1966

LIMNOLOGICAL DATA REPORT NO. 11

LAKE ONTARIO

CRUISE 66 - 17, SEPTEMBER 20 - 24

PUBLISHED BY
CANADIAN OCEANOGRAPHIC DATA CENTRE

CANADA CENTRE FOR INLAND WATERS

BURLINGTON, ONTARIO

Programmed by

GREAT LAKES DIVISION

INLAND WATERS BRANCH

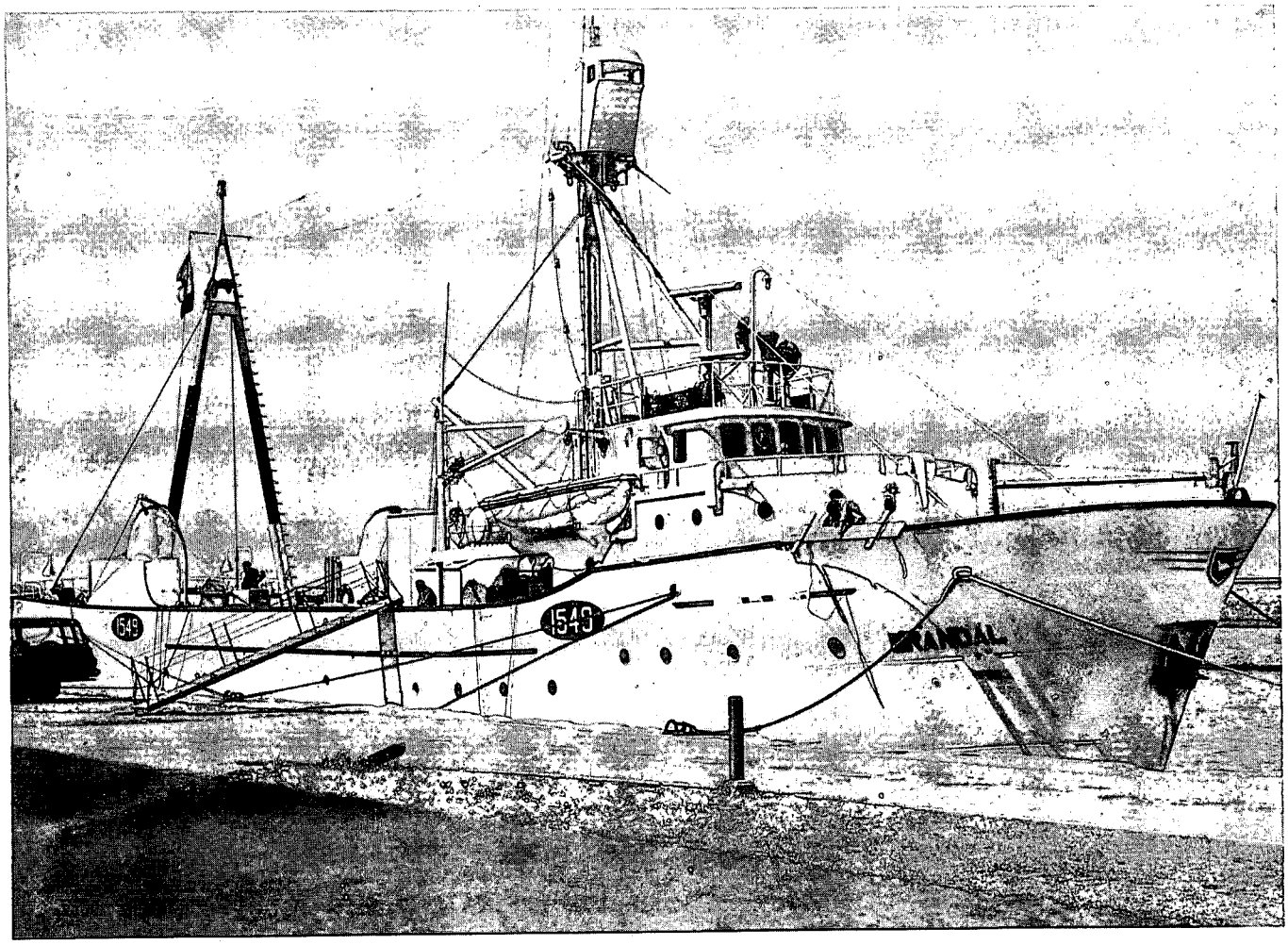
DEPARTMENT of ENERGY, MINES & RESOURCES

and

PUBLIC HEALTH ENGINEERING DIVISION

DEPARTMENT of NATIONAL HEALTH & WELFARE

CANADA



M.V. "Brandal"

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CANADA CENTRE FOR INLAND WATERS
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1969

FOREWORD

This report contains limnological data gathered for research and monitoring purposes, primarily to provide data required in connection with the IJC reference on pollution of Lakes Erie and Ontario.

The agencies involved were:

Department of Energy, Mines and Resources
Department of National Health and Welfare

The joint reference of the Governments of Canada and the United States to the International Joint Commission was for information on the following questions:

(1) Are the waters of Lake Erie, Lake Ontario and the International Section of the St. Lawrence River being polluted on either side of the boundary to an extent which is causing or is likely to cause injury to health or property on the other side of the boundary?

(2) If the foregoing question is answered in the affirmative, to what extent, by what causes, and in what localities is such pollution taking place?

(3) If the Commission should find that pollution of the character just referred to is taking place, what remedial measures would, in its judgement, be most practicable from the economic, sanitary and other points of view and what would be the probable cost thereof?

These data have been made available to International Joint Commission agencies, federal and provincial, operating under the respective Boards: The International Lake Erie Water Pollution Board and the International Lake Ontario - St. Lawrence River Water Pollution Board.

In view of their interest to limnological research workers who are not formally charged with studies on behalf of the International Joint Commission, these data are distributed widely in this report. Because of difficulties in interpretation, anyone using these data in the preparation of a paper or report which draws conclusions pertaining to the three questions posed above, is requested by the IJC Pollution Reference Boards to discuss the data interpretation with the agencies concerned before publishing the report or paper. Such discussion can be arranged through the Canada Centre for Inland Waters, P.O. Box 5050, Burlington, Ontario.

In all other respects, the data are free to be used for scientific research and studies and should be acknowledged in accordance with the usual scientific practice.

INTRODUCTION

This report is one of a series listing chemical, bacteriological and physical data for waters of Lake Ontario and Lake Erie, observed by Government of Canada agencies. The first twelve reports cover the year 1966, during which Lake Ontario was surveyed from June 1 to October 3, and Lake Erie, from August 8 to August 14.

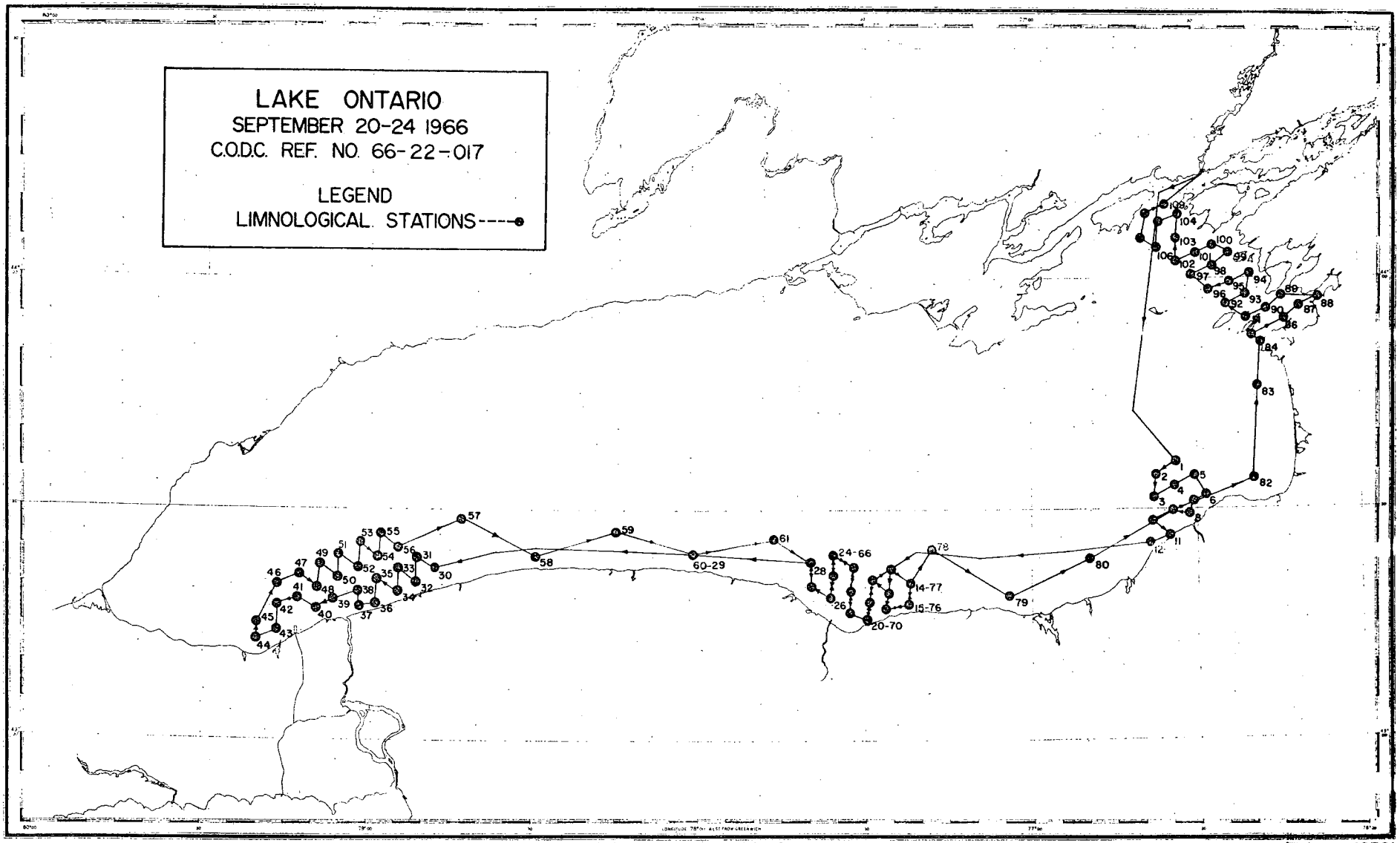
The 1966 surveys were carried out by the Great Lakes Division (Inland Waters Branch) and the Canadian Hydrographic Service (Marine Sciences Branch), both of which are Branches of the Department of Energy, Mines and Resources, and by the Public Health Engineering Division of the Department of National Health and Welfare. Staff from the three agencies carried out the work aboard the 140-foot stern trawler "Brandal", chartered by the Department of Energy, Mines and Resources.

Water-quality data gathered during eighteen cruises in 1966 are contained in twelve separate reports in the present series. Not reported on is a nineteenth cruise, from August 23 to 28, which was for seismic purposes only. Supplementary bathythermograph data and weather data are available on request from the Canada Centre for Inland Waters, P.O. Box 5050, Burlington, Ontario.

The Canadian Government's program developed in response to a request directed to the International Joint Commission by the Governments of Canada and the United States, that information relating to pollution of Lake Ontario, Lake Erie, and the international section of the St. Lawrence River be gathered. Preliminary listings of the data have already been made available to agencies preparing a report for the International Joint Commission.

The bacteriological data have already been published in Manuscript Report No. 67-1 of the Public Health Engineering Division, Department of National Health and Welfare. These data are again published in the present series of reports to facilitate comparison with the chemical and physical data.

Figure 1 shows the geographical locations of the observations listed in this data record, together with the vessel's track and the locations of bathythermograph lowerings.


LAKE ONTARIO
SEPTEMBER 20-24 1966
C.O.D.C. REF. NO. 66-22-017
LEGEND
LIMNOLOGICAL STATIONS
Published by the Canadian Hydrographic Service, Marine Sciences Branch.
LAKE ONTARIO
10501

Summary of the cruises and data listed in Data Reports Nos. 1 to 12. (An "X" indicates that the parameter is reported for one or more stations in the particular cruise).

Data Report No.	1		2	3	4	5	6	
Cruise No.	66-1	66-2	66-3	66-4	66-5	66-6	66-7	66-8
Dates (1966)	June 1 -June 5	June 7 -June 10	June 15 -June 19	June 21 -June 25	June 26 -June 30	July 4 -July 10	July 12 -July 15	July 19 -July 24
Cruise type	Physical	Monitor	Physical	Monitor	Coastal	Monitor	Geology	Monitor
Lake	Ontario	Ontario	Ontario	Ontario	Ontario	Ontario	Ontario	Ontario
Vessel	Brandal	Brandal	Brandal	Brandal	Brandal	Brandal	Brandal	Brandal
No. of stations	35	39	107	88	113	125	75	88
No. of BT slides	133	39	120	88	115	125	76	116
Station data:								
Date/time	X	X	X	X	X	X	X	X
Sounding	X	X	X	X	X	X	X	X
BT slide no.	X	X	X	X	X	X	X	X
Secchi depth	X	X	X	X	X	X		X
Sample depth	X	X	X	X	X	X	X	X
Temperature	X	X	X	X	X	X		X
Conductance, 18°C.	X	X		X	X	X	X	X
Dissolved oxygen				X	X	X	X	X
pH at 25°C.				X	X	X	X	X
Turbidity					X			X
B.O.D.						X		X
Total alkalinity		X		X	X	X		X
Hardness					X	X		X
Chloride					X	X		X
Nitrate + nitrite								
Nitrite				X	X	X		X
Reactive phosphate								
Phenol					X	X		X
Total residue								
MF coliforms	X	X		X	X	X		X
MF enterococci	X	X		X	X	X		X
20°C standard plate count		X			X	X		X
35°C standard plate count		X			X	X		X

7		8	9		10		11	12	
66-9	66-10	66-11	66-12	66-14	66-15	66-16	66-17	66-18	66-19
July 26 -July 29	Aug. 2 -Aug. 7	Aug. 8 -Aug. 14	Aug. 15 -Aug. 19	Aug. 29 -Sept. 2	Sept. 6 -Sept. 11	Sept. 12 -Sept. 16	Sept. 20 -Sept. 24	Sept. 26 -Sept. 29	Oct. 1 -Oct. 3
Physical Ontario Brandal	Monitor Ontario Brandal	Monitor Erie Brandal	Monitor Ontario Brandal	Monitor Ontario Brandal	Geology Ontario Brandal	Monitor Ontario Brandal	Coastal Ontario Brandal	Monitor Ontario Brandal	Physical Ontario Brandal
62	79	105	69	47	92	54	109	47	45
105	106	97	96	70	92	81	109	72	94
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X		X	X	X	X
X	X	X	X	X	X	X	X	X	X
X	X	X	X	X		X	X	X	X
	X	X	X	X	X	X	X	X	
	X	X	X	X	X	X	X	X	X
	X	X	X	X	X	X	X	X	
	X	X	X	X	X	X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	
		X	X	X		X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	
	X	X	X	X		X	X	X	

Description of the Data Record

Information in the headings for each station:

1. C-REF-No.	5. LAT.	7. YEAR	11. No. DEPTHS
2. CONS. No.	6. LON.	8. MONTH	12. SOUNDING
3. COUNTRY		9. DAY	13. BT SLIDE No.
4. INSTITUTE		10. TIME	

Explanations:

(1) Cruise number: the 1966 cruises are numbered consecutively from 01 to 19, without regard for the lake involved. (In following years, consecutive numbers will be assigned to each lake separately).

(2) Consecutive station number: the stations within each cruise are numbered in chronological order.

(4) Institute: For filing purposes, the institute code was 22 (Inland Waters Branch, Department of Energy, Mines and Resources).

(5) and (6) indicate the latitude and longitude of the vessel, in degrees, minutes and seconds, at the time of the observations.

(7), (8) and (9) indicate the date of the observations, according to Greenwich Mean Time.

(10) Indicates the messenger time in hours and minutes (Greenwich Mean Time) for the first bottle cast at the station. The hours of each day are numbered from 00 to 23.

(11) The number of depths at which observations were made. This should correspond to the number of depths actually listed. The count is listed to reveal omissions due to the loss of punch-cards.

(12) The sounding is listed in meters, to the nearest meter.

(13) Indicates the bathythermograph slide number corresponding to the particular station. The slides are numbered consecutively within each cruise.

Explanation of the data listing for each station

Parameter Name	Abbreviation (column heading)	Units used in the Data Reports	No. of decimals printed	1966 processing code	1967 (Star System) code
Secchi depth	SECCHI	meters	1	026	030
Sample depth	DEPTH	meters	1	998	001
Temperature	TEMP	°C	2	004	100
Conductance, 18°C.	CON 18	μmhos	0	014	no equivalent
Dissolved oxygen	D 02	mg/L	2	003	245
pH at 25°C.	PH 25	pH units	3	055	215
Turbidity	TURB	Jackson units	1	015	123
B.O.D.	BOD	mg O_2/L/5 days	1	001	239
Total alkalinity	T ALK	mg $CaCO_3$/L	1	051	220
Hardness	HARD	mg $CaCO_3$/L	1	050	300
Chloride	CL	mg/L	1	057	290
Nitrate + nitrite	NO3NO2	mg N/L	3	022	275
Nitrite	NO2	mg N/L	3	021	273
Reactive phosphate	R PO4	mg PO_4/L	3	028	262
Phenol	PHEN	mg C_6H_5OH/L	3	024	410
MF coliforms	MF COL	colonies/100 ml.	*	080	700
MF enterococci	MF ENT	colonies/100 ml.	*	084	706
20°C standard plate count	SPC 20	colonies/ml.	*	082	720
35°C standard plate count	SPC 35	colonies/ml.	*	083	721

Note: The four bacteriological parameters are listed in exponential form:

130E02 = 1.30 X 10^2 = 130.
100E00 = 1.00 X 10^0 = 1.
000E00 = 0.00 X 10^0 = 0.

* Exponential Notation

Note: For some parameters, the analytical methods listed in the Star System manual (Glennie and MacLeod 1967, pp. 23-33) are not the methods used for Data Reports Nos. 1-12.

Methods of Sampling and Measurement

Water sampling was carried out on the port side of the vessel, amidships, where a davit and a "chains" platform were installed. A small wooden deckhouse provided shelter for reading the thermometers and for transferring water from the primary sampling devices to small bottles which were taken to the shipboard laboratory. The sampling procedure together with photographs of the equipment are published in Manuscript Report No. 67-1 of the Public Health Division, Department of National Health and Welfare.

Samples were collected at standard depths of 1, 10, 20, 30, 50, 75, 100, 150 and 200 meters, where the depth of water permitted. The water sampling devices were metal Knudsen bottles with a capacity of 1.2 liters, and polyvinylchloride Van Dorn bottles with capacities of 2 and 3 liters. Oceanographic reversing thermometers, and rubber bulbs for bacteriological sampling, were mounted on the Knudsen bottles.

For bacteriological sampling, a sterile deflated pear-shaped rubber bulb was attached to a Knudsen bottle. A brass plug in the opening of the rubber bulb was pulled out by the reversing Knudsen bottle. (I.J.C. agencies 1966, pp 88-90).

Position (Latitude and longitude) was determined using radar ranges and bearings on identifiable shoreline features. Occasionally, dead-reckoning had to be used when the vessel was far from shore.

Sounding The depth of water at each station was measured with the ship's echo sounder. Corrections for the transducer depth have been applied.

Secchi depth is the depth of disappearance of a white disc, 30 centimeters in diameter, when it is lowered slowly into the water.

Sample depth The length of wire was measured with a meter wheel, using the water surface as the reference level. Wire-angle corrections were applied whenever depths were one meter or more.

Temperature Oceanographic reversing thermometers manufactured by Yoshino Keiko Co. of Japan were lowered in series to all the required depths, and were turned over after five minutes. Later, each thermometer was read twice in the vessel's deckhouse. Scale corrections and thermal-expansion corrections were applied to the readings. There were usually two thermometers on each Knudsen bottle. A single mean temperature value is reported in this final data record, but the individual readings are kept on file at the Canada Centre for Inland Waters. The difference between readings of paired thermometers was usually less than 0.05°C. (U.S. hydrographic Office 1955).

Additional temperature measurements were made with bathythermographs, and with a thermistor thermometer towed at a depth of one meter while the ship was underway. The BT and thermistor data are available on request from the Canada Centre for Inland Waters.

Storage conditions for the chemical samples Most of the analyses reported here were done in the ship's laboratory and were completed within about 12 hours after sampling.

Conductance at 18°C The electrical conductance was measured at laboratory temperature with an "Industrial Instruments" Model RC 16 B2 bridge and a dip cell with cell constant 1.00. At the time of the measurement, the temperature of the sample was measured with a mercury thermometer and recorded to the nearest 0.1°C. These temperature readings varied throughout the survey period, with a range of from 15 to 28°C.

Conductance at 18.0°C listed in the Data Reports Nos. 1 to 12, was computed from Dr. G.K. Rodgers' correction tables for Great Lakes Waters (I.J.C. agencies 1966, p. 51). However, 25°C will be the reference temperature used in future data reports in this series. To convert the conductance at 18.0°C to conductance at 25.0°C, multiply by 1.176.

Dissolved oxygen was measured using the Winkler iodometric method. One milliliter of each reagent was added to each sample. In 1966, the alkaline iodide solution contained 700 grams potassium hydroxide and 150 grams potassium iodide per liter. Azide was not used. (I.J.C. agencies 1968, pp. 67-78).

Oxygen percent saturation may be computed (Dobson 1967) from the measured oxygen concentration and the temperature, using the following equations:

Oxygen percent saturation (Lake Erie and upper Great Lakes)

$$= \frac{100 \text{ (oxygen in mg/L)}}{(14.380 - 0.4105\ T + 0.008800\ T^2 - 0.00009500\ T^3)} \%$$

Oxygen percent saturation (Lake Ontario)

$$= \frac{98.8 \text{ (oxygen in mg/L)}}{(14.380 - 0.4105 + 0.008800\ T^2 - 0.00009500\ T^3)} \%$$

A graph showing percent saturation as a function of oxygen concentration and temperature, according to either of these equations, provides a convenient way to evaluate percent saturation.

pH The pH is an approximate measure of $(-\log H^+)$ where H^+ is the hydrogen ion concentration.

pH	H^+	
7.0	$100. \times 10^{-9}$	gm atoms/liter
7.2	$63. \times 10^{-9}$	gm atoms/liter
7.5	$32. \times 10^{-9}$	gm atoms/liter
8.0	$10. \times 10^{-9}$	gm atoms/liter
8.2	6.3×10^{-9}	gm atoms/liter
8.5	3.2×10^{-9}	gm atoms/liter
9.0	1.0×10^{-9}	gm atoms/liter

Samples were analysed for pH about 10 to 20 hours after sampling. Changes in pH during the storage interval were probably ±0.1 to 0.3 pH units.

The pH near 25°C was measured using a Corning Model 10 meter, and glass and reference electrodes, calibrated with pH 7.4 (phosphate) and pH 9.2 (borax) standard solution. (I.J.C. agencies 1966, pp. 112-120).

Turbidity was measured within 24 hours after sampling, using a Hellige turbidimeter.

B.O.D. (Biochemical oxygen demand) One-liter samples were stored for a few hours so that they attained laboratory temperature. Then air was bubbled through each sample to produce oxygen concentrations near the equilibrium value for that temperature. Two 300-ml B.O.D. bottles were filled from each sample by means of a siphon. Dissolved oxygen in the sample of one of the B.O.D. bottles was measured immediately by the Winkler method. The sample in the other bottle was stored in the dark at 20°C, and after 5 days, its final oxygen concentration was measured. The "B.O.D." was the difference between the initial and final oxygen concentrations. A water seal was maintained around the top of each bottle during incubation. The dilution and seeding procedures of the American Public Health Association (1965, p. 415), were not included.

Alkalinity was measured using an Auto-Analyzer colorimetric instrument system. Samples were mixed with a buffered acidic methyl orange indicator solution. The final color was measured at 550 millimicrons. Standard solutions contained sodium bicarbonate. (I.J.C. agencies 1968, pp. 34-36). The unit for alkalinity in this report is mg $CaCO_3$/liter. The constituents reacting with the hydrogen ion during the alkalinity measurement were assumed to be CO_3^{-2}, and an equivalent amount of Ca^{++} was arbitrarily assumed to be present. Actually most of the alkalinity in Great Lakes waters is HCO_3^-. Conversion factor for alkalinity: 1 mg $CaCO_3$/liter = 1.219 mg HCO_3^-/liter.

Hardness ($Ca^{++} + Mg^{++}$) was measured using an Auto-Analyzer. The sample was mixed with disodium magnesium EDTA + disodium EDTA, then with Eriochrome Black T + pH 10.3 buffer. The resulting color was measured at 520 millimicrons. Standard solutions contained calcium. (I.J.C. agencies 1966, pp. 91-93). Lake-water samples contained some magnesium as well as calcium. The conventional unit, mg $CaCO_3$/L, used in Data Reports Nos. 1 to 12, gives information for ($Ca^{++} + Mg^{++}$), but not for Ca^{++} or CO_3^{-2}. Conversion factor for hardness: 1 mg $CaCO_3$/L = 0.0200 milli-equivalents ($Ca^{++} + Mg^{++}$)/L.

Chloride was measured using an Auto-Analyzer. Unfiltered samples were mixed with ferric ammonium sulfate + nitric acid + mercuric thiocyanate. The resulting color was measured at 480 millimicrons. (I.J.C. agencies 1966, pp. 97-98).

Nitrate + nitrite was measured using an Auto-Analyzer. Samples were not filtered. Nitrate was reduced to nitrite by adding sodium hydroxide, hydrazine sulfate, and copper sulfate. The mixture was passed through a 38°C heating bath. Then total nitrite was measured by adding orthophosphoric acid + sulfanilamide + N-(1-naphthyl) ethylenediamine dihydrochloride, and measuring the resulting color at 520 millimicrons. (I.J.C. agencies 1966, pp. 102-104).

(NO_3 + NO_2) was sampled on cruises 5, 6, 8 and 10, but the results for the 4°C water in Lake Ontario on those cruises were near 0.5 mg N/L, about $2\frac{1}{2}$ times the values found on cruise 66-12 and subsequent cruises in 1966 and 1967. The (NO_3 + NO_2) results for cruises 5, 6, 8 and 10 are probably in error and have been omitted from these final Data Reports. The (NO_3 + NO_2) data for cruise 66-11 on Lake Erie include values near 0.1 mg N/L for the eastern bottom water, which is in agreement with the 1967 data. Therefore the (NO_3 + NO_2) data from cruise 66-11 are probably correct, and have been printed in Data Report No. 8. For cruise 66-12 and following cruises on Lake Ontario, the (NO_3 + NO_2) data for the 4°C water have values near 0.2 mg N/L, which is also in agreement with 1967 results. Therefore the data for cruise 66-12 and later cruises are probably correct, and are included in the final Data Reports.

Nitrite Nitrite in unfiltered samples was measured, using an Auto-Analyzer, by adding sodium hydroxide + ortho-phosphoric acid + sulfanilamide + N-(1-naphthyl) ethylenediamine dihydrochloride. The resulting color was measured at 520 millimicrons. (I.J.C. agencies 1966, pp. 102-104).

Reactive phosphate Phosphate in unfiltered samples was measured, using an Auto-Analyzer, by adding ammonium molybdate + hydrochloric acid + stannous chloride, and measuring the resulting color at 660 millimicrons. (I.J.C. agencies 1966, pp. 94-96).

Ammonia was measured during 1966 on cruises 8, 10, 11, 12, 14, 16, 17 and 18. The maximum value was .072 mg N/L. There were very many results of .000 mg N/L, except for cruise 10 for which the minimum was .020 mg N/L. There was no obvious spatial distribution of the higher values. These data have not been included in the Data Reports Nos. 1 to 12.

Phenol and related substances. The pH of the sample was adjusted to 4.0 by adding ortho-phosphoric acid, and copper sulfate was also added, immediately after sampling. Analyses were done up to one week later. The sample was distilled, and phenol in the distillate was measured by adding ammonium chloride; then, ammonium hydroxide (to produce pH 10.0 ± 0.2), 4-aminoantipyrine and potassium ferricyanide were also added. The resulting color was extracted into chloroform and measured at 460 millimicrons (American Public Health Association 1965, pp. 516-520, distillation step and method A).

Storage conditions for bacteriological samples The analyses began within one or two hours after sampling, except for samples collected between midnight and 7.30 a.m. These night-time samples were stored at 10°C for up to 8 hours before their analyses commenced.

Total coliform density determinations were obtained by membrane filtration techniques using Bacto-m Endo MF Broth. Membranes were incubated at 35°C for 20±2 hours (American Public Health Association 1965, p. 615.

Fecal Streptococcus density determinations were obtained by membrane filtration techniques using Bacto-m Enterococcus Agar. Membranes were

incubated at 35°C (American Public Health Association 1965, p. 619).

20°C and 35°C Standard Plate Counts were made using 1 ml samples mixed with liquified (45°C) Bacto-Plate Count Agar, allowed to solidify and then incubated at 20°C for 48±3 hours or at 35°C for 24±2 hours. (American Public Health Association 1965, p. 592).

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The Canadian Oceanographic Data Centre produced and distributed the preliminary data records, and published final reports in the present series.

The Meteorological Branch of the Department of Transport provided meteorological instruments, and trained the personnel who carried out the weather observations.

Captain R. Caldwell and the crew of the "Brandal" operated the vessel in support of the limnological program.

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CRUISE 66-17, LAKE ONTARIO

C-REF-NO 017
CONS. NO 001
COUNTRY 18
INSTITUTE 22

LAT 43-36-00N
LON 076-33-36W

YEAR 1966
MONTH 09
DAY 20
TIME 1320

NO. DEPTHS 09
SOUNDING 0170
BT SLIDE NO 001

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		18.40	274	9.32	8.410	0.6	1.3	90.0
3.0								
10.0		18.42	275	9.35	8.430	0.5		90.0
20.0		11.87	277	9.52	8.110	0.4		93.0
30.0		4.55	281	12.28	8.060	0.7		94.0
50.0		4.05	280	12.66	8.100	0.5		94.0
75.0		3.95	279	12.80	8.100	0.5		94.0
100.0		3.88	278	12.87	8.090	0.6		94.0
150.0		3.80	282	11.51	8.060	0.3		95.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	126.0	25.0	0.010	0.005	0.010		000E00	000E00
3.0						0.000		
10.0	127.0	25.0	0.011	0.004	0.010		000E00	
20.0	132.0	25.0	0.097	0.003	0.010		100E00	
30.0	134.0	25.0	0.184	0.001	0.025		000E00	
50.0	134.0	25.0	0.185	0.000	0.025		000E00	
75.0	134.0	25.0	0.185	0.000	0.040		000E00	
100.0	134.0	24.0	0.185	0.000	0.025		000E00	
150.0	135.0	23.0	0.200	0.000	0.065		000E00	000E00

DEPTH	SPC 20	SPC 35
1.0	450E03	500E03
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		
150.0	140E01	110E01

C-REF-NO 017
CONS. NO 002
COUNTRY 18
INSTITUTE 22

LAT 43-34-36N
LON 076-37-27W

YEAR 1966
MONTH 09
DAY 20
TIME 1412

NO. DEPTHS 09
SOUNDING 0190
BT SLIDE NO 002

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		18.45	275	9.31	8.400	1.1	0.8	90.0
3.0								
10.0		18.48	274	9.26	8.410	0.7		91.0
20.0		18.45	280	9.29	8.010	0.6		90.0
30.0		5.81	274	11.32	8.410	0.8		94.0
50.0		4.20	279	12.67	8.130	0.5		93.0
75.0		3.94	279	12.81	8.110	0.5		93.0
100.0		3.91	278	12.90	8.110	0.7		93.0
150.0		3.77	281	12.38	8.050	0.2		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	127.0	24.0	0.008	0.002	0.015	0.000	000E00	100E00
3.0								
10.0	127.0	24.0	0.007	0.003	0.010		000E00	
20.0	128.0	25.0	0.007	0.003	0.005		000E00	
30.0	134.0	24.0	0.184	0.001	0.025		000E00	
50.0	134.0	24.0	0.184	0.001	0.050		000E00	
75.0	135.0	24.0	0.184	0.001	0.050		000E00	
100.0	134.0	24.0	0.184	0.001	0.050		000E00	
150.0	132.0	24.0	0.189	0.001	0.050		100E00	000E00

DEPTH	SPC 20	SPC 35
1.0	570E01	180E01
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		
150.0	100E01	800E00

C-REF-NO 017
CONS. NO 003
COUNTRY 18
INSTITUTE 22

LAT 43-31-42N
LON 076-37-45W

YEAR 1966
MONTH 09
DAY 20
TIME 1503

NO. DEPTHS 07
SOUNDING 0150
BT SLIDE NO 003

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		18.26	278	9.51	8.370	0.6	0.8	90.0
10.0		18.28	280	9.45	8.380	0.6		90.0
20.0		18.25	279	9.38	8.320	0.7		90.0
30.0		5.78	282	11.73	8.050	0.4		94.0
50.0		4.25	281	12.59	8.070	0.2		94.0
75.0		3.96	286	12.69	8.090	0.2		94.0
100.0		3.86	282	12.89	8.090	0.2		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	26.0	0.006	0.004	0.005		500E00	000E00
10.0	129.0	26.0	0.006	0.004	0.005		100E00	
20.0	129.0	26.0	0.006	0.004	0.005		100E00	
30.0	133.0	24.0	0.174	0.001	0.025		000E00	
50.0	134.0	24.0	0.190	0.000	0.045		000E00	
75.0	134.0	24.0	0.190	0.000	0.045		100E00	
100.0	134.0	24.0	0.185	0.000	0.045		000E00	100E00

DEPTH	SPC 20	SPC 35
1.0	140E01	430E01
10.0		
20.0		
30.0		
50.0		
75.0		
100.0	300E00	100E01

C-REF-NO 017
CONS. NO 004
COUNTRY 18
INSTITUTE 22

LAT 43-32-54N
LON 076-34-03W

YEAR 1966
MONTH 09
DAY 20
TIME 1550

NO. DEPTHS 08
SOUNDING 0138
BT SLIDE NO 004

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		18.30	279	9.40	8.410	0.7	0.8	90.0
3.0								
10.0		18.32	280	9.40	8.420	0.5		90.0
20.0		18.29	280	9.48	8.430	0.6		90.0
30.0		5.78	284	11.66	8.010	0.3		94.0
50.0		4.10	284	7.13	8.070	0.3		94.0
75.0		3.97	284	12.64	8.080	0.3		94.0
100.0		3.87	284	12.92	8.110	0.4		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	25.0	0.010	0.005	0.005		100E00	000E00
3.0						0.000		
10.0	129.0	25.0	0.010	0.005	0.005		000E00	
20.0	128.0	25.0	0.010	0.005	0.005		700E00	
30.0	134.0	24.0	0.173	0.002	0.020		000E00	
50.0	135.0	24.0	0.184	0.001	0.045		000E00	
75.0	132.0	24.0	0.184	0.001	0.040		000E00	
100.0	134.0	24.0	0.184	0.001	0.045		000E00	

DEPTH	SPC 20	SPC 35
1.0	160E01	170E01
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0	200E00	300E00

C-REF-NO 017	LAT 43-34-12N	YEAR 1966	NO. DEPTHS 08
CONS. NO 005	LON 076-30-24W	MONTH 09	SOUNDING 0114
COUNTRY 18		DAY 20	BT SLIDE NO 005
INSTITUTE 22		TIME 1642	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	3.5	18.08	277	9.63	8.420	0.6	0.9	90.0
3.0								
10.0		18.08	278	9.62	8.450	0.5		90.0
20.0		17.88	278	9.54	8.440	0.4		90.0
30.0		5.46	283	12.04	8.020	0.2		93.0
50.0		4.16	282	12.58	8.060	0.2		93.0
75.0		3.95	282	12.66	8.080	0.3		93.0
100.0		3.96	283	12.04	8.020	0.4		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	127.0	25.0	0.008	0.002	0.005		100E00	200E00
3.0						0.000		
10.0	127.0	25.0	0.008	0.002	0.010		200E00	
20.0	128.0	25.0	0.013	0.002	0.030		700E00	
30.0	134.0	23.0	0.180	0.000	0.010		000E00	
50.0	134.0	23.0	0.185	0.000	0.040		100E00	
75.0	134.0	23.0	0.185	0.000	0.040		200E00	
100.0	134.0	23.0	0.200	0.000	0.055		000E00	200E00

DEPTH	SPC 20	SPC 35
1.0	500E00	500E00
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0	600E00	500E00

C-REF-NO 017
CONS. NO 006
COUNTRY 18
INSTITUTE 22

LAT 43-31-57N
LON 076-27-12W

YEAR 1966
MONTH 09
DAY 20
TIME 1719

NO. DEPTHS 03
SOUNDING 0039
BT SLIDE NO 006

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.79	290	9.34	8.350	0.9	1.0	90.0
10.0		7.47	281	10.43	7.990	0.2		93.0
20.0		4.56	282	11.05	7.990	0.2		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	133.0	28.0	0.022	0.003	0.010		200E00	
10.0	134.0	24.0	0.177	0.003	0.050		110E01	
20.0	135.0	23.0	0.207	0.003	0.060		600E00	

DEPTH	SPC 20	SPC 35
1.0	280E02	460E01
10.0		
20.0		

C-REF-NO 017
CONS. NO 007
COUNTRY 18
INSTITUTE 22

LAT 43-30-54N
LON 076-30-42W

YEAR 1966
MONTH 09
DAY 20
TIME 1758

NO. DEPTHS 06
SOUNDING 0057
BT SLIDE NO 007

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.5	18.20	275	9.51	8.470	0.6	0.8	89.0
3.0								
10.0		18.21	275	9.50	8.490	0.3		90.0
20.0		9.01	280	10.11	8.000	0.2		93.0
30.0		4.89	282	11.47	8.000	0.2		94.0
50.0		4.08	284	11.47	8.000	0.5		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	128.0	25.0	0.002	0.003	0.005		100E01	200E00
3.0						0.000		
10.0	128.0	25.0	0.002	0.003	0.005		100E01	
20.0	132.0	24.0	0.148	0.002	0.040		500E00	
30.0	135.0	24.0	0.194	0.001	0.065		200E00	
50.0	136.0	24.0	0.199	0.001	0.080		200E00	400E00

DEPTH	SPC 20	SPC 35
1.0	620E01	100E01
3.0		
10.0		
20.0		
30.0		
50.0	600E00	400E00

C-REF-NO 017
CONS. NO 008
COUNTRY 18
INSTITUTE 22

LAT 43-29-12N
LON 076-31-24W

YEAR 1966
MONTH 09
DAY 20
TIME 1828

NO. DEPTHS 03
SOUNDING 0015
BT SLIDE NO 008

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.5	18.07	278	9.74	8.450	1.1	0.9	90.0
3.0								
10.0		18.05	277	9.66	8.480	0.9		90.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	127.0	25.0	0.004	0.001	0.010		360E01	420E01
3.0						0.000		
10.0	129.0	27.0	0.004	0.001	0.010		280E01	

DEPTH	SPC 20	SPC 35
1.0	110E02	100E00
3.0		
10.0		

C-REF-NO 017
CONS. NO 009
COUNTRY 18
INSTITUTE 22

LAT 43-30-00N
LON 076-34-12W

YEAR 1966
MONTH 09
DAY 20
TIME 1858

NO. DEPTHS 05
SOUNDING 0064
BT SLIDE NO 009

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.2	18.33	276	9.34	8.460	0.7	0.6	90.0
10.0		18.36	276	9.33	8.450	0.6		90.0
20.0		18.28	276	9.23	8.430	0.3		90.0
30.0		5.95	282	11.13	8.110	0.2		94.0
50.0		4.20	282	11.33	8.020	0.4		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	128.0	26.0	0.006	0.004	0.015		700E00	400E00
10.0	128.0	26.0	0.006	0.004	0.010		300E00	
20.0	129.0	27.0	0.006	0.004	0.025		000E00	
30.0	135.0	25.0	0.190	0.000	0.065		400E00	
50.0	135.0	25.0	0.200	0.000	0.080		400E00	000E00

DEPTH	SPC 20	SPC 35
1.0	200E01	120E01
10.0		
20.0		
30.0		
50.0	460E01	700E00

C-REF-NO 017
CONS. NO 010
COUNTRY 18
INSTITUTE 22

LAT 43-28-42N
LON 076-38-00W

YEAR 1966
MONTH 09
DAY 20
TIME 1937

NO. DEPTHS 06
SOUNDING 0080
BT SLIDE NO 010

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.0	17.84	297	9.50	8.350	0.7	0.7	90.0
10.0		17.88	291	9.40	8.400	0.4		90.0
20.0		17.82	296	9.43	8.380	0.4		90.0
30.0		6.45	284	11.60	8.100	0.2		94.0
50.0		4.11	285	12.33	8.070	0.2		94.0
75.0		3.97	282	11.56	8.030	0.2		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0	35.0	0.012	0.003	0.015		300E01	000E00
10.0	132.0	32.0	0.011	0.004	0.015		200E01	
20.0	135.0	34.0	0.011	0.004	0.015		410E01	
30.0	133.0	24.0	0.164	0.001	0.035		400E00	
50.0	134.0	24.0	0.190	0.000	0.055		000E00	
75.0	134.0	24.0	0.200	0.000	0.060		400E00	170E01

DEPTH	SPC 20	SPC 35
1.0	110E02	180E02
10.0		
20.0		
30.0		
50.0		
75.0	310E01	760E01

C-REF-NO 017
CONS. NO 011
COUNTRY 18
INSTITUTE 22

LAT 43-26-30N
LON 076-34-54W

YEAR 1966
MONTH 09
DAY 20
TIME 2017

NO. DEPTHS 03
SOUNDING 0019
BT SLIDE NO 011

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	2.1	18.11	481	9.86	8.340	1.3	1.6	89.0
3.0								
10.0		17.94	444	9.66	8.380	1.3		90.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	150.0	35.0	0.010	0.005	0.035		250E03	100E00
3.0						0.001		
10.0	150.0	35.0	0.015	0.005	0.035		200E03	

DEPTH	SPC 20	SPC 35
1.0	180E04	750E03
3.0		
10.0		

C-REF-NO 017
CONS. NO 012
COUNTRY 18
INSTITUTE 22

LAT 43-25-51N
LON 076-38-15W

YEAR 1966
MONTH 09
DAY 20
TIME 2055

NO. DEPTHS 03
SOUNDING 0016
BT SLIDE NO 012

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	3.0	17.99	335	9.56	8.400	1.1	1.1	90.0
3.0								
10.0		14.60	291	9.25	8.140	0.3		91.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	140.0	35.0	0.011	0.004	0.100		230E02	200E00
3.0						0.000		
10.0	134.0	30.0	0.071	0.004	0.075		770E01	

DEPTH	SPC 20	SPC 35
1.0	700E03	200E03
3.0		
10.0		

C-REF-NO 017
CONS. NO 013
COUNTRY 18
INSTITUTE 22

LAT 43-22-15N
LON 077-25-48W

YEAR 1966
MONTH 09
DAY 21
TIME 0037

NO. DEPTHS 09
SOUNDING 0180
BT SLIDE NO 013

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.98	279	9.39	8.290	0.5	0.5	90.0
3.0								
10.0		17.00	279	9.45	8.310	0.3		90.0
20.0		16.42	278		8.250	0.3		90.0
30.0		5.81	281	11.74	7.990	0.0		93.0
50.0		4.36	280	12.56	8.030	0.0		93.0
75.0		3.94	280	12.62	8.030	0.1		93.0
100.0		3.88	278	12.70	8.070	0.2		92.0
150.0		3.83	281	12.25	8.050	0.2		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	124.0	26.0	0.022	0.003	0.010		400E00	000E00
3.0						0.000		
10.0	124.0	26.0	0.022	0.003	0.010		100E02	
20.0	127.0	26.0	0.032	0.003	0.010		135E02	
30.0	131.0	25.0	0.170	0.000	0.020		210E01	
50.0	132.0	25.0	0.180	0.000	0.040		300E00	
75.0	132.0	25.0	0.185	0.000	0.035		160E01	
100.0	131.0	25.0	0.180	0.000	0.035		150E01	
150.0	131.0	25.0	0.185	0.000	0.035		110E01	000E00

DEPTH	SPC 20	SPC 35
1.0	420E01	620E01
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		
150.0	500E00	800E00

C-REF-NO 017
CONS. NO 014
COUNTRY 18
INSTITUTE 22

LAT 43-20-33N
LON 077-22-03W

YEAR 1966
MONTH 09
DAY 21
TIME 0136

NO. DEPTHS 07
SOUNDING 0090
BT SLIDE NO 014

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		17.19	280	9.53	8.380	0.3	0.6	89.0
3.0								
10.0		16.10	279	9.53	8.340	0.5		89.0
20.0		4.87	279	12.33	8.070	0.1		92.0
30.0		4.16	280	12.59	8.080	0.4		92.0
50.0		3.96	281	12.65	8.080	0.2		92.0
75.0		3.89	281	12.60	8.040	0.5		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	126.0	27.0	0.013	0.002	0.005		140E02	000E00
3.0						0.001		
10.0	127.0	27.0	0.032	0.003	0.010		190E02	
20.0	132.0	25.0	0.179	0.001	0.035		220E01	
30.0	132.0	25.0	0.179	0.001	0.050		150E01	
50.0	131.0	25.0	0.179	0.001	0.040		170E01	
75.0	131.0	25.0	0.180	0.000	0.045		120E01	000E00

DEPTH	SPC 20	SPC 35
1.0	390E01	120E01
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	160E01	180E01

C-REF-NO 017
CONS. NO 015
COUNTRY 18
INSTITUTE 22

LAT 43-17-30N
LON 077-22-09W

YEAR 1966
MONTH 09
DAY 21
TIME 0217

NO. DEPTHS 03
SOUNDING 0015
BT SLIDE NO 015

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		9.69	280	10.23	8.030	0.4	0.5	92.0
3.0								
10.0		5.71	282	10.94	7.940	0.6		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	25.0	0.153	0.002	0.035		170E02	000E00
3.0						0.000		
10.0	134.0	25.0	0.198	0.002	0.045		550E01	

DEPTH	SPC 20	SPC 35
1.0	640E01	150E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 016
COUNTRY 18
INSTITUTE 22

LAT 43-17-03N
LON 077-26-27W

YEAR 1966
MONTH 09
DAY 21
TIME 0252

NO. DEPTHS 03
SOUNDING 0019
BT SLIDE NO 016

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		9.77	280	10.06	8.030	0.4	0.4	92.0
3.0								
10.0		4.28	281	11.85	8.010	0.5		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	133.0	25.0	0.157	0.003	0.030	0.000	700E01	000E00
3.0								
10.0	134.0	25.0	0.195	0.000	0.055		220E01	

DEPTH	SPC 20	SPC 35
1.0	240E01	570E01
3.0		
10.0		

C-REF-NO 017 LAT 43-19-18N YEAR 1966 NO. DEPTHS 05
CONS. NO 017 LON 077-25-36W MONTH 09 SOUNDING 0058
COUNTRY 18 DAY 21 BT SLIDE NO 017
INSTITUTE 22 TIME 0331

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		11.07	280	10.19	8.110	0.5	0.4	91.0
3.0								
10.0		10.15	280	10.39	8.070	0.5		92.0
20.0		4.42	280	12.31	8.020	0.4		92.0
30.0		4.12	280	12.28	8.010	0.5		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	26.0	0.122	0.003	0.030		300E01	000E00
3.0						0.000		
10.0	132.0	26.0	0.132	0.003	0.030		220E01	
20.0	133.0	25.0	0.185	0.000	0.040		400E00	
30.0	133.0	25.0	0.190	0.000	0.045		200E00	000E00

DEPTH	SPC 20	SPC 35
1.0	140E01	140E01
3.0		
10.0		
20.0		
30.0	800E00	400E00

C-REF-NO 017
CONS. NO 018
COUNTRY 18
INSTITUTE 22

LAT 43-21-00N
LON 077-28-30W

YEAR 1966
MONTH 09
DAY 21
TIME 0413

NO. DEPTHS 08
SOUNDING 0123
BT SLIDE NO 018

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.49	278	9.66	8.290	0.6	0.5	90.0
3.0								
10.0		15.55	279	9.66	8.260	0.6		90.0
20.0		6.90	280	11.20	8.010	0.5		92.0
30.0		4.72	281	12.24	8.040	0.3		92.0
50.0		4.10	281	12.62	8.060	0.7		92.0
75.0		3.93	281	12.68	8.050	0.4		92.0
100.0		3.88	284	11.37	7.930	0.5		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.052	0.003	0.005		870E01	000E00
3.0						0.000		
10.0	129.0	27.0	0.048	0.002	0.005		350E01	
20.0	133.0	25.0	0.175	0.000	0.025		300E00	
30.0	133.0	25.0	0.190	0.000	0.025		200E00	
50.0	133.0	25.0	0.190	0.000	0.050		300E00	
75.0	133.0	25.0	0.185	0.000	0.085		400E00	
100.0	133.0	25.0	0.210	0.000	0.065		000E00	000E00

DEPTH	SPC 20	SPC 35
1.0	710E01	370E01
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0	110E01	700E00

C-REF-NO 017 LAT 43-18-03N YEAR 1966 NO. DEPTHS 05
CONS. NO 019 LON 077-29-09W MONTH 09 SOUNDING 0044
COUNTRY 18 DAY 21 BT SLIDE NO 019
INSTITUTE 22 TIME 0454

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		11.37	281	9.96	8.030	0.7	0.2	93.0
3.0								
10.0		9.36	281	10.53	8.020	0.4		93.0
20.0		4.42	281	12.05	8.010	0.2		95.0
30.0		4.17	283	11.77	7.990	0.7		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	25.0	0.131	0.004	0.020		150E01	000E00
3.0						0.000		
10.0	132.0	25.0	0.153	0.002	0.020		200E01	
20.0	133.0	25.0	0.199	0.001	0.050		600E00	
30.0	133.0	25.0	0.204	0.001	0.045		100E00	200E00

DEPTH	SPC 20	SPC 35
1.0	190E01	210E01
3.0		
10.0		
20.0		
30.0	170E01	150E01

C-REF-NO 017
CONS. NO 020
COUNTRY 18
INSTITUTE 22

LAT 43-15-45N
LON 077-29-57W

YEAR 1966
MONTH 09
DAY 21
TIME 0535

NO. DEPTHS 03
SOUNDING 0015
BT SLIDE NO 020

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		13.10	282	9.51	8.080	1.2	0.2	92.0
3.0								
10.0		4.67	282	11.65	7.980	0.6		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	25.0	0.110	0.005	0.015		400E01	200E00
3.0						0.001		
10.0	133.0	25.0	0.199	0.001	0.050		120E01	

DEPTH	SPC 20	SPC 35
1.0	470E01	620E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 021
COUNTRY 18
INSTITUTE 22

LAT 43-16-42N
LON 077-32-57W

YEAR 1966
MONTH 09
DAY 21
TIME 0609

NO. DEPTHS 02
SOUNDING 0021
BT SLIDE NO 021

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		13.56	280	9.50	8.120	0.9	0.4	92.0
10.0		6.13	282	10.85	8.010	0.3		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	25.0	0.099	0.006	0.015		500E01	
10.0	133.0	25.0	0.202	0.003	0.045		270E01	

DEPTH	SPC 20	SPC 35
1.0	360E01	740E01
10.0		

C-REF-NO 017
CONS. NO 022
COUNTRY 18
INSTITUTE 22

LAT 43-19-06N
LON 077-32-42W

YEAR 1966
MONTH 09
DAY 21
TIME 0706

NO. DEPTHS 05
SOUNDING 0048
BT SLIDE NO 022

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		14.50	280	9.71	8.230	1.1	0.3	92.0
3.0								
10.0		12.19	282	9.88	8.110	0.5		92.0
20.0		4.31	282	11.97	8.000	0.2		93.0
30.0		4.34	283	11.97	7.940	0.3		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	26.0	0.071	0.004	0.015		330E01	000E00
3.0						0.002		
10.0	130.0	26.0	0.111	0.004	0.020		160E01	
20.0	133.0	25.0	0.199	0.001	0.040		110E01	
30.0	134.0	25.0	0.209	0.001	0.035		150E01	000E00

DEPTH	SPC 20	SPC 35
1.0	600E00	220E01
3.0		
10.0		
20.0		
30.0	270E01	390E01

C-REF-NO 017
CONS. NO 023
COUNTRY 18
INSTITUTE 22

LAT 43-22-45N
LON 077-32-09W

YEAR 1966
MONTH 09
DAY 21
TIME 0758

NO. DEPTHS 08
SOUNDING 0122
BT SLIDE NO 023

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.51	276	9.54	8.360	0.8	0.4	91.0
3.0								
9.0		16.52	276	9.54	8.350	0.5		91.0
19.0		8.25	279	10.56	7.920	0.7		93.0
28.0		5.48	281	12.00	7.980	0.6		94.0
47.0		4.22	282	12.40	8.000	0.2		94.0
70.0		3.96	281	12.17	7.990	0.2		94.0
93.0		3.87	282	11.50	7.930	0.5		96.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	26.0	0.040	0.005	0.010		400E00	000E00
3.0						0.000		
9.0	130.0	26.0	0.039	0.006	0.010		700E00	
19.0	132.0	25.0	0.174	0.001	0.025		200E00	
28.0	133.0	25.0	0.184	0.001	0.030		100E01	
47.0	134.0	25.0	0.189	0.001	0.045		100E00	
70.0	135.0	25.0	0.194	0.001	0.050		000E00	
93.0	135.0	25.0	0.209	0.001	0.055		300E00	

DEPTH	SPC 20	SPC 35
1.0	400E00	600E00
3.0		
9.0		
19.0		
28.0		
47.0		
70.0		
93.0	600E00	170E01

C-REF-NO 017
CONS. NO 024
COUNTRY 18
INSTITUTE 22

LAT 43-24-12N
LON 077-35-42W

YEAR 1966
MONTH 09
DAY 21
TIME 0846

NO. DEPTHS 08
SOUNDING 0137
BT SLIDE NO 024

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.34	278	9.53	8.310	0.8	0.4	92.0
3.0								
10.0		16.38	279	9.54	8.300	0.7		92.0
19.0		16.31	278	9.54	8.290	0.3		93.0
29.0		5.98	281	11.48	7.940	0.2		96.0
48.0		4.34	282	12.24	7.960	0.5		96.0
71.0		4.00	282	12.05	7.950	0.2		96.0
95.0		3.87	284	11.37	7.900	0.6		96.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	25.0	0.035	0.005	0.005		150E01	000E00
3.0						0.000		
10.0	129.0	26.0	0.035	0.005	0.005		500E00	
19.0	129.0	26.0	0.040	0.005	0.005		130E01	
29.0	133.0	26.0	0.184	0.001	0.030		100E00	
48.0	133.0	26.0	0.190	0.000	0.045		000E00	
71.0	133.0	26.0	0.200	0.000	0.050		100E00	
95.0	134.0	26.0	0.210	0.000	0.050		000E00	000E00

DEPTH	SPC 20	SPC 35
1.0	780E01	520E01
3.0		
10.0		
19.0		
29.0		
48.0		
71.0		
95.0	150E01	130E01

C-REF-NO 017	LAT 43-21-30N	YEAR 1966	NO. DEPTHS 06
CONS. NO 025	LON 077-36-00W	MONTH 09	SOUNDING 0067
COUNTRY 18		DAY 21	BT SLIDE NO 025
INSTITUTE 22		TIME 0923	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.37	277	9.54	8.290	0.5	0.4	92.0
3.0								
10.0		16.33	279	9.50	8.280	0.6		92.0
20.0		5.24	282	11.57	7.930	0.3		96.0
29.0		4.40	284	11.63	7.900	0.4		96.0
49.0		4.17	284	11.10	7.840	0.4		96.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	128.0	27.0	0.040	0.005	0.005		130E01	
3.0						0.000		
10.0	128.0	27.0	0.040	0.005	0.005		110E01	
20.0	133.0	26.0	0.204	0.001	0.020		530E01	
29.0	132.0	25.0	0.209	0.001	0.025		200E00	
49.0	135.0	25.0	0.219	0.001	0.055		400E00	

DEPTH	SPC 20	SPC 35
1.0	120E01	390E01
3.0		
10.0		
20.0		
29.0		
49.0	200E00	700E00

C-REF-NO 017
CONS. NO 026
COUNTRY 18
INSTITUTE 22

LAT 43-18-21N
LON 077-36-21W

YEAR 1966
MONTH 09
DAY 21
TIME 1002

NO. DEPTHS 03
SOUNDING 0022
BT SLIDE NO 026

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		13.15	280	9.71	8.100	1.2		94.0
3.0								
10.0		4.75	284	11.37	7.940	0.3		96.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	25.0	0.099	0.006	0.035	0.002	550E01	000E00
3.0								
10.0	133.0	25.0	0.213	0.002	0.200		500E00	

DEPTH	SPC 20	SPC 35
1.0	460E01	100E02
3.0		
10.0		

C-REF-NO 017
CONS. NO 027
COUNTRY 18
INSTITUTE 22

LAT 43-20-15N
LON 077-39-39W

YEAR 1966
MONTH 09
DAY 21
TIME 1038

NO. DEPTHS 03
SOUNDING 0026
BT SLIDE NO 027

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		11.47	281	10.10	8.080	0.7	0.4	94.0
3.0								
10.0		4.75	281	11.16	7.910			96.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	26.0	0.121	0.004	0.040		700E01	600E00
3.0						0.000		
10.0	133.0	26.0	0.212	0.003	0.100		160E01	

DEPTH	SPC 20	SPC 35
1.0	170E02	170E02
3.0		
10.0		

C-REF-NO 017
CONS. NO 028
COUNTRY 18
INSTITUTE 22

LAT 43-23-18N
LON 077-39-45W

YEAR 1966
MONTH 09
DAY 21
TIME 1119

NO. DEPTHS 07
SOUNDING 0095
BT SLIDE NO 028

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.04	278	9.65	8.200	0.8		93.0
3.0								
9.0		14.63	279	9.70	8.230	0.5		93.0
19.0		11.04	281	10.23	8.090	0.4		95.0
28.0		5.18	281	11.96	8.000	0.2		95.0
47.0		4.04	281	12.47	8.020	0.3		96.0
70.0		3.87	283	12.05	8.000	0.2		96.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.062	0.003	0.200		700E00	000E00
3.0						0.000		
9.0	129.0	27.0	0.072	0.003	0.025		170E01	
19.0	130.0	26.0	0.126	0.004	0.010		190E01	
28.0	133.0	26.0	0.191	0.004	0.035		000E00	
47.0	134.0	26.0	0.195	0.000	0.040		200E00	
70.0	134.0	26.0	0.200	0.000	0.050		200E00	110E01

DEPTH	SPC 20	SPC 35
1.0	720E01	630E01
3.0		
9.0		
19.0		
28.0		
47.0		
70.0	160E01	110E01

C-REF-NO 017 LAT 43-24-21N YEAR 1966 NO. DEPTHS 05
CONS. NO 029 LON 078-01-03W MONTH 09 SOUNDING 0060
COUNTRY 18 DAY 21 BT SLIDE NO 029
INSTITUTE 22 TIME 1313

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		5.53	283	10.91	7.950	0.8		
3.0								
10.0		5.52	283	10.91	7.950	0.7		
20.0		5.48	283	11.00	7.980	0.4		
30.0		4.14	288	11.45	7.910	0.4		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	128.0		0.208	0.002	0.035		140E01	
3.0						0.000		
10.0	132.0		0.208	0.002	0.065		100E01	
20.0	132.0		0.208	0.002	0.030		400E00	
30.0	132.0		0.208	0.002	0.040		400E00	000E00

DEPTH	SPC 20	SPC 35
1.0	100E01	470E01
3.0		
10.0		
20.0		
30.0	170E01	200E01

C-REF-NO 017
CONS. NO 030
COUNTRY 18
INSTITUTE 22

LAT 43-22-03N
LON 078-47-39W

YEAR 1966
MONTH 09
DAY 21
TIME 1706

NO. DEPTHS 05
SOUNDING 0057
BT SLIDE NO 030

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		4.59	289	11.25	7.890	1.2		
3.0								
10.0		4.61	285	11.22	7.910	0.5		
20.0		4.58	286	11.33	7.920	0.7		
30.0		4.55	284	11.23	7.920	0.8		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	133.0		0.208	0.002	0.050		160E01	000E00
3.0						0.000		
10.0	133.0		0.208	0.002	0.060		160E01	
20.0	133.0		0.208	0.002	0.080		140E01	
30.0	132.0		0.213	0.002	0.055		140E01	000E00

DEPTH	SPC 20	SPC 35
1.0	310E01	180E01
3.0		
10.0		
20.0		
30.0	420E01	800E00

C-REF-NO 017	LAT 43-23-45N	YEAR 1966	NO. DEPTHS 07
CONS. NO 031	LON 078-51-12W	MONTH 09	SOUNDING 0103
COUNTRY 18		DAY 21	BT SLIDE NO 031
INSTITUTE 22		TIME 1759	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		5.62	284	11.05	7.910	0.3	0.3	
3.0								
10.0		5.66	283	11.05	7.900	0.6		
20.0		5.53	284	11.10	7.890	0.4		
30.0		5.49	285	11.14	7.890	0.7		
50.0		5.67	284	11.08	7.900	0.4		
75.0		4.04	282	13.11	7.950	0.2		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0		0.197	0.003	0.025		800E00	000E00
3.0						0.000		
10.0	132.0		0.198	0.002	0.035		600E00	
20.0	132.0		0.198	0.002	0.030		800E00	
30.0	132.0		0.198	0.002	0.025		100E01	
50.0	132.0		0.198	0.002	0.035		800E00	
75.0	132.0		0.198	0.002	0.025		120E01	000E00

DEPTH	SPC 20	SPC 35
1.0	340E01	600E00
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	220E01	220E01

C-REF-NO 017
CONS. NO 032
COUNTRY 18
INSTITUTE 22

LAT 43-20-21N
LON 078-51-12W

YEAR 1966
MONTH 09
DAY 21
TIME 1849

NO. DEPTHS 04
SOUNDING 0033
BT SLIDE NO 032

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	3.9	5.06	283	11.02	7.920	0.9	0.3	
3.0								
10.0		5.03	286	11.00	7.910	0.5		
20.0		4.75	285	11.16	7.910	0.4		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0		0.207	0.003	0.050		300E01	000E00
3.0						0.001		
10.0	135.0		0.207	0.003	0.055		230E01	
20.0	135.0		0.213	0.002	0.050		130E01	

DEPTH	SPC 20	SPC 35
1.0	820E01	130E01
3.0		
10.0		
20.0		

C-REF-NO 017 LAT 43-22-12N YEAR 1966 NO. DEPTHS 08
CONS. NO 033 LON 078-54-42W MONTH 09 SOUNDING 0093
COUNTRY 18 DAY 21 BT SLIDE NO 033
INSTITUTE 22 TIME 1921

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	10.0	4.90	284	11.65	7.960	0.3	0.2	
3.0								
10.0		4.79	283	11.71	7.960	0.0		
20.0		4.77	282	11.76	7.960	0.2		
30.0		4.59	282	11.91	7.960	0.3		
50.0		3.97	281	12.44	8.030	0.1		
75.0		3.95	287	10.57	7.910	0.2		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0		0.198	0.002	0.020		800E00	000E00
3.0						0.000		
10.0	131.0		0.198	0.002	0.030		120E01	
20.0	132.0		0.193	0.002	0.035		600E00	
30.0	134.0		0.198	0.002	0.035			
50.0	133.0		0.190	0.000	0.045		600E00	
75.0	136.0		0.229	0.001	0.080		200E01	100E00

DEPTH	SPC 20	SPC 35
1.0	320E01	900E00
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	630E01	270E01

C-REF-NO 017
CONS. NO 034
COUNTRY 18
INSTITUTE 22

LAT 43-19-12N
LON 078-54-51W

YEAR 1966
MONTH 09
DAY 21
TIME 2011

NO. DEPTHS 03
SOUNDING 0016
BT SLIDE NO 034

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.2	4.60	282	11.05	7.960	0.5	0.2	
3.0								
10.0		4.60	282	10.03	7.960	0.3		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	135.0		0.214	0.001	0.050		100E01	400E00
3.0						0.001		
10.0	135.0		0.219	0.001	0.055		130E01	

DEPTH	SPC 20	SPC 35
1.0	260E01	150E01
3.0		
10.0		

C-REF-NO 017 LAT 43-21-03N YEAR 1966 NO. DEPTHS 05
CONS. NO 035 LON 078-58-30W MONTH 09 SOUNDING 0079
COUNTRY 18 DAY 21 BT SLIDE NO 035
INSTITUTE 22 TIME 2100

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	9.0	4.94	283	11.31	8.000	0.5	0.2	
10.0		4.95	286	11.37	7.990	0.2		
20.0		4.79	278	11.39	7.940	0.1		
30.0		4.11	280	12.01	7.990	0.2		
50.0		4.13	281	11.39	7.940	0.1		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0		0.198	0.002	0.025		800E00	
10.0	134.0		0.204	0.001	0.025		200E00	
20.0	134.0		0.204	0.001	0.030		400E00	
30.0	133.0		0.214	0.001	0.035		200E00	
50.0	134.0		0.214	0.001	0.050		200E00	

DEPTH	SPC 20	SPC 35
1.0	180E01	170E01
10.0		
20.0		
30.0		
50.0	120E01	240E01

C-REF-NO 017
CONS. NO 036
COUNTRY 18
INSTITUTE 22

LAT 43-17-54N
LON 078-58-33W

YEAR 1966
MONTH 09
DAY 21
TIME 2131

NO. DEPTHS 02
SOUNDING 0011
BT SLIDE NO 036

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	3.5	5.95	282	10.83	7.930	1.1	0.2	
3.0								

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0		0.207	0.003	0.040		130E01	000E00
3.0						0.000		

DEPTH	SPC 20	SPC 35
1.0	120E02	330E01
3.0		

C-REF-NO 017 LAT 43-17-30N YEAR 1966 NO. DEPTHS 02
CONS. NO 037 LON 079-01-51W MONTH 09 SOUNDING 0007
COUNTRY 18 DAY 21 BT SLIDE NO 037
INSTITUTE 22 TIME 2159

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	2.7	6.22	281	10.83	7.930	1.5	0.2	
3.0								

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	135.0		0.198	0.002	0.045		100E01	000E00
3.0						0.000		

DEPTH	SPC 20	SPC 35
1.0	120E02	610E01
3.0		

C-REF-NO 017
CONS. NO 038
COUNTRY 18
INSTITUTE 22

LAT 43-19-30N
LON 079-02-00W

YEAR 1966
MONTH 09
DAY 21
TIME 2232

NO. DEPTHS 03
SOUNDING 0016
BT SLIDE NO 038

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.5	5.86	282	10.96	7.920	1.1	0.0	93.0
3.0								
10.0		5.86	282	10.94	7.940	1.2		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0	26.0	0.198	0.002	0.065		100E01	100E00
3.0						0.000		
10.0	133.0	28.0	0.207	0.003	0.045		180E01	

DEPTH	SPC 20	SPC 35
1.0	840E01	970E01
3.0		
10.0		

C-REF-NO 017	LAT 43-18-57N	YEAR 1966	NO. DEPTHS 02
CONS. NO 039	LON 079-06-12W	MONTH 09	SOUNDING 0013
COUNTRY 18		DAY 21	BT SLIDE NO 039
INSTITUTE 22		TIME 2311	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		14.56		9.93	8.230		0.4	92.0
3.0								

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0	28.0	0.071	0.004	0.060		850E03	110E02
3.0						0.000		

DEPTH	SPC 20	SPC 35
1.0	180E04	900E03
3.0		

C-REF-NO 017
CONS. NO 040
COUNTRY 18
INSTITUTE 22

LAT 43-16-57N
LON 079-09-21W

YEAR 1966
MONTH 09
DAY 21
TIME 2347

NO. DEPTHS 02
SOUNDING 0014
BT SLIDE NO 040

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		14.00	279	9.85	8.240	0.9		91.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0	25.0	0.065	0.005	0.020			

DEPTH	SPC 20	SPC 35
1.0		

C-REF-NO 017
CONS. NO 041
COUNTRY 18
INSTITUTE 22

LAT 43-18-30N
LON 079-12-36W

YEAR 1966
MONTH 09
DAY 22
TIME 0024

NO. DEPTHS 06
SOUNDING 0081
BT SLIDE NO 041

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		14.69	278	9.68	8.280	1.2	0.5	92.0
3.0								
10.0		14.34	281	9.77	8.190	0.8		92.0
20.0		10.18	281	9.85	8.040	1.3		92.0
30.0		7.33	283	10.63	7.980	2.4		93.0
50.0		5.44	281	11.23	7.990	1.2		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0	25.0	0.055	0.005	0.015		110E02	000E00
3.0						0.001		
10.0	134.0	25.0	0.064	0.006	0.025		500E01	
20.0	135.0	24.0	0.136	0.004	0.065		200E02	
30.0	135.0	24.0	0.181	0.004	0.060		300E03	
50.0	135.0	24.0	0.196	0.004	0.045		360E02	130E01

DEPTH	SPC 20	SPC 35
1.0	120E02	920E01
3.0		
10.0		
20.0		
30.0		
50.0	600E02	550E02

C-REF-NO 017
CONS. NO 042
COUNTRY 18
INSTITUTE 22

LAT 43-17-27N
LON 079-16-21W

YEAR 1966
MONTH 09
DAY 22
TIME 0109

NO. DEPTHS 06
SOUNDING 0080
BT SLIDE NO 042

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.89	277	9.51	8.350	0.6	0.6	91.0
3.0								
10.0		15.89	277	9.50	8.320	0.7		91.0
20.0		15.56	276	9.51	8.370	1.1		91.0
30.0		12.56	278	9.71	8.150	0.8		92.0
50.0		6.38	282	10.39	7.970	0.7		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	25.0	0.022	0.003	0.015	0.000	000E00	100E00
3.0								
10.0	132.0	25.0	0.022	0.003	0.010		000E00	
20.0	133.0	25.0	0.026	0.004	0.010		400E00	
30.0	134.0	25.0	0.095	0.005	0.015		800E00	
50.0	135.0	24.0	0.196	0.004	0.035		300E02	300E00

DEPTH	SPC 20	SPC 35
1.0	220E02	300E00
3.0		
10.0		
20.0		
30.0		
50.0	110E03	550E02

C-REF-NO 017	LAT 43-14-21N	YEAR 1966	NO. DEPTHS 03
CONS. NO 043	LON 079-16-42W	MONTH 09	SOUNDING 0022
COUNTRY 18		DAY 22	BT SLIDE NO 043
INSTITUTE 22		TIME 0149	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.73	279	10.31	8.350	1.8	0.6	91.0
3.0								
10.0		15.71	276	9.51	8.370	1.6		91.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	24.0	0.021	0.004	0.025		200E00	000E00
3.0						0.001		
10.0	133.0	24.0	0.026	0.004	0.055		000E00	

DEPTH	SPC 20	SPC 35
1.0	430E01	110E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 044
COUNTRY 18
INSTITUTE 22

LAT 43-13-03N
LON 079-20-24W

YEAR 1966
MONTH 09
DAY 22
TIME 0226

NO. DEPTHS 03
SOUNDING 0019
BT SLIDE NO 044

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.75	276	9.54	8.370	1.2	0.8	90.0
3.0								
10.0		15.77	277	9.56	8.380	1.4		90.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	24.0	0.026	0.004	0.035		200E00	000E00
3.0						0.001		
10.0	132.0	24.0	0.027	0.003	0.015		200E00	

DEPTH	SPC 20	SPC 35
1.0	640E01	140E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 045
COUNTRY 18
INSTITUTE 22

LAT 43-16-06N
LON 079-20-00W

YEAR 1966
MONTH 09
DAY 22
TIME 0313

NO. DEPTHS 06
SOUNDING 0062
BT SLIDE NO 045

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.86	278	9.53	8.400	1.4	0.6	89.0
3.0								
10.0		15.85	277	9.50	8.400	1.8		90.0
20.0		15.84	276	9.50	8.410	1.4		91.0
30.0		15.78	277	9.62	8.420	1.2		90.0
50.0		11.65	282	9.23	8.050	1.5		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	24.0	0.026	0.004	0.025		000E00	000E00
3.0						0.000		
10.0	133.0	25.0	0.026	0.004	0.025		000E00	
20.0	134.0	26.0	0.038	0.007	0.015		000E00	
30.0	133.0	26.0	0.041	0.004	0.015		200E00	
50.0	135.0	25.0	0.105	0.005	0.020		200E00	000E00

DEPTH	SPC 20	SPC 35
1.0	280E01	700E00
3.0		
10.0		
20.0		
30.0		
50.0	580E01	170E01

C-REF-NO 017
CONS. NO 046
COUNTRY 18
INSTITUTE 22

LAT 43-20-21N
LON 079-16-15W

YEAR 1966
MONTH 09
DAY 22
TIME 0421

NO. DEPTHS 07
SOUNDING 0098
BT SLIDE NO 046

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.41	278	9.77	8.400	1.0	0.9	90.0
3.0								91.0
10.0		15.24	278	9.71	8.380	0.8		92.0
20.0		9.74	283	10.25	8.020	0.7		93.0
30.0		7.47	282	10.42	7.980	0.6		92.0
50.0		4.93	281	11.08	7.940	0.4		93.0
75.0		4.16	280	11.39	8.040	0.5		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	25.0	0.026	0.004	0.010	0.000	200E00	000E00
3.0							600E00	
10.0	133.0	25.0	0.026	0.004	0.010		100E01	
20.0	135.0	25.0	0.136	0.004	0.020		600E00	
30.0	136.0	25.0	0.172	0.003	0.020		000E00	
50.0	136.0	24.0	0.198	0.002	0.030		200E00	000E00
75.0	136.0	25.0	0.193	0.002	0.035			

DEPTH	SPC 20	SPC 35
1.0	560E01	600E00
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	240E01	100E01

C-REF-NO 017
CONS. NO 047
COUNTRY 18
INSTITUTE 22

LAT 43-21-27N
LON 079-12-42W

YEAR 1966
MONTH 09
DAY 22
TIME 0505

NO. DEPTHS 07
SOUNDING 0102
BT SLIDE NO 047

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		7.02	282	10.83	8.010	1.4	0.3	93.0
3.0								
10.0		7.00	282	10.88	8.000	1.4		93.0
20.0		6.92	281	10.82	8.000	1.4		92.0
30.0		6.43	283	10.91	7.990	0.9		93.0
50.0		4.64	282	11.37	7.980	1.0		92.0
75.0		4.19	282	11.31	7.960	1.0		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	135.0	24.0	0.182	0.003	0.050		200E01	300E00
3.0						0.000		
10.0	136.0	24.0	0.182	0.003	0.040		100E02	
20.0	134.0	24.0	0.182	0.003	0.040		300E01	
30.0	135.0	24.0	0.187	0.003	0.035		100E02	
50.0	135.0	24.0	0.203	0.002	0.040		600E01	
75.0	135.0	24.0	0.214	0.001	0.055		200E01	300E00

DEPTH	SPC 20	SPC 35
1.0	390E02	440E02
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	130E02	430E01

C-REF-NO 017
CONS. NO 048
COUNTRY 18
INSTITUTE 22

LAT 43-19-54N
LON 079-09-00W

YEAR 1966
MONTH 09
DAY 22
TIME 0547

NO. DEPTHS 06
SOUNDING 0082
BT SLIDE NO 048

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.65	279	9.60	8.420	0.9	0.5	90.0
10.0		14.55	280	9.84	8.300	0.9		91.0
20.0		9.11	282	10.46	8.050	1.4		91.0
30.0		7.54	281	10.79	8.030	1.5		91.0
50.0		5.90	282	11.05	7.990	1.5		91.0
75.0		4.19	281	11.37	7.950	0.7		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	24.0	0.022	0.003	0.015		400E00	000E00
10.0	133.0	24.0	0.051	0.004	0.015		600E00	
20.0	135.0	24.0	0.158	0.002	0.030		000E00	
30.0	135.0	24.0	0.178	0.002	0.050		200E02	
50.0	142.0	30.0	0.268	0.002	0.040		100E02	
75.0	136.0	25.0	0.219	0.001	0.045		300E01	200E00

DEPTH	SPC 20	SPC 35
1.0	620E01	130E01
10.0		
20.0		
30.0		
50.0		
75.0	170E02	160E02

C=REF=NO 017	LAT 43-22-54N	YEAR 1966	NO. DEPTHS 07
CONS. NO 049	LON 079-08-48W	MONTH 09	SOUNDING 0109
COUNTRY 18		DAY 22	BT SLIDE NO 049
INSTITUTE 22		TIME 0634	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		9.42	282	10.56	8.060	1.2	0.3	92.0
3.0								
10.0		9.13	284	10.62	8.050	0.7		92.0
20.0		8.89	284	10.63	8.040	1.2		92.0
30.0		8.29	281	10.68	8.040	0.8		92.0
50.0		4.85	280	11.26	7.960	0.4		92.0
75.0		4.15	283	11.68	8.000	0.6		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	135.0	26.0	0.147	0.003	0.035		200E01	400E00
3.0						0.000		
10.0	135.0	27.0	0.162	0.003	0.040		200E01	
20.0	135.0	26.0	0.152	0.003	0.030		100E01	
30.0	135.0	26.0	0.158	0.002	0.025		600E01	
50.0	135.0	26.0	0.199	0.001	0.025		200E01	
75.0	133.0	25.0	0.209	0.001	0.035		400E01	300E00

DEPTH	SPC 20	SPC 35
1.0	310E03	400E03
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	330E02	110E02

C-REF-NO 017
CONS. NO 050
COUNTRY 18
INSTITUTE 22

LAT 43-21-06N
LON 079-05-12W

YEAR 1966
MONTH 09
DAY 22
TIME 0720

NO. DEPTHS 07
SOUNDING 0086
BT SLIDE NO 050

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.32	279	9.74	8.400	0.8	0.4	90.0
3.0								
10.0		13.53	282	9.77	8.230	0.6		90.0
20.0		10.94	280	10.16	8.090	0.6		90.0
30.0		9.05	282	10.33	8.040	0.9		92.0
50.0		7.29	284	10.63	7.990	1.4		92.0
75.0		5.53	283	10.96	7.980	1.0		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	26.0	0.026	0.004	0.015		200E00	100E00
3.0						0.000		
10.0	133.0	20.0	0.076	0.004	0.025		140E01	
20.0	134.0	25.0	0.131	0.004	0.025		100E02	
30.0	135.0	25.0	0.152	0.003	0.025		100E02	
50.0	135.0	25.0	0.183	0.002	0.050		500E02	
75.0	135.0	25.0	0.198	0.002	0.050		400E02	170E01

DEPTH	SPC 20	SPC 35,
1.0	150E01	900E00
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	600E03	100E03

C-REF-NO 017
CONS. NO 051
COUNTRY 18
INSTITUTE 22

LAT 43-24-12N
LON 079-05-03W

YEAR 1966
MONTH 09
DAY 22
TIME 0805

NO. DEPTHS 08
SOUNDING 0112
BT SLIDE NO 051

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		9.19	282	10.59	8.070	0.6	0.2	93.0
3.0								
10.0		8.76	283	10.63	8.060	0.7		93.0
20.0		6.80	283	11.16	8.030	0.5		91.0
30.0		4.74	283	12.11	8.010	0.6		91.0
50.0		4.11	284	12.50	8.040	0.2		91.0
75.0		3.93	281	12.54	8.070	0.2		91.0
100.0		3.88	288	10.03	7.900	0.4		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0	25.0	0.147	0.003	0.025		800E01	280E01
3.0						0.000		
10.0	134.0	26.0	0.152	0.003	0.020		500E01	
20.0	134.0	25.0	0.178	0.002	0.020		400E00	
30.0	134.0	25.0	0.194	0.001	0.025		700E00	
50.0	134.0	25.0	0.194	0.001	0.035		100E01	
75.0	133.0	25.0	0.194	0.001	0.040		400E00	
100.0	138.0	25.0	0.239	0.001	0.085		160E01	100E00

DEPTH	SPC 20	SPC 35
1.0	440E02	380E02
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0	830E01	120E01

C-REF-NO 017
CONS. NO 052
COUNTRY 18
INSTITUTE 22

LAT 43-22-39N
LON 079-01-45W

YEAR 1966
MONTH 09
DAY 22
TIME 0845

NO. DEPTHS 07
SOUNDING 0099
BT SLIDE NO 052

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		12.49	295	9.90	8.170	0.8	0.3	91.0
3.0								
10.0		10.42	285	10.31	8.090	0.8		90.0
20.0		7.96	282	10.64	8.010	0.6		91.0
30.0		6.04	287	10.95	7.960	0.2		91.0
50.0		4.46	283	11.97	7.990	0.2		90.0
75.0		4.11	283	11.91	7.990	0.0		90.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0	25.0	0.096	0.004	0.020		100E02	170E01
3.0						0.000		
10.0	133.0	25.0	0.132	0.003	0.020		100E03	
20.0	134.0	25.0	0.162	0.003	0.025		110E02	
30.0	135.0	25.0	0.188	0.002	0.035		700E01	
50.0	135.0	25.0	0.200	0.000	0.020		600E01	
75.0	135.0	25.0	0.210	0.000	0.045		300E01	000E00

DEPTH	SPC 20	SPC 35
1.0		270E02
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	560E01	180E01

C-REF-NO 017
CONS. NO 053
COUNTRY 18
INSTITUTE 22

LAT 43-25-39N
LON 079-01-33W

YEAR 1966
MONTH 09
DAY 22
TIME 0927

NO. DEPTHS 08
SOUNDING 0114
BT SLIDE NO 053

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		6.52	284	11.46	8.010	0.3	0.1	90.0
3.0								
10.0		6.03	282	11.69	7.990	0.2		91.0
20.0		4.99	282	12.11	7.990	0.6		91.0
30.0		4.15	281	12.72	8.050	0.4		91.0
50.0		3.96	281	12.83	8.050	0.2		92.0
75.0		3.91	283	12.73	8.060	0.2		91.0
100.0		3.85	292	10.67	7.910	1.2		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	134.0	25.0	0.182	0.003	0.020		400E00	000E00
3.0						0.000		
10.0	134.0	25.0	0.183	0.002	0.030		200E00	
20.0	134.0	25.0	0.188	0.002	0.030		200E00	
30.0	134.0	25.0	0.194	0.001	0.055		400E00	
50.0	134.0	25.0	0.194	0.001	0.040		000E00	
75.0	134.0	25.0	0.224	0.001	0.035		600E00	
100.0	138.0	26.0	0.239	0.001	0.090		400E00	000E00

DEPTH	SPC 20	SPC 35
1.0		220E01
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		150E01

C-REF-NO 017
CONS. NO 054
COUNTRY 18
INSTITUTE 22

LAT 43-23-57N
LON 078-58-00W

YEAR 1966
MONTH 09
DAY 22
TIME 1018

NO. DEPTHS 07
SOUNDING 0104
BT SLIDE NO 054

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		5.66	286	11.07	7.950	0.6	0.1	92.0
3.0								
10.0		5.51	287	11.10	7.950	0.2		92.0
20.0		5.33	286	11.10	7.930	0.4		92.0
30.0		4.99	285	10.97	7.930	0.8		94.0
50.0		4.89	286	11.17	7.940	0.5		94.0
75.0		4.13	286	11.86	7.980	0.1		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	136.0	26.0	0.201	0.004	0.035		700E01	100E00
3.0						0.000		
10.0	136.0	26.0	0.201	0.004	0.020		200E01	
20.0	137.0	26.0	0.197	0.003	0.035		180E01	
30.0	132.0	27.0	0.198	0.002	0.050		600E00	
50.0	138.0	27.0	0.198	0.002	0.040		800E00	
75.0	136.0	34.0	0.198	0.002	0.060		400E00	100E00

DEPTH	SPC 20	SPC 35
1.0		160E02
3.0		
10.0		
20.0		
30.0		
50.0		
75.0	180E01	800E00

C-REF-NO 017
CONS. NO 055
COUNTRY 18
INSTITUTE 22

LAT 43-26-54N
LON 078-57-48W

YEAR 1966
MONTH 09
DAY 22
TIME 1104

NO. DEPTHS 08
SOUNDING 0128
BT SLIDE NO 055

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		11.21	282	10.47	8.130	0.3	0.4	94.0
3.0								
10.0		9.40	282	10.78	8.060	0.2		94.0
20.0		7.83	281	11.17	8.020	0.2		94.0
30.0		5.56	283	11.86	8.010	0.1		94.0
50.0		4.00	283	12.86	8.040	0.2		94.0
75.0		3.90	282	12.89	8.060	0.0		94.0
100.0		3.83	281	12.80	8.070	0.1		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	28.0	0.105	0.005	0.030		000E00	000E00
3.0						0.000		
10.0	131.0	28.0	0.131	0.004	0.025		200E00	
20.0	130.0	28.0	0.151	0.004	0.055		000E00	
30.0	132.0	29.0	0.173	0.002	0.075		000E00	
50.0	132.0	30.0	0.184	0.001	0.065		000E00	
75.0	135.0	30.0	0.184	0.001	0.050		000E00	
100.0	135.0	28.0	0.184	0.001	0.040		200E00	180E01

DEPTH	SPC 20	SPC 35
1.0	700E00	210E01
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0	800E00	900E00

C-REF-NO 017
CONS. NO 056
COUNTRY 18
INSTITUTE 22

LAT 43-25-18N
LON 078-54-24W

YEAR 1966
MONTH 09
DAY 22
TIME 1149

NO. DEPTHS 08
SOUNDING 0117
BT SLIDE NO 056

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		6.85	282	11.18	7.990	0.8	0.2	93.0
3.0								
10.0			284	11.60		0.5		93.0
20.0			283	11.26		0.2		94.0
30.0		6.28	282	11.82	7.990	0.3		94.0
50.0		4.48	284	12.72	8.050	0.0		94.0
75.0		4.00	283	12.72	8.070	0.1		94.0
100.0		3.88	284	11.71	8.000	0.2		95.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	28.0	0.170	0.005	0.060		000E00	000E00
3.0						0.000		
10.0	132.0	28.0	0.177	0.003	0.040			
20.0	131.0	28.0	0.177	0.003	0.045		200E00	
30.0	134.0	28.0	0.192	0.003	0.065		000E00	
50.0	131.0	29.0	0.183	0.002	0.075		200E00	
75.0	132.0	29.0	0.183	0.002	0.085		000E00	
100.0	132.0	30.0	0.203	0.002	0.115		200E00	000E00

DEPTH	SPC 20	SPC 35
1.0	270E01	120E01
3.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0	800E00	800E00

C-REF-NO 017
CONS. NO 057
COUNTRY 18
INSTITUTE 22

LAT 43-29-00N
LON 078-43-00W

YEAR 1966
MONTH 09
DAY 22
TIME 1310

NO. DEPTHS 07
SOUNDING 0152
BT SLIDE NO 057

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		10.05	278	10.83	8.120	0.6	0.4	92.0
10.0		9.12	279	10.90	8.110	0.5		93.0
20.0		6.56	280	11.76	8.100	0.2		94.0
30.0		4.71	279	12.45	8.040	0.5		94.0
50.0		4.32	280	12.53	8.040	0.2		94.0
75.0		4.08	278	12.69	8.060	0.5		94.0
100.0			280	12.78		0.4		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	132.0	27.0	0.125	0.005	0.070		400E00	200E00
10.0	132.0	27.0	0.146	0.004	0.225		400E00	
20.0	132.0	27.0	0.157	0.003	0.065		000E00	
30.0	132.0	27.0	0.188	0.002	0.130		100E00	
50.0	132.0	27.0	0.188	0.002	0.110		100E00	
75.0	132.0	28.0	0.198	0.002	0.290		100E00	
100.0	132.0	27.0	0.193	0.002	0.290		000E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		

C-REF-NO 017
CONS. NO 058
COUNTRY 18
INSTITUTE 22

LAT 43-24-09N
LON 078-29-21W

YEAR 1966
MONTH 09
DAY 22
TIME 1448

NO. DEPTHS 04
SOUNDING 0053
BT SLIDE NO 058

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		5.23	280	11.26	7.960	1.3	0.3	94.0
10.0		4.92	281	11.09	7.940	0.5		95.0
20.0		4.55	283	11.14	7.920	0.7		95.0
30.0		4.56	281	11.15	7.930	0.9		95.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	133.0	27.0	0.221	0.004	0.135		500E00	000E00
10.0	135.0	28.0	0.226	0.004	0.230		700E00	
20.0	135.0	27.0	0.227	0.003	0.270		150E01	
30.0	131.0	27.0	0.214	0.001	0.075		120E01	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		

C-REF-NO 017
CONS. NO 059
COUNTRY 18
INSTITUTE 22

LAT 43-27-30N
LON 078-14-54W

YEAR 1966
MONTH 09
DAY 22
TIME 1618

NO. DEPTHS 07
SOUNDING 0123
BT SLIDE NO 059

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	9.0	5.74	280	11.40	7.940	0.5	0.2	94.0
10.0		5.41	281	11.48	7.950	0.2		95.0
20.0		5.18	281	11.62	7.960	0.5		
30.0		4.58	282	11.93	7.980	0.2		
50.0		4.01	281	12.62	8.050	0.2		
75.0		3.96	280	12.36	8.030	0.6		
100.0		3.93	285	10.30	7.890	0.8		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	27.0	0.187	0.003	0.035		500E00	100E00
10.0	136.0	27.0	0.197	0.003	0.030		400E00	
20.0	131.0		0.202	0.003	0.075		300E00	
30.0	131.0		0.193	0.002	0.030		100E00	
50.0	132.0		0.193	0.002	0.075		300E00	
75.0	135.0		0.198	0.002	0.080		000E00	
100.0	136.0		0.198	0.002	0.250		300E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		

C-REF-NO 017
CONS. NO 060
COUNTRY 18
INSTITUTE 22

LAT 43-24-24N
LON 078-01-00W

YEAR 1966
MONTH 09
DAY 22
TIME 1738

NO. DEPTHS 04
SOUNDING 0051
BT SLIDE NO 060

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.0	4.88	283	11.02	7.900	0.8	0.2	
10.0		4.88	285	11.03	7.890	0.7		
20.0		4.79	286	11.05	7.900	1.9		
30.0		4.57	285	11.20	7.900	0.9		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	133.0		0.208	0.002	0.030		300E00	100E01
10.0	119.0		0.018	0.002	0.030		160E01	
20.0	132.0		0.208	0.002	0.030		200E00	
30.0	132.0		0.208	0.002	0.090		100E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		

C-REF-NO 017	LAT 43-26-18N	YEAR 1966	NO. DEPTHS 07
CONS. NO 061	LON 077-46-12W	MONTH 09	SOUNDING 0128
COUNTRY 18		DAY 22	BT SLIDE NO 061
INSTITUTE 22		TIME 1906	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.5	7.92	284	11.00	8.000	0.4	0.4	
10.0		6.56	284	10.91	7.950	0.6		
20.0		6.19	284	10.86	7.940	0.8		
30.0		4.68	284	12.30	8.020	0.4		
50.0		3.98	282	12.71	8.070	0.5		
75.0		3.89	282	12.70	8.070	0.3		
100.0		3.83	287	12.33	8.020	0.6		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0		0.173	0.002	0.040		500E00	300E00
10.0	131.0		0.183	0.002	0.055		800E00	
20.0	132.0		0.189	0.001	0.060		600E00	
30.0	131.0		0.199	0.001	0.215		700E00	
50.0	132.0		0.189	0.001	0.110		100E00	
75.0	132.0		0.189	0.001	0.040		100E00	
100.0	132.0		0.194	0.001	0.075		400E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		

C-REF-NO 017
CONS. NO 062
COUNTRY 18
INSTITUTE 22

LAT 43-23-12N
LON 077-39-00W

YEAR 1966
MONTH 09
DAY 22
TIME 2011

NO. DEPTHS 06
SOUNDING 0102
BT SLIDE NO 062

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.0	15.17						
10.0		10.72						
20.0		5.38						
30.0		4.41						
50.0		3.91						
75.0		3.85						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								
50.0								
75.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		

C-REF-NO 017	LAT 43-20-12N	YEAR 1966	NO. DEPTHS 02
CONS. NO 063	LON 077-39-27W	MONTH 09	SOUNDING 0023
COUNTRY 18		DAY 22	BT SLIDE NO 063
INSTITUTE 22		TIME 2046	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.5	6.51						
10.0		4.77						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		

C-REF-NO 017
CONS. NO 064
COUNTRY 18
INSTITUTE 22

LAT 43-18-24N
LON 077-36-06W

YEAR 1966
MONTH 09
DAY 22
TIME 2120

NO. DEPTHS 03
SOUNDING 0024
BT SLIDE NO 064

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.2	4.60						
10.0		4.44						
20.0		4.37						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		

C-REF-NO 017	LAT 43-21-30N	YEAR 1966	NO. DEPTHS 05
CONS. NO 065	LON 077-35-57W	MONTH 09	SOUNDING 0064
COUNTRY 18		DAY 22	BT SLIDE NO 065
INSTITUTE 22		TIME 2153	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.5	15.90						
10.0		12.40						
20.0		5.43						
30.0		5.06						
50.0		4.17						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								
50.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		

C-REF-NO 017	LAT 43-24-24N	YEAR 1966	NO. DEPTHS 07
CONS. NO 066	LON 077-35-30W	MONTH 09	SOUNDING 0137
COUNTRY 18		DAY 22	BT SLIDE NO 066
INSTITUTE 22		TIME 2229	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.2	16.23						
10.0		16.25						
20.0		10.05						
30.0		5.43						
50.0		4.36						
75.0		3.91						
100.0		3.83						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								
50.0								
75.0								
100.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		

C-REF-NO 017	LAT 43-22-42N	YEAR 1966	NO. DEPTHS 07
CONS. NO 067	LON 077-32-12W	MONTH 09	SOUNDING 0121
COUNTRY 18		DAY 22	BT SLIDE NO 067
INSTITUTE 22		TIME 2307	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	3.0	16.08						
10.0		14.93						
20.0		6.44						
30.0		5.05						
50.0		4.32						
75.0		3.94						
100.0		3.82						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								
50.0								
75.0								
100.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		

C-REF-NO 017
CONS. NO 068
COUNTRY 18
INSTITUTE 22

LAT 43-19-18N
LON 077-32-24W

YEAR 1966
MONTH 09
DAY 22
TIME 2347

NO. DEPTHS 04
SOUNDING 0046
BT SLIDE NO 068

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		14.30	281	10.05	8.320	0.7	0.4	
10.0		6.58	282	11.70	8.060	0.8		
20.0		4.27	286	12.39	8.030	0.6		
30.0		3.99	286	12.31	8.010	1.1		

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	125.0		0.062	0.003	0.030		350E01	200E00
10.0	132.0		0.173	0.002	0.080		400E00	
20.0	132.0		0.184	0.001	0.120		000E00	
30.0	131.0		0.189	0.001	0.080		200E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		

C-REF-NO 017	LAT 43-16-42N	YEAR 1966	NO. DEPTHS 02
CONS. NO 069	LON 077-32-42W	MONTH 09	SOUNDING 0022
COUNTRY 18		DAY 23	BT SLIDE NO 069
INSTITUTE 22		TIME 0019	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		4.59						
10.0		4.33						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		

C-REF-NO 017
CONS. NO 070
COUNTRY 18
INSTITUTE 22

LAT 43-15-48N
LON 077-29-57W

YEAR 1966
MONTH 09
DAY 23
TIME 0042

NO. DEPTHS 01
SOUNDING 0015
BT SLIDE NO 070

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		5.88						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								

DEPTH	SPC 20	SPC 35
1.0		

C-REF-NO 017	LAT 43-18-00N	YEAR 1966	NO. DEPTHS 04
CONS. NO 071	LON 077-29-27W	MONTH 09	SOUNDING 0045
COUNTRY 18		DAY 23	BT SLIDE NO 071
INSTITUTE 22		TIME 0109	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		12.27						
10.0		5.42						
20.0		4.23						
30.0		3.84						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		

C-REF-NO 017
CONS. NO 072
COUNTRY 18
INSTITUTE 22

LAT 43-20-48N
LON 077-28-42W

YEAR 1966
MONTH 09
DAY 23
TIME 0156

NO. DEPTHS 07
SOUNDING 0122
BT SLIDE NO 072

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.06						
10.0		14.80						
20.0		5.89						
30.0		4.77						
50.0		4.22						
75.0		3.88						
100.0		3.84						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								
50.0								
75.0								
100.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		

C-REF-NO 017 LAT 43-22-06N YEAR 1966 NO. DEPTHS 08
CONS. NO 073 LON 077-24-39W MONTH 09 SOUNDING 0181
COUNTRY 18 DAY 23 BT SLIDE NO 073
INSTITUTE 22 TIME 0237

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		14.03						
10.0		12.82						
20.0		7.30						
30.0		5.01						
50.0		4.33						
75.0		3.95						
100.0		3.89						
150.0		3.81						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								
50.0								
75.0								
100.0								
150.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		
150.0		

C-REF-NO 017
CONS. NO 074
COUNTRY 18
INSTITUTE 22

LAT 43-19-18N
LON 077-25-18W

YEAR 1966
MONTH 09
DAY 23
TIME 0312

NO. DEPTHS 04
SOUNDING 0062
BT SLIDE NO 074

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		12.79						
10.0		11.11						
20.0		5.26						
30.0		4.30						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		

C-REF-NO 017	LAT 43-17-03N	YEAR 1966	NO. DEPTHS 02
CONS. NO 075	LON 077-26-12W	MONTH 09	SOUNDING 0018
COUNTRY 18		DAY 23	BT SLIDE NO 075
INSTITUTE 22		TIME 0339	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		9.30						
10.0		9.34						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		

C-REF-NO 017
CONS. NO 076
COUNTRY 18
INSTITUTE 22

LAT 43-17-45N
LON 077-21-48W

YEAR 1966
MONTH 09
DAY 23
TIME 0415

NO. DEPTHS 02
SOUNDING 0017
BT SLIDE NO 076

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		8.13						
10.0		6.97						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		

C-REF-NO 017	LAT 43-20-30N	YEAR 1966	NO. DEPTHS 06
CONS. NO 077	LON 077-21-36W	MONTH 09	SOUNDING 0093
COUNTRY 18		DAY 23	BT SLIDE NO 077
INSTITUTE 22		TIME 0454	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		14.09						
10.0		13.87						
20.0		8.45						
30.0		6.15						
50.0		4.06						
75.0		3.87						

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0								
10.0								
20.0								
30.0								
50.0								
75.0								

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		

C-REF-NO 017
CONS. NO 078
COUNTRY 18
INSTITUTE 22

LAT 43-24-48N
LON 077-18-00W

YEAR 1966
MONTH 09
DAY 23
TIME 0600

NO. DEPTHS 09
SOUNDING 0212
BT SLIDE NO 078

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.52	278	9.37	8.310	0.2	0.3	87.0
10.0		16.58	276	9.37	8.320	0.4		87.0
20.0		11.20	281	10.46	8.140	0.3		89.0
30.0		5.21	280	12.11	8.060	0.4		91.0
50.0		4.52	279	12.50	8.070	0.2		92.0
75.0		4.06	281	12.60	8.040	0.3		92.0
100.0		3.93	280	12.67	8.060	0.2		92.0
150.0		3.85	282	12.67	8.080	0.3		92.0
199.0		3.80	282	11.82	8.050	0.4		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	126.0	26.0	0.027	0.003	0.015		000E00	000E00
10.0	128.0	26.0	0.027	0.003	0.015		300E00	
20.0	130.0	25.0	0.098	0.002	0.030		170E01	
30.0	133.0	25.0	0.184	0.001	0.135		200E00	
50.0	133.0	25.0	0.189	0.001	0.125		000E00	
75.0	133.0	26.0	0.189	0.001	0.160		000E00	
100.0	134.0	26.0	0.189	0.001	0.250		000E00	
150.0	133.0	24.0	0.189	0.001	0.070		100E00	
199.0	133.0	24.0	0.199	0.001	0.075		500E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		
75.0		
100.0		
150.0		
199.0		

C-REF-NO 017 LAT 43-18-36N YEAR 1966 NO. DEPTHS 04
CONS. NO 079 LON 077-04-00W MONTH 09 SOUNDING 0035
COUNTRY 18 DAY 23 BT SLIDE NO 079
INSTITUTE 22 TIME 0744

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.54	280	9.62	8.350	0.3	0.0	88.0
10.0		15.44	279	9.62	8.350	0.5		88.0
20.0		8.27	282	10.85	8.150	0.3		91.0
30.0		4.78	281	11.54	8.050	0.3		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.032	0.003	0.015		400E00	000E00
10.0	129.0	27.0	0.037	0.003	0.020		400E00	
20.0	131.0	26.0	0.148	0.002	0.045		000E00	
30.0	132.0	25.0	0.198	0.002	0.065		200E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		

C-REF-NO 017	LAT 43-23-33N	YEAR 1966	NO. DEPTHS 05
CONS. NO 080	LON 076-49-24W	MONTH 09	SOUNDING 0071
COUNTRY 18		DAY 23	BT SLIDE NO 080
INSTITUTE 22		TIME 0923	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.91	274	9.20	8.380	0.2	0.3	89.0
10.0		16.94	275	9.20	8.370	0.5		90.0
20.0		16.37	278	9.28	8.300	0.3		89.0
30.0		8.30	281	10.93	8.090	0.5		92.0
50.0		4.28	284	11.68	7.980	0.6		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	128.0	26.0	0.021	0.004	0.010		100E00	000E00
10.0	128.0	26.0	0.020	0.005	0.015		200E00	
20.0	129.0	26.0	0.035	0.005	0.010		000E00	
30.0	134.0	26.0	0.149	0.001	0.040		100E00	
50.0	133.0	26.0	0.209	0.001	0.065		100E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		

C-REF-NO 017 | LAT 43-30-00N | YEAR 1966 | NO. DEPTHS 05
CONS. NO 081 | LON 076-34-03W | MONTH 09 | SOUNDING 0066
COUNTRY 18 | DAY 23 | BT SLIDE NO 081
INSTITUTE 22 | TIME 1104

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		15.51	278	9.56	8.360	0.4	0.5	89.0
10.0		14.35	278	9.70	8.360	0.7		88.0
20.0		10.54	282	10.53	8.200	0.5		90.0
30.0		5.55	284	11.65	8.050	0.6		92.0
50.0		4.17	286	11.30	8.010	0.3		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.042	0.003	0.015		000E00	000E00
10.0	129.0	27.0	0.046	0.004	0.020		200E00	
20.0	129.0	27.0	0.116	0.004	0.025		500E00	
30.0	134.0	26.0	0.188	0.002	0.040		000E00	
50.0	134.0	26.0	0.213	0.002	0.070		000E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		
50.0		

C-REF-NO 017
CONS. NO 082
COUNTRY 18
INSTITUTE 22

LAT 43-34-00N
LON 076-19-30W

YEAR 1966
MONTH 09
DAY 23
TIME 1233

NO. DEPTHS 04
SOUNDING 0040
BT SLIDE NO 082

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.79	276	9.30	8.440	0.7	0.5	88.0
10.0		16.81	275	9.23	8.420	0.4		88.0
20.0		16.75	277	9.23	8.420	0.6		88.0
30.0		7.94	284	10.37	8.050	0.3		92.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.016	0.004	0.025		000E00	100E00
10.0	128.0	26.0	0.021	0.004	0.025		000E00	
20.0	128.0	26.0	0.023	0.002	0.020		000E00	
30.0	133.0	26.0	0.188	0.002	0.060		000E00	000E00

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		
30.0		

C-REF-NO 017	LAT 43-46-00N	YEAR 1966	NO. DEPTHS 03
CONS. NO 083	LON 076-18-36W	MONTH 09	SOUNDING 0036
COUNTRY 18		DAY 23	BT SLIDE NO 083
INSTITUTE 22		TIME 1410	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.41	278	9.23	8.380	0.6	0.5	88.0
10.0		16.37	276	9.26	8.360	0.9		88.0
20.0		5.40	288	9.50	7.910	1.2		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	128.0	27.0	0.027	0.003	0.025		000E00	300E00
10.0	129.0	27.0	0.027	0.003	0.030		000E00	
20.0	135.0	26.0	0.229	0.001	0.075		000E00	

DEPTH	SPC 20	SPC 35
1.0		
10.0		
20.0		

C-REF-NO 017
CONS. NO 084
COUNTRY 18
INSTITUTE 22

LAT 43-51-54N
LON 076-17-57W

YEAR 1966
MONTH 09
DAY 23
TIME 1508

NO. DEPTHS 05
SOUNDING 0041
BT SLIDE NO 084

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.74	270	9.16	8.330	0.9	0.6	87.0
3.0								
10.0		14.93	275	9.05	8.270	0.9		89.0
20.0		7.93	284	8.94	7.930	1.1		94.0
30.0		6.84	285	9.19	7.890	1.2		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	126.0	26.0	0.017	0.003	0.050	0.000	000E00	100E00
3.0								
10.0	130.0	26.0	0.047	0.003	0.095		100E00	
20.0	135.0	26.0	0.197	0.003	0.140		100E00	
30.0	135.0	26.0	0.208	0.002	0.145		100E00	100E00

DEPTH	SPC 20	SPC 35
1.0	550E01	500E00
3.0		
10.0		
20.0		
30.0	470E01	700E00

C-REF-NO 017 LAT 43-52-24N YEAR 1966 NO. DEPTHS 03
CONS. NO 085 LON 076-19-15W MONTH 09 SOUNDING 0026
COUNTRY 18 DAY 23 BT SLIDE NO 085
INSTITUTE 22 TIME 1530

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.55	274	9.23	8.370	0.5	0.6	89.0
10.0		16.54	274	9.16	8.350	0.5		89.0
20.0		16.40	276	9.11	8.300	0.8		90.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.018	0.002	0.040		100E00	000E00
10.0	129.0	27.0	0.022	0.003	0.070		000E00	
20.0	129.0	27.0	0.023	0.002	0.040		100E00	

DEPTH	SPC 20	SPC 35
1.0	880E01	800E00
10.0		
20.0		

C-REF-NO 017
CONS. NO 086
COUNTRY 18
INSTITUTE 22

LAT 43-54-27N
LON 076-13-54W

YEAR 1966
MONTH 09
DAY 23
TIME 1612

NO. DEPTHS 03
SOUNDING 0020
BT SLIDE NO 086

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.0	16.90	271	9.19	8.410	0.7	0.4	90.0
3.0								
10.0		16.90	269	9.23	8.380	0.4		90.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	126.0	27.0	0.012	0.003	0.025	0.000	900E00	200E00
3.0								
10.0	128.0	27.0	0.012	0.003	0.030		000E00	

DEPTH	SPC 20	SPC 35
1.0	940E01	800E00
3.0		
10.0		

C-REF-NO 017
CONS. NO 087
COUNTRY 18
INSTITUTE 22

LAT 43-56-06N
LON 076-10-36W

YEAR 1966
MONTH 09
DAY 23
TIME 1643

NO. DEPTHS 03
SOUNDING 0017
BT SLIDE NO 087

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	3.9	17.01	267	9.23	8.410	0.6	0.8	89.0
3.0								
10.0		16.99	267	9.19	8.400	0.7		88.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	127.0	27.0	0.007	0.003			300E00	000E00
3.0						0.001		
10.0	127.0	27.0	0.008	0.002	0.035		600E00	

DEPTH	SPC 20	SPC 35
1.0	520E01	140E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 088
COUNTRY 18
INSTITUTE 22

LAT 43-57-42N
LON 076-07-18W

YEAR 1966
MONTH 09
DAY 23
TIME 1714

NO. DEPTHS 02
SOUNDING 0010
BT SLIDE NO 088

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	2.0	16.84	232	8.45	8.110	1.1	0.2	76.0
3.0								

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	125.0	22.0	0.008	0.002	0.040		700E01	400E00
3.0						0.000		

DEPTH	SPC 20	SPC 35
1.0	180E02	720E02
3.0		

C-REF-NO 017
CONS. NO 089
COUNTRY 18
INSTITUTE 22

LAT 43-57-45N
LON 076-13-57W

YEAR 1966
MONTH 09
DAY 23
TIMB 1801

NO. DEPTHS 02
SOUNDING 0012
BT SLIDE NO 089

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	4.5	16.74	267	9.19	8.360	0.5	0.8	88.0
3.0								

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	127.0	27.0	0.008	0.002	0.045		000E00	300E00
3.0						0.000		

DEPTH	SPC 20	SPC 35
1.0	430E01	280E02
3.0		

C-REF-NO 017
CONS. NO 090
COUNTRY 18
INSTITUTE 22

LAT 43-56-00N
LON 076-16-54W

YEAR 1966
MONTH 09
DAY 23
TIME 1833

NO. DEPTHS 01
SOUNDING 0012
BT SLIDE NO 090

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	7.0	16.60	273	9.19	8.380	0.3	0.4	89.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.014	0.001	0.035		000E00	000E00

DEPTH	SPC 20	SPC 35
1.0	630E01	180E01

C-REF-NO 017
CONS. NO 091
COUNTRY 18
INSTITUTE 22

LAT 43-54-51N
LON 076-20-48W

YEAR 1966
MONTH 09
DAY 23
TIME 1907

NO. DEPTHS 03
SOUNDING 0024
BT SLIDE NO 091

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.93	274	9.25	8.410	0.5	0.5	91.0
3.0								
10.0		16.95	274	9.31	8.370	0.6		91.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	28.0	0.017	0.003	0.025		000E00	200E00
3.0						0.000		
10.0	130.0	28.0	0.017	0.003	0.025		100E00	

DEPTH	SPC 20	SPC 35
1.0	490E01	340E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 092
COUNTRY 18
INSTITUTE 22

LAT 43-56-42N
LON 076-24-00W

YEAR 1966
MONTH 09
DAY 23
TIME 1941

NO. DEPTHS 03
SOUNDING 0017
BT SLIDE NO 092

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.0	16.76	274	9.25	8.380	0.3	0.8	91.0
3.0								
10.0		16.78	274	9.25	8.380	0.7		91.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	28.0	0.017	0.003	0.025	0.000	000E00	100E00
3.0								
10.0	130.0	28.0	0.017	0.003	0.025		000E00	

DEPTH	SPC 20	SPC 35
1.0	440E01	480E01
3.0		
10.0		

C-REF-NO 017 LAT 43-57-54N YEAR 1966 NO. DEPTHS 03
CONS. NO 093 LON 076-20-18W MONTH 09 SOUNDING 0024
COUNTRY 18 DAY 23 BT SLIDE NO 093
INSTITUTE 22 TIME 2009

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	7.5	16.73	273	9.28	8.410	0.6	0.6	89.0
3.0								
10.0		16.73	274	9.26	8.400	0.5		89.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	26.0	0.021	0.004	0.010		000E00	200E00
3.0						0.000		
10.0	131.0	26.0	0.022	0.003	0.020		000E00	

DEPTH	SPC 20	SPC 35
1.0	460E01	700E00
3.0		
10.0		

C-REF-NO 017
CONS. NO 094
COUNTRY 18
INSTITUTE 22

LAT 44-00-24N
LON 076-19-30W

YEAR 1966
MONTH 09
DAY 23
TIME 2039

NO. DEPTHS 01
SOUNDING 0010
BT SLIDE NO 094

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.5	16.83	277	9.33	8.430	0.7	0.6	89.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	26.0	0.013	0.002	0.025		000E00	100E00

DEPTH	SPC 20	SPC 35
1.0	800E00	230E01

C-REF-NO 017
CONS. NO 095
COUNTRY 18
INSTITUTE 22

LAT 43-59-42N
LON 076-23-21W

YEAR 1966
MONTH 09
DAY 23
TIME 2111

NO. DEPTHS 03
SOUNDING 0023
BT SLIDE NO 095

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.5	16.92	276	9.23	8.420	0.7	0.3	88.0
3.0								
10.0		16.94	276	9.22	8.410	0.7		89.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	26.0	0.012	0.003	0.020		000E00	000E00
3.0						0.000		
10.0	131.0	26.0	0.013	0.002	0.020		000E00	

DEPTH	SPC 20	SPC 35
1.0	700E00	150E01
3.0		
10.0		

C-REF-NO 017 LAT 43-58-30N YEAR 1966 NO. DEPTHS 04
CONS. NO 096 LON 076-27-12W MONTH 09 SOUNDING 0032
COUNTRY 18 DAY 23 BT SLIDE NO 096
INSTITUTE 22 TIME 2147

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.5	16.64	277	9.33	8.420	0.8	0.6	88.0
3.0								
10.0		16.66	277	9.31	8.410	0.3		88.0
20.0		16.62	278	9.26	8.410	0.3		87.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	26.0	0.022	0.003	0.010		000E00	100E00
3.0						0.000		
10.0	131.0	26.0	0.022	0.003	0.010		100E00	
20.0	129.0	26.0	0.027	0.003	0.015		000E00	

DEPTH	SPC 20	SPC 35
1.0	880E01	920E01
3.0		
10.0		
20.0		

C-REF-NO 017
CONS. NO 097
COUNTRY 18
INSTITUTE 22

LAT 44-00-27N
LON 076-30-30W

YEAR 1966
MONTH 09
DAY 23
TIME 2222

NO. DEPTHS 04
SOUNDING 0026
BT SLIDE NO 097

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0	5.2	17.29	277	9.08	8.430	0.4	0.4	88.0
3.0								
10.0		17.31	277	9.10	8.410	0.3		88.0
20.0		7.51	286	8.73	7.960	0.5		94.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	27.0	0.017	0.003	0.030		000E00	000E00
3.0						0.000		
10.0	133.0	27.0	0.017	0.003	0.030		100E00	
20.0	138.0	27.0	0.199	0.001	0.100		000E00	

DEPTH	SPC 20	SPC 35
1.0	240E01	200E01
3.0		
10.0		
20.0		

C-REF-NO 017
CONS. NO 098
COUNTRY 18
INSTITUTE 22

LAT 44-01-27N
LON 076-26-36W

YEAR 1966
MONTH 09
DAY 23
TIME 2258

NO. DEPTHS 04
SOUNDING 0029
BT SLIDE NO 098

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		17.13	277	9.19	8.340	0.4	1.1	87.0
3.0								
10.0		17.14	275	9.20	8.340	0.6		87.0
20.0		8.15	284	8.74	7.940	0.9		93.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	27.0	0.014	0.001	0.025		000E00	
3.0						0.000		
10.0	130.0	27.0	0.014	0.001	0.025		000E00	
20.0	136.0	26.0	0.199	0.001	0.080		000E00	

DEPTH	SPC 20	SPC 35
1.0	480E01	320E01
3.0		
10.0		
20.0		

C-REF-NO 017
CONS. NO 099
COUNTRY 18
INSTITUTE 22

LAT 44-03-09N
LON 076-23-36W

YEAR 1966
MONTH 09
DAY 23
TIME 2329

NO. DEPTHS 03
SOUNDING 0020
BT SLIDE NO 099

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.75	274	9.37	8.380	0.6	0.5	87.0
3.0								
10.0		16.78	275	9.37	8.420	0.6		87.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	26.0	0.014	0.001	0.025		000E00	200E00
3.0						0.000		
10.0	130.0	27.0	0.014	0.001	0.020		000E00	

DEPTH	SPC 20	SPC 35
1.0	180E01	270E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 100
COUNTRY 18
INSTITUTE 22

LAT 44-04-33N
LON 076-25-51W

YEAR 1966
MONTH 09
DAY 24
TIME 0000

NO. DEPTHS 03
SOUNDING 0024
BT SLIDE NO 100

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.70	287	9.10	8.140	0.7	0.4	88.0
3.0								
10.0		16.69	275	9.11	8.320	0.7		88.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	131.0	27.0	0.013	0.002	0.060	0.000	000E00	000E00
3.0								
10.0	135.0	27.0	0.013	0.002	0.055		200E00	

DEPTH	SPC 20	SPC 35
1.0	930E01	540E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 101
COUNTRY 18
INSTITUTE 22

LAT 44-03-15N
LON 076-29-45W

YEAR 1966
MONTH 03
DAY 24
TIME 0049

NO. DEPTHS 03
SOUNDING 0019
BT SLIDE NO 101

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		17.16	274	9.20	8.410	0.7	0.7	87.0
3.0								
10.0		17.20	279	9.16	8.410	0.6		87.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.013	0.002	0.030		100E00	000E00
3.0						0.000		
10.0	130.0	27.0	0.013	0.002	0.050		000E00	

DEPTH	SPC 20	SPC 35
1.0	770E01	390E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 102
COUNTRY 18
INSTITUTE 22

LAT 44-02-09N
LON 076-33-30W

YEAR 1966
MONTH 09
DAY 24
TIME 0123

NO. DEPTHS 04
SOUNDING 0029
BT SLIDE NO 102

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		17.18	274	8.99	8.380	0.3	2.0	88.0
3.0								
10.0		17.20	276	8.99	8.370	0.8		88.0
20.0		17.17	274	8.99	8.380	0.7		87.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	127.0	27.0	0.012	0.003	0.020		000E00	000E00
3.0						0.000		
10.0	128.0	27.0	0.012	0.003	0.025		000E00	
20.0	127.0	27.0	0.014	0.001	0.015		000E00	

DEPTH	SPC 20	SPC 35
1.0	110E02	530E01
3.0		
10.0		
20.0		

C-REF-NO 017
CONS. NO 103
COUNTRY 18
INSTITUTE 22

LAT 44-05-12N
LON 076-32-54W

YEAR 1966
MONTH 09
DAY 24
TIME 0200

NO. DEPTHS 03
SOUNDING 0019
BT SLIDE NO 103

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		17.13	276	9.00	8.360	0.8	0.7	87.0
3.0								
10.0		17.15	275	9.00	8.380	0.8		86.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	128.0	26.0	0.014	0.001	0.020		000E00	000E00
3.0						0.000		
10.0	128.0	26.0	0.014	0.001	0.020		100E00	

DEPTH	SPC 20	SPC 35
1.0	680E01	510E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 104
COUNTRY 18
INSTITUTE 22

LAT 44-08-03N
LON 076-32-21W

YEAR 1966
MONTH 09
DAY 24
TIME 0230

NO. DEPTHS 03
SOUNDING 0017
BT SLIDE NO 104

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.95	275	9.05	8.400	0.6	0.7	86.0
3.0								
10.0		16.98	276	9.05	8.400	0.6		87.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	26.0	0.013	0.002	0.015	0.000	100E00	000E00
3.0								
10.0	133.0	27.0	0.013	0.002	0.025		000E00	

DEPTH	SPC 20	SPC 35
1.0	150E01	220E01
3.0		
10.0		

C-REF-NO 017
CONS. NO 105
COUNTRY 18
INSTITUTE 22

LAT 44-07-06N
LON 076-36-18W

YEAR 1966
MONTH 09
DAY 24
TIME 0305

NO. DEPTHS 03
SOUNDING 0016
BT SLIDE NO 105

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		17.10	275	9.08	8.350	0.5	0.6	88.0
3.0								
10.0		17.15	274	9.08	8.380	0.6		88.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	27.0	0.013	0.002	0.025		000E00	000E00
3.0						0.000		
10.0	130.0	27.0	0.013	0.002	0.020		000E00	

DEPTH	SPC 20	SPC 35
1.0	110E02	190E02
3.0		
10.0		

C-REF-NO 017
CONS. NO 106
COUNTRY 18
INSTITUTE 22

LAT 44-03-57N
LON 076-36-42W

YEAR 1966
MONTH 09
DAY 24
TIME 0339

NO. DEPTHS 04
SOUNDING 0036
BT SLIDE NO 106

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		17.15	274	9.02	8.370	0.7	0.4	87.0
3.0								
10.0		17.18	274	8.99	8.370	0.9		88.0
20.0		17.15	274	9.00	8.380	0.3		87.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	26.0	0.013	0.002	0.015		100E00	000E00
3.0						0.000		
10.0	130.0	26.0	0.013	0.002	0.015		000E00	
20.0	129.0	26.0	0.014	0.001	0.010		000E00	

DEPTH	SPC 20	SPC 35
1.0	170E02	740E01
3.0		
10.0		
20.0		

C-REF-NO 017	LAT 44-05-27N	YEAR 1966	NO. DEPTHS 02
CONS. NO 107	LON 076-39-03W	MONTH 09	SOUNDING 0010
COUNTRY 18		DAY 24	BT SLIDE NO 107
INSTITUTE 22		TIME 0415	

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.94	274	8.94	8.360	0.2	0.5	88.0
3.0								

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	26.0	0.014	0.001	0.010		400E00	000E00
3.0						0.001		

DEPTH	SPC 20	SPC 35
1.0	800E02	980E02
3.0		

C-REF-NO 017
CONS. NO 108
COUNTRY 18
INSTITUTE 22

LAT 44-08-48N
LON 076-38-45W

YEAR 1966
MONTH 09
DAY 24
TIME 0450

NO. DEPTHS 03
SOUNDING 0019
BT SLIDE NO 108

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		16.95	275	9.00	8.380	0.6	0.4	91.0
3.0								
10.0		16.99	275	9.02	8.400	0.4		90.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	130.0	27.0	0.013	0.002	0.010	0.000	000E00	000E00
3.0								
10.0	129.0	27.0	0.013	0.002	0.015		000E00	

DEPTH	SPC 20	SPC 35
1.0	190E01	110E02
3.0		
10.0		

C-REF-NO 017 LAT 44-09-30N YEAR 1966 NO. DEPTHS 03
CONS. NO 109 LON 076-35-15W MONTH 09 SOUNDING 0015
COUNTRY 18 DAY 24 BT SLIDE NO 109
INSTITUTE 22 TIME 0518

DEPTH	SECCHI	TEMP	CON 18	D O2	PH 25	TURB	BOD	T ALK
1.0		17.08	275	9.08	8.380	0.5	0.3	86.0
3.0								
10.0		17.11	275	9.19	8.410	0.2		87.0

DEPTH	HARD	CL	NO3NO2	NO2	R PO4	PHEN	MF COL	MF ENT
1.0	129.0	26.0	0.013	0.002	0.010		700E00	000E00
3.0						0.000		
10.0	130.0	26.0	0.013	0.002	0.015		000E00	

DEPTH	SPC 20	SPC 35
1.0	170E01	840E01
3.0		
10.0		