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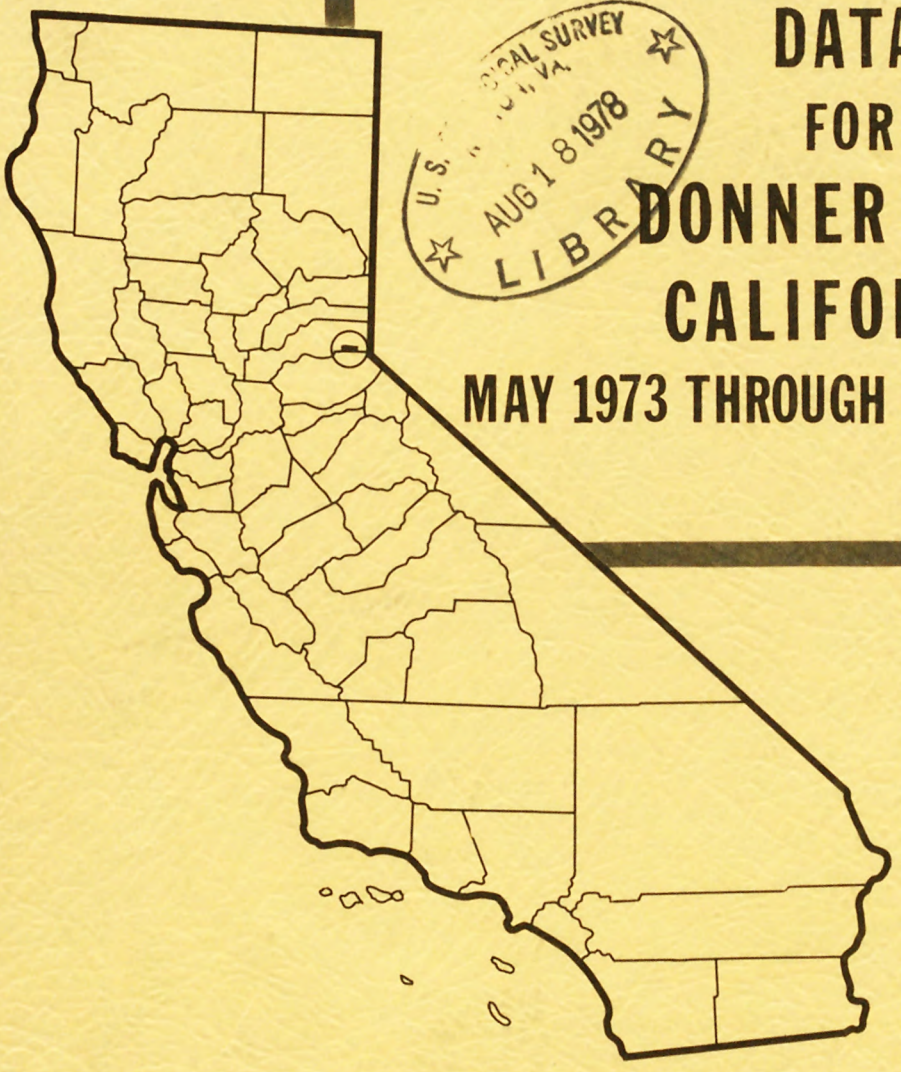
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LIMNOLOGICAL DATA FOR DONNER LAKE CALIFORNIA

MAY 1973 THROUGH DECEMBER 1973



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OPEN-FILE REPORT

Prepared in cooperation with the
CALIFORNIA DEPARTMENT OF WATER RESOURCES

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UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LIMNOLOGICAL DATA FOR DONNER LAKE, CALIFORNIA

MAY 1973 THROUGH DECEMBER 1973

By Alex E. Dong

Open-File Report

Prepared in cooperation with the

California Department of Water Resources

6226-01

Menlo Park, California

September 1975

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CONVERSION FACTORS

Factors for converting English units to the International System of Units (SI) are given below to four significant figures. However, in the text the metric equivalents are shown only to the number of significant figures consistent with the values for the English units.

English units	*Multiply by*	*Metric units*
acre-ft (acre-feet)	1.233×10^{-3}	hm^3 (cubic hectometres)
ft (feet)	3.048×10^{-1}	m (metres)
in (inches)	2.540	cm (centimetres)
	$2.540 \times 10^{+1}$	mm (millimetres)
in^2 (square inches)	6.452	cm^2 (square centimetres)
mi (miles)	1.609	km (kilometres)
mi^2 (square miles)	2.590	km^2 (square kilometres)

LIMNOLOGICAL DATA FOR DONNER LAKE, CALIFORNIA

MAY 1973 THROUGH DECEMBER 1973

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INTRODUCTION

Donner Lake is easily accessible to the metropolitan areas of Sacramento and San Francisco and is close to many recreational areas in the Sierra Nevada. The lake is used for recreation and is bordered by commercial establishments, summer vacation homes, and a large state campground. Domestic wastes around the lake have received only septic tank treatment. A sewerage system under construction and partly in use at the time of this study has been completed and now (January 1975) all domestic wastes are transported out of the basin.

In September of 1969 and 1970, a brief survey of the lake was conducted (Iwatsubo and others, 1972, p. 28). The results of that study indicated a well-established thermocline between 33 and 66 ft (10 and 20 m). A subsurface maximum in the dissolved-oxygen concentration occurred between 46 and 66 ft (14 and 20 m). In the shallow littoral zone, periphyton and patches of submerged rooted plants were visible.

In order to remain attractive for recreational use, Donner Lake will require sound management. A thorough understanding of the water quality in the lake and the quality of inflow and outflow is of paramount importance.

PURPOSE AND SCOPE

The purpose of this study, undertaken in the spring of 1973 in cooperation with the California Department of Water Resources, was to obtain selected data for definition of certain physical, chemical, and biological characteristics of Donner Lake. The lake probably was in an unenriched condition at the time of the study. Any future changes in the lake, caused by natural or human influences, can be related to the conditions documented in this report.

EXPLANATION

▼1 Water-quality sampling station

▼1A Benthic sampling site

N

80

39°20'

Negro Creek

Billy Mack Creek

Lakeview Creek

DONNER LAKE

1A 1B 1C 1D 1E

2A 2B 1 2C 2D 2E

3A 3B 3C 3D 3E

4A 4B 4C 4D 4E

5A 5B 2 5C 5D 5E

6A 6B 6C 6D 6E

DAM

Donner Creek

NEVADA CO

PLACER CO

120°15'

39°20'

CALIFORNIA

0 1 MILE

0 1 KILOMETRE

FIGURE 1.-- Index map.

The scope of the study included measuring the following:

1. Patterns and changes in profiles of temperature, dissolved oxygen, pH, conductance, and alkalinity.
2. Species and abundance of phytoplankton, zooplankton, and benthic invertebrates.
3. Rates of primary production.
4. Light transparency.
5. Concentrations of plant nutrients such as organic carbon, silica, nitrogen, phosphorus, and selected minor elements in the water and bottom sediments.

The compiled data collected during the study are presented in this report.

DESCRIPTION OF STUDY AREA

Donner Lake in Nevada County, one of the many lakes in the Sierra Nevada, is about 80 mi (130 km) northeast of Sacramento and about 12 mi (20 km) northwest of the world-renowned large alpine lake, Lake Tahoe. Donner Lake has a surface area of 1.5 mi^2 (3.8 km^2) and lies at an altitude of 5,935 ft (1,809 m) above mean sea level. The lake is regulated by a small dam and has a usable capacity of 9,500 acre-ft (11.7 hm^3) of water. The 14 mi^2 (36 km^2) drainage area consists of mostly coniferous forests. Three major inlets, Lakeview Creek, Billy Mack Creek, and Negro Creek, enter the lake from the west end of the lake (fig. 1). Donner Creek, outlet of the lake, receives lake water below the dam at the east end of the lake and flows eastward into the Truckee River.

The climate of Donner Lake basin is of highland type--winters are cold with abundant snowfall, and subzero temperatures are often recorded. The long-term average temperature is 26°F (-3°C) in January. Summers are cool and dry with a long-term average July temperature of 62°F (16°C). Most precipitation falls between November and March. Long-term average annual precipitation is about 45 in (115 cm) (California Region Framework Study Committee, 1971, Map 37). Average annual evaporation from the lake was estimated to be 36 in (90 cm) (California Region Framework Study Committee, 1971, Map 7).

METHODS

Water samples were collected for physical, chemical, and biological analyses at two stations in Donner Lake (fig. 1) in the following sequence:

1. Once monthly during May, August, October, and December.
2. Twice monthly during June and July.

Benthic samples were collected once on August 1, 1973, at 30 selected sites (fig. 1).

Sampling

Water samples for vertical-profile analyses of specific conductance, pH, and alkalinity (table 1), analyses of common chemical constituents and selected plant nutrients (tables 2 and 3), trace metals analyses (table 4), and phytoplankton analyses (table 5), were collected at stations 1 and 2 (fig. 1) using a PVC (polyvinyl chloride) sampler at the surface and at selected depths in the lake. Samples were collected at about 16-ft (5-m) vertical intervals. Phytoplankton and other chemical samples were collected at the surface and at depths selected to correspond closely to the depth immediately above, at, and below the metalimnion.

Zooplankton samples (table 6) were obtained using an open plankton net with a mesh size of 0.30 in (7.62 mm) and a diameter of 1.6 ft (0.5 m). Nets were dropped vertically from the water surface four times at each station to depths of 16 ft (5 m), 33 ft (10 m), and 100 or 130 ft (30 or 40 m).

Samples of benthic sediment (table 7) and benthic fauna (table 8) were collected at 30 sites (fig. 1), using a Ponar grab sampler with an area of 36 in^2 (232 cm^2).

Samples for chemical analysis were preserved by appropriate treatment immediately after collection. Treatment included chilling, filtration, and acidification. Phytoplankton samples were preserved with Lugol's solution, 2.5 ml (millilitres) of solution per 250 ml of sample; zooplankton samples were preserved with a 2 percent formaldehyde solution. Benthic invertebrates that did not pass through a no. 70 sieve[1] were collected and preserved in 70 percent ethyl alcohol.

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[1]U.S. Standard Sieve no. 70, mesh size 0.210 mm.

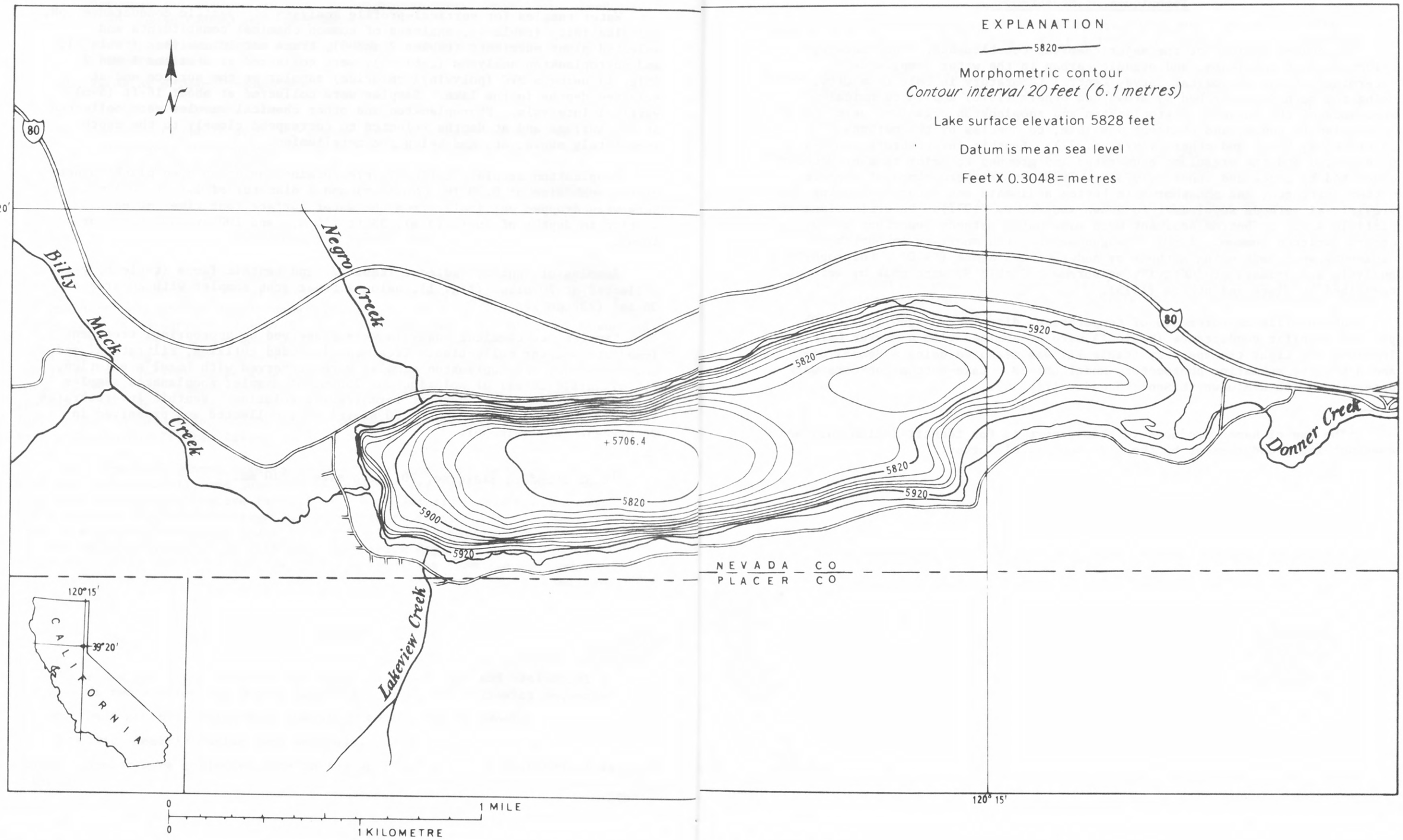

FIGURE 2.--Morphometric map of Donner Lake.

Techniques of Measurements

The concentrations of the major chemical constituents, trace metals, selected plant nutrients, and organic carbon in the water samples were determined at the Geological Survey Central Laboratory in Salt Lake City, using the methods described by Brown and others (1970) and in technical memoranda of the Survey. Phytoplankton and zooplankton organisms were identified to genus, and whenever possible, to species by the methods described by Slack and others (1973, p. 72). Benthic invertebrate samples were sorted and the organisms enumerated and grouped to major taxa by methods described by Slack and others (1973, p. 79-81). The percentage of organic matter, nitrogen, and phosphorus in bottom sediments was determined using the provisional methods supplement to Brown and others (1971). Determinations of particle sizes of bottom sediment were made using methods described by Guy and others (written commun., 1960). Manganese and iron analyses in bottom sediments were made using methods by Anderson and Jenne (1970). Chlorophyll-a analysis and primary productivity measurement (table 9) were made by methods described by Slack and others (1973).

Lake-profile measurements of temperature, dissolved oxygen (table 10), pH, and specific conductance (table 1) were determined with a Martek Mark II[2] instrument. Light transparency (table 11) was measured using a Secchi disk and a Whitney submarine photometer, Model LMT-8B. Lake-bottom contours were determined with a Bludworth Sonic Sounder (fig. 2).

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[2]The use of named products in this report is for identification only and does not imply endorsement by the U.S. Geological Survey.

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Table 1.--*Vertical-profile samples*

[Location of sampling stations shown in figure 1.]

Depth (feet)	Bicarbonate (HCO_3) (mg/l)	Carbonate (CO_3) (mg/l)	Specific conductance (micromhos)	pH (units)	Carbon dioxide (CO_2) (mg/l)
			STATION 1		
		May 17, 1973, at 1425			
0	24	0	79	7.4	1.5
16	24	0	69	7.0	3.8
30	--	--	78	6.7	--
36	--	--	81	6.6	--
42	--	--	83	6.6	--
66	--	--	85	6.5	--
82	--	--	85	6.4	--
98	24	0	87	6.4	15
115	--	--	85	6.4	--
131	--	--	86	6.4	--
148	--	--	86	6.4	--
164	--	--	86	6.3	--
180	24	0	87	6.3	19
197	--	--	87	6.3	--
213	--	--	87	6.2	--
		June 21, 1973, at 1500			
0	22	0	71	7.0	3.5
13	23	0	72	7.0	3.7
30	23	0	72	6.0	4.6
49	--	--	79	6.6	--
66	--	--	82	6.4	--
79	--	--	83	6.4	--
105	26	0	84	6.3	21
121	--	--	84	6.3	--
138	--	--	86	6.3	--
154	--	--	86	6.2	--
171	--	--	86	6.2	--
187	24	0	86	6.2	24
207	--	--	86	6.0	--
		June 7, 1973, at 1615			
0	22	0	71	7.5	1.1
16	21	0	72	7.2	2.1
21	22	0	70	7.2	2.2
33	--	--	73	6.9	--
49	--	--	80	6.6	--
66	24	0	83	6.6	9.6
82	--	--	85	6.4	--
98	--	--	87	6.4	--
131	--	--	86	6.3	--
164	--	--	86	6.3	--
197	24	0	87	6.1	6.0
220	--	--	87	6.1	--
		July 10, 1973, at 1310			
0	24	0	74	7.5	1.2
13	24	0	74	7.5	1.2
33	24	0	72	7.2	2.4
49	--	--	79	7.1	--
66	--	--	81	7.0	--
82	--	--	83	6.8	--
98	--	--	85	6.8	--
115	--	--	86	6.7	--
131	--	--	86	6.7	--
164	--	--	84	6.6	--
197	--	--	85	6.6	--
213	24	0	85	6.5	12

July 31, 1973, at 1400

0	24	0	73	7.4	1.5
13	24	0	73	7.5	1.2
26	25	0	74	7.4	1.6
36	24	0	76	7.5	1.2
52	--	--	79	7.3	--
69	--	--	82	7.1	--
82	--	--	83	6.9	--
98	24	0	85	6.8	6.0
115	--	--	86	6.7	--
131	--	--	86	6.7	--
148	--	--	86	6.6	--
164	--	--	86	6.6	--
180	25	0	86	6.6	10
197	--	--	86	6.5	--

Aug. 13, 1973, at 1500

0	24	0	75	7.5	1.2
13	24	0	75	7.4	1.5
30	24	0	75	7.2	2.4
49	--	--	79	7.0	--
66	--	--	82	6.8	--
82	--	--	83	6.6	--
98	24	0	85	6.5	12
115	--	--	86	6.4	--
131	--	--	86	6.3	--
148	--	--	86	6.3	--
164	--	--	86	6.3	--
180	25	0	88	6.2	25
197	--	--	88	6.2	--

Sept. 13, 1973, at 1445

0	--	--	80	7.8	--
13	24	0	80	7.5	12
30	--	--	79	7.4	--
49	--	--	82	7.4	--
66	--	--	85	6.8	--
75	--	--	87	6.7	--
88	--	--	86	6.4	--
98	--	--	88	6.3	--
115	--	--	88	6.3	--
131	26	0	88	6.3	21
148	--	--	88	6.3	--
164	--	--	88	6.2	--
180	26	0	88	6.3	21
197	--	--	88	6.2	--

Oct. 16, 1973, at 1215

0	27	0	80	7.6	1.1
13	27	0	79	7.2	2.7
30	28	0	80	7.2	2.8
52	--	--	80	7.2	--
66	--	--	83	6.8	--
85	--	--	84	6.6	--
98	28	0	86	6.4	18
115	--	--	86	6.3	--
131	--	--	86	6.3	--
148	--	--	86	6.3	--
164	--	--	86	6.2	--
180	28	0	87	6.2	28
197	--	--	88	6.1	--

Dec. 6, 1973, at 1445

0	36	0	86	7.0	5.7
13	--	--	86	7.0	--
30	--	--	84	6.6	--
49	--	--	84	6.6	--
72	24	0	84	6.5	12
89	--	--	84	6.5	--
98	--	--	84	6.5	--
115	--	--	84	6.4	--
131	--	--	84	6.4	--
148	25	0	84	6.4	16
164	--	--	84	6.4	--
171	--	--	84	6.4	--
197	27	0	84	6.4	17

Table 1.--*Vertical-profile samples*--Continued

Depth (feet)	Bicarbonate (HCO_3) (mg/l)	Carbonate (CO_3) (mg/l)	Specific conductance (micromhos)	pH (units)	Carbon dioxide (CO_2) (mg/l)	Depth (feet)	Bicarbonate (HCO_3) (mg/l)	Carbonate (CO_3) (mg/l)	Specific conductance (micromhos)	pH (units)	Carbon dioxide (CO_2) (mg/l)
					STATION 2						
		May 16, 1973, at 1310						June 7, 1973, at 1410			
0	24	0	81	7.3	1.9	0	22	0	71	7.5	1.1
16	--	--	81	7.2	--	16	22	0	70	7.1	2.7
30	24	0	78	6.8	6.0	33	22	0	77	6.7	7.0
42	--	--	84	6.7	--	49	--	--	82	6.4	--
66	--	--	83	6.5	--	66	23	0	83	6.4	14
82	--	--	84	6.4	--	82	--	--	85	6.4	--
98	--	--	84	6.4	--	98	--	--	85	6.4	--
115	23	0	85	6.4	14	115	--	--	85	6.4	--
131	--	--	86	6.4	--	131	--	--	86	6.4	--
148	24	0	87	6.3	19	148	24	0	86	6.3	19
164	--	--	87	6.3	--	164	--	--	86	6.3	--
		June 21, 1973, at 1200						July 11, 1973, at 0830			
0	23	0	72	7.0	3.7	0	24	0	73	7.6	.9
13	24	0	75	7.0	3.8	13	24	0	72	7.4	1.5
30	24	0	74	6.5	12	33	24	0	75	7.3	1.9
49	--	--	77	6.6	--	66	--	--	81	7.1	--
66	26	0	81	6.5	13	66	--	--	82	6.9	--
85	--	--	83	6.4	--	82	--	--	85	6.7	--
98	--	--	83	6.3	--	98	--	--	86	6.6	--
118	--	--	85	6.3	--	115	--	--	86	6.6	--
128	21	0	85	6.3	21	131	--	--	87	6.6	--
148	--	--	85	6.2	--	164	--	--	87	6.6	--
157	27	0	86	6.2	27	174	24	0	87	6.6	9.6

July 31, 1973 at 1130

0	24	0	75	7.4	1.5
13	24	0	74	7.4	1.5
30	24	0	74	7.4	1.5
52	25	0	82	7.2	2.5
66	--	--	80	7.1	--
85	24	0	86	6.8	6.0
98	--	--	86	6.8	--
115	--	--	86	6.7	--
131	--	--	86	6.7	--
148	--	--	86	6.7	--
164	25	0	86	6.6	10
174	--	--	86	6.6	--

Aug. 13, 1973, at 1145

0	24	0	75	7.4	1.5
13	24	0	76	7.1	3.0
30	23	0	75	6.9	4.6
49	--	--	81	6.8	--
66	24	0	86	6.6	9.6
82	--	--	90	6.4	--
98	--	--	88	6.3	--
115	--	--	88	6.3	--
131	24	0	88	6.2	24

Sept. 13, 1973, at 1100

0	24	0	78	7.7	.8
13	24	0	78	7.3	1.9
33	--	--	79	7.3	--
49	--	--	82	7.3	--
66	--	--	84	6.9	--
82	--	--	87	6.8	--
98	23	0	86	6.5	12
115	--	--	88	6.4	--
131	26	0	88	6.4	16
148	--	--	89	6.3	--
164	--	--	89	6.3	--

Oct. 16, 1973, at 1430

0	27	0	79	7.7	.8
13	24	0	79	7.3	1.9
26	24	0	79	7.4	1.5
49	--	--	80	7.0	--
66	24	0	83	6.6	9.6
85	--	--	85	6.4	--
98	--	--	87	6.3	--
115	--	--	88	6.3	--
131	24	0	88	6.2	24
148	--	--	88	6.2	--
164	--	--	88	6.1	--

Dec. 6, 1973, at 1230

0	38	0	86	7.2	3.8
13	--	--	84	7.0	--
33	--	--	84	6.7	--
52	25	0	84	6.7	3.6
66	24	0	84	6.4	9.6
82	--	--	84	6.4	--
98	--	--	84	6.4	--
115	--	--	84	6.3	--
131	24	0	84	6.3	24
148	--	--	84	6.2	--
157	--	--	84	6.1	--

Table 2.--*Analyses of common chemical constituents*

STATION I

DATE	TIME	DEPTH (FT)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	ALKALINITY AS CACO3 (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
MAY												
17...	1433	13	5.5	1.4	5.2	1.0	23	0	19	.4	9.9	.0
17...	1504	180	6.5	1.6	6.6	1.2	26	0	21	.5	13	.0
SEP.												
13...	1453	13	7.1	1.6	7.2	1.0	34	0	28	0.7	11	.5
13...	1540	180	6.5	1.7	7.1	1.0	26	0	21	.9	13	.6

DATE	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA,MG) (MG/L)	NONCARBONATE HARDNESS (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	CARBON DIOXIDE (CO2) (MG/L)
MAY										
17...	47	.06	20	1	35	.5	72	7.3	9.0	1.8
17...	55	.07	23	2	37	.6	88	6.3	4.5	21
SEP.										
13...	58	.08	24	0	38	.2	64	7.8	11.0	.9
13...	51	.07	23	2	39	.6	70	6.3	5.0	21

Table 2.--*Analyses of common chemical constituents*--Continued

STATION 2

DATE	TIME	DEPTH (FT)	DIS-SOLVED CAL-CIUM (CA) (MG/L)	DIS-SOLVED MAG-NE-SIUM (MG) (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	DIS-SOLVED PO-TAS-SIUM (K) (MG/L)	BICAR-BONATE (HCO3) (MG/L)	CAR-BONATE (CO3) (MG/L)	ALKA-LINITY AS CACO3 (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLO-RIDE (CL) (MG/L)
MAY											
16...	1318	13	6.1	1.6	6.3	1.2	25	0	21	.4	12
16...	1355	131	8.1	1.6	6.6	1.3	26	0	21	0.5	13
SEP.											
13...	1108	13	6.1	1.6	6.4	1.1	24	0	20	.9	11
13...	1154	131	7.0	1.6	7.2	1.2	33	0	27	1.5	13

DATE	DIS-SOLVED FLUO-RIDE (F) (MG/L)	DIS-SOLVED SOLIDS (RESI-DUE AT 180 C) (MG/L)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARD-NESS (CA,MG) (MG/L)	NON-CAR-BONATE HARD-NESS (MG/L)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	TEMPER-ATURE (DEG C)
MAY									
16...	.0	56	.08	22	1	37	.6	83	9.5
16...	.0	55	.07	27	5	34	.6	88	4.5
SEP.									
13...	.6	59	.08	22	2	37	.6	81	17.5
13...	.4	59	.08	24	0	38	.6	86	5.0

Table 3.--*Plant-nutrient analyses*

STATION 1

DATE	TIME	DEPTH (FT)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)
MAY								
17...	1425	.0	10	--	.00	.07	--	.04
17...	1433	13	9.7	--	.02	.07	--	.20
17...	1443	30	9.7	--	.00	.08	--	.07
17...	1453	98	10	--	.01	.08	--	.09
17...	1504	180	10	--	.04	.00	--	.08
JUNE								
07...	1615	.0	11	.00	.00	.01	--	.17
07...	1625	16	11	.00	.00	.01	--	.17
07...	1630	23	10	.00	.00	.01	--	.09
07...	1640	66	11	.02	.04	.01	--	.12
07...	1650	197	11	.02	.04	.00	--	.13
21...	1500	.0	11	.00	.00	.02	.02	.27
21...	1508	13	10	.00	.00	.02	.01	.23
21...	1523	30	10	.00	.00	.02	.01	.25
21...	1602	98	10	.02	.02	.01	.01	.24
21...	1617	180	10	.00	.00	.01	.01	.27
JULY								
10...	1310	.0	11	.00	.00	.04	.01	.16
10...	1318	13	11	.00	.00	.01	.01	.13
10...	1330	33	10	.00	.01	.00	.00	.12
10...	1340	98	10	.02	.02	.01	.01	.12
10...	1348	197	10	.04	.04	.00	.01	.16
31...	1400	.0	14	.01	.05	.03	.02	.26
31...	1448	180	11	.04	.04	.02	.01	.06
AUG.								
13...	1500	.0	11	.01	.00	.01	.01	.17
13...	1508	13	11	.00	.00	.01	.01	.15
13...	1518	30	11	.00	.00	.01	.00	.18
13...	1542	98	10	.02	.03	.01	.03	.20
13...	1602	180	10	.06	.06	.01	.01	.16
SEP.								
13...	1445	.0	11	.00	.01	.01	.02	.06
13...	1453	13						
13...	1534	131						
13...	1540	180	11	.04	.05	.01	.01	.04
OCT.								
16...	1300	.0	11	.00	.01	.00	.01	.27
16...	1305	13	11	.03	.03	.01	.00	.23
16...	1310	30	11	.00	.00	.01	.01	.02
16...	1315	98	10	.03	.03	.01	.01	.24
16...	1320	180	11	.10	.11	.01	.03	.23
DEC.								
06...	1445	.0	10	.03	.03	.06	.00	.09
06...	1620	148	10	.09	.05	.02	.00	.00

Table 3.--*Plant-nutrient analyses*--Continued

STATION 1--Continued

DATE	DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L)	TOTAL KJEL-DAHL NITRO-GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L)	TOTAL NITRO-GEN (N) (MG/L)	TOTAL PHOS-PHORUS (P) (MG/L)	DIS-SOL-VED PHOS-PHORUS (P) (MG/L)	DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L)	TEMPER-ATURE (DEG C)
MAY								
17...	--	.11	.10	.11	.00	.00	.00	14.5
17...	--	.27	.13	.29	.00	.00	.00	9.0
17...	--	.15	.08	.15	.00	.00	.00	6.8
17...	--	.17	.14	.18	.00	.00	.00	5.0
17...	--	.08	.08	.12	.00	.00	.00	4.5
JUNE								
07...	--	.18	.16	.18	.01	.01	.00	17.5
07...	--	.18	.13	.18	.00	.01	.00	13.0
07...	--	.10	.10	.10	.00	.00	.00	10.5
07...	--	.13	.13	.15	.00	.00	.00	6.0
07...	--	.13	.11	.15	.02	.00	.00	4.5
21...	.28	.29	.30	.29	.01	.00	.00	17.0
21...	.22	.25	.23	.25	.01	.00	.00	14.5
21...	.17	.27	.18	.27	.01	.00	.00	12.5
21...	.09	.25	.10	.27	.01	.01	.01	5.0
21...	.14	.28	.15	.28	.01	.00	.00	4.5
JULY								
10...	.09	.20	.10	.20	.03	.00	.00	19.5
10...	.10	.14	.11	.14	.03	.00	.00	18.3
10...	.12	.12	.12	.12	.02	.00	.00	10.8
10...	.08	.13	.09	.15	.01	.01	.00	5.5
10...	.16	.16	.17	.20	.01	.00	.00	4.5
31...	.04	.29	.06	.30	.02	.02	.02	22.0
31...	.09	.08	.10	.12	.04	.00	.00	4.5
AUG.								
13...	.18	.18	.19	.19	.02	.01	.00	20.5
13...	.14	.16	.15	.16	.01	.01	.00	20.0
13...	.25	.19	.25	.19	.00	.00	.00	18.0
13...	.09	.21	.12	.23	.00	.01	.00	5.5
13...	.11	.17	.12	.23	.00	.02	.00	4.5
SEP.								
13...	.08	.07	.10	.07	.01	.02	.02	17.5
13...	--	--	--	--	--	--	--	17.5
13...	--	--	--	--	--	--	--	17.5
13...	.08	.05	.09	.09	.01	.03	.02	5.0
OCT.								
16...	.18	.27	.19	.27	--	.02	.02	12.8
16...	.16	.24	.17	.27	--	.03	.03	11.8
16...	.07	.03	.08	.03	--	.03	.01	11.5
16...	.12	.25	.13	.28	--	.02	.02	5.6
16...	.14	.24	.03	.34	--	.03	.03	4.8
DEC.								
06...	.08	.15	.08	.18	.01	.03	.01	5.0
06...	.00	.00	.00	.09	.03	.01	.02	5.0

Table 3.--*Plant-nutrient analyses*--Continued

STATION 2

DATE	TIME	DEPTH (FT)	DIS-SOLVED SILICA (SIO2) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L)	AMMONIA NITRO-GEN (N) (MG/L)	DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L)	ORGANIC NITRO-GEN (N) (MG/L)
MAY								
16...	1310	.0	10	--	.01	.07	--	.14
16...	1318	13	10	--	.00	.00	--	.12
16...	1326	30	9.9	--	.01	.07	--	.06
16...	1335	66	10	--	.15	.07	--	.01
16...	1355	131	10	--	.03	.00	--	.10
JUNE								
07...	1410	.0	12	.00	.02	.01	--	.18
07...	1420	16	11	.00	.01	.01	--	.18
07...	1430	33	11	.01	.00	.01	--	.14
07...	1436	66	10	.04	.03	.01	--	.12
07...	1445	148	11	.03	.04	.01	--	.10
21...	1200	.0	10	.00	.00	.00	.01	.24
21...	1212	13	10	.00	.00	.00	.01	.18
21...	1227	30	10	.00	.00	.01	.00	.19
21...	1301	66	10	.00	.00	.01	.02	.18
21...	1326	131	11	.02	.00	.01	.01	.18
JULY								
11...	0830	.0	11	.00	.00	.01	.01	.08
11...	0838	13	11	.00	.00	.00	.01	.08
11...	0850	33	10	.00	.00	.00	.01	.10
11...	0900	98	10	.00	.04	.03	.05	.06
11...	0910	164	11	.00	.00	.05	.01	.06
31...	1130	.0	11	.04	.04	.02	.01	.14
31...	1212	131	11	.00	.02	.02	.01	
AUG.								
13...	1145	.0	11	.00	.00	.02	.01	.16
13...	1153	13	11	.00	.00	.02	.01	.17
13...	1204	30	11	.00	.00	.02	.01	.18
13...	1226	66	9.8	.01	.00	.02	.07	.20
13...	1236	131	10	.05	.06	.01	.01	
SEP.								
13...	1100	.0	10	.05	.04	.01	.01	.08
13...	1154	131	11	.00	.02	.01	.03	.06
OCT.								
16...	1515	.0	11	.03	.05	.00	.02	.07
16...	1520	13	10	.03	.08	.01	.03	.02
16...	1525	30	10	.02	.00	.01	.01	.02
16...	1530	66	9.8	.00	.00	.00	.01	.01
16...	1535	131	11	.07	.07	.00	.01	.02
DEC.								
06...	1230	.0	10	.03	.03	.03	.00	.28
06...	1405	131	10	.03	.03	.05	.00	.13

Table 3.--*Plant-nutrient analyses*--Continued

STATION 2--Continued

DATE	DISSOLVED ORGANIC NITROGEN (N) (MG/L)	TOTAL KJELDAHL NITROGEN (N) (MG/L)	DISSOLVED KJEL. NITROGEN (N) (MG/L)	TOTAL NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	DISSOLVED PHOSPHORUS (P) (MG/L)	DISSOLVED ORTHO. PHOSPHORUS (P) (MG/L)	TEMPERATURE (DEG C)
MAY								
16...	--	.21	.16	.22	.00	.00	.00	13.5
16...	--	.12	.12	.12	.00	.00	.00	9.5
16...	--	.13	.12	.14	.00	.00	.00	7.0
16...	--	.08	.08	.23	.00	.00	.00	5.5
16...	--	.10	.05	.13	.00	.00	.00	4.5
JUNE								
07...	--	.19	.19	.19	.00	.02	.00	17.5
07...	--	.19	.09	.19	.01	.01	.01	13.0
07...	--	.15	.15	.16	.00	.01	.00	8.0
07...	--	.13	.13	.17	.01	.01	.00	6.0
07...	--	.11	.11	.14	.01	.00	.00	5.0
21...	.14	.24	.15	.24	.01	.01	.00	16.5
21...	.16	.18	.17	.18	.01	.00	.00	14.0
21...	.12	.20	.12	.20	.01	.09	.00	12.0
21...	.15	.19	.17	.19	.01	.01	.00	6.5
21...	.12	.19	.13	.21	.01	.01	.01	5.0
JULY								
11...	.09	.09	.10	.09	.01	.01	.01	20.0
11...	.07	.08	.08	.08	.02	.01	.01	19.5
11...	.11	.10	.12	.10	.01	.01	.01	12.5
11...	.03	.09	.08	.13	.01	.01	.01	5.0
11...	.08	.11	.09	.11	.01	.01	.01	4.7
31...	.05	.16	.06	.20	.00	.00	.00	21.5
31...	.07		.08		.03	.03	.00	5.0
AUG.								
13...	.09	.18	.10	.18	.00	.00	.00	20.5
13...	.10	.19	.11	.19	.00	.00	.00	20.0
13...	.12	.20	.13	.20	.00	.00	.00	19.5
13...	.02	.22	.09	.23	.02	.00	.00	5.0
13...	.07		.08		.01	.00	.00	4.0
SEP.								
13...	.03	.09	.04	.14	.01	.02	.02	17.5
13...	.09	.07	.12	.07	.01	.01	.01	4.5
OCT.								
16...	.05	.07	.07	.10	--	.02	.03	13.0
16...	.05	.03	.08	.06	--	.02	.05	12.0
16...	.00	.03	.00	.05	--	.02	.03	12.0
16...	.00	.01	.00	.01	--	.03	.02	7.0
16...	.01	.02	.02	.11	--	.02	.02	5.0
DEC.								
06...	.20	.31	.20	.34	.03	.02	.01	5.0
06...	.10	.18	.10	.21	.02	.02	.01	5.0

Table 4.--*Analyses of trace elements*

STATION 1

DATE	TIME	DEPTH (FT)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)
MAY												
17...	1433	13	--	--	10	<20	1	10	4	90	20	<100
17...	1504	180	--	--	20	20	0	10	2	50	9	<100
SEP.												
13...	1453	13	0	2	10	<25	0	<10	6	80	20	<50
13...	1540	180	6	0	20	<25	1	<10	1	70	20	<50

DATE	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MOLYB-DENUM (MO) (UG/L)	DIS-SOLVED MOLYB-DENUM (MO) (UG/L)	TOTAL VANA-DIUM (V) (UG/L)	DIS-SOLVED VANA-DIUM (V) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAY											
17...	1	10	0	--	.0	17	0	1.1	.0	--	--
17...	1	30	0	.2	.0	1	0	--	.0	--	--
SEP.											
13...	2	0	0	.0	.0	1	0	.2	.0	20	30
13...	2	0	0	.0	.0	1	0	.4	.0	20	20

STATION 2

DATE	TIME	DEPTH (FT)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL COBALT (CO) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)
MAY												
16...	1318	13	--	--	10	<20	1	10	4	50	9	<100
16...	1355	131	--	--	10	<20	0	10	2	50	9	<100
SEP.												
13...	1106	--	3	1	10	<25	0	<10	1	80	50	<50
13...	1154	131	0	0	20	<25	1	<10	2	80	40	<50

DATE	DIS-SOLVED LEAD (PB) (UG/L)	TOTAL MAN-GANESE (MN) (UG/L)	DIS-SOLVED MAN-GANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	TOTAL MOLYB-DENUM (MO) (UG/L)	DIS-SOLVED MOLYB-DENUM (MO) (UG/L)	TOTAL VANA-DIUM (V) (UG/L)	DIS-SOLVED VANA-DIUM (V) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
MAY											
16...	1	10	0	.0	.0	0	0	1.2	.0	--	--
16...	1	10	0	.0	.0	1	0	1.1	.0	--	--
SEP.											
13...	1	0	0	.0	.0	1	0	.0	.0	20	0
13...	2	0	0	.0	.0	1	0	.0	.0	20	20

Table 5.--*Taxa and numbers of phytoplankton*

[Location of stations shown in figure 1.]

Date	Station 1														
	May 17, 1973					June 7, 1973					June 21, 1973				
Time	1425	1433	1443	1453	1504	1615	1625	1630	1640	1650	1500	1508	1523	1602	1617
Sampling depth (feet)	0	16	33	98	180	0	16	33	98	180	0	16	33	98	180
Taxa	Concentration, in cells per millilitre														
CHLOROPHYTA															
Chlorophyceae (green algae)															
Cosmarium staurastroides	170	110	320	62	94	38	39	76	190	130	21	23	180	86	59
Cosmocladium sp.	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--
CHRYSOPHYTA															
Bacillariophyceae (diatoms)															
Asterionella formosa	7	17	--	--	--	13	19	29	23	20	53	14	33	11	6
Melosira italica	--	--	--	21	22	--	--	--	--	--	--	--	--	49	21
Rhizosolenia sp.	15	--	--	--	--	12	15	55	96	97	17	6	--	17	5
Synedra tenera	20	43	110	84	60	--	--	--	250	34	--	23	53	89	80
Chrysophyceae (yellow-brown algae)															
Dinobryon sp.	11	41	150	51	17	--	3	10	--	--	1010	540	29	47	36
CRYPTOPHYTA															
Cryptophyceae (flagellates)															
Cryptomonas sp.	--	--	--	--	--	--	--	6	--	1	--	--	--	--	--
Unidentified flagellates	--	13	50	66	140	28	20	24	36	38	--	23	180	47	--
CYANOPHYTA															
Myxophyceae (blue-green algae)															
Anacystis sp.	--	--	--	--	--	--	--	--	23	--	--	--	190	--	--
Unidentified blue-green algae	--	--	--	--	--	--	--	20	--	--	--	--	--	--	--
PYRROPHYTA															
Dinophyceae (dinoflagellates)															
Peridinium sp.	--	8	--	--	--	7	2	--	--	--	50	--	--	--	--

Table 5.--*Taxa and numbers of phytoplankton*--Continued

Station 1															
Date	July 10, 1973					July 31, 1973					Aug. 13, 1973				
Time	1310	1318	1330	1340	1348	1400	1410	1425	1435	1448	1500	1508	1518	1542	1602
Sampling depth (feet)	0	16	33	98	180	0	16	33	98	180	0	16	33	98	180
Taxa															
CHLOROPHYTA															
Chlorophyceae (green algae)															
Cosmarium staurastroides	--	3	9	140	120	--	--	--	270	190	--	--	--	540	160
Unidentifed flagellates	--	--	--	--	--	--	--	110	--	--	--	--	--	--	--
CHRYSOPHYTA															
Bacillariophyceae (diatoms)															
Asterionella formosa	--	--	8	54	--	--	--	--	68	--	--	--	--	140	10
Melosira italica	--	--	--	16	38	--	--	--	--	19	--	--	--	--	10
Rhizosolenia sp.	--	9	81	100	78	--	--	--	49	68	--	--	--	110	32
Synedra tenera	--	--	--	71	57	--	--	--	25	24	--	--	--	60	57
Chrysophyceae (yellow-brown algae)															
Chrysochromulina parva	--	--	--	--	--	--	--	--	--	--	140	--	--	--	--
Chrysochromulina sp. (other)	--	--	--	--	--	180	45	140	23	--	--	72	96	--	--
Dinobryon sertularia	39	23	14	--	--	--	--	--	--	--	--	--	--	--	--
Dinobryon sp.	--	--	--	--	--	--	--	--	--	--	--	13	53	--	--
CRYPTOPHYTA															
Cryptophyceae (flagellates)															
Cryptomonas sp.	--	--	--	--	16	--	4	--	19	11	--	--	--	--	14
Unidentified flagellates	26	120	79	--	14	--	23	69	17	19	65	95	160	--	44
CYANOPHYTA															
Myxophyceae															
Unidentified blue-green algae	--	--	--	--	--	--	--	--	--	--	--	--	--	46	--
PYRROPHYTA															
Dinophyceae (dinoflagellates)															
Gymnodinium sp.	--	--	--	--	--	--	82	110	--	--	--	--	--	--	--
Peridinium sp.	20	--	8	--	--	140	4	23	--	--	--	--	--	--	--
Peridinium-like	--	--	--	--	--	45	--	--	--	--	26	17	--	--	--
MISCELLANEOUS GROUP															
Ciliates	5	--	13	--	--	--	9	--	--	--	--	4	--	--	11

Table 5.--*Taxa and numbers of phytoplankton*--Continued

Date	Station 1														
	Sept. 13, 1973					Oct. 16, 1973					Dec. 6, 1973				
Time	1445	1453	1510	1534	1540	1300	1305	1310	1315	1320	1445	1510	1535	1555	1620
Sampling depth (feet)	0	16	33	98	180	0	16	33	98	180	0	16	33	98	180
Taxa	Concentration, in cells per millilitre														
CHLOROPHYTA															
Chlorophyceae (green algae)															
Cosmarium staurastroides	--	24	--	65	250	13	--	--	100	57	48	68	110	59	55
CHRYSOPHYTA															
Bacillariophyceae (diatoms)															
Asterionella formosa	150	81	99	80	210	21	47	62	190	38	160	110	140	170	84
Fragilaria crotonensis	--	--	--	27	--	--	--	--	--	--	--	--	--	--	--
Melosira italica	--	--	--	--	--	--	--	--	--	7	--	--	--	22	19
Nitzschia sp.	--	--	--	23	--	--	--	--	--	--	--	--	--	--	--
Rhizosolenia sp.	--	--	--	19	28	--	--	--	--	31	--	--	--	--	--
Synedra sp.	--	--	--	--	48	--	--	--	--	--	--	--	--	--	--
Synedra tenera	--	--	--	--	79	--	--	--	--	25	21	21	28	15	16
Chrysophyceae (yellow-brown algae)															
Chrysochromulina parva	320	--	--	--	--	310	120	98	--	--	--	--	--	--	--
Chrysochromulina sp. (other)	--	140	49	54	--	--	--	--	--	--	--	--	--	--	--
Unidentified flagellates	--	--	--	--	--	56	--	--	--	29	--	41	75	30	23
CRYPTOPHYTA															
Cryptophyceae (flagellates)															
Cryptomonas sp.	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--
Unidentified flagellates	43	--	76	58	33	--	55	97	69	21	37	24	42	20	20
CYANOPHYTA															
Myxophyceae															
Unidentified blue-green algae	--	--	--	--	34	--	--	--	--	--	--	--	--	--	--
PYRROPHYTA															
Dinophyceae (dinoflagellates)															
Peridinium-like	71	110	59	--	--	--	39	41	--	--	--	--	--	--	--

Table 5.--*Taxa and numbers of phytoplankton--Continued*

Date	Station 2														
	May 16, 1973					June 7, 1973					June 21, 1973				
Time	1310	1318	1326	1335	1355	1410	1420	1430	1436	1445	1200	1212	1227	1301	1326
Sampling depth (feet)	0	16	33	82	148	0	16	33	82	148	0	16	33	82	148
Taxa	Concentration, in cells per millilitre														
CHLOROPHYTA															
Chlorophyceae (green algae)															
Cosmarium staurastroides	370	130	450	96	58	86	28	81	340	88	--	--	260	270	120
CHRYSOPHYTA															
Bacillariophyceae (diatoms)															
Asterionella formosa	9	13	32	--	--	17	21	22	35	--	20	22	24	47	--
Melosira italica	--	--	18	26	59	--	--	--	--	18	--	--	--	--	35
Rhizosolenia sp.	--	--	--	--	--	--	8	24	140	100	--	11	110	68	43
Synedra tenera	40	50	100	110	56	--	--	--	160	100	6	21	64	190	110
Chrysophyceae (yellow-brown algae)															
Dinobryon sertularia	--	--	--	--	--	--	9	--	--	--	--	--	--	--	--
Dinobryon sp.	200	67	200	63	--	39	--	21	--	--	480	550	--	--	70
CRYPTOPHYTA															
Cryptophyceae (flagellates)															
Cryptomonas sp.	--	26	--	--	--	--	3	4	--	--	--	--	--	--	--
Unidentified flagellates	--	47	57	38	85	18	11	28	39	17	--	33	170	130	39
CYANOPHYTA															
Myxophyceae (blue-green algae)															
Anacystis sp.	--	2	--	--	--	--	--	--	17	33	--	--	--	76	170
PYRROPHYTA															
Dinophyceae (dinoflagellates)															
Peridinium sp.	--	22	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 5.--*Taxa and numbers of phytoplankton*--Continued

Date	Station 2														
	July 11, 1973					July 31, 1973					Aug. 13, 1973				
Time	0830	0838	0850	0900	0910	1130	1140	1150	1200	1212	1145	1153	1204	1226	1236
Sampling depth (feet)	0	16	33	82	148	0	16	33	82	148	0	16	33	82	148
Taxa	Concentration, in cells per millilitre														
CHLOROPHYTA															
Chlorophyceae (green algae)															
Cosmarium staurastroides	--	--	--	140	--	--	--	17	710	89	--	--	--	320	130
CHRYSOPHYTA															
Bacillariophyceae (diatoms)															
Asterionella formosa	--	--	--	25	--	--	--	--	33	11	--	--	--	59	9
Melosira italica	--	--	--	--	--	--	--	--	--	23	--	--	--	--	--
Rhizosolenia sp.	9	9	63	100	7	--	--	70	190	12	--	--	--	210	34
Synedra delicatissima	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--
Synedra tenera	--	--	--	120	--	--	--	--	--	54	--	--	--	--	73
Chrysophyceae (yellow-brown algae)															
Chrysochromulina sp. (other)	--	--	--	--	--	120	150	88	--	--	110	130	53	--	--
Dinobryon sertularia	22	20	--	--	10	--	--	--	--	--	--	--	--	--	--
Dinobryon sp.	--	--	16	--	--	--	7	--	--	--	--	--	18	--	--
CRYPTOPHYTA															
Cryptophyceae (flagellates)															
Cryptomonas sp.	--	--	--	--	--	--	--	--	--	17	--	--	--	15	14
Unidentified flagellates	64	60	95	29	24	--	34	31	--	28	28	81	91	38	46
CYANOPHYTA															
Myxophyceae															
Unidentified blue-green algae	--	--	--	30	--	--	--	--	--	--	--	--	--	--	--
PYRROPHYTA															
Dinophyceae (dinoflagellates)															
Glenodinium sp.	--	--	--	--	--	130	85	--	--	--	--	--	--	--	--
Peridinium sp.	14	16	--	--	8	46	5	11	--	--	3	--	--	--	--
Peridinium-like	--	--	--	--	--	--	--	--	--	--	20	27	21	--	--
MISCELLANEOUS GROUP															
Ciliates	--	6	--	--	9	--	--	8	--	--	5	--	--	--	--

Table 5.--*Taxa and numbers of phytoplankton--Continued*

Date	Station 2														
	Sept. 13, 1973					Oct. 16, 1973					Dec. 6, 1973				
Time	1100	1120	1130	1140	1154	1515	1520	1525	1530	1535	1230	1250	1300	1330	1405
Sampling depth (feet)	0	16	33	82	148	0	16	33	82	148	0	16	33	82	148
Taxa	Concentration, in cells per millilitre														
CHLOROPHYTA															
Chlorophyceae (green algae)															
Cosmarium staurastroides	--	--	--	70	220	--	--	--	75	58	69	120	130	56	63
CHRYSOPHYTA															
Bacillariophyceae (diatoms)															
Asterionella formosa	66	66	44	55	170	83	87	94	200	56	130	76	180	180	180
Melosira granulata	--	--	--	--	--	--	--	--	--	--	--	--	--	22	--
Rhizosolenia sp.	--	--	--	--	43	--	--	--	--	15	--	16	--	--	--
Synedra tenera	--	--	--	54	110	--	--	--	12	44	23	20	--	14	30
Chrysophyceae (yellow-brown algae)															
Chrysochromulina parva	250	--	180	170	--	200	150	170	67	--	--	--	--	--	--
Chrysochromulina sp. (others)	--	75	--	--	--	--	--	--	--	--	--	--	--	--	--
Unidentified flagellates	--	--	--	--	--	--	--	--	--	--	23	50	46	48	38
CRYPTOPHYTA															
Cryptophyceae (flagellates)															
Cryptomonas sp.	--	--	--	--	--	--	--	--	8	--	--	--	--	--	--
Unidentified flagellates	--	--	64	88	100	39	55	120	89	80	78	59	140	17	80
PYRROPHYTA															
Dinophyceae (dinoflagellates)															
Peridinium-like	47	110	64	--	--	21	40	46	--	--	--	--	--	--	--

Table 6.--*Taxa and numbers of zooplankton*

[Location of stations shown in figure 1.]

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 1, May 17, 1973, 1425 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	0	0
Keratella earlinae	0	0	0	0	0	0	0	0
Keratella quadrata	53	14	130	33	212	60	184	23
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	0	0	0	0	0	0	0	0
Synchaetidae								
Polyarthra sp.	0	0	0	0	0	0	0	0
Synchaeta sp.	153	39	118	30	88	25	440	55
TOTAL ROTIFERS	206	53	248	63	300	85	624	78
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	0	0	0	0	0	0	0	0
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0
Holopedidae								
Holopedium gibberum	0	0	0	0	0	0	0	0
Copepoda								
Cyclopidae	0	0	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	103	26	110	28	50	14	156	20
Temoridae								
Epischura nevadensis	83	21	32	8	0	0	16	2
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	186	47	142	36	50	14	172	22
TOTAL OF ALL ORGANISMS	392	100	390	100	350	100	796	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 1, June 7, 1973, 1615 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	0	0
Keratella earlinae	76	1	36	<1	30	<1	75	<1
Keratella quadrata	276	3	660	4	1,250	5	1,020	4
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	24	<1	24	<1	0	0	0	0
Synchaetidae								
Polyarthra sp.	0	0	0	0	0	0	0	0
Synchaeta sp.	9,924	95	17,376	95	21,630	94	27,195	95
TOTAL ROTIFERS	10,300	99	18,096	99	22,910	99	28,290	99
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	0	0	12	<1	0	0	15	<1
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0
Holopedidae								
Holopedium gibberum	0	0	0	0	0	0	0	0
Copepoda								
Cyclopidae	0	0	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	140	1	210	1	100	<1	210	1
Temoridae								
Epischura nevadensis	0	0	30	<1	0	0	15	<1
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	140	1	252	1	100	0	240	1
TOTAL OF ALL ORGANISMS	10,440	100	18,348	100	23,010	100	28,530	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 1, June 21, 1973, 1300 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0			0	0
Keratella earlinae	150	5	60	1			40	<1
Keratella quadrata	45	2	0	0			80	1
Notholca squamula	0	0	0	0			0	0
Gastropidae								
Gastropus hyptopus	0	0	60	1			0	0
Synchaetidae								
Polyarthra sp.	60	2	60	1			0	0
Synchaeta sp.	2,115	76	7,640	95			12,180	98
TOTAL ROTIFERS	2,370	85	7,820	98			12,300	99
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	390	14	0	0			0	0
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0			0	0
Holopedidae								
Holopedium gibberum	0	0	0	0			0	0
Copepoda								
Cyclopidae	0	0	0	0			0	0
Diaptomidae								
Diaptomus pallidus	30	1	180	2			30	<1
Temoridae								
Epischura nevadensis	0	0	40	<1			100	1
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0			0	0
TOTAL CRUSTACEA	420	15	220	2			130	1
TOTAL OF ALL ORGANISMS	2,790	100	8,040	100			12,430	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 1, July 10, 1973, 1310 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	0	0
Keratella earlinae	646	7	680	5	850	7	725	6
Keratella quadrata	0	0	0	0	0	0	0	0
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	221	2	527	4	1,575	14	1,550	13
Synchaetidae								
Polyarthra sp.	51	1	34	<1	50	<1	0	0
Synchaeta sp.	4,199	43	4,386	30	3,225	28	1,575	13
TOTAL ROTIFERS	5,117	53	5,627	39	5,700	49	3,850	32
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	3,230	33	6,239	43	3,525	30	6,150	52
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0
Holopedidae								
Holopedium gibberum	0	0	0	0	2	<1	0	0
Copepoda								
Cyclopidae	0	0	17	<1	0	0	0	0
Diaptomidae								
Diaptomus pallidus	799	8	2,159	15	2,000	17	1,350	11
Temoridae								
Epischura nevadensis	510	5	425	3	400	3	525	4
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	4,539	46	8,840	61	5,927	50	8,025	67
TOTAL OF ALL ORGANISMS	9,656	99	14,467	100	11,627	99	11,875	99

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 1, July 31, 1973, 1400 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	0	0
Keratella earlinae	765	5	1,050	4	2,440	5	1,900	5
Keratella quadrata	0	0	0	0	0	0	0	0
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	2,250	15	5,160	21	8,560	19	5,000	14
Synchaetidae								
Polyarthra sp.	180	1	240	1	120	<1	300	1
Synchaeta sp.	510	3	690	3	1,520	3	450	1
TOTAL ROTIFERS	3,705	24	7,140	29	12,640	27	7,650	21
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	3,600	24	8,940	37	21,080	47	20,450	56
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0	100	<1
Holopedidae								
Holopedium gibberum	75	<1	600	2	1,600	4	1,100	3
Copepoda								
Cyclopidae	0	0	0	0	0	0	50	<1
Diaptomidae								
Diaptomus pallidus	4,965	34	5,100	21	7,200	16	5,150	14
Temoridae								
Epischura nevadensis	2,340	16	2,370	10	2,120	5	2,050	6
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	10,980	74	17,010	70	32,000	72	28,900	79
TOTAL OF ALL ORGANISMS	14,685	100	24,150	100	44,640	100	36,550	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 1, August 13, 1973, 1500 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina								
Keratella earlinae			2,550	5	5,400	6	4,500	6
Keratella quadrata			0	0	0	0	0	0
Notholca squamula			0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus			1,825	4	3,200	3	3,100	4
Synchaetidae								
Polyarthra sp.			75	<1	700	1	400	<1
Synchaeta sp.			775	2	1,000	1	4,800	7
TOTAL ROTIFERS			5,225	11	10,300	11	12,800	17
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris			4,500	9	11,000	11	16,000	23
Daphnidae								
Ceriodaphnia reticulata			200	<1	0	0	0	0
Holopedidae								
Holopedium gibberum			12,450	25	14,200	15	5,600	8
Copepoda								
Cyclopidae			0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus			9,900	20	19,700	20	10,600	15
Temoridae								
Epischura nevadensis			17,725	35	42,200	43	24,200	35
Mysidacea								
Mysidae								
Mysis relicta			0	0	0	0	0	0
TOTAL CRUSTACEA			44,775	89	87,100	89	56,400	81
TOTAL OF ALL ORGANISMS			50,000	100	97,400	100	69,200	99

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 1, October 16, 1973, 1215 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	675	8	3,268	8	4,700	7	6,050	6
Keratella earlinae	1,725	20	7,144	18	19,100	28	33,250	33
Keratella quadrata	75	1	--	0	750	1	1,200	1
Notholca squamula	0	0	--	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	525	6	266	1	400	<1	100	<1
Synchaetidae								
Polyarthra sp.	75	1	76	<1	0	0	0	0
Synchaeta sp.	0	0	--	0	0	0	0	0
TOTAL ROTIFERS	3,075	36	10,754	28	24,950	36	40,600	40
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	550	6	17,442	43	31,600	46	47,550	47
Daphnidae								
Ceriodaphnia reticulata	3,250	37	8,246	20	9,150	13	9,300	9
Holopedidae								
Holopedium gibberum	825	10	1,026	2	700	1	1,150	1
Copepoda								
Cyclopidae	0	0	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	975	11	2,740	7	2,950	4	2,900	3
Temoridae								
Epischura nevadensis	0	0	0	0	0	0	350	<1
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	5,600	64	29,454	72	44,400	64	61,250	60
TOTAL OF ALL ORGANISMS	8,675	100	40,208	100	69,350	100	101,850	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 1, December 6, 1973, 1445 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	850	12	2,125	14	2,192	19	3,145	28
Keratella earlinae	200	3	187	1	176	2	170	2
Keratella quadrata	40	<1	51	<1	64	<1	221	2
Notholca squamula	170	2	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	0	0	0	0	0	0	0	0
Synchaetidae								
Polyarthra sp.	0	0	0	0	48	<1	136	1
Synchaeta sp.	2,730	39	6,664	45	4,240	36	2,567	23
TOTAL ROTIFERS	3,990	56	9,027	60	6,720	57	6,239	56
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	580	8	2,686	18	2,448	21	1,836	17
Daphnidae								
Ceriodaphnia reticulata	60	1	119	1	64	<1	0	0
Holopedidae								
Holopedium gibberum	0	0	0	0	0	0	0	0
Copepoda								
Cyclopidae	0	0	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	2,250	32	2,754	19	2,272	19	2,635	24
Temoridae								
Epischura nevadensis	70	1	85	<1	160	1	323	3
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	2,960	42	5,644	39	4,944	41	4,794	44
TOTAL OF ALL ORGANISMS	6,950	100	14,671	100	11,664	100	11,033	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 2, May 16, 1973, 1310 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	0	0
Keratella earlinae	0	0	0	0	0	0	0	0
Keratella quadrata	2	<1	45	3	40	2	20	2
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	0	0	0	0	0	0	0	0
Synchaetidae								
Polyarthra sp.	0	0	0	0	0	0	0	0
Synchaeta sp.	180	52	1,418	91	2,295	97	1,140	92
TOTAL ROTIFERS	182	52	1,463	94	2,335	99	1,160	94
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	0	0	0	0	0	0	10	1
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0
Holopedidae								
Holopedium gibberum	0	0	0	0	0	0	0	0
Copepoda								
Cyclopidae	0	0	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	119	35	42	3	13	<1	20	2
Temoridae								
Epischura nevadensis	42	12	53	3	10	<1	50	4
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	161	47	95	6	23	0	80	7
TOTAL OF ALL ORGANISMS	343	100	1,558	100	2,358	100	1,240	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 2, June 8, 1973, 1410 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	0	0
Keratella earlinae	33	<1	90	1	0	0	15	<1
Keratella quadrata	171	3	1,090	8	165	3	150	2
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	0	0	0	0	0	0	0	0
Synchaetidae								
Polyarthra sp.	0	0	0	0	0	0	0	0
Synchaeta sp.	5,244	94	11,760	89	5,265	97	5,745	92
TOTAL ROTIFERS	5,448	97	12,940	98	5,430	100	5,910	94
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	0	0	0	0	0	0	0	0
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0
Holopedidae								
Holopedium gibberum	0	0	0	0	0	0	0	0
Copepoda								
Cyclopidae	0	0	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	81	1	120	1	0	0	300	5
Temoridae								
Epischura nevadensis	39	1	80	1	0	0	0	0
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	15	<1
TOTAL CRUSTACEA	120	2	200	2	0	0	315	5
TOTAL OF ALL ORGANISMS	5,568	100	13,140	100	5,430	100	6,225	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 2, June 21, 1973, 1200 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0		
Keratella earlinae	0	0	315	5	140	2		
Keratella quadrata	0	0	45	1	0	0		
Notholca squamula	0	0	0	0	0	0		
Gastropidae								
Gastropus hyptopus	75	3	30	<1	0	0		
Synchaetidae								
Polyarthra sp.	60	2	30	<1	0	0		
Synchaeta sp.	2,115	88	4,185	62	5,560	89		
TOTAL ROTIFERS	2,250	93	4,605	68	5,700	91		
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	0	0	1,905	28	280	4		
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0		
Holopedidae								
Holopedium gibberum	0	0	0	0	0	0		
Copepoda								
Cyclopidae	0	0	0	0	0	0		
Diaptomidae								
Diaptomus pallidus	105	4	210	3	200	3		
Temoridae								
Epischura nevadensis	60	2	60	1	100	2		
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0		
TOTAL CRUSTACEA	165	6	2,175	32	580	9		
TOTAL OF ALL ORGANISMS	2,415	100	6,780	100	6,280	100		

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 2, July 11, 1973, 0830 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	0	0
Keratella earlinae	960	6	1,095	4	1,100	5	780	4
Keratella quadrata	0	0	0	0	0	0	0	0
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	1,035	7	1,305	5	940	4	1,020	5
Synchaetidae								
Polyarthra sp.	0	0	0	0	0	0	0	0
Synchaeta sp.	3,600	24	2,505	10	2,960	12	3,300	16
TOTAL ROTIFERS	5,595	37	4,905	19	5,000	21	5,100	25
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	8,730	59	18,630	78	17,940	76	15,520	74
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0	0	0
Holopedidae								
Holopedium gibberum	30	<1	30	<1	0	0	0	0
Copepoda								
Cyclopidae	0	0	0	0	0	0	20	<1
Diaptomidae								
Diaptomus pallidus	330	2	195	1	380	2	240	1
Temoridae								
Epischura nevadensis	90	1	90	<1	200	1	220	1
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	9,180	62	18,945	79	18,520	79	16,000	76
TOTAL OF ALL ORGANISMS	14,775	99	23,850	98	23,520	100	21,100	101

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 2, July 31, 1973, 1130 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	0	0
Keratella earlinae	570	7	1,410	4	1,920	3	750	1
Keratella quadrata	0	0	0	0	0	0	0	0
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	180	2	4,290	13	9,080	15	6,450	12
Synchaetidae								
Polyarthra sp.	270	3	90	<1	160	<1	150	<1
Synchaeta sp.	210	2	870	3	1,160	2	1,200	2
TOTAL ROTIFERS	1,230	14	6,660	20	12,320	20	8,550	15
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	2,355	28	17,850	54	39,160	66	37,600	69
Daphnidae								
Ceriodaphnia reticulata	30	<1	0	0	0	0	0	0
Holopedidae								
Holopedium gibberum	30	<1	600	2	480	1	700	1
Copepoda								
Cyclopidae	0	0	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	3,150	38	5,820	18	4,880	8	4,650	8
Temoridae								
Epischura nevadensis	1,515	18	1,980	6	2,360	4	2,700	5
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	7,080	84	26,250	80	46,880	79	45,650	83
TOTAL OF ALL ORGANISMS	8,310	100	32,910	100	59,200	100	54,200	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 2, August 13, 1973, 1145 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	0	0	0	0	0	0	200	<1
Keratella earlinae	104	1	1,470	4	1,100	2	3,100	6
Keratella quadrata	26	<1	0	0	0	0	400	1
Notholca squamula	0	0	90	<1	0	0	0	0
Gastropidae								
Gastropus hyptopus	507	4	660	2	3,300	5	4,100	8
Synchaetidae								
Polyarthra sp.	312	2	1,140	4	500	1	400	1
Synchaeta sp.	169	1	750	2	3,500	6	5,400	11
TOTAL ROTIFERS	1,118	8	4,110	12	8,400	14	13,600	28
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	143	1	1,860	6	5,600	9	7,200	14
Daphnidae								
Ceriodaphnia reticulata	0	0	0	0	0	0	200	<1
Holopedidae								
Holopedium gibberum	884	7	3,150	10	8,300	13	4,700	9
Copepoda								
Cyclopidae	0	0	0	0	0	0	100	<1
Diaptomidae								
Diaptomus pallidus	6,487	51	10,380	32	15,600	24	9,200	18
Temoridae								
Epischura nevadensis	4,147	32	12,840	40	25,700	40	15,400	31
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	11,661	91	28,230	88	55,200	86	36,800	72
TOTAL OF ALL ORGANISMS	12,779	99	32,340	100	63,600	100	50,400	100

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 2, October 16, 1973, 1515 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	3,750	9	1,254	4	6,750	8	1,450	2
Keratella earlinae	12,800	30	5,054	15	33,900	40	41,450	46
Keratella quadrata	1,500	4	114	<1	1,000	1	4,550	5
Notholca squamula	0	0	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	200	<1	874	2	250	<1	200	<1
Synchaetidae								
Polyarthra sp.	0	0	114	<1	0	0	150	<1
Synchaeta sp.	0	0	0	0	0	0	0	0
TOTAL ROTIFERS	18,250	44	7,410	21	41,900	50	47,800	53
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	15,900	38	17,176	50	28,100	33	31,700	35
Daphnidae								
Ceriodaphnia reticulata	5,300	12	6,156	18	10,400	12	7,650	8
Holopedidae								
Holopedium gibberum	850	2	1,824	5	1,450	2	1,150	1
Copepoda								
Cyclopidae	50	<1	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	1,950	4	1,634	5	2,200	3	1,400	2
Temoridae								
Epischura nevadensis	0	0	0	0	50	<1	450	<1
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	24,050	56	26,790	78	42,200	50	42,350	46
TOTAL OF ALL ORGANISMS	42,300	100	34,200	99	84,100	100	90,150	99

Table 6.--*Taxa and numbers of zooplankton*--Continued

PHYLUM Class Order Family *Genus species*	Number of organisms and percentage composition in vertical tows							
	16-0 feet		33-0 feet		66-0 feet		131-0 feet	
	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total	Number of organisms in sample	Percent of total
	Station 2, December 6, 1973, 1230 hours							
ROTIFERA								
Monogononta								
Ploima								
Brachionidae								
Kellicottia longispina	380	14	4,573	28	3,792	26	4,720	23
Keratella earlinae	410	16	2,006	12	512	4	520	2
Keratella quadrata	0	0	51	<1	48	<1	140	1
Notholca squamula	30	1	0	0	0	0	0	0
Gastropidae								
Gastropus hyptopus	0	0	0	0	0	0	0	0
Synchaetidae								
Polyarthra sp.	30	1	0	0	48	<1	100	0
Synchaeta sp.	240	9	6,154	37	4,080	28	8,480	42
TOTAL ROTIFERS	1,090	41	12,784	77	8,480	58	13,960	68
ARTHROPODA								
Crustacea								
Cladocera								
Bosminidae								
Bosmina longirostris	410	16	1,870	11	2,608	18	1,900	9
Daphnidae								
Ceriodaphnia reticulata	110	4	68	<1	0	0	40	<1
Holopedidae								
Holopedium gibberum	0	0	0	0	0	0	0	0
Copepoda								
Cyclopidae	0	0	0	0	0	0	0	0
Diaptomidae								
Diaptomus pallidus	990	38	1,836	11	2,976	21	3,880	19
Temoridae								
Epischura nevadensis	40	2	34	<1	304	2	600	3
Mysidacea								
Mysidae								
Mysis relicta	0	0	0	0	0	0	0	0
TOTAL CRUSTACEA	1,550	60	3,808	22	5,888	41	6,420	31
TOTAL OF ALL ORGANISMS	2,640	100	16,592	100	14,368	100	20,380	100

Table 7.--*Chemical and particle-size analyses of benthic samples, August 1, 1973*

[Location of sampling sites shown in figure 1.]

Sampling sites	Nitrite plus nitrate in bottom deposits (N) (mg/kg)	Nitrogen in bottom deposits (N) (mg/kg)	Phosphorus in bottom deposits (P) (mg/kg)	Organic carbon in bottom deposits (C) (grams/kg)	Iron in bottom deposits (Fe) (µg/gram)	Manganese in bottom deposits (Mn) (µg/gram)	Particle-size distribution in percentage		
							Clay (smaller than 0.004 mm)	Silt (0.004 to 0.062 mm)	Sand (0.062 to 2.0 mm)
1A	1.8	1,100	110	1.9	13,800	300	2	13	85
1B	0.5	2,000	310	23	16,500	600	10	43	47
1C	3.2	870	65	14	9,100	100	0	4	96
1D	0.5	520	210	21	28,800	600	5	39	56
1E	0.5	363	180	30	19,000	400	6	51	43
2A	0.0	2,300	360	2.7	23,800	900	4	25	71
2B	0.9	3,500	350	37	25,400	800	17	44	39
2C	3.2	3,500	400	40	23,200	1,000	7	50	43
2D	2.3	3,100	170	32	21,300	1,200	9	62	29
2E	0.5	3,200	210	32	25,800	1,300	6	34	60
3A	0.9	1,100	250	16	12,200	400	1	8	91
3B	0.9	3,500	400	38	25,900	1,400	25	68	7
3C	1.8	4,900	300	37	26,000	1,200	10	51	39
3D	4.1	3,700	240	31	24,700	1,100	17	58	25
3E	4.1	--	180	41	20,200	1,600	3	25	72
4A	0.5	--	370	39	15,100	800	4	18	78
4B	0.5	4,000	520	35	37,900	3,700	16	55	29
4C	1.8	4,300	520	41	38,000	3,200	15	53	32
4D	4.1	2,900	220	33	39,500	3,100	15	56	29
4E	0.9	--	250	19	8,800	200	7	14	79
5A	0.0	1,600	120	15	14,500	300	2	5	93
5B	1.4	4,200	360	46	27,300	1,200	17	64	19
5C	1.8	9,300	440	41	33,600	1,900	22	58	20
5D	3.2	1,700	91	18	3,200	100	2	7	91
5E	3.6	273	160	43	19,200	1,600	8	32	60
6A	--	--	--	--	--	--	--	--	--
6B	0.5	290	230	6.4	6,100	60			
6C	0.0	5,300	360	34	10,100	300	4	18	78
6D	0.5	5,000	360	49	17,300	600	8	55	37
6E	3.6	327	68	19	4,400	100			

Table 8.--*Taxa and numbers of benthic organisms, August 1, 1973*

[Location of sampling sites shown in figure 1.]

Order	Family	Number of stations reporting organism present	Total number of organisms	Percent of total
Diptera	Tendipedidae (larvae)	17	72	74.2
Mysidacea	Mysidae	6	19	19.6
Plesiopora	Enchytraeidae	2	2	2.1
	Tubificidae	2	4	4.1
	Total		97	100.0

Table 9.--*Measurements of primary productivity and chlorophyll-a at station 1*

[Location of sampling stations shown in figure 1.]

Depth (feet)	Light intensity (in percent of light incident at water surface)	Primary productivity (in milligrams carbon per cubic metre per day)	Chlorophyll-a concentration (in micrograms per litre)
		May 16, 1973	
2	60	4.7	1.8
7	30	11.8	3.7
10	20	14.4	3.2
15	10	12.2	5.7
20	5	10.2	5.5
33	1	4.7	2.0
		August 14, 1973	
3	60	2.2	.1
11	42	3.6	.2
18	33	3.7	.2
28	22	2.9	.2
39	12	3.3	.2
65	2	2.6	1.0
		October 17, 1973	
3	60	1.5	.4
19	30	2.5	.5
26	20	2.3	.4
41	10	2.0	.4
54	5	3.5	.8
79	1	1.2	1.5

Table 10.--*Vertical profiles of water temperatures and dissolved oxygen*

[Location of sampling stations shown in figure 1.]

SAMPLING STATION 1

Depth (feet)	Temperature (deg C)	Dissolved oxygen (mg/l)	Percent saturation
May 17, 1973, 1425 hours			
0.0	14.5	9.5	115
3.3	12.0	9.5	110
6.6	11.0	10.0	114
9.8	9.5	10.2	111
13	9.0	10.6	114
16	8.2	10.2	107
20	7.5	10.2	106
23	7.3	10.2	105
26	7.0	10.0	103
30	6.8	10.0	103
36	6.3	9.8	100
46	6.0	9.5	97
56	5.7	9.3	93
66	5.5	9.3	92
82	5.3	9.0	89
98	5.0	8.9	87
115	4.8	8.9	86
131	4.7	8.7	84
148	4.5	8.6	83
164	4.5	8.4	81
180	4.3	8.3	80
197	4.3	8.1	78
213	4.2	7.4	71
June 7, 1973, 1615 hours			
0.0	17.5	8.2	106
3.3	17.2	8.2	106
6.6	15.0	8.4	104
9.8	14.5	8.5	104
13	14.0	8.7	105
16	13.0	8.9	106
20	11.8	9.0	105
23	10.5	9.5	94
26	9.0	9.4	101
30	9.0	9.5	102
33	8.8	9.5	102
39	7.5	9.4	98
49	6.7	9.0	92
66	6.0	8.6	87
82	5.5	8.3	82
98	5.0	8.1	79
131	4.8	7.9	77
164	4.6	7.7	75
197	4.5	6.8	65
220	4.5	6.6	63

Depth (feet)	Temperature (deg C)	Dissolved oxygen (mg/l)	Percent saturation
June 21, 1973, 1500 hours			
0.0	17.5	9.3	121
3.3	17.0	9.0	115
6.6	16.0	9.0	114
9.8	15.0	9.0	111
13	14.5	9.2	112
16	14.0	9.2	111
20	13.5	9.2	110
23	13.5	9.6	114
26	13.0	9.4	111
30	12.5	9.6	113
33	11.0	9.8	111
36	10.0	10.0	111
39	9.0	10.2	110
43	8.0	10.2	107
46	7.5	10.2	106
49	7.0	10.2	105
52	6.5	10.2	104
56	6.5	9.8	100
59	6.0	9.8	99
66	6.0	9.8	99
72	5.5	9.8	97
79	5.5	9.8	97
89	5.0	9.2	90
105	5.0	8.8	86
121	5.0	8.9	87
138	4.5	8.9	86
154	4.5	8.7	84
171	4.5	8.5	83
187	4.5	8.2	80
203	4.5	7.9	77
207	4.5	7.6	74

Table 10.--*Vertical profiles of water temperatures and dissolved oxygen*--Continued

[Location of sampling stations shown in figure 1.]

SAMPLING STATION 1

Depth (feet)	Temperature (deg C)	Dissolved oxygen (mg/l)	Percent saturation
July 10, 1973, 1310 hours			
0.0	19.5	7.7	104
3.3	19.5	7.7	104
6.6	18.8	7.7	103
9.8	18.5	7.8	104
13	18.3	7.8	103
16	18.2	7.9	104
20	17.7	8.4	109
23	16.0	8.8	111
26	13.8	9.2	111
30	12.0	9.4	108
33	10.8	9.7	109
39	9.5	9.8	107
49	8.5	9.9	105
66	7.2	9.9	102
82	6.0	8.9	89
98	5.5	8.5	85
115	5.0	7.9	77
131	5.0	7.7	75
164	4.8	7.6	74
180	4.5	7.4	71
213	4.5	6.5	63
July 31, 1973, 1400 hours			
0.0	22.0	7.9	113
3.3	21.5	7.9	113
6.6	20.5	8.0	111
9.8	20.5	8.0	111
13	20.5	8.1	112
16	20.0	8.0	110
20	20.0	8.0	110
23	20.0	7.9	108
26	19.0	8.6	115
30	17.0	9.5	123
33	15.0	10.2	126
36	12.5	10.6	123
39	11.0	10.7	120
43	10.0	10.6	116
46	9.0	10.6	114
52	8.5	10.5	112
59	7.5	10.4	108
69	6.5	9.9	100
82	6.0	9.2	93
98	5.5	8.5	84
115	5.0	7.8	76
131	5.0	7.5	74
148	4.5	7.5	72
164	4.5	7.4	71
180	4.5	6.9	66
197	4.5	5.7	55
August 13, 1973, 1500 hours			
0.0	20.5	7.8	108
3.3	20.5	7.7	107
6.6	20.5	7.5	104
9.8	20.5	7.6	106
13	20.0	7.5	103
16	20.0	7.5	103
20	20.0	7.5	103
23	20.0	7.5	103
26	20.0	7.5	103
30	18.0	8.7	114
33	16.0	9.5	120
36	14.5	9.6	117
39	11.5	10.4	120
43	10.0	10.4	114
46	9.0	10.2	110
49	9.0	10.3	111
52	8.5	10.5	112
56	8.0	10.4	108
59	7.5	9.9	103
66	7.0	9.1	94
82	6.0	8.7	88
98	5.5	8.1	80
115	5.0	7.7	75
131	5.0	7.4	73
148	5.0	7.3	72
164	5.0	7.0	69
180	4.5	6.6	63
197	4.5	5.7	55

Table 10.--*Vertical profiles of water temperatures and dissolved oxygen*--Continued

[Location of sampling stations shown in figure 1.]

Depth (feet)	Temperature (deg C)	Dissolved oxygen (mg/l)	Percent saturation
SAMPLING STATION 1			
September 13, 1973, 1445 hours			
0.0	17.0	7.8	100
3.3	17.0	7.8	100
6.6	17.0	7.7	99
9.8	17.0	7.7	99
13	17.0	7.7	99
16	17.0	7.7	99
20	17.0	7.6	97
23	17.0	7.5	96
26	16.5	7.7	97
30	16.5	7.7	97
33	16.5	7.6	96
36	16.5	7.5	95
39	16.5	7.5	95
43	15.5	7.8	94
46	12.0	9.4	108
49	11.0	10.0	101
52	9.5	10.2	111
56	8.5	10.0	106
59	8.0	9.7	102
62	7.0	9.4	96
66	7.0	9.3	95
75	6.0	8.6	87
89	5.5	7.5	74
98	5.0	7.3	72
115	5.0	6.9	68
131	5.0	6.5	64
148	5.0	6.5	64
164	5.0	6.2	62
180	5.0	5.3	52
197	5.0	5.0	49
October 16, 1973, 1215 hours			
0.0	12.8	8.6	101
3.3	12.1	8.6	100
6.6	12.0	8.5	99
9.8	11.9	8.5	99
13	11.8	8.5	98
16	11.6	8.5	98
20	11.6	8.5	98
23	11.5	8.5	98
26	11.5	8.6	98
30	11.5	8.5	98
33	11.5	8.5	98
39	11.5	8.5	98
46	11.5	8.5	98
52	11.3	8.5	99
56	10.8	8.7	98
October 16--continued			
59	10.6	9.0	101
62	8.9	9.5	102
66	8.0	9.6	101
72	7.4	9.2	96
79	6.5	8.6	88
85	6.2	8.5	86
92	6.0	8.0	81
98	5.6	7.4	74
115	5.0	6.9	68
131	5.0	6.7	66
148	4.9	6.4	63
164	4.9	6.1	60
182	4.8		
197	4.8		
200	4.8		
December 6, 1973, 1445 hours			
0.0	5.0	9.3	91
3.3	5.0	9.2	90
6.6	5.0	9.3	91
9.8	5.0	9.3	91
13	5.0	9.3	91
16	5.0	9.3	91
20	5.0	9.2	90
23	5.0	9.1	89
26	5.0	9.2	90
30	5.0	9.2	90
33	5.0	9.2	90
39	5.0	9.2	90
49	5.0	9.0	88
59	5.0	9.1	89
72	5.0	9.0	88
89	5.0	9.0	88
98	5.0	9.0	88
115	5.0	9.0	88
131	5.0	8.9	87
148	5.0	8.9	87
164	5.0	9.0	88
171	5.0	8.9	87
197	5.0	8.9	87

Table 10.--*Vertical profiles of water temperatures and dissolved oxygen*--Continued

[Location of sampling station shown in figure 1.]

SAMPLING STATION 2

Depth (feet)	Temperature (deg C)	Dissolved oxygen (mg/l)	Percent saturation
May 16, 1973, 1310 hours			
0.0	13.5	9.5	113
3.3	12.5	9.4	109
6.6	11.0	9.6	109
9.8	10.0	10.2	112
13	9.5	10.2	111
16	9.0	10.1	109
20	8.5	10.2	109
23	8.3	10.0	105
30	7.0	9.8	101
36	7.0	9.7	100
46	6.5	9.5	103
56	6.0	9.3	94
66	5.5	8.9	88
82	5.0	8.7	85
98	5.0	8.6	84
115	4.7	8.5	83
131	4.5	8.4	81
148	4.3	8.1	78
164	4.3	7.8	75
June 7, 1973, 1410 hours			
0.0	17.5	8.7	113
3.3	17.0	8.7	112
6.6	15.5	8.9	111
9.8	14.5	8.9	109
13	13.5	9.1	108
16	13.0	9.3	109
20	12.5	9.3	108
23	11.5	9.4	107
26	11.5	9.3	106
30	10.8	9.6	108
33	8.0	9.5	100
39	7.2	9.3	96
49	6.5	9.0	92
66	6.0	8.7	88
88	5.5	8.3	82
98	5.0	8.2	80
115	5.0	8.1	79
131	4.8	8.0	78
148	4.8	7.6	74
164	4.7	7.5	72
167	4.7	6.3	61
June 21, 1973, 1200 hours			
0.0	16.5	8.2	105
3.3	16.5	8.3	106
6.6	16.0	8.3	105
9.8	15.5	8.2	102
13	14.0	8.3	100
16	13.5	8.3	99
20	13.0	8.4	99
23	12.5	8.4	98
26	12.5	8.5	99
30	12.0	8.6	99
33	11.0	8.8	100
36	10.5	9.0	101
39	10.5	9.0	101
43	10.0	8.9	98
46	9.0	9.0	97
49	8.0	9.1	96
52	7.5	9.5	99
56	7.0	9.4	97
59	7.0	9.4	97
62	6.5	9.1	93
66	6.5	9.1	93
72	6.0	9.1	91
79	6.0	8.8	89
85	5.5	8.7	86
92	5.5	8.7	86
98	5.5	8.6	85
108	5.0	8.4	82
118	5.0	8.2	80
128	5.0	8.1	79
138	5.0	8.0	78
148	5.0	7.9	77
157	4.5	7.9	76

Table 10.--*Vertical profiles of water temperatures and dissolved oxygen*--Continued

[Location of sampling stations shown in figure 1.]

SAMPLING STATION 2

Depth (feet)	Temperature (deg C)	Dissolved oxygen (mg/l)	Percent saturation
July 11, 1973, 0830 hours			
0.0	20.0	7.6	104
3.3	20.0	7.6	104
6.6	19.8	7.6	104
9.8	19.5	7.6	103
13	19.5	7.6	103
16	19.0	7.7	103
20	18.0	8.0	105
23	17.5	8.2	106
26	16.3	8.3	105
30	14.5	9.0	110
33	12.5	9.3	108
39	9.5	9.5	103
49	8.0	9.7	102
66	6.3	9.2	93
82	5.5	8.5	84
98	5.0	8.1	79
115	5.0	7.8	76
131	4.8	7.6	74
164	4.7	7.4	72
174	4.7	7.3	71
July 31, 1973, 1130 hours			
0.0	21.5	7.8	108
3.3	21.0	7.8	108
6.6	21.0	7.8	108
9.8	20.5	7.7	105
13	20.5	7.8	107
16	20.5	7.9	108
20	19.5	8.0	108
23	19.5	8.1	109
26	19.0	8.5	113
30	17.5	8.9	116
33	14.5	9.7	118
36	12.5	10.4	121
39	12.0	10.2	117
46	9.0	10.2	110
52	7.5	10.1	105
59	7.0	10.0	103
66	7.5	9.6	100
75	5.5	8.7	86
85	5.0	8.4	82
98	5.0	8.2	80
115	5.0	7.6	75
131	5.0	7.5	74
148	5.0	7.4	73
164	5.0	7.1	70
174	5.0	6.8	67
August 13, 1973, 1145 hours			
0.0	20.5	7.8	107
3.3	20.5	7.9	108
6.6	20.5	7.8	107
9.8	20.5	7.8	107
13	20.0	7.8	107
16	20.0	8.0	110
20	20.0	7.8	107
23	20.0	7.7	105
26	20.0	7.8	107
30	19.5	7.9	107
33	18.5	8.7	116
36	16.0	9.7	123
39	12.0	10.4	120
43	11.0	10.6	120
46	9.0	10.6	119
49	8.0	10.2	107
52	7.5	10.5	104
56	6.5	10.0	102
59	6.0	9.8	99
62	5.5	9.6	95
66	5.0	9.3	92
72	5.0	8.9	87
82	4.0	8.4	80
98	4.0	7.9	75
115	4.0	7.5	71
131	4.0	7.1	68

Table 10.--*Vertical profiles of water temperatures and dissolved oxygen*--Continued

[Location of sampling stations shown in figure 1.]

SAMPLING STATION 2

Depth (feet)	Temperature (deg C)	Dissolved oxygen (mg/l)	Percent saturation
September 13, 1973, 1100 hours			
0.0	17.5	7.7	100
3.3	17.5	7.7	100
6.6	17.5	7.5	97
9.8	17.5	7.6	99
13	17.5	7.6	99
16	17.5	7.6	99
20	17.5	7.6	99
23	17.0	7.7	99
26	17.0	7.6	97
30	17.0	7.6	97
33	16.5	7.8	100
36	16.5	7.6	97
39	16.5	7.5	96
43	16.0	7.6	96
46	14.5	8.7	106
49	11.5	9.5	109
52	11.0	9.6	120
56	10.0	9.4	104
59	9.0	9.3	101
62	8.0	9.2	97
66	8.0	9.2	97
69	7.5	9.1	95
72	7.0	9.1	94
75	7.0	8.6	89
82	6.5	8.1	83
92	6.0	7.6	77
98	5.5	7.3	72
115	5.0	7.0	69
131	5.0	6.6	65
148	4.5	6.1	58
164	4.5	5.0	49
October 16, 1973, 1430 hours			
0.0	13.0	8.5	101
3.3	12.8	8.6	101
6.6	12.4	8.4	98
9.8	12.1	8.3	97
13	12.0	8.3	97
16	12.0	8.3	97
26	11.9	8.3	97
33	11.7	8.2	94
39	11.5	8.2	94
46	11.0	8.3	94
49	10.9	8.5	97
52	10.4	8.8	99
56	10.0	9.0	100
59	8.8	9.3	100
62	7.5	9.2	96
66	7.1	9.0	93
72	6.5	8.6	88
79	6.0	8.2	82
85	6.0	7.7	77
92	5.6	7.3	72
98	5.3	7.0	69
115	5.0	6.5	64
131	5.0	6.2	61
148	4.9	5.6	55
164	4.9		
167	4.6		
December 6, 1973, 1230 hours			
0.0	5.0	9.4	92
3.3	5.0	9.3	91
6.6	5.0	9.3	91
9.8	5.0	9.3	91
13	5.0	9.3	91
16	5.0	9.3	91
20	5.0	9.5	93
23	5.0	9.3	91
26	5.0	9.3	91
33	5.0	9.3	91
39	5.0	9.3	91
46	5.0	9.3	91
52	5.0	9.3	91
59	5.0	9.1	89
66	5.0	9.1	89
72	5.0	9.2	90
82	5.0	9.1	89
98	5.0	9.2	90
115	5.0	9.2	90
131	5.0	9.1	89
148	5.0	8.8	86
157	5.0	9.0	88

Table 11.--*Light-transparency measurements*

[Location of sampling stations shown in figure 1.]

Date	Depth, in feet		
	Station 1		Station 2
	Secchi disk transparency	1 percent transmission of surface light	Secchi disk transparency
May 16, 1973	--	33.0	15.5
May 17	16.5	37.0	--
June 6	16.5	--	16.5
June 21	29.5	58.5	28.0
July 10	37.5	75.5	--
July 11	--	--	44.5
July 31	39.5	--	41.0
Aug. 13	39.5	78.5	41.0
Sept. 13	39.5	--	39.5
Oct. 16	46.0	78.5	39.5
Dec. 6	26.0	--	24.5

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