 2,280 2,260 2,360	a510 510 500 525	40 50 60 64	78.0 75.5 66.0 66.0	2,500 2,740 a2,780 2,780	565 625 a640 640
<u>ت</u>			Site	e C-1			
3 10 20 30 40 50	81.0 81.0 80.5 79.0 77.5 73.0	al,990 1,990 2,010 2,290 2,580 2,970	a440 440 510 585 700	55 58 59 60 70 77	68.0 67.0 65.5 63.5 59.0 58.0	a2,970 2,970 2,970 2,970 a2,880 2,880	a700 700 700 700 a670 670
			Site	e C-2			
3 10 20 30 40	81.5 80.5 80.0 78.0 77.0	1,990 1,990 1,990 2,420 2,580	440 440 545 585	50 60 70 71	73.0 64.0 58.5 58.0	2,850 2,970 2,630 2,690	655 700 600 610
			Site	e C-3			
3 10 20	82.0 80.5 80.0	2,040 1,990 1,990	445 440 440	30 35	78.0 78.0	2,360 2,360	525 525
			Site	e P-5			
3 10	82.0 81.5	a2,350 2,350	a520 520	20	79.5	2,350	520

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	ULTS OF SURVEY, JUNE	19-20,	1962Conti	nued	
			Site	P-6			
3 8 10 20 30 40 50	82.0 81.0 80.5 79.5 79.0 76.5 75.5	a1,610 1,650 1,730 1,940 2,470 2,580 2,850	a 335 340 365 420 555 585 655	55 58 60 65 70 75	73.0 66.5 63.0 60.5 58.5 57.0	3,010 a3,040 3,010 2,960 a2,740 2,800	695 a700 695 680 a630 640
			Site	P-7			
3 10 20	84.5 82.0 81.0	a2,170 2,170 2,260	a480 480 500	30 40 47	78.0 76.0 75.0	2,200 a2,580 2,440	490 a580 550
			Site	D-1			
3 10 10. 11 12 15 20	83.0 81.0 5 81 81 81 80 80.0	a1,400 1,440 1,530 1,670 1,830 1,920 1,980	a280 290 310 350 390 410 430	30 40 55 60 62 65	80.0 78.5 76.5 71.0 66.0 65.0 62.0	2,260 2,630 2,910 2,800 2,800 2,800 2,800 2,800	500 600 640 640 640 640 640
			Site	D-2			
3 10 20	84.0 81.0 81.0	al,520 1,850 1,970	a315 395 425	30 31	79.5 79.5	2,150 2,150	475 475
			Site	P-8			
3 10 20 30 35	82.5 81.0 80.0 78.5 78.0	a1,210 1,300 1,460 1,830 2,200	a235 250 295 390 485	40 41 45 50 58	78.0 78.0 76.5 76.5 75.0	2,440 2,440 2,760 2,960 3,360	550 550 630 685 775
			Site	E-1			
3 10	84.0 82.0	a885 920	a145 155	20 30	80.0 77.0	1,130 1,990	210 430
			Site				
3 10 20	85.0 83.0 80.0	a936 990 1,190	a160 175 225	30 40 43	78.0 78.0 78.0	a1,820 2,800 2,800	a395 640 640
			Site	F-1			
3 10 20	82.0 81.5 79.0	810 810 1,140	125 125 210	30 40 43	77.0 77.0 77.0	2,100 a2,550 2,550	460 a595 595
			Site	F-2			
3 10	81.0 81.0	824 810	130 125	20 25	79.0 79.0	1,110 a1,510	205 a315
			Site			Appen - Second Adam	Stand States
3 10 16	80.0 80.5 79.0	a824 800 a983	al 32 125 al 71	20 21	79.0 79.0	1,060 1,060	190 190

(Location of Data-Collection Sites are Shown on Figure 4)

	•	240					
DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PFM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESULT	S OF SURVEY, JUNE	19-20, 1	962Continu	ed	
			Site				
3	80.0	824	130	10	80.0	800	125
			Site		(12) (22) (4 * (4794)		
2	01 5	970	145	17	80.0	860	140
3 10	81.5 80.5	870 805	125	17	00.0	800	140
			Site	G-2			
3	81.5	a869	a144	28	76.5	1,680	350
10	80.5	805	125	30	76.0	1,910	410
20	79.0	920	155 190	40 41	76.0 76.0	a2,390 2,390	a545 545
22 25	78.5 77.0	1,050 1,550	315	41	70.0	2,550	545
			Site	P-9			
3	81.0	a898	a150	30	76.5	2,080	455
10	80.0	810	125	35		a2,190	a500
20	79.0	990	175	36	76.0	2,230	500
			Site	P-9A			
3	81.0	a815	a122	25	77.0	1,670	350 380
10 20	81.0 79.0	780 770	115 110	26 28	76.5 76.5	1,790 1,940	420
21	78.5	960	165	30	76.5	2,040	445
22 23	78.0 77.5	1,080	195 230	35	76.0	2,420	545
				P-10			
3	83.5	a1,240	a232	20	81.0	1,240	232
10	83.0	1,240	232	24	80.0	1,240	232
			Site	P-164			
3	85.0	al,330	a248	15	82.0	1,570	275
10	82.5	1,330	248				
			Site	P-178			
3	85.0	al,720	a320	14	85.0	al,570	a275
10	85.5	1,570	275				
				P-11			120-177 Sec. 11
3 10	83.0 82.5	al,770 1,770	a320 320	12	82.0	1,790	325
.5	5219			P-12			
3	84.0	al,570		10	82.5	1,670	290
2	04.0	ar,570		P-13	0219		
	.				01 5	1.460	220
3	85.5	a1,460	a220	8	84.5	1,460	220

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		R	ESULTS OF SURVEY, N	OVEMBER	13-14, 1962		
			Site	A-1			
3 20 30 40 50 60	66.5 66.5 66.5 66.5 66.5 66.5 66.0	1,490 1,490 1,500 1,500 1,500 1,500 1,500	302 302 308 308 308 308 308 308	70 75 78 80 85 90 95	65.5 65.5 64.5 64.5 64.0 64.0	1,710 1,900 2,100 2,160 2,310 2,380 2,380	365 418 470 487 530 542 542
			Site	A-2			
3 10 20 30 40 50 60 70	66.5 66.5 66.5 66.5 66.5 66.5 66.5 66.5	a1,500 1,500 1,500 1,500 1,500 1,500 1,500 1,540	a 308 308 308 308 308 308 308 308 308 320	75 78 80 85 90 95 97	65.5 65.5 65.0 65.0 65.0 65.0	a1,970 2,100 2,150 2,260 2,380 a2,380 2,380 2,380	a432 470 485 513 542 a542 542
			Site	A-3			
3 10 20 30 40 50 60	67.0 66.5 66.5 66.5 66.0 66.0 66.0	1,500 1,500 1,500 1,500 1,500 1,500 1,520	308 308 308 308 308 308 308 313	65 68 70 75 80 90 95	66.5 66.5 66.0 65.0 65.0 65.0	1,520 1,520 1,810 1,980 2,120 2,380 2,380	313 313 392 440 475 542 542
			Site	P-1			
3 10 20 30 40 50 60	66.5 67.0 67.0 66.5 66.5 66.5 66.5	a1,480 1,480 1,480 1,480 1,480 1,480 1,480 1,510 1,580	a300 300 300 300 300 300 312 330	70 72 75 80 82 85 90 95	65.5 65.5 65.0 65.0 65.0 65.0 65.0 65.0	1,800 1,930 1,940 2,260 2,260 2,310 2,380 2,380	390 422 515 515 528 542 542
			Site	B-1			
3 10 20	66.5 66.5 66.5	1,470 1,470 1,470	300 300 300	30 40 43	66.5 66.5 66.0	1,470 1,470 1,470	300 300 300
			Site	B-2			
3 10 20 30 40	66.5 66.0 66.5 65.0	1,470 1,470 1,470 1,470 1,470 1,470	300 300 300 300 300	50 60 70 72 75	65.5 65.5 65.5 65.5 65.0	1,470 1,470 1,470 1,610 1,760	300 300 300 340 380
			Site	B-3			
3 10 20 30 40 50 60	66.5 66.5 66.5 66.5 66.5 66.5 66.5	a1,470 1,470 1,470 1,470 1,470 1,470 1,470 1,470	a300 300 300 300 300 300 300	70 75 78 80 85 90 92	66.5 65.5 65.0 65.0 65.0 64.5	1,470 1,760 1,810 2,050 2,130 2,380 2,380	300 380 392 457 478 542 542

DEPTH (FT)	TEMPERATURE (°F)		CHLORIDE (PPM, CALCULATED)		TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
L		RESULTS	OF SURVEY, NOVEMBE	R 13-14	, 1962Cont	inued	
			Site	P-2			
3 20 30 40 50 60	66.0 66.0 66.0 66.0 66.0 66.0 66.0 66.0	a1,460 1,460 1,460 1,460 1,460 1,460 1,460 1,460 1,460	a298 298 298 298 298 298 298 298 298	70 72 75 78 80 85 88	65.5 65.0 64.5 64.5 64.5 64.0 64.0	1,670 1,700 2,020 2,040 a2,220 2,260 2,260	355 362 450 455 a502 515 515
			Site	P-2A			
3 10 20 30 40 50 60	66.0 66.0 65.5 65.5 65.5 65.5 65.5	al,450 1,450 1,450 1,450 1,450 1,450 1,450 1,450	a295 295 295 295 295 295 295 295	67 70 72 75 78 80 85	65.5 65.5 65.0 64.5 64.5 64.5	1,580 1,690 1,760 2,040 2,170 2,250 2,250	330 360 378 455 490 512 512
			Site	P-3			(a)
3 10 20 30	66.5	a1,450 1,450 a1,450 1,450	a292 290 a290 290	40 50 56	66.0 66.0 66.0	1,450 1,450 1,450	290 290 290
			Site	P-4			
3 10 20 30 40 50 60	66.5 66.0 66.0 65.5	a1,450 1,450 1,450 1,450 1,450 1,450 1,450 1,460	a292 292 292 292 292 292 292 292 298	65 66 70 75 80 85	65.0 64.5 64.5 64.0 64.0 64.0	1,460 1,600 1,690 1,700 1,920 a2,100 2,150	298 335 360 362 422 a470 484
			Site	C-1			
3 10 20 30 40 50	65.0 65.0 65.0	al,430 1,430 1,430 1,430 1,430 1,430 1,470	a290 290 290 290 290 290 300	55 60 62 65 68 70	64.5 64.0 63.5 63.5 63.5	1,530 1,700 1,920 a2,010 2,050 2,050	317 362 422 a442 457 457
			Site	C-3			
3 10 20	66.0	1,430 1,430 1,430	290 290 290	30 40 42	65.5 65.0 65.0	1,430 1,430 1,430	290 290 290
			Site	P-5			
3		a1,340 1,340	a265 265	20 24	63.0 61.5	1,340 1,340	265 265
				P-6	64.5	1,410	282
10 20 30	65.0 64.5	a1,410 1,410 1,410 1,410 1,410	a282 282 282 282	40 50 59	64.0 64.0	1,460 1,460 1,460	298 298

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESULTS	OF SURVEY, NOVEMBE	R 13-14	, 1962Cont	inued	
			Site	P-7			
3 10 20 30 40	64.5 64.5 64.0 64.0	a1,350 1,350 1,350 1,350 1,350 1,350	a270 270 270 270 270	50 55 58 60 62	63.5 63.5 64.0 64.0 65.0	1,350 1,460 1,580 1,800 2,120	270 298 330 390 475
			Site	D-1			
3 10 20 30	65.0 64.5 64.5 64.0	a1,400 1,400 1,400 1,400 1,400	a280 280 280 280	40 50 60 65	64.0 64.0 63.5	1,450 1,450 a1,480 1,600	295 295 a302 336
			Site	P-8			
3 10 20 30	64.0 64.0 64.5 64.0	a1,410 1,410 1,410 a1,430	a282 282 282 a290	38 40 47	64.0 63.5 63.5	1,430 1,430 1,430	290 290 290
			Site	E-2			
3 10 20	63.5 63.5 63.5	a1,410 1,410 1,410	a282 282 282	30 40 45	62.5 62.5 62.5	1,470 1,500 a1,520	300 310 a312
			Site	F -1			
3 10 20	62.5 62.5 62.5	al,470 1,470 1,470	a300 300 300	30 40 45	62.0 62.0 61.5	1,470 1,520 a1,950	300 312 a430
			Site	G-1			
3 10	60.0 60.0	1,490 1,490	300 300	15	60.0	1,490	300
			Site	G-2			
3 10	60.0 60.0	al,490 1,490	a300 300	20 30	60.0 59.5	1,500 1,500	308 308
	50 5	1 (20	Site		50.0	1 620	340
3 10 20	58.5 58.5 59.5	a1,630 1,630 1,630	a340 340 340	30 33	59.0 59.0	1,630 1,630	340
			Site	P-9A			
3 10 20 22	59.5 59.5 59.5 59.0	a1,640 1,640 1,640 2,120	a 342 342 342 475	25 28 30	59.0 59.0 59.0	2,970 3,250 3,250	710 790 790
			Site	P-10			
3 10 15	58.5 58.5 58.5	al,800 1,800 1,900	a 385 385 417	18 20	58.5 58.5	a3,470 3,470	a850 850

(Location of Data-Collection Sites are Shown on Figure 4)

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESULTS	OF SURVEY, NOVEMBE	3-14	, 1962Cont	inued	
			Site	174			
3 10	58.5 58.5	2,150 4,060	484 1,020	13	58.5	4,800	1,250
			Site	-11			
3 5 8	57.0 57.0 57.5	a2,580 2,580 5,100	a610 610 1,350	10 11	58.0 58.0	a5,890 5,890	al,620 1,620
			Site	- 12			
3 5	56.0 56.0	a4,060 4,230	al,020 1,070	8 10	58.0 58.5	6,600 a7,050	1,880 a2,060
			Site	P-13			
3 6	56.0 56.0	a6,580 6,580	a1,870 1,870	8	56.0	7,050	2,060
			RESULTS OF SURVEY	MARCH	6, 1963		
			Site	4-1			
Top 3 10 20	44.0 44.0 44.5 44.5	1,860 1,860 1,890 1,900	398 398 405 410	30 40 50 60	44.5 44.5 44.5 44.5	1,900 1,900 1,900 1,900	410 410 410 410
			Site	4-2			
Top 3 10 20 30 40 50	44.0 44.5 44.0 44.0 44.0 44.0 44.0	a1,860 1,860 1,890 1,890 1,900 1,900 1,900	a398 398 405 405 410 410 410	77 78 79 80 81 82 83	41.0 41.0 41.0 40.5 40.5 40.5	2,590 2,720 3,180 3,450 a3,630 3,800 3,900	600 635 765 840 ∍880 940 968
60 70 71 72 73 74 75 76	44.0 43.5 43.0 43.0 43.0 43.0 43.0 42.5 42.0	1,900 1,910 1,910 1,910 1,910 1,910 2,070 2,380	410 410 410 410 410 410 450 540	84 85 86 87 88 89 90	40.5 40.5 40.5 40.5 40.5 40.5 41.5 42.0	3,900 4,000 4,000 4,000 4,000 4,260 a4,310	968 998 998 998 998 1,060 a1,070
			Site	4-3			
Top 3 10 20 30 40 50 60	44.5 44.5 44.5 44.5 44.5 44.5 44.5 44.5	1,900 1,900 1,900 1,900 1,900 1,900 1,900 1,900	410 410 410 410 410 410 410 410	78 79 80 81 82 83 84 85	41.0 41.0 41.5 41.5 41.5 42.0 42.0	2,720 3,180 3,490 3,800 3,900 4,000 4,110 4,110	635 765 850 940 968 998 1,030 1,030
70 71 72 73 74 75 76 77	44.5 44.5 43.0 43.0 42.5 42.0 41.5	1,900 1,910 1,910 2,060 2,140 2,340 2,560	410 412 425 450 472 528 590	86 87 88 90 91 92	42.0 42.0 42.0 42.0 42.0 42.0 42.5 43.0	4,110 4,110 4,210 4,210 4,310 4,420 4,620	1,030 1,030 1,030 1,060 1,080 1,120 1,170

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	ULTS OF SURVEY, MAR	сн 6, 1	963Continue	ed	
			Site	P-1			
Top 3 10 20 30 40 50	46.5 47.0 47.0 47.0 47.0 47.0 47.0 47.0	al,850 1,850 1,850 1,850 1,850 1,850 1,850 1,850	a395 395 395 395 395 395 395 395	77 78 79 80 81 82 83	43.5 43.5 43.5 43.5 43.0 43.0 43.0	2,620 2,730 2,730 2,900 3,010 3,120 3,280	608 638 638 685 715 748 795
60 70 71 72 73 74 75 76	47.0 47.0 46.0 46.0 45.5 45.0 44.5	1,850 1,850 2,010 2,010 2,050 2,100 2,400	395 395 435 435 446 460 542	84 85 86 87 88 89 90	44.0 44.5 44.5 44.5 44.5 44.5 44.5 44.5	3,490 3,630 3,680 3,720 3,770 3,800 a3,840	850 890 910 918 930 940 a950
			Site	B-1			
Top 3 10 20	47.5 47.0 47.0 47.0	1,920 1,920 1,920 1,920	410 410 410 410	30 40 41	47.0 47.0 47.0	1,920 1,920 1,920	410 410 410
			Site	B-2			
Top 3 10 20 30	47.0 47.0 47.0 47.0 47.0 47.0	1,920 1,920 1,920 1,920 1,920 1,920	410 410 410 410 410	40 50 60 70	47.0 47.0 46.5 46.0	1,920 1,920 1,920 2,030	410 410 410 440
			Site f	3-3			
Top 3 10 20 30 40	47.5 47.5 47.5 47.5 47.5 47.5 47.5	a1,860 1,860 1,920 1,920 1,920 1,920 1,920	395 395 410 410 410 410 410	50 60 70 71 90	47.5 47.0 46.5 46.0 45.5	1,920 1,930 2,030 2,110 a3,450	410 412 440 462 a830
			Site F	-2			
Top 3 10 20 30 40 50 60 65 66 68	48.5 48.0 47.5 47.5 47.5 47.5 47.5 47.0 47.0 46.5 46.5	a1,840 1,840 1,870 1,870 1,870 1,870 1,870 1,870 1,890 1,900 2,000 2,100	a390 398 398 398 398 398 398 400 403 432 460	70 71 72 73 74 75 76 77 78 79	46.5 45.5 45.0 45.0 44.5 44.5 44.5 44.5 44	2,100 2,120 2,280 2,320 2,380 2,500 2,800 2,950 3,100 a3,610	460 468 510 522 540 570 658 700 740 880
			Site P	-2A			
Top 3 10 20 30 40 50	48.0 48.0 48.0 48.0 47.5 47.5 47.5	al,820 1,820 1,820 1,820 1,820 1,820 1,820 1,820 1,820	a 388 388 388 388 388 388 388 388 388	67 68 69 70 71 72 73	46.0 45.0 45.0 45.0 45.0 44.5 44.5	2,220 2,340 2,440 2,490 2,550 2,620 2,700	495 528 555 570 588 608 630

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	ULTS OF SURVEY, MAI	RCH 6, 1	963Continu	ed	
			Site P-2A-	-Continu	ied		
60 61 62 63 64 65 66	47.5 47.0 46.5 46.5 46.5 46.5 46.5 46.0	1,800 1,880 1,940 1,990 2,020 2,070 2,220	388 400 415 430 440 452 495	74 75 76 77 78 79	44.5 44.5 44.5 44.5 44.5 44.5 44.5	2,820 a2,960 3,000 3,040 3,040 4,030	662 a700 715 725 725 1,010
			Site	P-3			
Top 3 10 20	47.5 47.5 47.5 47.5	al,810 1,810 1,810 1,810 1,810	a385 385 385 385	30 40 50 53	47.5 47.5 47.0 47.0	1,810 1,810 1,810 1,810	385 385 385 385
			Site	P-4			
Top 3 10 20 30 40	49.0 49.0 49.0 48.5 48.5 48.5	al,830 1,320 1,820 1,820 1,820 1,820 1,820	a388 385 385 385 385 385 385	66 67 68 69 70 71	45.0 45.0 44.5 44.5 44.5 44.5	2,290 2,310 2,310 2,360 2,410 2,460	515 520 520 532 548 560
50 60 61 62 63 64 65	48.5 47.0 46.0 45.5 45.5 45.5	1,820 1,920 2,050 2,100 2,150 2,150 2,280	385 410 445 460 475 475 505	72 73 74 75 76 77	44.5 44.5 44.5 44.5 44.5 44.5 44.5	2,460 2,510 2,560 a2,610 2,610 2,660	560 575 590 a600 600 675
			Site	C-1			
Top 3 10 20 30 40 50	48.5 48.5 48.5 48.5 48.5 48.5 48.0 48.0	a1,800 1,800 1,810 1,810 1,810 1,810 1,810 1,840	a 3 82 382 382 382 382 382 382 382 382	55 58 60 64 65 68	46.5 46.5 46.5 45.5 45.5 45.5 45.0	1,950 1,950 a2,100 2,200 2,250 2,250 2,350	420 420 a462 490 500 500 530
			Site	C-2			
Top 3 10 20	49.0 48.5 48.0 48.0	a1,810 a1,810 1,810 1,810 1,810	a 382 a 382 382 382 382	30 40 42	48.0 48.0 48.0	1,810 1,810 1,810	382 382 382
			Site	e P-5			
Тор 3	49.5 49.5	al,770 l,770	a370 370	10 16	49.5 49.5	1,770 1,770	370 370
			Site	e P-6			(#)
Top 3 10 20 30 40 50	50.5 50.0 49.5 48.5 48.0 48.0 48.0	al,770 1,770 1,780 1,780 1,810 1,810 1,810	a372 372 372 372 380 380 408	55 57 59 60 62 64 66	47.5 47.0 46.5 46.0 45.5 45.5	2,010 2,100 2,150 2,250 2,350 2,400 a2,500	435 460 475 502 530 545 a570

(Location of	Data-Collection	Sites are	Shown on	Figure 4)
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DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED
		RES	ULTS OF SURVEY, MAR	ксн 6, 1	963Continu	ed	
			Site	P - 7			
Top 3 10 20	50.5 50.0 49.0 48.5	a1,730 1,730 1,730 1,730	a 362 362 362 370	30 40 45	48.0 46.5 46.0	1,800 a1,840 1,840	378 a392 392
			Site	D-1			
Top 3 10 20 30 40 50	51.0 50.0 49.5 49.0 48.5 48.5 48.0	al,800 al,790 1,790 1,790 1,800 1,840 1,900	a 375 a 378 378 378 378 378 388 402	55 56 57 58 59 60	47.5 47.5 47.5 47.5 47.0 47.0	2,050 2,170 2,230 2,340 a2,400 2,450	477 480 498 528 a542 560
			Site	P-8			
Top 3 10 20	52.0 51.0 50.0 49.5	a1,820 1,820 1,820 1,820 1,820	a388 388 388 388 388	30 40 50	49.5 49.5 49.5	1,850 1,880 1,920	392 398 410
			Site	E-3			
Top 3 10 20	52.0 52.0 52.0 51.5	al,960 1,960 1,960 1,960 1,960	a425 425 425 425	30 40 44	51.5 51.0 51.0	1,960 1,960 1,960	425 425 425
			Site	F-1			
Top 3 10 20	54.0 52.0 51.0 51.0	a2,020 2,020 2,020 2,020 2,020	ə440 440 440 440	30 35 40	50.5 50.5 50.5	2,020 2,100 2,240	440 460 500
			Site	G-1			
Top 3 10	54.0 53.0 52.0	a2,120 a2,130 2,130	a470 a468 468	20 30	51.5 51.5	2,130 2,190	468 485
			Site	P-9			
Top 3 10	54.0 54.0 52.5	a2,220 2,220 2,220	a 498 498 498	20 26	52.0 52.0	2,220 2,220	498 498
			Site	P-9A			
Top 3 10 15	56.0 55.5 53.0 52.5	a2,250 2,250 2,250 2,350	a508 508 508 530	20 22 23 24	52.5 52.5 52.5 52.5	2,400 2,450 2,600 a2,720	545 560 600 a640
			Site	P-10			
Top 3 5 7 9	54.5 54.0 52.5 52.5 52.5	a2,550 2,600 2,700 2,750 2,840	a588 600 630 642 670	10 13 15 16	52.0 52.0 53.0 53.0	2,840 2,900 2,950 a3,620	670 685 700 a890

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	ULTS OF SURVEY, MAR	сн 6, 1	963Continue	ed	
			Site	159			
Top 3 5 7	54.5 54.4 54.5 53.5	a2,690 2,690 2,740 2,990	a630 630 640 710	8 9 10 12	53.5 53.5 54.5 55.0	3,040 3,440 3,940 4,720	725 840 980 1,200
			Site	174			
Top 3 4 5	56.5 56.0 55.5 55.5	a3,570 3,570 3,770 5,270	a870 870 932 1,400	6 7 8 9	55.0 55.0 55.0 55.0	5,750 6,720 7,000 a7,190	1,530 1,810 1,890 a1,950
			Site	178			
Top 3 4 5	55.5 55.5 54.5 54.5	3,600 3,600 4,800 4,800	882 882 1,220 1,220	6 7 8 9	54.5 54.5 54.5 54.5	6,000 6,800 7,500 7,500	1,600 1,830 2,050 2,050
			Site	P-11			
Top 3 4	55.0 54.5 54.5	a4,420 4,420 5,800	al,120 1,120 1,540	5 6	54.0 54.0	6,800 a7,940	1,830 a2,200
			RESULTS OF SURVEY	, JUNE	7-8, 1963	÷	
			Site	A-1			
3 10 20 30 40 42	77.5 77.0 77.0 76.5 71.5 70.5	1,870 1,870 1,870 1,870 2,040 2,050	412 412 412 412 460 462	45 47 50 55 58	69.0 68.5 68.0 63.0 63.0	2,050 2,060 2,090 2,110 2,110	462 465 475 480 480
			Site	A-2			
3 10 20 30 35 40 45 50 53	77.5 77.0 77.0 77.0 76.0 69.0 67.0 64.0	1,870 1,870 1,870 2,000 2,050 2,050 2,050 2,050 2,050 2,090	412 412 412 448 462 462 462 462 475	58 60 65 70 80 85 90 95	62.0 60.0 56.5 54.5 52.0 51.5 50.5 50.5	2,090 2,090 2,110 2,060 2,090 2,130 2,250 2,440	475 480 465 475 485 518 570
			Site	A-3			
3 10 20 30 40 50 55 60	77.5 77.0 77.0 76.0 70.5 66.5 63.5 59.5	a1,870 1,870 1,870 2,050 2,050 2,050 2,050 2,090	a412 412 412 462 462 462 475	65 70 75 80 85 90 95 97	55.5 54.0 53.5 52.0 51.5 51.0 50.0 50.0	2,050 2,050 2,140 2,170 2,220 a2,480 2,290	462 462 475 488 495 510 a580 545

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	LTS OF SURVEY, JUNE	7-8,1	963Continue	ed	
			Site	P-1			
3 10 20 30 40 50	77.5 77.0 76.5 75.0 70.5 66.5	al,870 1,870 1,870 1,900 2,060 2,150	a415 415 415 420 465 490	60 70 80 90 99	61.5 55.5 53.0 51.5 51.0	2,150 2,150 2,190 a2,290 2,390	490 490 502 a535 558
			Site	B-3			
3 10 20 30 40 50	80.0 78.5 77.5 77.0 71.5 68.5	al,870 1,870 1,870 1,870 2,180 2,380	a415 415 415 415 500 555	60 70 80 90 91 93	62.5 56.0 54.0 52.0 52.0 51.5	2,330 2,310 2,330 2,330 a2,460 2,550	540 535 540 540 a590 602
			Site	P-2			
3 10 20 30 35 40	79.0 78.0 77.5 75.5 74.5 72.5	al,900 1,900 1,900 1,910 2,010 2,270	a420 420 425 452 525	50 60 70 80 90 92	70.0 63.0 57.0 55.0 53.0 53.0	2,730 2,530 2,380 2,430 2,530 2,530	652 595 555 570 595 595
			Site	P-2A			
3 10 20 30 40 50	78.0 77.5 77.0 75.0 73.0 71.0	al,910 1,950 1,970 2,040 2,370 2,960	a428 535 440 460 552 715	60 70 80 83 86	62.5 57.0 56.0 55.0 54.0	a2,570 2,400 2,350 a2,480 2,600	a608 560 545 a590 615
			Site	P-3			
3 10 20 30 35	79.0 77.0 76.5 75.5 73.5	a1,910 1,910 1,930 1,930 2,020	a 428 428 430 430 455	40 50 55 60 62	72.5 69.5 63.5 57.0 55.5	2,220 2,360 2,250 a2,090 2,090	510 550 518 a475 475
			Site		-	0.000	709
3 10 20 30 40	79.5 78.5 78.5 76.5 73.5	al,910 1,910 1,910 2,000 2,520	a430 430 430 450 595	50 60 70 80 85	71.5 63.5 58.0 57.0 57.0	2,930 2,740 2,490 2,520 a2,500	708 655 590 595 a588
			Site	C – 1			
3 10 20 30 40	78.5 77.5 77.0 76.0 73.5	al,960 1,960 1,960 2,110 2,490	a442 442 442 480 590	50 60 70 76	72.0 63.0 59.5 59.5	2,960 a2,790 2,560 2,440	715 a675 605 570
			Site	P-5			
3 10	77.5 77.0	al,930 1,930	a430 430	20 26	76.0 75.0	1,980 1,980	442 442

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	LTS OF SURVEY, JUNE	7-8, 1	963Continue	ed	
			Site	P-6			
3 10 20 30 40	78.0 78.0 76.0 75.0 74.5	al,950 1,950 1,950 2,100 2,650	a435 435 435 475 630	50 60 70 75	72.0 59.0 59.0 59.0	a3,060 3,060 2,750 a2,340	a740 740 658 a545
			Site	P-7			
3 10 20 28	80.0 80.0 78.5 77.0	al,760 1,760 1,790 1,830	a388 388 390 400	30 35 40 50	76.0 75.5 74.0 67.0	1,830 1,890 1,810 2,010	400 420 395 452
			Site	D-1			
3 10 20 30	79.0 78.5 78.5 77.0	al,950 1,950 1,950 2,190	a435 435 435 500	40 50 60 70	75.5 72.0 64.5 58.5	2,390 2,940 2,840 2,540	555 710 682 600
			Site	P-8			
3 10 20 30	79.5 79.0 77.0 77.0	a2,110 2,110 2,210 2,300	a475 475 508 532	40 50 60 63	75.5 73.5 63.0 61.0	2,340 a2,780 2,830 2,630	545 a645 680 625
			Site	E-3			
3 10 20	78.5 78.5 77.0	a2,210 2,210 2,210	a505 505 505	30 40 47	77.0 76.5 75.5	2,230 2,280 a2,560	512 525 a590
			Site	F-1			
3 10 20 30	78.5 78.5 78.5 77.0	a1,920 1,920 1,920 2,020	a425 425 425 455	40 45 47	76.5 76.5 76.0	2,160 a2,210 2,210	470 a475 475
			Site	G-2			
3 10 20	78.5 78.5 78.5	a1,480 1,480 1,630	a310 310 340	30 40	78.0 77.5	a1,740 1,830	a345 380
			Site	P-9			
3 10 20	79.0 79.0 79.0	a1,510 1,510 1,510	a320 320 320	30 36	76.5 76.0	1,710 2,160	370 495
			Site	P-9A			
3 10 20	80.0 80.0 79.0	al,570 1,570 1,600	a305 305 310	29 30 32	78.0 78.0 78.0	1,610 1,610 1,610	315 315 315
			Site	P-10			
3 10	80.0 80.0	al,590 1,590	a305 305	20 22	79.5 79.5	1,600 1,600	310 310

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	TS OF SURVEY, JUNE	7-8, 1	963Continue	ed	
			Site	174		5	
3 10	80.5 80.5	al,820 1,800	a362 362	13 14	79.5 78.0	1,800 a1,710	362 a340
			Site	P-11			
3 10	80.5 80.5	a1,800 1,800	a358 358	12	78.5	1,860	382
			RESULTS OF SURVEY,	AUGUST	19-20, 1963		
			Site	A-1			
3 10 20 30	85.5 84.5 84.0 83.5	2,010 2,010 2,010 2,010 2,010	450 450 450 450	40 50 52	82.5 79.5 78.0	2,010 2,050 2,090	450 460 475
			Site	A-2			
3 10 20 30 40	85.5 84.5 84.0 83.5 82.5	2,010 2,010 2,010 2,010 2,010 2,010	450 450 450 450 450	50 60 70 80 90	79.0 76.5 74.0 70.0 66.5	2,050 2,190 2,430 2,550 2,590	460 485 560 600 615
			Site	A-3			
3 10 20 30 40	85.5 84.5 84.0 83.5 83.0	a2,010 2,010 2,010 2,010 2,010 2,010	a450 450 450 450 450	50 60 70 80 90	79.0 76.5 73.5 72.0 71.5	2,050 2,190 2,330 2,490 2,490	460 485 530 580 580
			Site	P-1			
3 10 20 30 40	85.5 84.5 84.0 84.0 83.0	a2,000 2,000 2,000 2,000 2,000 2,000	a448 448 448 448 448 448	50 60 70 80 87	78.5 76.5 74.0 71.5 68.0	2,090 2,270 2,390 2,490 2,490	475 510 550 580 580
			Site				
3 10 20	86.0 85.5 84.5	a2,000 2,000 2,000	a450 450 450	30 33	83.0 82.5	2,000 2,000	450 450
			Site	B-2			
3 10 20 30	86.0 85.5 84.5 83.0	2,000 2,000 2,000 2,000	450 450 450 450	40 50 53	81.5 78.5 77.5	2,000 2,075 2,090	450 468 472
			Site	B-3			
3 10 20 30 40	86.0 85.5 84.5 83.0 81.5	2,000 2,000 2,000 2,000 2,000 2,000	450 450 450 450 450	50 60 70 77	78.5 76.0 73.5 73.0	2,070 2,190 a2,330 2,380	468 485 a518 540

(Location of Data-Collection Sites are Shown on Figure 4)

(Location of Data-Collection Sites are Shown on Figure 4)

preprint Temperature (TT) specific connucrate (HCR0H05 AT 25'C) cultable (PPh, CALCULATED) perfit (TT) teperature (TS) specific connucrate (HCR0H05 AT 25'C) Cultable (PPh, CALCULATED) RESULTS OF SURVEY, AUGUST 19-20, 19-30-Continued Site P-2 Site P-2A Site P-3 Site P-3 Site P-3 Site P-3 Site P-4 Site P-4 Site P-4 Site P-4 Site P-5 Site P-5 Site P-5									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		TEMPERATURE (°F)	CONDUCTANCE			(°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			RESULT	S OF SURVEY, AUGUST	19-20,	1963Cont i	nued		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				Site	P-2				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	86.0	al.990	a442	60	76.0			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	10	85.5	1,990	442					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						69.5	a2,330	a525	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	40	81.5	1,990		85	69.5	2,330	525	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	50	//.0	2,050		P-2A				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						78.0	2 070	466	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			a2,000 1,980				2,160	474	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	20	84.0	1,980						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					15	/4.0	2,270	2.0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				Site	P-3				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3	85.0	al,990						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	10	84.5	1,980						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$,0	10.0			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				Site	P-4				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3		al,990						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			1,990					510	
40 82.0 1,900 440 70 7100 21100 Site C-1 3 85.0 a1,990 442 50 78.0 2,160 495 10 85.0 1,990 442 60 76.0 2,160 495 20 84.0 1,980 442 71 72.5 2,270 515 30 83.0 1,990 442 71 72.5 2,270 515 30 85.0 a1,960 4428 16 81.5 1,930 420 Site P-5 3 84.0 a1,980 a428 16 81.5 1,930 420 Site P-6 Site P-6 Site D-1 3 84.0 1,980 435 60 77.0 2,160 495 30 84.0 1,980 435 50 79.0 2,160 495 30 84.0 1,980 435 50 78.5 2,270 510 <td colspa<="" td=""><td>30</td><td>83.0</td><td>1,980</td><td>440</td><td>70</td><td>73.5</td><td>2,190</td><td></td></td>	<td>30</td> <td>83.0</td> <td>1,980</td> <td>440</td> <td>70</td> <td>73.5</td> <td>2,190</td> <td></td>	30	83.0	1,980	440	70	73.5	2,190	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	40	82.0	1,900			7110	-,		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						70.0	2 160	495	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			al,990				2,160	495	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	20	84.0	1,980	440	70	73.0	2,160		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			1,990 2,000		/1	12.5	2,270	515	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				Site	P-5				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					16	81.5	1,930	420	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	10	83.0	1,930						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$								150	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3								
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			1,980	435	60	77.0	2,160		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	30	83.0	1,980			74.0	2,190	500	
3 84.5 1,980 435 50 78.5 2,270 510 10 84.0 1,980 435 60 76.0 2,330 530 20 83.5 1,980 435 64 74.0 2,330 530 30 83.0 1,980 435 64 74.0 2,330 530 Site P-7 3 84.0 1,990 438 40 80.0 1,930 420 10 84.0 1,980 435 50 76.5 1,930 420 20 84.0 1,980 435 60 74.0 1,930 420						0-	0.050	4.50	
10 84.0 1,960 435 60 76.0 2,330 530 20 83.5 1,980 435 64 74.0 2,330 530 30 83.0 1,980 435 64 74.0 2,330 530 Site P-7 3 84.0 1,990 438 40 80.0 1,930 420 10 84.0 1,980 435 50 76.5 1,930 420 20 84.0 1,980 435 60 74.0 1,930 420									
30 83.0 1,980 435 61 710 Site P-7 3 84.0 1,990 438 40 80.0 1,930 420 10 84.0 1,980 435 50 76.5 1,930 420 20 84.0 1,980 435 60 74.0 1,930 420	20	83.5	1,980	435	60	76.0	2,330	530	
Site P-7 3 84.0 1,990 438 40 80.0 1,930 420 10 84.0 1,980 435 50 76.5 1,930 420 20 84.0 1,980 435 60 74.0 1,930 420	30	83.0	1,980			/4.0		220	
3 84.0 1,950 430 40 420 10 84.0 1,980 435 50 76.5 1,930 420 20 84.0 1,980 435 60 74.0 1,930 420				Site		122			
10 84.0 1,960 435 60 74.0 1,930 420 20 84.0 1,980 435 60 74.0 1,930 420									
20 0110				435					
				435					

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESULT	S OF SURVEY, AUGUST	19-20,	1963Conti	nued	
			Site	P-8			
3 10 20 30	84.0 84.0 83.5	a1,990 1,980 1,980 1,980	a438 435 435 438	40 50 57	83.0 79.0 77.0	1,990 2,270 2,380	442 510 540
			Site	E-3			
3 10 20	84.5 84.0 84.0	al,990 1,980 1,990	a438 435 438	30 40 46	83.0 83.0 82.5	1,990 1,990 2,060	438 438 460
			Site	F-2			
3 10 20	83.0 83.0 83.0	a2,050 2,050 2,050	a450 450 450	30 40	83.0 82.5	2,050 2,160	450 472
			Site	G-2			
3 10 20	84.0 83.5 83.5	a2,090 2,090 2,090	a 452 452 452	30 33 35	83.5 83.5 84.0	2,190 2,250 2,250	480 500 500
			Site	P-9			
3 10	84.0 84.0	a2,060 2,060	a442 442	20 29	84.0 83.5	2,060 2,060	442 442
			Site	P-9A			
3 10	83.5 83.5	a2,190 2,190	a485 485	20 24	83.5 84.0	2,190 2,540	485 595
			Site	P-10			
3 10	83.5 84.0	a2,380 2,380	a542 542	15	84.0	2,380	542
			Site		2		6 (87 B)
3	81.0	a3,920	a1,050	4	81.0	3,800	1,010
			RESULTS OF SURVEY,		R 1, 1963		
2	74 5	2,070	442	40	74.5	2,100	450
3 10 20 30	74.5 74.5 74.5 74.5	2,070 2,080 2,100 2,100	442 445 450	50 53	74.5 74.5 74.5	2,100 2,100	450 450
			Site	A-2		5*	
3 10 20 30 40 50 60 70	74.5 74.5 74.5 74.5 74.5 74.5 74.5 72.0 70.0	a2,110 2,110 2,110 2,110 2,110 2,110 2,110 2,250 2,290	a460 460 460 460 460 460 480 490	75 80 85 87 88 89 90	68.0 66.0 63.0 63.0 63.0 63.0 63.0	2,320 2,320 a2,420 2,420 2,420 a3,400 3,500	510 510 a540 540 540 a800 840

			2012 C	1			
DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	LTS OF SURVEY, OCTO	BER 1,	1963Contin	ued	
			Site	A-3			
3 10 20 30 40	74.5 74.5 74.5 74.5 74.5 74.5	2,110 2,110 2,110 2,110 2,110 2,110	460 460 460 460 460	50 60 70 75 80	74.5 72.5 70.5 68.0 66.0	2,110 2,250 2,290 2,310 2,330	460 480 490 500 510
			Site	P-1			
3 20 30 40 50	75.5 75.0 75.0 75.0 75.0 75.0	a2,090 2,090 2,090 2,090 2,090 2,090 2,090	a 450 450 450 450 450 450 450	60 70 80 85 86	73.0 71.0 67.0 65.5 65.5	2,200 2,290 2,340 a2,440 2,490	470 500 520 a540 550
			Site	B-2			
3 10 20 30	75.5 75.5 75.5 75.5	2,090 2,090 2,090 2,090 2,090	450 450 450 450	40 50 53	75.5 75.5 75.5	2,090 2,090 2,090	450 450 450
			Site	B-3			
3 10 20 30 40 50 60	75.5 75.5 75.5 75.5 75.5 75.5 75.5 73.0	a2,100 2,100 2,100 2,100 2,100 2,100 2,100 2,250	a450 450 450 450 450 450 450 480	70 78 80 82 83 84 85	70.0 70.0 70.5 70.5 70.5 70.5 70.5 70.5	2,250 2,920 4,680 a4,590 4,590 4,990 5,490	480 650 1,210 a1,170 1,170 1,330 1,500
			Site	P-2			
3 10 20 30 40 50	75.5 75.5 75.5 75.5 75.5 75.5 75.5	a2,110 2,110 2,110 2,110 2,110 2,110 2,110	a450 450 450 450 450 450 450	60 70 75 78 80 81	73.5 71.5 71.5 73.0 73.5 73.5	2,200 2,290 2,630 3,620 a4,080 4,150	470 490 560 840 a970 990
			Site	P-2A			
3 10 20 30 40	75.5 75.5 75.5 75.5 75.5	a2,110 2,110 2,110 2,110 2,110 2,110	a450 450 450 450 450	50 60 70 74	75.5 74.0 71.5 72.5	2,110 2,210 a2,360 2,800	450 470 a510 620
			Site	P-3			
3 10 20 30	75.5 75.5	a2,110 2,110 2,110 2,110	a450 450 450 450	40 50 55	75.5 75.5 75.0	2,110 2,110 2,110	450 450 450
			Site	P-4			a based
3 10 20 30 40	76.0 75.5 75.5	a2,120 2,120 2,120 2,120 2,120 2,120	a460 460 460 460 460	50 60 70 74 75	75.5 74.0 75.5 75.0 75.0	2,120 2,250 a3,590 4,170 a4,370	460 490 a850 1,010 a1,090

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	LTS OF SURVEY, OCTO	BER 1,	1963Contin	ued	
			Site	C-1			
3 10 20	76.0 76.0 76.0	a2,140 2,140 2,140	a460 460 460	52 55 57	76.0 75.5 75.5	2,170 2,180 2,270	470 475 490
30 40 50 51	76.0 76.0 76.0 76.0	2,140 2,140 2,140 2,140 2,170	460 460 460 470	60 65 69	75.5 76.5 76.0	2,510 a2,830 3,610	550 a640 840
	,0.0	2,170	Site	C-2			
3	76.5	2,140	460	50	76.0	2,140	460
10 20 30 40	76.0 76.0 76.0 76.0	2,140 2,140 2,140 2,140 2,140	460 460 460 460	51 53 55 57	76.0 76.0 76.0 76.0	2,180 2,360 2,360 2,360 2,360	470 510 510 510
			Site	P-5			
3 10	75.5 75.0	a2,110 2,110	a450 450	16	73.0	2,110	450
			Site				
3 10 20 30	76.5 76.0 76.0 76.0	a2,160 2,160 2,160 2,160	a460 460 460 460	50 55 60 63	76.0 75.5 75.5 75.5	2,220 2,300 a2,780 a2,800	480 510 a620 a630
40	76.0	2,160	460 Site	P-7			
3	76.5	a2,120	a450	40	76.5	2,120	450
10 20 30	76.5 76.5 76.5	2,120 2,120 2,120	450 450 450	50 55 58	74.5 74.5 74.5	2,120 2,120 2,120	450 450 450
			Site	D-1			
3 10 20 30 40	77.5 76.5 76.5 76.5 76.0	a2,180 2,180 2,180 2,180 2,180 2,180	a470 470 470 470 470	50 55 60 62	75.5 75.5 75.5 75.5	2,180 a2,180 2,190 2,220	470 a470 475 480
			Site	°-8			
3 10 20 30	76.5 76.5 76.0 75.5	a2,170 2,170 2,170 2,170 2,170	a460 460 460 460	40 50 55	55.5 75.0 75.0	2,200 2,200 2,200	470 470 470
			Site I	E-3			
3 10 20	76.5 76.0 75.5	a2,180 2,180 2,180	a470 470 470	30 40 42	74.0 74.0 74.0	2,190 2,190 2,190	470 470 470
			Site I	-2			
3 10 20	76.0 74.0 74.0	a2,200 2,250 2,310	a470 480 500	30 39	73.5 73.5	a2,310 2,310	a500 500

		(Local For					
DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	JLTS OF SURVEY, OCTO	OBER 1,	1963Contin	ued	
			Site	G-2			
3 10 20	75.5 74.0 73.0	a2,330 2,330 2,410	a500 500 520	30 32	73.0 73.0	a2,480 2,480	a550 550
			Site	P-9A			
3 10	76.0 73.0	a2,490 2,490	a540 540	20 23	73.0 73.0	a2,880 2,990	a640 670
			Site	P-10			
3 10	73.5 71.5	a2,670 a2,950	a590 a650	13	70.0	3,230	720
			Site	P-11			
2	72.5	a3,040	a680				
			RESULTS OF SURVEY,	NOVEMB	ER 15, 1963		
			Site	A-1			
3 10 20 30	69.5 69.5 69.5 69.0	2,340 2,340 2,340 2,340 2,340	520 520 520 520	40 50 54	69.0 69.0 69.0	2,340 2,340 2,340	520 520 520
			Site	A-2			
3 10 20 30 40	69.5 69.5 69.0 69.0 69.0	a2,340 2,340 2,340 2,340 2,340 2,340	a520 520 520 520 520 520	50 60 80 97	69.0 69.0 69.0 69.0	2,340 2,340 2,340 2,340 2,340	520 520 520 520
			Site	P-1			
3 10 20 30 40 50 60	69.0 69.0 69.0 69.0 69.0 69.0 69.0	a2,310 2,310 2,310 2,310 2,310 2,310 2,310 2,310 2,310	a510 510 510 510 510 510 510 510 510	70 75 80 85 87 90 92 95	69.0 69.0 69.0 69.0 69.0 69.0 69.0 69.0	2,320 2,370 2,420 2,540 a2,630 2,880 2,980 3,500	512 524 536 658 620 650 840
			Site	e B-3			
3 10 20 30 40 50	69.0 69.0 69.0 69.0 69.0 69.0	a2,300 2,300 2,300 2,300 2,300 2,300 2,300	a500 500 500 500 500 500	60 70 80 86 93	69.0 69.0 69.0 69.0 69.0	2,300 2,300 2,300 a2,300 2,300 2,300	500 500 500 a500 500
				e P-2	(0.5	2 2 2 0	500
3 10 20 30 40	68.5 68.5 68.5	a2,280 2,280 2,280 2,280 2,280 2,280 2,280	a500 500 500 500 500	50 60 70 75 78	68.5 68.5 69.0 69.0 69.0	2,280 2,280 2,280 2,280 2,280 2,280	500 500 a500 500

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	ULTS OF SURVEY, NO	VEMBER	15, 1963Con	tinued	
			Site	P-3			
3 10 20 30	68.0 68.0 68.0 68.0	a2,280 2,280 2,280 2,280 2,280	a490 490 490 490	40 50 53	68.0 68.0 68.0	2,280 2,280 2,280	490 490 490
			Site	P-4			
3 10 20 30 40	68.0 68.0 67.5 67.5 67.5	a2,260 2,260 2,260 2,260 2,260 2,260	a490 490 490 490 490	50 60 70 80	67.5 67.5 67.5 67.5	2,260 2,260 a2,260 2,260 2,260	490 490 a490 490
			Site	C-1			
3 10 20 30	67.5 67.5 67.5 67.5	a2,220 2,220 2,220 2,220 2,220	a480 480 480 480	40 50 60 69	67.5 67.0 67.0 67.0	2,220 2,220 a2,240 2,240	480 480 a490 490
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-1-12		Site	P-6			
3 10 20 30	67.0 67.0 66.5 66.5	a2,200 2,200 2,200 2,200 2,200	a480 480 480 480	40 50 60 69	66.5 66.5 66.5 66.5	2,200 2,200 2,200 2,200	480 480 480 480
			Site	D-1			
3 10 20 30	66.5 66.0 66.0	a2,200 2,200 2,200 2,200 2,200	a470 470 470 470	40 50 60 67	66.0 66.0 66.0	2,200 2,200 2,200 2,200	470 470 470 470
			Site	e P-8			
3 10 20 30	66.0 66.0 66.0	a2,200 2,200 2,200 2,200 2,200	a470 470 470 470	40 50 53	66.0 66.0 66.0	2,200 2,200 2,200	470 470 470
			Site	e E-3			
3 10 20	65.5 65.5 65.5	a2,210 2,210 2,210	a480 480 480	30 38	65.0 65.0	2,210 2,210	480 480
			Sit	e F-2			
3 10 20	64.0 64.0 65.5	a2,260 2,260 2,210	a490 490 480	30 40 43	64.0 64.0 64.0	2,260 2,260 2,260	490 490 490
			Sit	e G-2			
3 10 20	62.5 63.0 63.0	a2,410 2,410 2,410	a510 510 510	30 33	63.0 63.0	2,410 2,410	510 510
			Sit	e P-9A			
3 10	61.5 61.5	a2,240 2,240	a500 500	20 28	61.5 62.0	2,240 2,240	500 500

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	ILTS OF SURVEY, NOVE		5, 1963Cont	inued	
				P-10			
3 10	60.5 60.5	a2,400 2,400	a550 550	14	61.0	2,400	550
		e.	Site	178			
3	55.0	a2,350	a630	5	55.0	2,350	630
			RESULTS OF SURVEY,	DECEMBE	R 17, 1963		
			Site	A-1			
3 10	56.0 56.0	2,360 2,360	510 510	40 50	56.0 56.0	2,360	510
20 30	56.0 56.0	2,360 2,360	510	57	56.0	2,360	510 510
			Site	A-2			
3	56.0	2,360	510	60	56.0	2,360	510
10 20	56.0 56.0	2,360 2,360	510 510	70. 80	56.0 56.0	2,360 2,360	510 510
30	56.0	2,360	510	90	56.0	2,360	510
40 50	56.0 56.0	2,360 2,360	510 510	93	56.0	2,360	510
			Site	A-3			
3	56.0 56.0	a2,360 2,360	a510 510	60 70	56.0 56.0	2,360	510
20	56.0	2,360	510	80	56.0	2,360 2,360	510 510
30 40	56.0 56.0	2,360 2,360	510 510	90 92	56.0 56.0	2,360 a2,360	510 a510
50	56.0	2,360	510	97	56.0	2,360	610
			Site			100 Jan 200	
3 10	56.0 56.0	a2,360 2,360	a515 515	50 60	56.0 56.0	2,360 2,360	515
20	56.0 56.0	2,360	515	70	56.0	2,360	515
30 40	56.0	2,360 2,360	515 515	80 88	56.0 56.0	2,360 2,360	515 515
			Site	B-3			
3 10	56.0 56.0	a2,330 2,330	a505 505	50 60	56.0 56.0	2,330	505
20	56.0	2,330	505	70	56.0	2,330 2,330	505 505
30 40	56.0 56.0	2,330 2,330	505 505	80 86	56.0 56.0	2,330 2,330	505 505
			Site	P-2			
3	56.0	a2,320	a505	50	56.0	2,320	505
10 20	56.0 56.0	2,320 2,320	505 505	60 70	56.0 56.0	2,320 2,320	505 505
30 40	56.0 56.0	2,320 2,320	505 505	80 85	56.0 56.0	2,320 2,320	505 505
			Site	P-2A			
3	55.0	a2,290	a495	50	55.0	2,290	495
10 20	55.0 55.0	2,290 2,290	495 495	60 70	55.0 55.0	2,290 2,290	495 495
30 40	55.0 55.0	2,290 2,290	495 495	78 80	55.0 55.0	a2,280 2,290	a 495 495
		-,-,-			11.0	2,200	- , , ,

a By laboratory analysis.

- 60 -

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, DECEM	1BER 17	, 1963Conti	nued	
			Site	P-3			
3 10 20 30	55.0 55.0 55.0 55.0	a2,280 2,280 2,280 2,280 2,280	a495 495 495 495	40 50 56	55.0 55.0 55.0	2,280 2,280 2,280	495 495 495
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-,	Site	P=4			
3 10 20 30 40	55.0 55.0 55.0 55.0 55.0	a2,290 2,280 2,280 2,280 2,280 2,280	a495 495 495 495 495	50 60 70 78	55.0 55.0 55.0 55.0	2,280 2,280 2,280 2,280 2,280	495 495 495 495
			Site	C-1			
3 10 20 30	54.0 54.0 54.0 54.0	a2,250 2,250 2,230 2,230	a485 485 480 480	40 50 60 64	53.0 53.0 53.0 53.0	2,230 2,230 2,230 2,230 2,230	480 480 480 480
		in a statement	Site	P-6			
3 10 20 30	54.0 54.0 54.0 54.0	a2,230 2,230 2,230 2,230 2,230	a480 480 480 480	40 50 60 63	53.0 53.0 53.0 52.0	2,230 2,230 2,230 2,230 2,230	480 480 480 480
			Site	P-7			
3 10 20	52.0 52.0 52.0	a2,050 2,050 2,050	a435 435 435	30 34	52.0 52.0	2,050 2,050	435 435
			Site	D-1			
3 10 20 30	53.0 53.0 53.0 53.0	a2,250 2,250 2,250 2,250 2,250	a485 485 485 485	40 50 60 67	52.0 52.0 52.0 52.0	2,250 2,250 2,250 2,250	485 485 485 485
			Site	P-8			
3 10 20	52.0 52.0 52.0	a2,250 2,250 2,250	a475 475 475	30 40 44	52.0 52.0 52.0	2,250 2,250 2,250	475 475 475
			Site	e E-3			
3 10 20	50.0 50.0 50.0	a2,260 2,260 2,260	a490 490 490	30 40	50.0 50.0	2,260 2,260	490 490
			Site	e F-2			
3 10	40.0 48.0	a2,260 2,260	a490 490	20	48.0	2,260	490
				e G-2	1 = -	-0.490	a605
3 10 20	48.0 48.0 47.0	a2,280 2,280 2,280	a530 530 530	30 33	47.0 46.0	a2,480 2,480	605 605

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, DECE	MBER 17	, 1963Conti	nued	
			Site	P-9A			
3 10	46.0 46.0	a2,290 2,290	a530 530	20 25	46.0 46.0	2,290 2,290	530 530
			Site	P-10			
3 10	44.0 44.0	a2,390 2,390	a565 565	15	43.0	2,470	580
			Site	174			
3	42.0	a2,360	a560	7	42.0	2,360	560
			Site	P-11			
3	42.0	a2,540	a610	4	42.0	2,540	610
			RESULTS OF SURVEY	, JANUAR	RY 29, 1964		
			Site	A-2			
3 10 20 30 40	47.5 47.5 47.5 47.0 47.0	a2,330 2,330 2,330 2,330 2,330 2,330	a495 495 495 495 495	50 60 70 80 90	47.0 47.0 47.0 47.0 46.5	2,330 2,330 2,330 2,330 2,330 a2,330	495 495 495 495 a500
			Site	P-1	A.		
3 10 20 30 40	47.5 47.5 47.0 47.0 47.0	a2,340 2,340 2,340 2,340 2,340 2,340	a 495 495 495 495 495	50 60 70 80 88	47.0 46.5 46.5 46.5 46.5	2,340 2,340 2,340 2,340 2,340 2,340	495 495 495 495 495
			Site	B-3			
3 10 20 30 40 50	47.5 47.5 47.5 47.5 47.5 47.5 47.5	a2,320 2,320 2,320 2,320 2,320 2,320 2,320	a495 495 495 495 495 495	60 70 80 84 87	47.5 47.0 46.0 46.0 46.0	2,320 2,320 2,320 2,320 2,320 2,320	495 495 495 495 495
			Site	P-2			
3 10 20 30 40	47.0 47.0 47.0 47.0 46.5	a2,330 2,330 2,330 2,330 2,330 2,330	a500 500 500 500 500	50 60 70 73	46.5 46.5 46.5 46.0	2,330 2,330 2,330 2,330 2,330	500 500 500 500
			Site	P-2A			
3 10 20 30 40	46.5 46.5 46.5 46.5 46.5	a2,300 2,300 2,300 2,300 2,300	a490 490 490 490 490	50 60 70 80	46.5 46.0 46.0 46.0	2,300 2,300 2,300 2,300	490 490 490 490
			Site	P-4			
33 10 20 30 40	46.5 46.5 46.5 46.5 46.5	a2,280 2,280 2,280 2,280 2,280 2,280	a490 490 490 490 490	50 60 70 76 77	46.0 46.0 46.0 44.0 44.0	2,280 2,300 2,300 2,410 2,410	490 514 514 535 535

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)		TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, JAN	UARY 29,	1964Contin	nued	
			Sit	e C-1			
3	46.0	a2,260	a480	50	45.0	2,270	485
10	46.0	2,270	485	60	44.0 43.5	2,290	504
20 30	46.0 45.5	2,270 2,270	485 485	70 72	43.5	2,330 a2,380	514 a525
40	45.0	2,270	485				
			Sit	e P-6			
3	45.0	a2,240	a475	40	45.0	2,240	475
10	45.0	2,240	475 475	50 60	45.0 44.0	2,240 2,250	475 485
20 30	45.0 45.0	2,240 2,240	475	66	43.0	2,310	514
			Sit	e P-7			
3	45.5	a2,180	a460	40	45.0	2,240	475
10	45.5	2,180	460	50	44.5	2,250	485
20 30	45.0 45.0	2,240 2,240	475 475	60	44.0	2,250	485
				e D-1			
	1.5.5			40	45.5	2,230	490
3 10	45.5 45.5	a2,220 2,230	a475 490	50	45.5	2,230	490
20	45.5	2,230	490	60	44.0 43.5	2,240 2,250	495 500
30	45.5	2,230	490	63	43.5	2,250	500
				e P-8	12.1		555
3 10	45.5 45.5	a2,270 2,270	a525 525	30 40	45.4 45.5	2,270 2,270	525 525
20	45.5	2,270	525				
			Sit	e E-3			
3	46.0	a2,300	a500	30	46.0	2,300	500
10 20	46.0 46.0	2,300 2,300	500 500	36 36	45.5	2,330	510
20	40.0	2,500		e F-2			
					1 - 1	2 200	1.75
3 10	45.5	a2,320 2,320	a475 475	30 40	45.4	2,320 2,320	475 475
20	45.4	2,320	475	41	45.0	2,320	475
			Sit	e G-2			
3	45.5	a2,400	a545	30	45.5	a2,580	a605
10	45.4	2,400	545	31	45.4	2,580	605
20	45.5	2,400	545				
			Sit	e P-9A			
3	45.5	a2,430	a560	20	45.4 45.4	2,430	560 560
10	45.4	2,430	560	25	42.4	2,430	500
			Sit	e P-10			
3	46.0	a2,680	a650	15	48.0	a3,560	a950
10	46.0	2,790	680				
			Sin	te P-11			
3	48.5	a4,630	a1,270	4	48.5	4,630	1,270

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
			RESULTS OF SURVEY	, MARCH	1 4, 1964		
			Site	A-2			
3 10 20 30 40 50	48.0 48.0 48.0 48.0 48.0 48.0 48.0	a2,320 2,320 2,320 2,320 2,320 2,320 2,320	a500 500 500 500 500 500	60 70 80 90 99	47.5 47.0 47.0 47.0 47.0	2,320 2,320 2,310 2,310 2,310	500 500 500 500 500
			Site	P-1			
3 10 20 30 40 50	50.0 50.0 49.5 49.5 49.5 49.5 49.5	a2,310 2,310 2,310 2,310 2,310 2,310 2,310	a505 505 505 505 505 505 505	60 70 80 90 95	49.0 48.0 47.5 47.5 47.0	2,310 2,310 2,310 2,310 2,310 2,310	505 505 505 505 505
			Site	B-3			
3 10 20 30 40 50	48.5 48.5 48.0 48.0 47.5 47.5	a2,320 2,320 2,320 2,320 2,320 2,320 2,320	a505 505 505 505 505 505 505	60 70 80 90 91	47.5 47.5 47.5 47.0 47.0	2,320 2,320 2,320 2,320 2,320 2,320	505 505 505 505 505
			Site	P-2			
3 10 20 30 40	49.0 49.0 49.0 48.5 48.5	a2,310 2,310 2,310 2,310 2,310 2,310	a500 500 500 500 500	50 60 70 80 85	48.5 48.5 48.0 48.0 48.0	2,310 2,310 2,310 2,310 2,310	500 500 500 500 500
			Site	P-4			
3	49.5	a2,250	a495	81	48.0	2,250	495
			Site	C-1			
3	49.0	a2,230	a480 Site	P=6			
3 10 20 30 40	49.0 49.0 49.0 49.0 49.0	a2,230 2,230 2,230 2,230 2,230 2,230	a485 485 485 485 485 485	50 60 70 80	48.0 48.0 48.0 48.0	2,230 2,230 2,230 2,230 2,230	485 485 485 485
			Site	D-1			
3 10 20 30 40	46.5 46.5 46.5 47.5 47.0	a2,230 2,230 2,230 2,230 2,230 2,230	a490 490 490 490 490	50 60 70 71	47.0 47.0 47.0 46.5	2,230 2,230 2,230 2,230 2,230	490 490 490 490
			Site	P-8			
3 10 20 30	49.0 49.0 49.0 48.0	a2,260 2,260 2,260 2,260	a500 500 500 500	40 50 57	47.0 47.0 47.0	2,260 2,260 2,260	500 500 500

a By laboratory analysis.

*

(Location of Data-Collection Sites are Shown on Figure 4)

(FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	ULTS OF SURVEY, MA	RCH 4,	1964Continu	led	
			Site	E-3			
3	49.0	a2,280	a515	40 50	48.0 47.0	2,280 2,280	515 515
10 20	49.0 49.0	2,280 2,280	515	60	47.0	2,280	515
30	48.0	2,280	515 RESULTS OF SURVE		20 1064		
				A-2	. 29, 1904		
	// F	2 200		60	51.0	2,290	500
3 10	66.5 66.5	a2,290 2,290	a500 500	70	50.0	2,290	500
20	66.0	2,290	500	80	50.0	a2,300	a500
30	66.0	2,290	500	90	49.5	2,300	500
40 50	61.0 53.5	2,290 2,290	500 500	93	49.5	2,300	500
			Site	P-1			
3	67.0	a2,290	a500	37	61.0	2,290	500
10	67.0	2,290	500	38	60.5	2,290	500
20	67.0	2,290	500	39	58.5	2,290	500 500
30 32	66.0 65.0	2,290 2,290	500 500	40 50	58.0 55.0	2,300 2,300	500
33	63.5	2,290	500	60	52.0	2,300	500
34	62.0	2,290	500	70	50.5	2,300	500
35 36	62.0 62.0	2,290 2,290	500 500	80 85	50.0 50.0	2,300 2,300	500 500
		1022 - 100	Site	B-3			
3	66.0	a2,290	a500	50	54.0	2,290	500
10	66.0	2,290	500	60	51.5	2,290	500
20	66.0	2,290	500	70	50.0	2,290	500
30 40	65.5 61.5	2,290 2,290	500 500	80 88	48.5 48.5	2,290 a2,300	500 a500
			Site	P-2			
3	66.5	a2,260	a495	50	55.0	2,260	495
10	66.5	2,260	495	60	52.0	2,300	500
20	66.5	2,260	495	70	50.5	2,300	500
30 40	65.5 59.5	2,260 2,260	495 495	80 85	50.0 50.0	2,300 2,300	500 500
			Site	P-4			
3	66.5	a2,260	a505	50	53.5	2,260	505
10	66.5	2,260	505	60	51.5	2,260	505
20	66.0	2,260	505	70	50.5	a2,270	a500 500
30 40	64.0 59.0	2,260 2,260	505 505	79	50.0	2,270	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
			Site	e C-1			
3	66.5	a2,260	a500	50	54.0	2,260	500
10	66.0	2,260	500	60	52.0	a2,270	a500 500
20 30	66.0 62.5	2,260 2,260	500 500	70 73	52.0 51.0	2,270 2,270	500
40	57.0	2,260	500	15	2.10		

					-		
DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESI	ULTS OF SURVEY, APR	IL 29,	1964Continu	ued	
			Site				
	a rat 152				FF F	2 2 70	500
3 10	66.0 66.0	a2,270 2,270	a500 500	50 60	55.5 52.5	2,270 2,270	500 500
20	65.5	2,270	500	70	52.0	2,270	500
30 40	64.0 57.5	2,270 2,270	500 500	75	52.0	2,270	500
			Site	D-1			
-	11 -	0.210		40	50 F	2,310	515
3 10	66.5 66.5	a2,310 2,310	a515 515	50	59.5 55.0	2,310	515
20	66.5	2,310	515	60	51.5	2,310	515
30	65.5	2,310	515	68	51.0	2,310	515
			Site	P-8			
3	66.5	a2,380	a530	40	57.5	2,380	530
10	66.5	2,380	530	50	54.0	2,380	530
20 30	66.5 62.5	2,380 2,380	530 530	56	52.0	2,380	530
			Site	E-3			
3	68.0	a2,490	a585	40	56.0	2,490	585
10	68.0	2,490	585	50	53.5	a2,310	a515
20 30	67.5 62.5	2,490 2,490	585 585	53	53.5	2,310	515
			Site	F-2			
3	68.0	a2,510	a585	30	67.5	2,510	585
10	69.0	2,510	585	40	59.5	2,510	585
20	69.0	2,510	585	43	57.5	2,510	585
			Site	G-2			
3	68.0	a2,570	a605	30	63.5	2,570	605 605
10 20	68.0 68.0	2,570 2,570	605 605	35	62.5	2,570	605
			Site	P-9A			
3	68.5	a2,660	a640	20	68.5	2,660	640
10	69.0	2,660	640	26	68.0	2,660	640
			Site	P-10			
3	69.5	a2,050	a760	16	69.5	3,320	810
10 15	69.5 69.5	3,050 3,150	760 770	17	69.5	a4,430	al,180
15	0,,,	5,150		170			
-	70.0	-2 100	a900	8	68.5	6,520	1,610
36	70.0 69.0	a3,490 5,240	1,290	9	68.5	7,000	1,730
			Pite	P-11			
3	67.5	5,720	1,410	5	67.5	6,320	1,560
-		10.101					

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
			RESULTS OF SURVEY,	JULY 1	, 1964		
			Site	4-2			
3 10 20 30 40 50	81.0 80.5 79.5 78.5 69.5 59.5	a2,340 2,340 2,340 2,340 2,340 2,340 2,340 2,380	a515 515 515 515 515 523	60 70 80 90 92	56.0 54.0 53.0 53.0 53.0	2.380 2,380 2,380 2,380 2,380 2,380	523 523 523 523 523
			Site	4-3			
3 10 20 30 40 50	81.0 81.0 79.5 78.0 68.5 60.0	a2,340 2,340 2,340 2,340 2,340 2,340 2,340 2,340	a515 515 515 515 515 515 515	60 70 80 90 92	56.5 54.0 53.0 53.0 53.0	2,340 2,330 2,330 a2,320 2,320 2,320	515 510 510 a495 495
			Site	P-1			
3 10 20 30 40 50	80.0 80.0 78.5 69.5 60.0	a2,350 2,350 2,350 2,350 2,350 2,350 2,350 2,350	a515 515 515 515 515 515 515	60 70 80 90 91	56.5 54.0 53.0 52.5 52.5	2,350 2,320 2,320 a2,300 2,300	515 508 508 a495 495
			Site	B-3			
3 10 20 30 40	81.0 81.5 81.5 78.0 68.5	a2,340 2,340 2,340 2,340 2,340 a2,390	a520 520 520 520 a535	50 60 70 80 88	60.0 56.0 54.0 53.0 53.0	2,380 2,340 a2,290 2,200 2,200	530 520 a485 465 465
			Site	P-2			
3 10 20 30 40	82.0 82.0 80.5 78.5 69,0	a2,360 2,360 2,420 a2,420 2,420 2,420	a520 520 540 a540 540	50 60 70 80 85	59.5 56.0 54.0 53.0 53.0	2.420 2.420 2.420 2.420 2.420 2.420	540 540 540 540 540
			Site	P-2A			
3 10 20 30 40	81.0 81.0 81.0 79.5 70.5	a2,390 2,390 2,390 2,390 a2,470	a530 530 530 530 a560	50 60 70 80 82	61.0 56.0 55.0 53.5 53.5	2,300 a2,300 2,300 2,300 2,300 2,300	500 a500 500 500 500
			Site	P=3			
3 10 20 30	82.5 82.0 80.5 79.0	a2,400 2,400 2,400 2,400	a530 530 530 530	40 50 53	71.5 61.5 60.0	2,430 2,400 2,390	538 530 528
			Site	P=4			
3 10 20 30 40	82.5 82.5 81.5 78.0 71.5	a2,380 2,380 2,380 2,400 a2,510	a530 530 530 540 a575	50 60 70 78	62.0 57.5 55.0 54.0	2,510 2,510 a2,310 2,310	575 575 a495 495

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	SULTS OF SURVEY, JU	ILY 1, 1	964Continue	:d	
			Site	C-1			
3 10 20	83.5 83.0 81.5	a2,390 2,390 2,390	a535 535 535	40 50 60	72.0 61.5 57.5	a2,510 2,470 2,440	a580 570 550
30	80.0	2,390	535	70	55.5	a2,290	a500
			Site	P-5			
3 10	84.0 84.0	a2,430 2,430	a550 550	18	82.5	2,430	550
			Site	P-6			
3	84.0	a2,440	a550	40	70.0	a2,530	a580
10 20	83.0 83.0	2,440 2,440	550 550	50 60	61.0 58.0	2,530 2,440	580 550
30	79.0	2,440	550	68	56.0	2,440	550
			Site	P-7	1.48630 Pro-		
3 10	83.5 83.5	a2,460 2,460	a550 550	40 50	68.0 60.5	2,460 2,340	550 520
20 30	83.0 78.0	2,460 2,460	550 550	60	56.5	a2,320	a510
			Site	D-1			
3 10	84.0 83.5	a2,480 2,480	a565 565	40 50	71.0 60.5	2,520 a2,400	580 a540
20 30	82.0 78.5	2,480 a2,520	565 a580	60 66	57.0 55.5	2,400 2,400	540 540
			Site	P-8			
3	84.0	a2,540	a585	40	71.0	a2,540	a590
10 20 30	83.0 81.0 78.0	2,540 2,540 2,540	585 585 585	50 57	61.5 58.0	2,540 2,540	585 585
		-12		Site E-	3		
3	81.0	a2,470	a560	40	73.5	a2,770	a650
10 20 30	80.0 80.0 78.5	2,470 2,470 2,720	560 560 620	50 51	62.0 60.5	2,520 2,520	570 570
			Site	F-2			
3 10 20	85.0 83.5 79.0	a2,570 2,570 2,700	a605 605 635	30 40 41	79.0 78.5 78.5	3,860 a3,890 3,890	908 a960 960
		-0 =	Site	G-2			
3 10 20	83.5 81.5 79.0	a2,590 2,590 a2,610	a605 605 a610	30 34	79.5 79.5	a3,130 5,010	a760 1,215
			Site	P-9A			
3 10	87.5 84.0	a2,680 2,680	a630 630	20 26	80.0 82.0	a2,910 a4,000	a700 a1,000

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RE	SULTS OF SURVEY, J	JLY 1, 1	968Continue	ed	
			Site	e P-10			
3 10	86.0 85.0	a2,770 2,770	a665 665	16	83.5	a3,600	a890
			Site	e P-11			
3	89.0	a3,420	a840	6	85.0	4,310	1,090
			RESULTS OF SURVEY	, NOVEMB	ER 2-4, 1964		
			Site	e A-1			
3 10 20 30	66.0 66.0 66.0	a2,440 2,440 2,440 2,490	a558 558 558 570	40 50 51	65.0 64.5 64.0	2,570 2,570 2,590	590 590 595
	5.15			e A-2			
3 10 20 30 40 50	64.5 66.0 65.5 65.0 64.5	a2,530 2,530 2,530 2,530 2,550 a2,550 a2,570	a585 585 585 585 585 590 a595	60 70 80 90 91	63.0 59.0 55.5 54.0 54.0	2,530 2,350 a2,330 2,330 2,330 2,330	585 520 a515 515 515
			Site	e P-1			
3 10 20 30 40	65.5 65.5 65.5 65.5 65.0	a2,540 2,590 2,590 2,590 2,590 2,590	a585 595 595 595 595	50 60 70 80 84	64.5 63.5 59.5 56.5 55.0	2,640 2,630 2,450 2,440 2,440 2,440	605 600 560 555 555
			Site	e B-3			
3 10 20 30 40	67.0 66.5 66.0 66.0 65.5	a2,530 2,530 2,530 2,530 2,530 2,530	a590 590 590 590 590	50 60 70 80 83	63.5 62.5 59.5 59.5 58.0	2,580 2,580 2,460 2,430 2,430 2,430	600 600 560 545 545
			Site	e P-2			
3 10 20 30 40	66.5 66.5 66.5 66.5 65.5	a2,540 2,540 2,570 2,570 2,570 2,590	a585 585 590 590 595	50 60 70 79	65.0 64.5 63.5 63.5	2,590 2,610 2,590 2,590	595 600 595 595
			Site	e P-3			
3 10 20 30	66.0 65.5 65.5 65.5	a2,590 2,590 2,590 2,590 2,590	a605 605 605 605	40 50 52	65.5 65.5 65.5	2,590 2,590 2,590	605 605 605
			Site	e P-4			
3 10 20 30 40 50	66.5 66.5 66.5 66.5 65.0 64.5	2,630 2,630 2,630 2,630 2,630 2,630 2,650	605 605 605 605 605 610	60 70 71 72 75	64.5 64.0 64.0 58.0 58.0	2,650 a2,550 2,550 2,550 2,550 2,550 2,500	610 a585 585 585 585 575

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, NOVEM	IBER 2-4	, 1964Cont	inued	
			Site	C-1			
3 10 20	66.5 66.5 66.0	a2,590 2,590 2,595	a600 600 605	40 50 60	65.5 64.5 64.5	2,595 2,595 2,590	605 605 605
30	65.5	2,595	605	69	64.0	2,590	605
			Site	P=5			
3 10	65.5 65.5	2,600 2,600	605 605	14	65.5	2,600	605
			Site	e P-6			
3 10 20 30	66.0 66.0 66.0	a2,600 2,600 2,600 2,600 2,600	a605 605 605 605	40 50 60 70	65.5 65.5 65.0 64.0	2,600 2,620 2,620 2,620 2,620	605 610 610 610
			Site	e D-1			
3 10 20 30	66.5 66.5 66.5 66.5	a2,600 2,600 2,600 2,600	a600 600 600 600	40 50 60	66.5 66.5 64.0	2,600 2,600 2,600	600 600 600
50	00.9	_,	Sit	e P-7			
3 10 20 30	67.0 67.0 67.0 66.5	a2,600 2,600 2,600 2,600	a610 610 610 610	40 50 55	66.0 55.5 55.5	2,600 2,600 2,600	610 610 610
			Sit	e P-8			
3 10 20	67.0 67.0 66.5	a2,600 2,600 2,620	a610 610 615	30 40 43	66.5 66.5 66.0	2,620 2,620 2,620	615 615 615
			Sit	e E-3			
3 10 20	66.0 66.0 66.0	a2,600 2,600 2,600	a610 610 610	30 40 46	65.5 65.0 64.0	2,600 2,570 2,570	610 600 600
			Sit	e F-2			
3 10 20	66.0 66.0 66.0	a2,560 2,560 2,560	a595 595 595	30 37		2,560 2,560	595 595
			Sit	e P-3			
3 10	66.5 66.0	a2,510 2,510	a580 580	20 29		2,510 2,480	580 570
			Sit	e P-9A			
3 10	66.5	a2,370 2,370	a540 540	20 21 e P-10		2,370 2,370	540 540
3	67.5 66.5	a2,420 2,420	a552 552	12	66.5	a2,420	a552

(Location of Data-Collection Sites are Shown on Figure 4)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, NOVE	1BER 2-4,	1964Cont	inued	
			Site	178			
3	66.0	a3,130	a830	15	66.0	a3,190	a990
			RESULTS OF SURVEY	, MAY 15	-16, 1965		
			Site	A-1			
3 10 20 30 40 50	60.0 60.0 59.5 58.0 58.0 57.0	3,180 3,180 3,180 3,180 2,920 2,630	690 690 690 690 635 580	60 70 80 90 98	57.5 58.0 58.5 59.0 59.0	a2,630 2,630 2,690 2,750 2,750	≥580 580 595 610 610
	10			e P-1			
3	60	a2,540	a570	e B-1			
3 10 20 30 40 50	60.5 60.0 59.5 58.0 56.0 56.5	a2,500 2,500 2,500 2,500 2,480 2,170	a560 560 560 555 485	60 70 80 90 92	58.0 58.5 59.0 59.5 59.5	2,120 2,170 2,220 2,280 2,280	475 485 495 505 505
50	,	-,	100 Th	e P-2			
3 10 20 30 40	64.5 61.0 59.5 58.0 56.0	a2,500 2,500 2,500 2,550 2,550 2,550	a550 550 550 560 560	50 60 70 80 87	57.0 57.5 58.0 58.5 59.0	2,410 2,410 2,410 2,480 2,540	530 530 530 540 550
	#) [Site	P-2A			
3 10 20 30 40	62.0 61.5 59.5 58.0 57.0	a2,480 2,480 2,480 2,480 2,480 2,380	a550 550 550 550 550 525	50 60 70 80 88	56.5 57.0 58.0 58.0 58.0	2,020 2,020 2,070 2,170 2,020	445 445 455 475 445
			Site	e G-2			
3 10 20 30	64.0 63.0 62.5 60.5	1,800 2,310 a2,460 2,460	400 515 a550 550	40 50 60 62	60.5 61.5 62.0 63.0	2,250 2,100 2,050 2,050	505 470 460 460
			Site	e P-4			
3 10 20 30 40 45	61.0 59.0 58.0 57.0 57.0 57.0	2,540 2,540 2,540 2,540 a2,540 a2,590 2,480	550 550 550 550 a560 535	50 60 70 80 83	58.0 58.0 58.5 58.5 58.0	2,260 2,200 2,260 2,260 2,260 2,260	488 475 488 488 488
			Sit	e C-1			275.04
3 10 20 30 40	63.5 62.5 61.5 61.0 61.0	a2,390 2,390 2,390 2,390 2,390 2,190	a540 540 540 540 495	50 60 70 78	61.0 62.0 62.0 62.0	2,090 2,090 2,090 2,090 2,090	470 470 470 470

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	
		RESUL	TS OF SURVEY, NOVE⊬	IBER 2-4	, 1964Cont	inued		
		(s.	Site	P-6				
3 10 20 30	64.0 62.5 61.0 59.0	a2,380 2,280 2,580 2,640	a540 540 585 650	40 50 60 65	58.0 58.0 58.5 59.0	2,480 2,180 2,280 2,280	610 535 550 550	
Site P-7								
3 10 20 30	64.0 64.0 63.0 62.0	1,630 1,630 2,420 2,580	378 378 560 595	40 50 60 65	61.0 62.0 63.0 63.0	2,640 2,210 2,210 2,210	605 505 505 505	
Site P-8								
3 10 20 30	66.5 66.0 65.0 64.5	2,220 2,220 2,310 a2,680	515 515 535 a620	40 50 55	64.0 64.0 64.0	2,680 a2,790 2,790	620 a650 650	
	Site D-1							
3 10 20 30	65.5 65.5 64.0 63.0	a2,680 2,680 2,680 2,680 2,680	a620 620 620 620	40 50 60 62	62.0 62.0 64.0 64.0	2,630 2,360 2,260 2,150	610 550 525 500	
			Site	E-1				
3 10 20 30	70.5 70.5 71.0 71.0	a2,550 2,490 2,490 2,490 2,490	a580 565 565 565	40 50 55	71.5 72.0 72.0	2,610 2,610 2,610	590 590 590	
Site F-2								
3 5 8 10	75.0 75.0 75.0 75.0	1,210 1,210 1,210 a1,390	263 263 263 a302	20 30 40 44	74.5 74.0 74.5 74.0	1,560 2,060 a2,570 2,570	340 475 a600 600	
1.60			Site	G-2				
3 10 20 21	72.5 72.5 72.5 72.0	580 635 635 745	120 130 130 150	22 25 30 37	72.0 73.0 73.0 73.0	785 830 830 a1,060	155 165 165 a200	
			Site	P-9				
3 10	73.0 73.0	880 880	175 175	20 21	73.0 73.5	820 820	165 165	
-	Site P-9A 3 72.5 526 102 20 73.0 al.370 a235							
3 10 15	72.5 72.5 73.0	526 a658 930	102 a128 180	20 25 30	73.0 73.5 73.5	al,370 1,230 1,880	210 395	
Site P-10								
3 10	74.0 74.0	a1,240 1,410	a208 238	20	74.0	1,440	245	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
			RESULTS OF SURVEY,	NOVEMBE	ER 8-9, 1961		
			Site	A-1			
3 10 20 30 40 50	61.5 62.0 61.5 61.5 61.5 61.5	a2,330 2,330 2,330 2,330 2,330 2,330 2,330	a518 518 518 518 518 518 518 518	60 70 76 80 90 100	61.5 61.0 60.0 61.5 60.5 61.0	2,330 2,330 2,330 2,330 2,330 2,330 2,330	518 518 a518 518 518 518 518
			Site	A-2			
3 10 20	62.0 62.0 62.0	2,330 2,330 2,330	518 518 518	30 35	62.0 62.0	2,330 2,330	518 518
			Site	B-1			
3 10	62.0 62.0	2,330 2,330	518 518	20 25	62.0 62.0	2,330 2,330	518 518
			Site	B-2			
3 10 20	62.0 62.0 62.0	2,330 2,330 2,330	518 518 518	30 32	62.0 61.5	2,330 2,330	518 518
			Site	B-3			
3 10 20 30 40	63.0 63.0 63.0 63.0 63.0	2,330 2,330 2,330 2,330 2,330 2,330 2,330	518 518 518 518 518 518	50 60 70 80 90	63.0 63.0 61.5 61.5 61.5	2,330 2,330 2,330 2,220 2,220	518 518 518 478 478
			Site	P-1			
3 10 20 30	62.0 62.0 62.0 61.5	2,330 2,300 2,300 2,300	518 500 500 500	40 50 60	61.5 61.5 61.5	2,300 2,300 2,300	500 500 500
			Site	C - 1			
3 10 20	61.5 61.5 61.0	2,250 2,230 2,230	487 482 482	30 32	61.0 61.0	2,230 2,230	482 482
			Site	C-2			
3 10 20 30	61.5 61.5 61.5 61.0	2,250 2,250 2,250 2,250 2,250	487 487 487 487	40 50 60 67	61.0 60.5 60.5 60.5	2,250 2,250 2,250 2,250 2,200	487 487 487 473
			Site	P-3			
3 10 20 30	61.0 61.0 61.0 61.0	a2,120 2,120 2,120 2,120 2,120	a458 458 458 458	40 50 60 70	61.0 60.5 60.5 60.5	2,120 2,120 2,120 2,120 2,120	458 458 458 458
			Site	P-5			
3 10	60.5 60.5	2,100 2,050	446 432	17	60.0	2,050	432

Table 2.--Temperature, Specific Conductance, and Chloride Content of Water, Whitney Reservoir--Continued

(Location of Data-Collection Sites are Shown on Figure 6)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
	2	RESULT	TS OF SURVEY, NOVER	IBER 8-9	, 1961Conti	nued	
			Site	e P-6			
3 10 20 30	60.0 60.0 60.0 60.0	1,820 1,820 1,820 1,820 1,820	368 368 368 368	40 50 60	59.5 59.5 59.5	1,800 1,800 1,800	364 364 364
			Site	e P-7			
3 10	60.0 59.5	1,800 1,800	364 364	15	59.5	1,800	364
			Site	e P-8			
3 10	58.0 56.5	1,250 1,200	214 200	15 20	56.0 56.0	1,210 1,280	203 222
			Sit	e F-1			
2	61.0	1,460	272				
			Site	e F-2			
3 10 20 25	60.5 60.0 59.0 59.0	1,450 1,450 1,480 1,490	269 269 277 280	30 35 40 44	58.5 58.5 58.5 58.5	1,490 1.490 1,500 1,500	280 280 282 282
			Sit	e P-10			
38	58.0 58.0	1,450 1,450	269 269	12 e P - 11	58.0	1,450	269
3 10 15	60.5 60.5 60.0	a2,190 2,190 2,190	a460 460 460	20 21	60.0 60.0	2,190 2,190	460 460
			Sit	e P-12			
3 5 6 7	58.0 58.0 58.5 59.5	a1,160 1,200 1,400 2,000	a 190 200 255 418	8 10 15 16	60.0 60.0 60.0 60.0	2,100 2,100 2,100 2,100	445 445 445 445
			Sit	e P-13			
3 10 15	58.0 58.0 56.0	2,200 2,200 2,200	473 473 473	20 25 28	56.0 55.5 55.5	2,200 2,200 2,200	473 473 473
			Sit	e P-14			201 (Card)
3 5 10	55.5 55.5 55.5	2,200 2,200 2,200	473 473 473	15 20 21	55.0 54.5 54.5	2,200 2,200 2,200	473 473 473
			RESULTS OF SURVE	Y, MARCH	6-7, 1962		
				e A-1			
3 10 20 30 40	56.0 55.0 54.5 54.5 54.5	al,900 1,900 1,900 1,900 1,900 1,900	a395 395 395 395 395	50 60 70 80 90	54.5 54.5 54.5 54.5 54.5	1,900 1,900 1,900 1,900 a1,900	395 395 395 395 395 a395

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESI	JLTS OF SURVEY, MAR	сн 6-7,	1962Contin	nued	
			Site	A-2			
3 10 20	56.0 55.0 54.5	1,900 1,900 1,900	395 395 395	30 35	54.5 54.5	1,900 1,900	395 395
			Site	A-3			
3 10	56.5 54.5	1,750 1,800	356 368	20 25	54.5 54.5	1,850 1,850	380 380
			Site	B-1			
3 10	55.5 54.0	1,900 1,900	395 395	20 24	54.0 54.0	1,900 1,900	395 395
			Site	B-2			
3 10 20	55.0 54.5 54.0	1,900 1,900 1,900	395 395 395	30 37	54.0 54.0	1,900	395
			Site	B-3			
3 10 20 30 40	55.5 54.5 54.5 54.0 54.0	1,900 1,900 1,900 1,900	395 395 395 395 395 395	50 60 70 80 84	54.0 54.0 54.0 54.0 54.0	1,900 1,900 1,900 1,900	395 395 395 395
40	54.0	1,900	Site		54.0	1,900	395
3 10 20 30	55.0 54.0 53.5 53.5	1,900 1,900 1,900 1,900	395 395 395 395 395	40 50 57	53.5 53.5 53.5	1,900 1,900 1,900	395 395 395
			Site	C-1			
3 10	54.5 54.0	a1,880 1,880	a390 390	20 31	54.0 54.0	1,880 1,880	390 390
			Site				
3 10 20 30 40	54.5 54.5 54.0 54.0 53.5	1,890 1,890 1,890 1,890 1,890 1,890	390 390 390 390 390 390	50 60 70 76	53.5 53.5 53.5 53.0	1,890 1,890 a1,890 1,890	390 390 a390 390
			Site	C-3			
3 10	54.5 54.0	1,890 1,890	390 390	18	54.0	1,890	390
			Site	P-2			
3 10 20 30	55.0 54.0 53.5 53.0	1,890 1,890 1,890 1,890	390 390 390 390	40 50 52	53.0 53.0 53.0	1,890 1,890 1,890	390 390 390

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESI	ULTS OF SURVEY, MAR	сн 6-7,	1962Contir	nued	
			Site	P-3			
3 10 20 30	54.5 54.0 53.0 53.0	1,890 1,890 1,890 1,890	390 390 390 390	40 50 60 70	53.0 53.0 53.0 53.0	1,890 1,890 1,890 1,890	390 390 390 390
			Site	P-4			
3 10 20	54.5 54.0 53.5	1,820 1,820 1,820	370 370 370	30 36	53.5 53.5	1,820 1,820	370 370
			Site	P-5			
3 10	55.5 53.5	a1,800 1,810	a368 369	21	53.0	1,820	370
			Site	D-1			
3 10	54.0 52.0	1,850 1,850	380 380	12	51.0	1,850	380
			Site	D-2			
3 10 20 30	54.0 53.0 51.0 51.0	1,850 1,850 1,850 1,850 1,850	380 380 380 380 380	40 50 54	51.0 51.0 51.0	1,850 1,850 1,850	380 380 380
			Site	D-3			
3 10	54.0 52.5	1,880 1,880	388 388	20 23	52.0 52.0	1,880 1,880	388 388
			Site	P-6			
3 10 20 30	55.0 54.0 52.0 52.0	1,850 1,850 1,850 1,850 1,850	380 380 380 380	40 50 60 62	52.0 52.0 52.0 52.0	1,850 1,850 1,850 1,850	380 380 380 330
			Site	P-7			
3 10	54.5 53.5	1,850 1,850	380 380	20 26	53.0 53.0	1,820 1,820	370 370
			Site	E-1			
3 10 20	53.0 52.0 52.0	1,880 1,880 1,880	388 388 388	30 32	52.0 52.0	1,880 1,880	388 388
			Site	F-2			
3 10 20	55.0 54.5 54.0	al,850 1,850 1,850	a372 372 372	30 40 44	52.0 52.0 51.0	1,850 1,850 1,850	372 372 372

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	ULTS OF SURVEY, MAR		1962Contin	nued	
			Site	P-10			
3 10	55.0 53.5	1,850 1,870	372 375	13	53.5	1,870	375
			Site	P-11			
3 10 15	53.0 53.0 53.5	2,050 2,100 2,200	436 450 470	20 22	52.0 52.0	2,250 2,250	480 480
			Site	P-12			
3 8 10	53.5 53.5 53.5	1,900 2,150 2,150	394 466 466	15 18	53.5 53.5	2,200 2,250	470 480
			Site	P-13			
3 10 15	54.5 54.0 54.0	2,050 2,100 2,150	436 450 466	20 29	54.0 54.0	2,150 2,200	466 470
			Site	P-14			
3 10	53.5 53.0	ə2,270 2,270	a480 480	20	53.0	2,270	480
			RESULTS OF SURVE	Y, JUNE	21, 1962		
			Site	A-1			
3 10 20 30 40	83.5 83.0 81.0 78.0 78.0	al,730 1,790 1,800 1,810 1,810	a365 370 372 372 372 372	50 60 70 80 90	76.0 72.5 65.5 64.0 61.5	1,830 1,810 1,860 1,950 a1,950	375 372 380 395 a395
			Site	A-2			
3 10 20	84.0 83.5 81.0	1,730 1,800 1,800	365 372 372	30 32	79.0 78.0	1,810 1,820	372 374
			Site	A-3			
3 10	83.5 83.5	1,730 1,730	365 365	20 25	81.0 80.0	1,800 1,800	372 372
			Site	B -1			
3 10 20	85.0 84.5 83.0	1,770 1,730 1,770	370 365 370	30 36	81.5 79.0	1,770 1,770	370 370
			Site	B-2	ž.		
3 10 20	85.0 85.0 84.0	1,770 1,780 1,780	370 375 375	30 35	81.0 79.0	1,780 1,760	375 370

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RE	SULTS OF SURVEY, JU	NE 21,	1962Contin	ued	
			Site	B-3			
3 10 20 30	83.5 83.5 83.0 78.5	al,780 1,780 1,780 1,770	a 375 375 375 375 370	40 50 60 63	77.0 76.0 75.0 73.5	1,780 1,790 1,800 1,800	375 375 375 375
			Site	P-1			
3 10 20 30	84.0 84.0 82.0 80.5	a1,630 1,620 1,750 1,720	a 340 340 360 350	40 50 51	78.0 76.0 76.0	1,690 1,730 a1,730	348 355 a355
			Site	C-1			
3 10 20	84.5 83.5 81.5	1,590 1,700 1,780	330 348 375	30 31	79.0 79.0	1,710 1,720	350 352
			Site	C-2			
3 10 20 30	85.0 82.5 82.5 79.0	a1,600 1,700 a1,780 1,760	a330 348 a375 370	40 50 55	77.0 76.0 75.0	1,720 1,700 a1,640	352 348 a340
			Site	C-3			
3 10	85.0 84.5	1,600 1,610	330 330	20 21	83.5 82.5	1,770 1,780	372 375
			Site	P-2			
3 10 20 30	85.0 84.5 82.0 79.5	a1,450 1,690 1,680 1,640	a295 345 344 340	40 50 59	77.0 76.0 75.0	a1,600 1,600 1,650	a330 330 340
			Site	P-3			
3 10 20 30	86.0 84.0 81.0 78.0	a1,430 1,600 a1,640 1,450	a290 330 a340 295	40 50 60 66	76.0 74.5 74.0 71.5	al,230 1,230 1,560 1,480	a235 235 320 300
			Site	P-4		*	
3 10 20 30	85.0 84.0 79.0 79.0	a1,410 1,250 1,460 1,570	a280 244 290 320	35 40 43	79.0 77.0 76.0	1,290 a1,160 1,160	250 a212 212
			Site	P-5			
3 10	86.0 83.0	a1,480 1,560	a292 320	16	82.0	1,570	320
			Site	e D-1			
3 10	85.0 82.0	1,260 1,590	242 325	13	81.0	1,570	320

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	ULTS OF SURVEY, JUN	IE 21, 1	962Continu	ed	
			Site	D-2			
3 10 20 30	85.0 82.0 79.5 79.5	al,200 1,570 1,750 al,800	a232 320 370 a380	40 50 60 63	76.5 74.5 72.0 71.0	1,240 a1,070 1,480 1,590	235 a198 300 325
			Site	D-3			
3 10	84.5 83.0	1,230 1,490	232 300	20 22	79.5 79.0	1,490 1,530	300 313
			Site	P-6			
3 10 20 30 40 42 45	83.5 81.5 80.0 80.0 77.0 77.0 76.0	al,180 1,420 a2,260 2,260 1,790 1,700 1,380	a228 285 a485 485 378 350 275	48 50 52 55 60 61	74.0 73.5 73.5 71.5 71.0 71.0	1,130 a1,050 1,100 1,270 1,550 1,550	210 a200 205 250 320 320
			Site	P-7			
3 10 20	83.0 81.5 79.0	al,500 1,500 1,380	a305 305 275	30 39	76.5 76.0	1,260 1,100	250 205
			Site	E-1			
3 4 5 6 7	84.5 84.0 82.0 81.0 81.0	al,090 1,090 1,370 1,820 1,820	a205 205 275 385 385	30 40 45 46 47	80.0 80.0 78.5 78.0 74.0	a2,320 2,310 2,200 a1,970 1,420	a500 495 475 a415 285
8 9 10 20	81.0 81.0 81.0 80.5	2,150 2,150 2,150 2,330	465 465 465 500	48 50 54	74.0 73.0 71.5	1,490 1,340 1,340	300 265 265
			Site	E-2			
3	86.0	1,090	205	6	84.0	1,090	205
			Site	P=8			
3 4 5 6 7	89.0 87.0 86.0 85.0 84.0	al,370 1,480 1,700 1,790 1,920	a270 292 350 378 410	8 9 10 20 29	83.0 83.0 83.0 83.0 81.5	1,970 1,940 2,030 2,200 2,140	425 415 435 480 465
			Site	°-9			
3 4 5 6 7 8 10	87.0 84.5 84.0 83.5 83.5 83.5 83.5	a1,430 1,430 1,610 1,810 1,910 2,030 2,140	a290 290 350 380 405 435 465	20 30 45 47 48 49	82.0 81.5 81.5 81.0 80.5 80.0 79.0	2,360 a2,400 2,400 2,400 2,350 2,250 2,020	515 a520 520 515 490 435

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	ILTS OF SURVEY, JU	NE 21, 19	962Continue	d	
			Site	e F-2			
3 10 20	87.0 82.5 81.0	a2,320 2,420 2,420	a510 535 535	30 40 44	81.0 80.5 80.5	2,420 2,470 2,470	535 545 545
20		-,		P-9A			
3 10 20	85.0 82.0 81.5	a2,410 2,410 2,410	a530 530 530	30 40 41	80.5 80.0 80.0	2,410 2,450 2,450	530 540 540
			Sit	e G-l			
3 10 20	86.5 81.5 81.0	a2,430 2,430 2,430	a530 530 530	30 36	81.0 80.5	2,430 2,430	530 530
			Sit	e P-10			
3 10	85.5 82.0	a2,310 2,360	a505 520	20 21	80.5 80.5	2,370 2,370	520 520
			Sit	e P-11			
3 10	86.5 82.0	a2,400 2,420	a525 535	20 23	81.5 81.5	2,470 2,470	545 545
			Sit	e P-12			
3 10	85.0 82.0	al,830 1,830	a380 380	20	79.0	1,830	380
			Sit	e P-13			
3 10	86.5 83.5	a2,470 2,420	a545 535	20 27	83.0 83.0	2,470 2,470	545 545
			Sit	e P-14			
3 10	86.5 83.0	a2,470 2,470	a550 545	20 21	83.0 83.0	2,470 2,470	545 545
			RESULTS OF SURVE	Y, AUGUS	ST 15, 1962		
			Sit	e A-1			
3 10 20 30 40 50	85.0 85.0 81.5 80.5 80.0 79.5	a1,520 1,520 1,500 1,520 1,480 1,380	a305 305 296 305 290 270	60 70 80 85 90	78.5 77.0 74.5 -	1,220 a1,050 1,170 a1,750 1,850	230 a193 220 a355 380
			Sit	te A-2			
3 10 20	86.0 85.0 82.0	1,520 1,520 1,500	305 305 296	30 36	81.0 80.5	1,520 1,520	305 305
			SI	te A-3			
3 10	85.5 85.5	1,520 1,520	305 305	20 26	81.5 81.0	1,500 1,520	296 305

a By laboratory analysis.

4

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULAT	ED)
		RESULT	S OF SURVEY, AUGUS	т 15, 19	962Continue	d		
			Site	B-1				
3 10	86.0 85.5	1,530 1,490	305 295	20 28	84.0 83.0	1,490 1,430	295 280	
			Site	B-2				
3 10 20	87.0 86.0 84.0	1,530 1,520 1,520	305 305 300	30 37	82.5 82.0	1,500 1,520	296 300	
			Site	B-3				
3 10 20 30 40	85.5 85.5 83.0 82.0 81.0	1,530 1,530 1,500 1,520 1,480	305 305 296 300 290	50 60 70 80	80.5 79.5 78.0 77.0	1,350 1,270 920 a865	260 240 160 a151	
			Site	P-1				
3 10 20	85.0 85.0 84.5	al,480 1,480 1,480	a300 300 300	30 40 49	82.5 81.5 81.0	1,470 1,470 1,430	290 290 280	
			Site	C-1				
3 10 20	86.5 86.0 84.5	1,480 1,480 1,520	300 300 305	30 33	82.0 82.0	1,400 1,420	275 278	
			Site	C-2				
3 10 20 30 40 50	86.5 86.0 84.5 82.0 81.5 80.0	al,480 1,480 1,520 1,520 1,410 1,130	a295 295 305 305 275 210	59 60 70 75	79.0 79.0 78.0 77.5	1,000 1,000 a974 940	180 180 a175 165	
			Site	C-3				
3 10	86.5 85.5	1,480 1,480	295 295	19	84.5	1,500	296	
			Site	P-2				
3 10 20 30	86.5 86.0 84.0 82.5	1,430 1,410 1,430 1,440	282 275 282 285	40 50 52	81.5 80.5 80.0	1,410 1,070	275 195	
			Site	P-3				
3 10 20 30	86.5 85.5 83.0 81.5	al,400 1,400 al,430 1,340	a275 275 a282 260	40 50 60 69	80.5 80.5 79.0 79.0	1,270 1,250 a1,260 1,260	245 242 a240 240	
			Site	e P-4				
3 10 20	86.5 84.0 83.0	al,280 1,370 1,380	a250 265 270	30 40 42	81.5 81.0 80.5	1,350 1,300 1,300	260 250 250	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESULT	'S OF SURVEY, AUGUS	т 15, 19	962Continue	d	
			Site	P-5			
3 10	88.0 86.0	a1,480 1,470	a295 290	16	84.0	1,470	290
			Site	D-1			
3 10	85.0 84.0	1,260 1,270	240 245	13	83.0	1,280	245
			Site	D-2			
3 10 20 30	85.0 84.0 83.5 82.0	1,250 1,250 1,360 1,360	238 238 260 260	40 50 60 65	81.0 80.5 79.5 79.0	1,290 1,260 1,120 1,070	250 240 210 198
			Site	D-3			
3 10	86.0 84.0	1,250 1,260	238 240	20	83.5	1,290	250
			Site	P-6			
3 10 20 30	83.0 82.5 82.0 81.0	al,170 1,170 1,250 1,260	a225 240 240 242	40 50 60 61	80.5 80.0 79.5 79.0	1,200 1,160 a1,130 1,130	225 220 a212 212
			Site	P-7			
3 10 20	83.5 82.5 82.0	al,260 1,260 1,250	a242 242 240	30 40	81.0 80.0	1,170 1,160	225 220
			Site	E-1			
3 10 20 30	86.0 83.0 82.0 81.5	al,170 1,130 1,150 1,170	a220 210 215 220	40 50 54	81.0 80.5 80.0	1,050 1,130 1,110	192 210 205
			Site	E-2			
3	87.5	1,150	215	6	83.5	1,130	210
			Site	P-8			
3 10	84.5 84.0	a1,230 1,180	a235 225	20 21	82.0 81.5	1,170 1,170	220 220
			Site	P-9			
3 10 15 20	88.0 85.0 83.0 83.0	al,680 1,490 1,290 al,060	a332 295 250 a195	25 30 40 49	82.0 81.5 80.5 80.0	1,030 1,070 1,130 1,130	190 200 210 210
			Site	F-2			
3 10 20	87.5 86.0 82.5	a1,760 1,580 1,070	a360 315 200	30 40 45	82.0 81.5 80.0	1,070 1,130 1,150	200 210 215

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, AUGU	ST 15,	1962Continu	ed	
			Site	P-9A			
3 10 20	89.5 87.5 82.5	al,930 2,010 al,140	a395 420 a210	30 40 42	80.5 80.0 80.0	1,050 1,130 1,130	192 210 210
			Site	G-1			
3 10 20	90.5 87.0 86.5	a2,060 2,120 2,070	a430 435 430	30 32	81.0 81.0	a1,260 1,100	a238 205
			Site	P-10			
3 10	89.0 87.0	al,910 1,600	a395 320	20	85.5	1,620	325
			Site	P-11			
3 10	91.5 89.5	a2,400 2,290	a520 495	20 21	87.0 87.0	2,360 2,360	510 510
				P-12			
3 10	90.5 88.0	al,940 2,160	a400 460	19	87.0	2,160	460
			Site	P-13			
3 10	92.0 88.0	a2,490 2,490	a545 545	20 29	87.0 86.5	2,490 2,490	545 545
				P-14			
3 10	92.0 87.0	a2,530 2,490	a560 560	20 21	86.0 86.0	2,490 2,490	560 560
			RESULTS OF SURVEY,	NOVEMBE	R 15, 1962		
			Site	A-1			
3 10 20 30 40	61.5 62.0 62.0 61.5 61.5	1,470 1,470 1,470 1,470 1,470 1,470	300 300 300 300 300	50 60 70 80 87	61.5 61.5 61.5 61.5 61.5	1,470 1,470 1,470 1,470 1,530	300 300 300 300 302
			Site	A-2			
3 10 20	61.5 62.0 62.0	1,470 1,470 1,400	300 300 300	30 40	62.0 62.0	1,400 1,400	300 300
			Site	A-3			
3 10	62.0 62.0	1,470 1,470	300 300	20 25	62.0 62.0	1,470 1,470	300 300
			Site	B-1			
3 10 20	62.0 62.0 62.0	1,440 1,440 1,440	298 298 298	30 32	62.0 62.0	1,440 1,440	298 298

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCUL)	ATED)
		RESUL	TS OF SURVEY, NOVE	1BER 15,	1962Conti	nued		
			Site	B-2				
3 10 20	62.0 62.0 62.0	1,440 1,440 1,440	298 298 298	30 40 41	61.5 61.5 61.5	1,440 1,440 1,440	298 298 298	
			Site	B-3				
3 10 20 30 40	63.0 62.0 62.0 62.0 62.0	1,440 1,440 1,440 1,440 1,440 1,440	298 298 298 298 298 298	50 60 70 80 83	62.0 61.5 61.5 61.5 61.5	1,440 1,410 1,410 1,410 1,410 1,410	298 276 276 276 276	
			Site	P-1				
3 10 20	61.5 61.5 61.5	1,460 1,460 1,460	302 302 302	30 40 43	61.5 61.5 61.5	1,460 1,410 1,410	302 276 276	
			Site	C-1				
3 10	61.0 61.0	1,360 1,360	265 265	18	61.5	1,360	265	
			Site	C-2				
3 10 20 30	61.0 61.0 61.0 61.0	1,290 1,270 1,270 1,270 1,270	260 246 246 246	40 50 58	61.0 61.0 61.0	1,270 1,270 1,300	246 246 262	
			Site	C-3				
3 10 20	61.0 61.0 61.0	1,260 1,260 1,260	242 242 242	30 31	61.0 61.0	1,260 1,260	242 242	
			Site	P-2				
3 10 20 30 40	61.5 61.5 61.5 61.5 61.0	1,290 1,290 1,290 1,290 1,290 1,290	258 258 258 258 258 258	50 60 70 71	61.0 61.0 61.0 61.0	1,290 1, 29 0 1,290 1,290	258 258 258 258	
			Site	P-3		2		
3 10 20 30	61.5 61.0 61.0 61.0	1,250 1,250 1,250 1,250	255 255 255 255	40 50 60 63	61.0 61.0 60.5 61.0	1,250 1,250 1,250 1,250	255 255 255 255	
			Site	P-5				
3 10	60.0 59.0	1,300 1,300	258 258	14	59.0	1,300	258	
			Site					
3 10 20 30	60.5 60.5 60.5 60.5	1,060 1,060 1,060 1,060	205 205 205 205	40 50 60 65	60.5 60.5 60.5 60.5	1,060 1,060 1,060 1,100	205 205 205 215	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULAT	ED)
		RESULT	S OF SURVEY, NOVE	MBER 15,	1962Contin	ued		
			Sit	e P-6				
3 10 20 30	60.5 60.0 60.0 60.0	1,080 1,050 1,050 1,050	205 200 200 200	40 50 60 64	60.0 60.0 60.0 60.0	1,050 1,050 1,050 1,050 1,050	200 200 200 200	
			Sit	e P-7				
3 10 20	61.5 61.0 61.0	1,030 1.030 1,030	198 198 198	30 39	61.0 61.0	1,030 1,030	198 198	
			Sit	e P-9A				
3 10 20	61.0 61.0 61.0	1,150 1,150 1,250	215 215 240	30 40 43	60.5 60.5 60.5	1,400 1,460 1,480	270 282 290	
			Sit	e F-2				
3 10 20	59.0 59.0 59.0	1,090 1,090 1,090	202 202 202	30 40 42	59.0 59.5 59.0	1,090 1,200 1,150	202 225 215	
			Sit	e G-1				
3 10 20	61.0 61.0 61.0	1,280 1,290 1,340	240 242 255	30 38	60.5 60.0	1,380 1,480	264 285	
			Sit	e P-9				
3 10 20	59.5 59.5 60.0	1,050 1,050 1,050	192 192 192	30 40 49	59.5 59.5 59.0	1,130 1,340 1,440	212 255 280	
			Sit	e P-10				
3 10	61.0 61.0	1,260 1,260	238 238	20	60.0	1,260	238	
			Sit	e P-11				
3 10	61.5 61.5	1,540 1,540	290 290	20 21	61.0 60.5	1,540 1,540	290 290	
				P-11A		12 (120 2 800)		
3 10	61.0 61.0	1,560 1,560	300 300	20 23	61.0 61.0	1,560 1,560	300 300	
		2 AB624.5		e P-12	(0.0	1 500	290	
3 10	61.5 60.0	1,510	288 292	18	60.0	1,520	290	
			Sit	e P-13	520			
3 10	60.0 60.0	1,200 1,200	208 208	20 24	60.0 60.0	1,200 1,200	208 208	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE	CHLORIDE (PPM, CALCULATED)
		(MICROMHOS AT 25°C)				(MICROMHOS AT 25°C)	
		RESULT	S OF SURVEY, NOVEME	BER 15,	1962Contin	ued	
			Site	P-14			
3 10	60.0 60.0	1,170 1,170	208 208	19	59.0	1,250	230
			RESULTS OF SURVEY,	MARCH	7-8, 1963		
			Site	A-1			
top 3 10 20 30 40	53.0 53.0 51.5 51.0 50.0 50.0	a1,440 1,440 1,440 1,440 1,440 1,440 1,440	a282 282 282 282 282 282 282 282	50 60 70 80 87	50.0 50.0 50.0 50.0 50.0	1,440 1,440 1,440 1,440 1,440 1,440	282 282 282 282 282 282
			Site	A-2			
top 3 10	53.5 53.0 52.5	al,440 1,440 1,440	a282 282 282	20 30 38	51.0 50.5 50.5	1,440 1,440 1,440	282 282 282
			Site	A-3			
top 3 10	54.0 54.0 53.5	a1,440 1,440 1,440	a282 282 282	20 25	53.5 53.5	1,440 1,440	282 282
			Site	B-1			
top 3 10	54.5 54.0 52.0	al,440 1,440 1,440	a282 282 282	20 30 35	52.0 51.5 51.0	1,440 1,440 1,440	282 282 282
			Site	B-2			
top 3 10	54.4 54.5 53.0	1,440 1,440 1,400	282 282 282	20 30 35	52.0 51.5 51.5	1,440 1,440 1,440	282 282 282
			Site	B-3		<i>x</i>	
top 3 10 20 30 40	55.0 54.5 52.0 52.0 52.0 51.0	al,440 1,440 1,440 1,440 1,440 1,440 1,440	a282 282 282 282 282 282 282 282	50 60 70 80 85	50.5 50.5 50.5 50.5 50.5 50.5	1,440 1,440 1,440 1,440 1,440 a1,430	282 282 282 282 282 a282
			Site	P=1			
top 3 10 20 30	53.5 53.0 52.0 51.5 51.0	al,450 1,450 1,450 1,450 1,450 1,450	a288 288 288 288 288 288 288	40 50 60 63	51.0 51.0 50.0 50.0	1,450 1,450 1,450 1,450	288 288 288 288 288
			Site	C - 1			
top 3 10	53.0 53.0 52.0	a1,470 1,470 1,470	a288 288 288	20 30 31	51.0 51.0 51.0	1,470 1,470 1,470	288 288 288

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULA	TED
		RESULT	S OF SURVEY, MARCH	7-8, 19	63Continue	d		
			Site	C-2				
top 3 10 20 30	53.0 53.0 52.0 51.5 51.0	al,470 1,470 1,470 1,470 1,470 al,480	a288 288 288 288 288 a295	40 50 60 70 75	50.5 50.5 50.0 50.0 50.0	1,480 1,480 a1,470 1,470 1,470	295 295 a288 288 288	
			Site	C-3				
top 3	53.0 54.0	a1,470 1,470	a288 288	10 18	53.0 52.5	1,470 1,470	288 288	
			Site	P-2				
top 3 10 20	53.0 53.0 52.0 51.5	a1,480 1,480 1,480 1,480 1,480	a292 292 292 292 292	30 40 50 56	51.0 51.0 50.5 50.5	1,480 1,480 1,480 1,480	295 295 295 295	
			Site	P-3				
top 3 10 20 30	54.5 55.0 54.0 52.5 52.0	al,490 1,490 1,490 1,490 al,480	a295 295 295 295 a295 a295	40 50 60 69	52.0 51.0 51.0 51.0	a1,480 1,480 1,480 1,480	a295 295 295 295	
			Site	P-4				
ор 3 10	54.0 55.0 54.0	al,530 1,530 1,530	a305 305 305	20 30 38	52.0 51.0 51.0	1,530 1,530 1,530	305 305 305	
			Site	P-5				
ор 3	55.5 54.5	al,480 1,480	a298 298	10 17	53.0 52.0	1,480 1,480	298 298	
			Site	D-1				
ор 3	56.5 55.0	al,520 1,520	a305 305	10 14	53.0 52.0	1,520 1,520	305 305	
			Site	D-2				
op 3 10 20	55.0 55.0 54.0 53.5	al,550 1,620 1,620 1,620 1,620	a 310 325 325 325 325	30 40 50 60	52.0 51.5 51.0 50.5	1,620 1,620 1,620 a1,620	325 325 325 a325	
			Site	D-3				
ор 3	55.0 55.0	a1,520 1,520	a305 305	10 20	53.5 52.0	1,520 1,520	305 305	
			Site	P-6				
3 10 20	53.0 52.5 52.0 52.0	al,560 1,560 1,560 1,580	a318 318 318 320	30 40 50 60	52.0 51.5 51.0 51.0	1,620 1,680 1,710 a1,780	325 340 350 a365	

				11		T	
DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)		TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		DECU	LTS OF SURVEY, MAR	RCH 7-8	1963Contin	nued	
		KESU			1909 001111	1400	
			Site	e P-7			210
top	53.0	al,550	a310	20 24	52.0 51.5	1,550	310 310
3 10	53.0 53.0	1,550 1,550	310 310	27	51.05	122	
		17 Bard Minise 15	Site	e E-1			
400	F2 0	a1,600	a320	30	53.0	1,650	330
top 3	52.0 52.0	1,600	320	40	53.0	1,730	352 370
10	52.5	1,600	320 325	50 56	52.5 52.0	1,800 a1,820	a372
20	52.5	1,020		e P-8		And Audit Providences	
		1 (00		20	52.5	1,630	328
top 3	53.5 53.5	a1,630 1,630	a328 328	30	52.0	a1,630	a328
10	53.0	1,630	328				
			Sit	e P-9			
top	54.5	a1,620	a328	30	53.0	1,620	328
3	54.5	1,620	328 328	40 45	53.0 53.0	1,620 a1,740	328 a355
10 20	55.0 55.0	1,620 1,620	328	48	53.0	1,760	360
	100		Sit	e F-l			
top	55.0	a1,670	a338	20	53.0	1,670	338
3	55.0	1,670	338 338	30 40	53.0 52.5	a1,840 1,340	a382 382
10	55.0	1,670		e P-9A			
					F7 0	1,880	380
top	54.5 55.0	al,730 1,730	a355 355	30 40	53.0 53.0	1,880	380
3 10	55.0	1,730	355	43	52.5	1,880	380
20	54.0	1,880	380				
				te G-1		1 020	400
top	55.0	al,900	a392 392	20 30	54.5 54.5	1,930 1,930	400
3 10	55.0 55.0	1,900 1,900	392	31	54.0	1,930	400
			Sit	te P-10			
top	56.0	a1,880	378	10	56.0	1,880	378
3	56.0	1,880	378	20	56.0	1,880	378
			Sit	te P-11			
top	56.0	a2,100	a450	10	56.0	2,100 2,100	450 450
3	57.0	2,100	450	20	56.0	2,100	00
			Si	te P-12			201
top	57.0	al,870	a380	10 19	56.0 55.5	1,900 1,900	386 386
-3	57.0	1,870	380		22.2	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
				te P-13			1.00
top	59.0	a2,160	a465 468	20 29		a2,240 2,240	a482 482
3 10	59.0 59.0	2,170 2,170	468	2)	-/	2000 / 2 172 (1929)	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	JLTS OF SURVEY, MAR	сн 7-8,	1963Contin	ued	
			Site	P-14			
top 3	59.0 59.0	a2,240 2,240	a482 482	10 19	59.0 58.0	2,240 2,240	482 482
			RESULTS OF SURV	EY, JUNE	9, 1963		
			Site	A-1			
3 10 20 30 40	77.5 77.5 77.5 77.0 76.0	al,420 1,420 1,420 1,450 1,450	a285 285 285 290 290	50 60 70 80 86	74.0 72.0 66.5 63.5 61.0	1,480 1,480 a1,520 1,520 1,520	300 300 a310 310 310
			Site	A-2			
3 10 20	78.0 77.5 77.5	1,420 1,420 1,450	285 285 290	30 33	77.0 77.0	1,450 1,450	290 290
			Site	B-2			
3 10 20	78.5 78.5 78.5	1,400 1,400 1,400	280 280 280	30 35	78.0 78.0	1,400 1,400	280 280
			Site	B-3			
3 10 20 30 40	79.0 79.0 78.5 78.0 75.5	1,420 1,420 1,420 1,420 1,420 1,450	285 285 285 285 285 290	50 60 70 80 82	74.0 72.5 67.0 63.5 62.5	1,450 1,450 1,510 1,510 1,510	290 290 305 305 305
			Site	P-1			
3 10 20 30	79.0 79.0 79.0 78.5	al,350 1,350 1,350 al,390	a268 268 268 a280	40 50 60	77.0 74.5 72.0	1,500 1,520 1,520	305 310 310
			Site	C-1			
3 10 20	79.5 79.5 79.0	al,360 1,360 1,380	a268 268 270	30 32	78.5 78.5	1,380 1,380	270 270
			Site	C-2			
3 10 20 30 40	79.5 79.5 79.0 79.0 76.0	al,410 1,410 1,410 1,410 1,410 1,430	a282 282 282 282 282 282 286	50 60 70 73	74.0 72.5 70.0 69.0	1,460 1,460 a1,460 1,460	292 292 a292 292 292
			Site	P-2			
3 10 20 30	80.5 80.5 80.0 79.0	al,320 1,320 1,360 1,400	a260 260 270 280	40 50 55	77.0 75.0 73.5	a1,510 1,500 1,500	a310 305 305

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	(FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RES	SULTS OF SURVEY, JUI		963Continue	:d	
3 10 20 30 40	80.5 80.5 80.5 80.0 78.0	al,320 1,320 1,360 1,400 1,650	a262 262 262 280 310	50 60 70 73	76.5 74.0 69.0 68.0	a1,720 1,550 a1,500 1,500	a368 302 a302 302
			Site	P-4			
3 10 20	80.5 80.5 80.0	a1,240 1,240 1,270	a245 245 260	30 40 42	79.5 78.5 78.5	1,380 1,580 a1,670	305 320 a360
			Site	P=5			
3 10	81.0 80.5	al,320 1,320	a265 265	16	80.0	1,320	265
			Site	D-2			
3 10 20 30	80.5 80.5 80.0 79.5	a1,240 1,240 1,280 1,380	a245 245 270 305	40 50 60 70	78.0 78.0 77.5 77.0	1,700 1,790 a1,820 1,820	365 380 a398 398
			Site	P-6			
3 10 20 30 35	81.0 81.0 81.0 80.5 79.0	a1,180 1,180 1,180 1,180 1,220 1,700	a232 232 232 320 360	40 50 60 64	78.0 77.0 77.0 77.0	1,790 a1,860 1,860 1,860	390 a405 405 405
			Site	P-7			
3 10 20	82.5 82.0 81.5	al,220 1,220 1,220	a235 235 235	30 37	79.0 78.0	1,580 a1,760	280 a382
			Site	E-1			
3 10 20 30	82.0 81.0 80.5 79.0	a1,160 1,160 1,400 1,710	a228 228 310 350	40 50 58	78.0 77.5 77.5	1,830 a1,880 1,880	390 a 410 410
			Site	P-8			
3 10 20	81.5 81.0 80.0	a1,070 1,070 1,070	a 178 178 178	30 33	78.5 78.0	a1,780 1,780	a390 390
			Site	• P - 9			
3 10 20 25 27	83.0 82.5 81.0 80.5 79.0	al,160 1,160 1,160 1,250 1,700	a230 230 230 250 310	30 35 40 50 53	78.5 78.0 78.0 78.0 78.0	1,820 1,820 1,900 1,900 1,900	390 390 420 420 420

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCUL	
		RES	ULTS OF SURVEY, J		63Continue	d		
			Site	e F-2				
3 10 13 14 15	82.0 82.0 81.0 81.0 80.5	al,240 1,210 1,060 1,380 1,480	a245 240 230 250 260	17 20 30 40 45	80.5 80.5 78.0 77.5 77.0	1,690 1,800 1,880 a1,900 1,900	310 390 400 a420 420	
			Site	e P-9A				
3 10 20	82.0 80.5 79.0	al,590 1,780 1,910	a338 380 422	30 40 43	78.5 78.0 77.5	al,910 1,910 1,910	a422 422 422	
			Site	e G-1				
3 10 20	79.5 79.0 78.5	al,910 1,910 1,910	a422 422 422	30 34	78.5 78.5	1,910 1,910	422 422	
			Site	e P-10				
3 10	82.0 81.5	1,580 1,600	338 360	20	79.0	1,800	390	
			Site	e P-11				
3 10	80.5 80.5	a1,940 1,940	a435 435	20 22	79.5 79.5	1,940 1,940	435 435	
			Site	e P-12				
3 10	81.5 78.0	al,910 1,910	a422 422	18	76.0	1,910	422	
			Site	e P-13				
3 10	83.0 82.5	al,950 1,950	a430 430	20 27	82.0 81.5	1,950 1,950	430 430	
			Site	e P-14				
3 10	83.5 83.0	al,950 1,950	a430 430	19	82.0	al,960	a435	
			RESULTS OF SURVE	Y, AUGUST	21, 1963			
			Site	e A-1				
3 10 20 30 40 50 60	84.5 84.5 83.0 82.5 82.0 81.5 80.0	al,880 1,880 1,840 1,840 1,840 1,840 1,830 1,800	a415 415 410 410 410 405 395	65 68 70 75 80 86	77.5 75.0 73.5 68.0 66.5 64.5	1,760 1,730 1,630 1,630 1,580 1,580	394 388 370 370 340 340	
			Site	e A-2				
3 10 20	84.0 83.5 83.0	1,890 1,890 1,880	420 420 415	30 40	82.5 82.0	1,840 1,840	410 410	

a By laboratory analysis.

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(Location of Data-Collection Sites are Shown on Figure 6)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	LTS OF SURVEY, AUGU	ST 21,	1963Continu	ued	
			Site	A-3			
3 10	84.5 84.5	1,890 1,890	420 420	20 26	83.5 82.5	1,840 1,840	410 410
			Site	B-3			
3 10 20 30 40	84.0 84.0 83.0 82.0 82.0	a1,840 1,840 1,840 1,840 1,840 1,840	a405 405 405 405 405	50 60 70	81.5 80.5 80.0	1,840 1,800 1,800	405 395 395
			Site	B-1			
3 10 20	84.0 84.0 83.0	1,890 1,890 1,890	420 420 420	30 34	82.0 81.5	1,890 1,840	420 405
			Site	P=1			
3 10 20 30	85.5 85.0 84.0 83.0	al,890 1,890 1,890 1,880	a420 420 420 418	40 50 60 65	83.0 82.5 81.0 79.5	1,880 1,840 1,830 1,800	418 405 400 395
			Site	C-2			
3 10 20 30	85.0 84.5 84.0 83.5	a1,900 1,900 1,890 1,870	a422 422 420 416	40 50 58	83.0 82.0 81.0	1,850 1,840 1,840	412 405 405
			Site	P-2			
3 10 20 30	85.5 85.0 84.0 83.5	a1,900 1,900 1,900 1,900	a422 422 422 422	40 50 52	83.0 82.5 82.0	1,900 1,890 1,890	422 420 420
			Site	P-3			
3 10 20 30	85.5 85.0 84.0 83.5	al,910 1,910 1,910 1,910 1,910	a428 428 428 428	40 50 60 67	83.5 83.0 81.5 75.0	1,910 1,930 1,850 1,730	428 435 412 392
			Site	P-4			
3 10 20 30	85.5 85.0 83.5 83.5	al,940 1,940 1,930 1,930	a438 438 435 435	40 50 60 66	83.0 82.0 78.5 76.5	1,940 1,940 1,820 1,790	438 438 398 392
	01. 5	21.010	a425	P-5 15	83.5	1,910	425
3 10	84.5 84.0	al,910 1,910	425		· · · · ·	.,,,,,,	
			Site				
3 10 20 30	85.0 84.5 83.5 83.5	a1,930 1,920 1,920 1,920	a435 430 430 430	40 50 60 64	83.5 83.0 79.0 78.0	1,920 1,930 1,880 1,840	430 435 418 405

a By laboratory analysis.

- 92 -

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	LTS OF SURVEY, AUG	UST 21,	1963Contin	ued	
			Site	P-6			
3 10 20 30	85.0 84.0 84.0 83.0	al,930 1,930 1,930 1,930 1,930	a432 432 432 432	40 50 58	82.0 82.5 82.0	1,930 1,930 1,930	432 432 432
50	0,0	1,990	Site	P-7			
3 10 20	84.5 84.5 84.0	1,940 1,940 1,940	432 432 432	30 34	83.5 83.5	1,970 1,970	445 445
20		.,,	Site	E-1			
3 10 20 30	85.5 84.0 83.5 83.5	al,990 1,970 1,970 1,970	a450 445 445 445	40 50 53	83.0 83.0 83.0	1,970 1,970 1,970	445 445 445
			Site	P-8			
3 10	85.5 84.0	al,970 1,970	a448 448	20 28	83.5 83.5	1,970 1,970	448 448
			Site	P-9			
3 10 20	86.5 84.0 83.5	a2,150 2,050 2,050	a488 463 463	30 40 47	83.5 83.5 83.5	2,150 2,150 2,100	488 488 480
			Site	F-1			
3 10 20	87.5 85.0 84.0	a2,130 2,260 2,140	a485 522 491	30 40 43	84.0 83.5 83.5	2,140 2,130 2,130	491 488 488
			Site	P-9A			
3 10 20	86.5 85.5 84.5	a2,280 2,280 2,280	a520 520 520	30 40 41	84.0 84.0 84.0	2,200 2,280 2,280	507 520 520
			Site	G-1			
3 10 20	86.5 86.0 84.5	a2,330 2,330 2,330	a535 535 535	30 32	84.0 84.0	2,400 2,400	556 556
			Site	P-10			
3 10	86.5 84.5	a2,310 2,310	a 53 5 535	19	83.5	2,310	535
				P-11	01. 0	2 1:22	rr 0
3 10	85.0 84.0	a2,420 2,420	a558 558	19	84.0	2,420	558
				P-12			
3 10	87.5 85.0	a2,400 2,400	a562 562	16	84.0	2,400	562

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	ILTS OF SURVEY, AUG	UST 21,	1963Contin	ued	
			Site	P-13			
3 10	87.0 85.0	a2,390 2,390	a555 555	20 25	84.5 84.5	2,390 2,390	555 555
			Site	P-14			
3 10	84.5 83.5	2,390 2,390	555 555	18	83.0	2,390	555
			RESULTS OF SURVEY,	NOVEMBI	ER 14, 1963		
			Site	A-1			
3 10 20 30 40	67.0 67.0 67.0 67.0 67.0	a2,090 2,090 2,090 2,090 2,090 2,090	a460 460 460 460 460	60 70 80 88	67.0 67.0 67.0 67.0	2,090 2,090 a2,090 2,090	460 460 a460 460
			Site	A-2			
3 10	67.0 67.0	2,090 2,090	460 460	20 27	67.0 67.0	2,090 2,090	460 460
			Site	A-3			
3 10	67.0 66.5	2,090 2,090	460 460	19	66.5	2,090	460
			Site	B-3			
3 10 20 30 40	67.0 67.0 67.0 67.0 67.0	2,090 2,090 2,090 2,090 2,090 2,090	460 460 460 460 460	50 60 70 77	67.0 67.0 67.0 66.5	2,090 2,090 a2,090 2,090 2,090	460 460 a460 460
			Site	P-1			
3 10 20	66.5 66.5 66.5	2,090 2,090 2,090	460 460 460	30 40 48	66.5 66.5 66.5	2,090 2,090 2,090	460 460 460
			Site	C-2			
3 10 20 30	66.5 66.0 66.0 66.0	2,090 2,090 2,090 2,090	460 460 460 460	40 50 60 64	66.0 66.0 66.0 66.0	a2,090 2,090 2,090 2,090 2,090	a460 460 460 460
			Site	P-3			
3 10 20 30	66.5 66.0 66.0 66.0	a2,090 2,090 2,090 2,090	a460 460 460 460	40 50 60 64	66.0 66.0 66.0 66.0	2,090 2,090 a2,090 2,090	460 460 a460 460
			Site	P-4			
3 10	64.5 64.0	2,090 2,090	460 460	11	64.0	2,090	460

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, NOVER	IBER 14,	1963Contir	nued	
			Site	D-2			
3 10 20 30	66.0 66.0 66.0 65.5	a2,090 2,090 2,090 2,090 2,090	a460 460 460 460	40 50 56	65.5 65.5 65.5	a2,090 2,100 2,100	a 460 470 470
			Site	P-6			
3 10 20 30	65.0 65.0 65.0	a2,090 2,090 2,090 2,090 2,090	a470 470 470 470	40 50 54	65.0 65.0 65.0	2,090 a2,110 2,110	470 a460 460
			Site	P-9			
3 10 20	65.5 65.5 65.5	a2,130 2,130 2,130	a470 470 470	30 40 43	65.5 65.5 65.0	a2,140 2,140 2,140	a470 470 470
			Site	F-2			
3 10 20	65.0 65.0 65.0	a2,150 2,150 2,150	a480 480 480	30 38	65.0 65.0	2,150 2,150	480 480
			Site	P-9A			
3 10 20	65.5 65.5 65.5	a2,140 2,140 2,140	a470 470 470	30 34	65.5 65.5	2,140 2,140	470 470
			Site	G-1			
3 10	65.0 65.0	a2,120 2,120	a470 470	20 27	65.0 65.0	2,120 2,120	470 470
			Site	P-11			
3 10	64.5 64.5	a2,240 2,240	a480 480	13	64.5	2,240	480
			Site	P-12			
3 10	65.5 65.5	a2,050 2,050	a440 440	11	65.5	2,050	440
			Site	P-13			
3 10	66.5 66.5	a2,270 2,270	a510 510	20	66.5	2,270	510
			Site	P-14			
3 10	64.5 64.5	a2,290 2,290	a500 500	12	64.5	2,290	500

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
			RESULTS OF SURVEY	, MARCH	3, 1964		
			Site	A-1			
3 10 20 30 40	49.0 49.0 49.5 48.5	a2,070 2,070 2,070 2,070 2,070 2,070	a445 445 445 445 445 445	50 60 70 76	48.0 48.0 48.0 48.0	a2,070 2,070 2,070 2,070 2,070	a450 450 450 450
			Site	B-3			
3 10 20 30 40	50.0 49.5 49.5 49.0 48.5	a2,070 2,070 2,070 2,070 2,070 2,070	a440 440 440 440 440	50 60 70 80	48.5 48.5 48.0 48.0	2,070 2,070 2,070 2,070 2,070	440 440 440 440
			Site	C-2			
3 10 20 30	49.0 49.0 48.5 48.0	a2,050 2,050 2,050 a2,040	a445 445 445 a440	40 50 56	47.5 47.5 47.5	2,040 2,040 2,050	440 440 445
			Site	P-2			
3 10 20 30	48.5 48.5 48.5 48.0	a2,020 2,020 2,020 2,020 2,020	a430 430 430 430	40 50 60 68	48.0 48.0 47.5 47.5	2,020 2,020 2,020 2,020 2,020	430 430 430 430
			Site	P-3			
3 10 20 30	51.0 51.0 50.0 48.5	a2,010 2,010 2,010 2,010	a435 435 435 435	40 50 60 65	48.5 48.0 47.5 47.5	2,010 2,040 a2,040 2,040	435 445 a445 445
			Site	P-4			
3 10 20	51.0 51.0 50.0	1,990 1,990 1,990	428 428 428	30 36	48.5 48.0	1,940 1,940	418 418
			Site	D-2			
3 10 20 30	52.0 52.0 52.0 49.0	al,990 1,990 1,940 al,940	a428 428 418 a418	40 50 52	48.5 48.5 48.0	1,940 1,940 1,940	418 418 418
			Site	P-6			
3 10 20 30	52.0 52.0 52.0 50.5	al,800 1,800 1,800 1,800 1,800	a378 378 378 378 378	40 50 57	50.0 48.5 48.5	1,800 1,800 1,800	378 378 378
			Site	E-1			
3 10 20 30	54.0 53.0 51.0 49.5	al,770 1,770 al,730 1,730	a370 370 a358 358	40 52 56	49.5 49.5 49.5	1,730 1,820 1,850	358 390 395

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED
		RES	ULTS OF SURVEY, MA	RCH 3, 1	964Continu	ed	
			Site	P-9			
3 10 20	55.5 55.5 55.0	a1,620 1,620 1,620	a332 332 332	32 35 40	52.0 50.0 49.0	1,620 1,620 1,620	332 332 332
30	53.0	1,620	332	43	49.0	1,620	332
			Site		100 m		6
3 10 20	54.0 54.0 51.0	al,520 1,520 1,520	a302 302 302	30 40	49.5 49.5	1,620 1,720	352 402
			Site	P-9A			
3 10 20	53.0 53.0 50.0	a1,470 1,470 1,580	a290 290 310	30 38	49.5 49.5	1,670 1,750	360 390
			Site	G - 1			
3 10	52.5 52.0	al,370 1,370	a268 268	20 25	52.0 52.0	1,370 1,570	268 305
			Site	P-11			
3 10	54.0 54.0	al,180 1,180	a218 218	15	53.0	1,180	218
			Site	P-12			
3 10	51.0 52.0	al,100 1,100	a190 190	12	52.5	1,100	190
			Site	P-13			
3 10	54.5 54.5	al,120 1,120	a200 200	20 22	53.0 53.0	1,120 1,120	200 200
			Site	P-14			
3 10	54.0 54.0	al,010 1,010	a178 178	13	54.0	1,010	178
			RESULTS OF SURV	EY, MAY	27, 1964		
			Site	A-1			
3 10 20 30 40	74.5 74.5 74.0 72.5 70.0	al,710 1,730 1,730 1,760 1,820	a 365 368 368 375 388	60 70 80 86 87	64.5 62.5 61.0 61.0 60.5	1,890 1,910 1,910 1,910 1,910 1,910	402 405 405 405 405
50	67.0	1,860	398				
			Site				
3 10	75.0 75.0	1,720	366 368	20 28	74.0 73.0	1,730 1,750	368 372

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
			RESULTS OF SURVE	Y, MAY	27, 1964Co	ntinued	
			Site	B-2			
3 10	76.5 76.5	1,690 1,690	354 354	20 30	76.0 72.5	1,720 1,720	366 366
			Site	B-3			
3 10 20 30 40	76.5 76.0 74.5 73.0 69.5	al,710 1,710 1,710 1,730 1,730	a362 362 364 364 375	50 60 70 80 86	67.3 64.5 63.0 62.0 61.5	1,830 1,840 1,850 1,860 1,840	390 394 396 398 394
			Site	P-1			
3 10 20 30	77.0 77.0 76.0 73.5	a1,640 1,640 1,650 1,640	a342 342 345 342	40 50 57	70.5 68.0 67.0	1,810 a1,810 1,810	385 a385 385
			Site	C-2			
3 10 20 30 40	77.5 77.0 76.0 74.0 73.0	al,650 1,650 1,650 1,580 1,580 1,650	a345 345 345 330 345	50 60 70 76	70.0 67.0 64.5 63.0	1,730 a1,790 1,870 1,870	350 a375 390 390
			Site	P-2			
3 10 20 27	79.0 78.0 76.0	al,630 1,630 1,540 al,540	a340 340 315 a315	30 40 50 57	74.0 71.5 69.0 66.5	1,540 1,660 a1,790 1,790	315 350 a380 380
			Site	P-3			
3 10 20 30	79.0 78.5 77.0 74.5	a1,620 1,620 1,540 a1,420	a342 342 330 a285	40 50 60 68	69.0 67.0 65.0 64.0	1,680 1,820 a1,830 1,830	350 380 a388 388
			Site	P-4			
3 10 20	79.0 79.0 78.5	a1,610 1,610 1,570	a338 338 330	30 40 47	76.5 75.5 71.0	1,390 a1,390 1,300	278 a278 270
			Site	P-5			
3 10	80.0 79.5	a1,600 1,600	a335 335	13	78.5	1,570	330
			Site	e D−2		12.1 Martinetari	
3 10 20 30	78.5 78.0 77.5 75.5	a1,540 1,540 1,490 1,380	a318 318 300 290	40 50 60 61	73.0 68.0 65.5 65.5	1,760 1,760 a1,790 1,760	370 370 a378 370

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCUL)	
		RES	ULTS OF SURVEY, MA	Y 27, 19	964Continue	d		
			Site	P-6				
3 10 20 30 35	78.5 78.5 77.5 76.0 75.0	al,430 1,430 1,430 1,270 al,240	a288 288 288 250 a240	40 45 50 58	74.0 73.0 67.5 66.5	1,270 1,330 a1,740 1,730	250 260 a368 360	
			Site	P-7				
3 10	80.5 80.0	a1,410 1,410	a282 282	20 25	78.5 77.0	1,400 1,400	280 280	
			Site	E-1				
3 10 20 30	79.5 79.5 75.5 72.5	a1,420 1,420 1,190 1,180	a288 288 250 250	40 50 53	72.0 68.0 67.5	1,190 1,650 1,720	250 340 350	
			Site	P-8				
3 10 20	80.5 78.0 76.5	al,190 1,190 al,100	a228 228 a195	27 29	76.5	al,090 1,090 1,090	a195 195	
			Site	P-9				
3 10 20	81.5 81.5 81.0	al,280 1,290 al,280	a252 250 a250	30 40 46	77.0 73.5 69.5	1,020 a1,050 a1,310	190 a185 a255	
			Site	F-2				
3 10 20	81.0 81.0 80.0	1,180 1,180 1,150	210 210 200	30 44	76.5 75.0	910 930	180 180	
			Site	P-9A				
3 10 20	81.0 80.5 77.0	al,140 1,090 a906	a215 195 a152	30 40 42	76.5 71.0 71.0	930 1,010 a1,010	180 185 a185	
			Site	G-1				
3 10 20	79.5 79.5 78.0	a919 919 919	a150 150 150	30 31	77.0 77.0	919 919	150 150	
			Site	P-11				
3 10	80.0 80.0	a948 948	a158 158	13	80.0	948	158	
				P-12			232	
3 10	81.0 79.0	a951 840	a162 150	15	77.0	a826	a115	
			Site	P-13				
3 10	81.0 80.5	a1,000 1,000	a172 172	20 23	79.5 77.5	1,060 1,060	180 180	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
L		RES	ULTS OF SURVEY, MAY	(27, 19	64Continue	d	
			Site	P-14			
3 10	81.0 80.5	a1,060 1,060	a182 182	15	79.5	1,060	182
			RESULTS OF SURVEY	, NOVEME	ER 5, 1964		
			Site	A-1			
3 10 20 30 40 50	68.0 68.0 68.0 68.0 68.0 68.0	al,770 1,770 1,770 1,770 1,770 1,770 1,770	a380 380 380 380 380 380 380	60 70 80 85 90 93	68.0 68.0	1,770 1,770 a1,770 1,770 1,770 1,770	380 378 378 378 378 378 378 378
			Site	B-1			
3 10 20 30 40	68.0 68.0 68.0 68.0 68.0	al,740 1,740 1,740 1,740 1,740 1,740	a 368 368 368 368 368 368	50 60 70 80	68.0 67.5 67.5 67.5	1,740 1,740 1,740 1,750	368 368 368 370
			Site	P-1			
3 10 20 30	68.0 68.0 67.5 67.5	a1,670 1,670 1,670 1,670	a355 355 355 355	40 50 57	67.5 67.5 67.5	1,670 1,670 1,670	355 355 355
			Site	C-2			
top 3 10 20	67.5	a1,670 1,670 1,670 1,670	a352 352 352 352 352	30 40 50 60	67.5	1,670 1,670 1,670 1,670	352 352 352 352
			Site	e P-2			
3 10 20 30 40	69.0 69.0 68.0 68.0 68.0	a1,680 1,680 1,680 1,680 1,680 1,680	a360 360 360 360 360 360	50 60 70 73	68.0 68.0 68.0 68.0	1,680 1,680 1,680 1,680 1,680	360 360 360 360
			Site	e P-3			
3 10 20 30	69.0 68.5 68.5 68.5	a1,690 a1,660 1,660 1,660	a355 a352 352 352	40 50 60 67	68.5 68.5 68.5 68.5	1,660 1,660 1,660 1,660	352 352 352 352 352
			Site	e P-4			
3 10 20 30	69.0 69.0 68.5 68.5	a1,640 1,640 1,620 a1,620	a348 348 342 a342	40 50 60 64	68.5 68.5 68.5 68.5	1,620 1,620 1,620 1,620	342 342 342 342 342
			Sit	e P-5			
3 10	66.5 65.5	a382 382	a16 16	11	65.5	382	16

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, NOV	EMBER 5,	1964Contir	nued	
			Sit	e D-2			
3 10 20 30	69.0 68.0 68.0 68.0	al,530 al,510 1,510 1,510	a318 a318 318 318	40 50 60 61	68.0 68.0 68.0 68.0	1,510 1,510 1,510 1,510	318 318 318 318 318
			Sit	e P-6			
3 10 20 30	68.5 68.0 67.5 67.5	al,360 1,360 1,360 1,410	a278 278 278 300	40 50 56 57	67.5 67.5 67.5 67.5	1,410 1,410 1,410 1,410	300 300 300 300
			Sit	e P-7			
3 10 20	68.0 67.5 67.5	al,080 1,180 al,280	a212 240 a260	30 35	67.0 66.0	1,160 1,050	230 210
			Site	e E-1			
3 10 20	67.5 67.5 67.0	1,180 1,180 1,280	240 240 250	30 40 50	67.0 67.0 67.0	1,280 1,280 1,290	250 250 255
			Site	e P-8			
3 10	67.0 67.0	a689 1,020	a116 180	20 27	67.0 66.5	1,150 1,090	230 210
	2011			e P-9			
3 10 20	68.0 68.0 67.5	al,070 1,070 990	a205 205 200	30 40 45	67.0 66.5 66.5	1,190 1,190 1,190	260 260 260
			Site	e F-2			
3 10 20	68.0 68.0 68.0	a989 989 989	a185 185 185	30 40	67.0 66.0	1,050 990	200 185
			Site	e P-9A			
3 10 20	68.0 67.5 67.5	a934 934 940	a172 172 175	30 40	67.0 66.0	940 1,050	175 190
			Site	e G-1			
1 3 10	67.0 67.0 66.5	785 a785 785	140 a140 140	20 28	66.5 65.5	785 690	140 120
			Site	e P-10			
3 10	66.5 66.0	a603 720	a98 110	18	64.0	450	80
			Site	e P-11			
3 10	67.0 66.0	a710 710	a117 117	15	65.5	710	117

Table 2.--Temperature, Specific Conductance, and Chloride Content of Water, Whitney Reservoir--Continued

(Location of Data-Collection Sites are Shown on Figure 6)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, NOVEM	IBER 5,	1964Contin	ued	
			Site	P-12			
3 10	66.5 64.0	al,080 620	a208 95	13	64.0	620	95
			Site	P-13			
3 10	68.5 68.0	al,030 1,030	a195 195	15 20	66.0 64.0	750 338	110 a28
			Site	P-14			
3 10	68.0 68.0	al,200 1,200	a232 232	14	68.0	1,200	232

Table 3.--Temperature, Specific Conductance, and Chloride Content of Water, Hubbard Creek Reservoir

DEPTH TEMPERATURE SPECIFIC CHLORIDE DEPTH TEMPERATURE CHLORIDE SPECIFIC (°F) CONDUCTANCE (PPM, CALCULATED) (FT) (°F) CONDUCTANCE (PPM, CALCULATED) (FT) (MICROMHOS AT 25°C) (MICROMHOS AT 25°C) RESULTS OF SURVEY, SEPTEMBER 30, 1963 Site A 20 71.0 a739 a739 a136 136 74.0 739 3 10 136 27 71.0 a136 71.0 739 Site B 739 136 7 70.5 a136 72.0 a739 3 Site C 69.5 a748 a139 a136 20 a742 3 70.0 a751 a139 742 748 69.0 136 29 9 69.5 139 10 69.5 Site D a139 75.0 a731 B2 Site E a137 a742 **B3** 70.0 RESULTS OF SURVEY, DECEMBER 16, 1963 Site A 25 510 93 a93 ---3 10 20 a510 --a508 a93 30 ----a510 93 93 --510 Site B 91 12 503 --a91 a503 3 ---503 91 Site C 503 92 11 a503 a92 - --3 ___ 92 10 ---503 Site D 86 480 a480 B7 --a86 3 ---Site E 481 86 a86 9 a481 3 ---RESULTS OF SURVEY, APRIL 29, 1964 Site A 144 144 20 68.0 715 715 69.5 3 144 68.0 715 29 715 144 69.0 Site B 144 a144 20 68.0 715 69.0 a715 3 144 144 24 67.5 715 10 68.5 715

(Location of Data-Collection Sites are Shown on Figure 9)

		●P D.D. COLECTION OF COLECTION					
DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)		TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	ILTS OF SURVEY, APR	IL 29,	964Continu	ed	
			Sit	e C			
3 10 20	69.0 68.0 67.0	710 710 710	142 142 142	30 32	66.0 66.0	710 710	142 142
	.,		Sit	e D			
3	68.0	a710	a142	9	68.0	710	142
2			Site				
3 10	68.0 65.5	710 710	142 142	12	65.5	710	142
			Sit	e E			
3 10	67.5 67.5	a729 730	a150 150	18 24	67.5 67.0	767 a767	157 a157
			RESULTS OF SURVEY,	SEPTEM	BER 24, 1964		
			Sit	еA			
3 10 15 20 21 22	73.0 73.0 73.0 73.0 73.0 73.0 73.0	a 790 790 800 730 a740 294	a167 167 170 150 a156 38	25 26 28 30 34	72.5 72.5 72.5 72.5 72.5 72.5	294 294 294 294 294 a294	38 38 38 38 38 a38
			Sit	e C			
1 5 10 15 16	73.5 73.0 73.0 73.0 72.5	400 375 375 350 300	90 50 50 45 40	18 20 25 31 35	72.5 72.5 72.0 72.0 72.0	290 250 270 210 210	35 26 30 15 15
			Site	D+1			
1 5 10	72.5 72.5 72.5	427 427 427	67 67 67	15 20 24	72.5 72.5 72.5	427 427 a427	67 67 a67
			Site	D+2			
1 15	72.5 72.5	280 a251	30 a26	20	72.5	210	15
			Site	D+3			
1	72.0	a219	20	11	72.0	210	18
			Site	D+4			
1	72.0	200	10	3	72.0	200	10

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESULT	TS OF SURVEY, SEPTER	1BER 24,	1964Conti	nued	
			Site	e B			
1 5 10	73.5 73.5 73.5	740 740 740	150 150 150	11 14	73.5 73.5	730 740	145 150
			Site	еE			
1 11	73.5 73.5	855 855	175 175	15	73.5	860	180
			Site	E+2			
1 11	73.5 73.5	910 890	198 195	14 19	73.5 73.0	a889 a953	a195 209
			RESULTS OF SURVEY	, NOVEM	BER 20, 1964		
			Site	e A			
5 10 15 20 25 26 27	57.0 57.0 57.0 57.0 57.0 57.0 57.0 57.0	a697 697 697 697 697 697 697 697	a140 140 140 140 140 140 140	28 29 30 31 35 40 43	57.0 57.0 55.0 54.0 54.0 54.0 54.0 54.0	697 697 a553 553 490 490 a336	140 140 a107 107 95 95 a53
			Site	e C			
5 10 15 19 20	57.0 57.0 57.0 57.0 57.0 53.0	a655 a655 655 a562 270	al 31 131 131 al 09 52	25 30 35 40 43	53.0 53.0 53.0 53.0 53.0	270 243 243 243 a243 a243	52 35 35 35 35 a35
			Site	e D			
5 10 15 17	56.0 56.0 54.0 54.0	a614 600 565 a533	al21 112 107 al00	18 19 20 26	53.0 53.0 53.0 53.0	465 390 390 390	89 75 75 75
			Site	D+1			
5 10 11 12 13 14	53.0 53.0 53.0 53.0 53.0 53.0 53.0	a413 405 405 405 a364 280	a76 73 73 73 a64 49	15 20 25 30 35	53.0 53.0 53.0 53.0 53.0 53.0	256 226 226 226 a226	35 21 21 21 21 a21
			Site	D+3			
5 10 15	51.0 51.0 51.0	a218 206 206	a24 23 23	20 25 29	52.0 52.0 52.0	206 294 282	23 22 21
			Site	D+4			
3	52.0	a227	a23	5	50.0	227	23

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, NOVEM	BER 20,	1964Conti	nued	
			Site	Е			
5 10 15 17 18	57.0 56.0 56.0 56.0 55.0	a693 660 660 657 655	a140 135 135 130 130	19 20 25 30 35	52.0 52.0 52.0 52.0 52.0	a649 669 689 689 a689	a 129 134 138 138 a 138
			Site	E+1			
5 10 15 17	55.0 53.0 52.0 51.0	a658 600 590 565	a121 110 108 89	18 19 20 24	51.0 51.0 52.0 52.0	565 535 490 a399	89 85 79 a64
			Site	E+1A			
5 10 16	50.0 50.0 51.0	a393 370 340	a66 63 58	20 25 28	52.0 52.0 52.0	300 290 290	51 49 49
			RESULTS OF SURVEY,	NOVEMBE	ER 21, 1964		
			Site	e A			
3 5 10 15 17 20	56.0 56.0 56.0 56.0 56.0 56.0	a634 630 630 630 a625 460	a127 125 125 125 a123 90	25 30 35 40 42	53.5 53.5 53.5 53.5 53.5 54.0	380 250 270 270 a270	68 35 38 38 a38
			Site	e C			
3 5 10 15 20	54.0 54.0 54.0 54.0 54.0	a615 615 615 590 515	a121 121 121 115 98	25 30 35 40 43	53.0 53.0 53.0 53.0 53.0	a436 240 225 225 a225	a80 45 27 27 a27
			Site	e D			
3 5 10 15	54.0 54.0 54.0 53.0	a524 524 505 505	a102 102 100 100	20 23 25 26	53.0 53.0 53.0 53.0	a454 303 295 a282	a86 57 35 a31
			Site	D+1			
3 5 10 15	53.0 53.0 52.0 52.0	a499 450 350 348	a94 85 66 60	20 25 30 35	52.0 52.0 52.0 52.0	348 348 347 a346	60 60 56 a54
			Site	D+3			
3 5 10 15	49.0 49.0 49.0 49.0	a222 222 222 222	a24 24 24 24 24	20 25 29	49.0 49.0 48.0	222 222 222	24 24 24

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, NOVEM	1BER 21,	1964Conti	nued	
			Site	D+4			
3	48.0	a241	a28	5	48.0	241	28
			Site	E			
3	54.0	a664 664	a133	15	54.0 54.0	664 664	133
5 10	54.0 54.0	664	133 133	20 26	54.0	664	133 133
			Site	E+1			
3 5	52.0	a548	a105	20	49.0	415	70
10	50.0 49.0	500 415	100 70	25 28	49.0 49.0	415 a415	70 a70
15	49.0	415	70	2010 al al a			
			Site				
3 5 10	49.0 49.0	a355 355	a56 56	20 25	49.0 49.0	355 355	56 56
10 15	49.0 49.0	355 355	56 56	27	49.0	355	56
			RESULTS OF SURVEY,	DECEMBEI	R 10, 1964		
			Site	A			
3 5	50.0 50.0	593 593	114 114	25 30	49.0 49.0	593 593	114 114
10 15	49.0	593 593	114	35 37	49.0	593 593	114
20	49.0	593	114	57	19.0		
			Site	В			
3 5	49.0 49.0	a593 593	a114 114	15 19	49.0 49.0	593 593	114 114
10	49.0	593	114	.,	19.0		
			Site	C			
3 5	49.0 49.0	a601 601	a117 117	25 30	49.0 49.0	601 601	117 117
10	49.0	601	117	35 40	49.0 49.0	601 601	117 117
15 20	49.0 49.0	601 601	117 117	40	49.0	601	117
			Site	D			
3 5	49.0 49.0	a567 567	a109 109	20 25	49.0 49.0	567 567	109 109
10 15	49.0 49.0	567 567	109 109 109	27	49.0	567	109
.,		201	Site	D+1			
3	49.0	a521	a99	20	49.0	521	99
3 5 10	49.0 49.0	521 521	99 99	25 30	49.0 49.0	521 521	99 99
15	49.0	521	99	34	49.0	521	99

a By laboratory analysis.

Table 3.--Temperature, Specific Conductance, and Chloride Content of Water, Hubbard Creek Reservoir--Continued

(Location of Data-Collection Sites are Shown on Figure 9)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, DECEM	BER 10,	1964Conti	nued	
			Site	D+3			
3 5 10 15	45.0 45.0 45.0 45.0	a352 352 352 352	a52 52 52 52	20 25 29	45.0 46.0 46.0	352 343 343	52 51 51
			Site	D+4			
3	47.0	a331	a46	5	45.0	301	42
			Site	Е			
3 5 10 15	48.0 47.0 46.0 46.0	a616 616 616 616	all9 119 119 119 119	20 25 30 35	46.0 46.0 46.0 46.0	616 616 616 616	119 119 119 119
		2	Site	E+1			
3 5 10	46.0 46.0 46.0	a594 594 594	all1 111 111	15 20 25	46.0 46.0 46.0	594 594 594	111 111 111
			Site	E+1A			
3 5 10 15	46.0 46.0 46.0 46.0	a571 571 571 571	a106 106 106 106	20 25 30 32	46.0 46.0 46.0 46.0	571 571 550 550	106 106 102 102
			Site	E+2			
3 5 10	46.0 46.0 46.0	a442 442 442	a77 77 77	15 20	46.0 47.0	442 445	77 78
			Site	E+3			
3 5	46.0 46.0	a451 451	a84 84	10 15	45.0 45.0	451 451	84 84

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULAT	ED)
			RESULTS OF SURVEY,	JANUAR	Y 30, 1964			
			Site	А				
3 10	47.0 47.0	562 562	74 74	20 28	46.5 46.5	562 562	74 74	
			Site	В				
3 10	48.5 48.5	a579 579	a 76 76	20 22	48.5 48.5	579 579	76 76	
			Site	C				
3 10	48.5 48.5	a615 615	a80 80	15	48.5	620	81	
			Site	E				
3 10	47.0 47.0	a562 562	a74 74	20 21	47.0 47.0	562 562	74 74	
			Site	F				
3 10	49.0 49.0	a578 578	a 79 79	20	49.0	578	79	
			RESULTS OF SURVEY	. JUNE	30, 1964			
			Site					
3 10	85.0 80.5	620 620	85 85	20 26	78.5 78.0	645 a675	90 100	
			Site	В				
3 10	87.0 79.0	a645 645	a100 100	20	77.5	645	100	
			Site	С				
3 10	87.0 82.5	a645 645	a100 100	15	80.0	645	100	
			Site	D				
3	90.5	a648	a102	10	82.0	648	102	
			Site	E				
3 10	84.5 80.0	a644 644	a101 101	20	75.5	644	101	
			Site	F				
3 10	84.0 79.0	a666 666	a108 108	19	78.0	666	108	
			RESULTS OF SURVEY,		ER 4, 1964			
			Site	A				
3 10	67.0 67.0	a350 350	a35 35	20 30	67.0 67.0	351 a351	35 a35	

Table 4.--Temperature, Specific Conductance, and Chloride Content of Water, Proctor Reservoir--Continued

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY, NOVER	1BER 4,	1964Contin	ued	
			Site	в			
3 10	68.0 68.0	a361 361	a39 39	18 19	68.0 68.0	361 361	39 39
			Site	e C			
3 10	69.0 69.0	a374 a371	a41 a38	13 18	69.0 69.0	372 372	39 39
			Site	e D			
3 10	68.5 68.5	a350 a384	a41 a42	14	68.5	400	42
			Site	εE			
3 10	68.0 68.0	a310 310	a31 41	20 21	68.0 68.0	315 315	32 32
			Site	F			2
3 10	68.0 68.0	a344 344	a33 33	20 25	68.0 68.0	345 345	34 34

(Location of Data-Collection Sites are Shown on Figure 11)

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCUL	
			RESULTS OF SURVEY	, остові	ER 25, 1961			
			Site	A-1				
3 10 20 30	71.0 71.0 71.0 71.0	410 410 410 410	34 34 34 34	40 50 60 70	71.0 70.5 70.5 70.5	410 410 410 410	34 34 34 34	
			Site	A-2				
3 10 20 30	71.0 71.0 71.0 71.0	410 410 410 410	34 34 34 34	40 50 60 65	71.0 70.5 70.5 70.5	410 410 410 a413	34 34 34 a36	
			Site	A-3				
3 10 20 30 40	71.0 71.0 71.0 71.0 71.0	410 410 410 410 410	34 34 34 34 34	50 60 70 75 80	70.5 70.5 71.0 71.0 71.0	410 410 425 a425	34 34 34 36 a36	
			Site	B-1				
3 10 20	72.0 72.0 71.5	410 410 410	34 34 34	30 40 50	71.5 71.5 71.5	410 410 410	34 34 34	
			Site	B-2				
3 10	72.0 72.0	410 410	34 34	20	72.0	410	34	
			Site	B-3				
3 10	72.0 72.0	410 410	34 34	20	72.0	410	34	
			Site	C-1				
3 10 20	71.5 71.5 71.5	400 400 400	33 33 33	25 30 34	71.5 71.5 71.5	400 400 400	33 33 33	
			Site	C-2				
3 10 20 30	71.5 71.5 71.0 71.0	400 400 400 400	33 33 33 33 33	40 50 60	70.0 69.5 69.5	390 385 385	32 31 31	
			Site	C-3				
3 10	71.5 71.5	400 400	33 33	20 30	71.5 71.0	400 400	33 33	
			Site	D-1				
3 10	71.5 71.0	400 400	33 33	15	71.0	400	33	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULA	TED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESUL	TS OF SURVEY,	остов	ER 25,	1961Contin	ued	
				Site	D-2			
3 10 20	71.0 71.0 71.0	400 400 400	33 33 33		30 40	71.0 69.5	395 400	32 33
				Site	D-3			
3 10	71.5 71.5	400 400	33 33		15	71.5	400	33
				Site	E-1			
3 10 20	71.5 71.0 71.0	a360 360 360	a28 28 28		25 30 40	70.5 70.0 69.0	310 280 250	19 13 13
				Site	E-2			
3 10 20 30 40	71.0 71.0 70.5 70.0 70.0	360 360 310 270 250	28 28 19 15 13		50 60 70 80	69.5 69.5 69.5 69.5	250 a252 250 250	13 a13 13 13
				Site	F-1			
3 10 20	71.0 71.0 71.0	295 295 295	17 17 17		30 40 50	69.5 68.0 67.5	275 295 295	15 17 17
				Site	F-2			
3 10	71.0 71.0	295 295	17 17		15	70.5	295	17
				Site	G-1			
3 10	71.0 71.0	250 250	13 13		15 22	71.0 71.0	260 320	14 20
				Site	G-2			
3 10 20 25	71.0 70.5 70.0 68.0	260 260 280 320	14 14 16 20		30 35 40	67.5 67.0 67.0	320 325 a330	20 20 a21
	1		RESULTS OF S	URVEY,	AUGUST	14, 1962		
				Site				
3 10 20 30 35 40	87.0 87.0 85.0 76.5 72.5	412 418 420 435 468 468	37 36 36 35 30 30		45 50 55 60 70	67.5 66.0 63.0 63.0 63.0	468 468 468 468 468	30 30 30 30 30 30

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	LTS OF SURVEY, AUGU	ST 14,	1962Contin	ued	
			Site	A-2			
3 10 20 30	87.0 87.0 87.0 83.0	418 435 435 435	36 35 35 35	40 50 60 63	72.5 66.0 63.0 63.0	438 455 463 474	36 34 33 32
			Site	A-3			
3 10 20 30 35 40	86.0 85.5 85.5 82.0 77.0 72.0	a 430 430 435 468 474	a40 40 39 36 32	45 50 55 60 70 79	65.0 65.5 62.0 62.0 60.5 60.0	474 474 474 474 a474 a474 474	32 32 32 32 32 a32 32 32
			Site	B-1			
3 10 20 30 32	85.5 85.5 85.5 82.0 80.5	431 431 431 435 452	a40 40 39 37	35 38 40 48	76.0 72.0 69.5 69.0	459 476 a476 476	37 36 a36 36
			Site	B-2			
3 10 20 30	85.5 85.5 85.5 81.5	431 431 431 435	36 36 36 36	40 50 53	69.5 63.0 61.5	476 483 483	37 38 38
			Site	B-3			
3 10	86.0 86.0	431 431	36 36	18	85.5	431	36
			Site	C-1			
3 10 20	87.0 86.5 86.0	422 422 422	35 35 35	30 31	82.0 82.0	432 432	36 36
			Site	C-2			
3 10	86.0 86.0	420 420	35 35	20 29	85.0 83.0	420 427	35 35
			Site	C-3			
3 10 20 30 32 35	86.5 86.0 85.0 82.0 80.0 74.5	a 422 422 422 432 455 474	a38 38 38 38 38 36 34	38 40 45 50 51	71.0 69.0 65.0 63.0 62.5	485 474 495 a495 495	33 34 33 a33 33
			Site	D			
3 10 20	87.0 86.5 84.5	a427 427 437	a38 38 38	30 38	81.0 73.0	437 490	38 33

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATE	D)
		RESU	LTS OF SURVEY, AUGU	ST 14,	1962Continu	ued		
			Site	E-1				
3 10 20	87.0 86.0 85.5	474 474 460	41 41 42	30 40 46	82.0 70.0 64.5	448 540 554	43 37 36	
			Site	E-2				
3 10 20 30 40	85.5 85.5 85.0 82.0 70.5	a448 448 448 448 514	a43 43 43 43 39	50 60 70 75	64.0 61.0 59.5 60.0	514 514 a514 605	39 39 a39 32	
			Site	F-1				
3 10 20	87.0 86.0 83.5	a468 468 468	a49 49 49	30 40 41	82.0 70.0 67.0	468 580 580	49 37 37	
			Site	G-1				
3 10	87.0 85.5	a469 469	a49 49	20 22	83.5 83.0	469 469	49 49	
			Site	H-1				
3 10	89.0 86.0	a451 451	a52 52	20 23	85.5 85.0	469 469	49 49	
			Site	1-1				
3	87.0	a458	a51	8	84.5	458	51	
			RESULTS OF SURVI	EY, MAY	26, 1964			
			Site	A-1				
3 10 20 30 40	77.0 76.5 76.5 73.0 70.0	a 464 464 464 464 464 480	a48 48 48 48 49	50 60 70 80 88	67.5 64.5 62.0 62.0 60.5	a500 510 520 a536 550	a52 53 54 a55 56	
			Site	A-3				
3 10 20 30 40	77.0 77.0 76.0 73.5 70.0	480 480 480 480 480	49 49 49 49 49	50 60 70 80 90	67.0 65.5 62.5 58.5 58.0	500 510 510 510 550	50 53 53 53 53 56	
	21		Site	B-1				
3 10 20 30 40	80.0 79.5 76.5 74.0 71.5	a461 461 461 471 481	a48 48 48 48 48	50 60 62 70 72	69.5 62.5 61.5	481 a492	48 a48 	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCUL	
			RESULTS OF SURVEY,	MAY 26	5, 1964Cont	inued		
			Site	B-2				
3 10 20	79.5 79.0 76.5	461 461 461	48 48 48	30 40 49	73.5 70.5 68.5	461 461 461	48 48 48	
			Site	C				
3 10 20	80.0 79.0 78.0	a455 455 455	a47 47 47	30 40	71.0 70.0	455 455	47 47	
			Site	D-1				
3 10 20	79.5 79.0 78.0	a 455 455 455	a47 47 47	30 40	71.0 69.0	455 470	47 43	
			Site	E-2				
3 10 20 30	79.0 78.0 76.0 72.0	a454 454 454 a437	a48 48 48 a40	40 50 57	64.0 62.5	454 454 a468	48 48 a43	
			Site	F-1				
3 10 20	81.0 79.5 77.0	a395 395 405	a39 39 37	30 36	72.0 70.5	a412 412	a34 34	
			Site	G-1				
3 10 20	80.0 79.5 77.0	a418 418 405	a 39 39 39	30 40 41	75.0 72.0	420 400	39 39	
			Site	H-1				
3 10	81.0 80.5	a443 443	a42 42	13	80.0	443	42	
			RESULTS OF SURVEY,	NOVEME	BER 6, 1964			
			Site	A-3				
3 10 20 30 40	68.0 67.5 67.5 67.5 67.5	a350 350 350 350 350 350	a28 28 28 28 28 28	50 60 70 80 82	67.5 67.0 66.0 66.5 66.5	360 370 379 a379 379	30 32 34 a34 34	
_			Site		(7.0	259	21	
3 10 20 30 40	69.0 68.0 67.5 67.5 67.5	a350 350 355 355 355	a28 28 30 30 30	50 60 64 66	67.0 67.0 66.0 66.0	358 a368 368 368	31 a32 32 32	

DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)	DEPTH (FT)	TEMPERATURE (°F)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25°C)	CHLORIDE (PPM, CALCULATED)
		RESU	LTS OF SURVEY, NOVE	MBER 6,	1964Conti	nued	
			Site	C-2			
3	68.0	a347	a27	43	64.5	200	5 4 4
10	67.5	347	27	44	64.0	190	4
20	67.0	347	27	45		190	4
30	67.0	347	27	46	64.0	190	4 3.8
40	66.0	330	24	50	64.5	196	3.8
41	65.5	230	12	60	64.5	a196	a3.8
42	65.0	210	10	65	64.5	196	3.8
			Site	D-2			
3 10	63.0 62.0	a198 200	a3.2 3	20	62.0	200	3
			Site	E-2			
2	11 5	2/0			1.5.0		
3	66.5	360	32	50	65.0	390	33
10	66.5	380	33	57	64.5	390	33
20	66.5	380	33	60	64.0	a405	a34
30	66.5	380	33	65	64.0	400	33
40	66.5	380	33	70		450	36
			Site	F-1			
3	68.0	a341	a27	30	67.5	341	27
10 20	68.0 67.5	341 341	27 27	31	67.5	341	27
			Site	G-1			
3	66.0	a343	a28	30	64.0	a302	a20
10	66.0	343	28	31	64.0	a337	a25
20	65.0	320	26				42.9
			Site	H-1			
3 10	64.0 62.0	a220 200	a7.5 8	17	62.0	200	8
			-				

- 6