

DFO - Library / MPO - Bibliothèque



14010624

Oceanographic data from Frobisher Bay and Winton Bay in the Eastern Canadian Arctic for the years 1978 and 1979

Joseph E. Lovrity

Arctic Biological Station
Department of Fisheries and Oceans
555 St. Pierre Blvd.
Ste. Anne de Bellevue, Que. H9X 3R4

March 1981

Canadian Data Report of Fisheries and Aquatic Sciences No. 261

QH
90.5
C33
No 261



Government of Canada
Fisheries and Oceans

Gouvernement du Canada
Pêches et Océans

Canadian Data Report of Fisheries and Aquatic Sciences

These reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of Data Reports reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries management, technology and development, ocean sciences, and aquatic environments relevant to Canada.

Numbers 1-25 in this series were issued as Fisheries and Marine Service Data Records. Numbers 26-160 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Data Reports. The current series name was changed with report number 161.

Data Reports are not intended for general distribution and the contents must not be referred to in other publications without prior written clearance from the issuing establishment. The correct citation appears above the abstract of each report.

Rapport statistique canadien des sciences halieutiques et aquatiques

Ces rapports servent de base à la compilation des données de classement et d'archives pour lesquelles il y a peu ou point d'analyse. Cette compilation aura d'ordinaire été préparée pour appuyer d'autres publications ou rapports. Les sujets des Rapports statistiques reflètent la vaste gamme des intérêts et politiques du Ministère des Pêches et des Océans, notamment gestion des pêches, techniques et développement, sciences océaniques et environnements aquatiques, au Canada.

Les numéros 1 à 25 de cette série ont été publiés à titre de Records statistiques, Service des pêches et de la mer. Les numéros 26-160 ont été publiés à titre de Rapports statistiques du Service des pêches et de la mer, Ministère des Pêches et de l'Environnement. Le nom de la série a été modifié à partir du numéro 161.

Les Rapports statistiques ne sont pas préparés pour une vaste distribution et leur contenu ne doit pas être mentionné dans une publication sans autorisation écrite préalable de l'établissement auteur. Le titre exact paraît au haut du résumé de chaque rapport.

48982

i

Canadian Data Report of
Fisheries and Aquatic Sciences 261

March 1981

OCEANOGRAPHIC DATA FROM FROBISHER BAY AND WINTON BAY IN THE
EASTERN CANADIAN ARCTIC FOR THE YEARS 1978 AND 1979

by

Joseph E. Lovrity

Arctic Biological Station
Department of Fisheries and Oceans
555 St. Pierre Blvd.
Ste. Anne de Bellevue, Que. H9X 3R4

QH
9015
C33
No 261

©Minister of Supply and Services Canada 1981

Cat. No. Fs 97-13/261

ISSN 0706-6465

Correct citation for this publication:

Lovrity, J. E. 1981. Oceanographic data from Frobisher Bay and Winton Bay in the Eastern Canadian Arctic for the years 1978 and 1979. Can. Data Rep. Fish. Aquat. Sci. 261: v + 117 p.

CONTENTS

Abstract/Résumé	iv
Acknowledgements	v
Introduction	1
Maps of station positions, Fig. 1-2	3
Table 1. Station locations	6
Table 2. Explanations of data headings	7
Table 3. Ice data, 1978-79	9
Table 4. Frobisher Bay oceanographic data, 1978-79	15
Table 5. Winton Bay oceanographic data, 1978	111

ABSTRACT

Lovrity, J. E. 1981. Oceanographic data from Frobisher Bay and Winton Bay in the Eastern Canadian Arctic for the years 1978 and 1979. Can. Data Rep. Fish. Aquat. Sci. 261: v + 117 p.

Tables of oceanographic data from 46 station occupations in Frobisher Bay and Winton Bay in 1978 and 41 station occupations in Frobisher Bay in 1979 include information on temperature, salinity, dissolved oxygen, nitrate, nitrite, ammonia, phosphate, silicate, particulate and dissolved organic carbon, chlorophyll a, b, and c, and total counts of bacteria.

Key words: Arctic waters, Canada coast, temperature, salinity, oxygen, nutrients, carbon, bacteria counts, sea ice

RÉSUMÉ

Lovrity, J. E. 1981. Oceanographic data from Frobisher Bay and Winton Bay in the Eastern Canadian Arctic for the years 1978 and 1979. Can. Data Rep. Fish. Aquat. Sci. 261: v + 117 p.

Tables des données physiques et chimiques de 46 stations occupées dans la Baie Frobisher et la Baie Winton en 1978 et de 41 stations occupées dans la Baie Frobisher en 1979 incluant des renseignements sur les temperature, salinité, oxygène dissout, nitrites, nitrates, ammoniac, phosphates, silicates, les carbones particulaires et dissouts, les chlorophylles a, b, et c, et les comptes totaux de cellules bactériennes.

ACKNOWLEDGEMENTS

The data used in this report originated from ongoing marine biological investigations by the Arctic Biological Station, some of which were carried out under the Eastern Arctic Marine Environmental Studies (EAMES) program. J. N. Bunch and S. I. C. Hsiao were the principal program leaders concerned with these collections. T. Cartier, P. Cējka, B. Chabot, E. Deland, R. C. Harland, G. Horonowitsch, J. Laliberté, D. Lussier, L. McDuff, D. Michaud and B. Petolas collected most of the samples. Nutrient and pigment analyses were done by G. Horonowitsch, J. Laliberté, D. Lussier and D. Michaud. R. C. Harland analysed the carbon samples and was instrumental in obtaining the total bacteria data. I thank A. Theriault and A. Pelletier for their significant assistance at the Ikaluit Research Laboratory, Frobisher Bay. I also want to thank Lois McMullon and Hazel Stephens for their invaluable role in the preparation of the typescript and in the production of the final report.

INTRODUCTION

The observations recorded here were made from the spring of 1978 to the early winter of 1979 in Frobisher Bay (Fig. 1 and 2) and during summer and fall of 1978 in Winton Bay (Fig. 2). The data included in the tables were taken in support of marine biological collections and in conjunction with experimental work on bacteria and phytoplankton, carried out by the Arctic Biological Station. Most of the material came from upper Frobisher Bay, within a few miles of the village of Frobisher Bay, and was collected from small boats. A few collections were made from the research vessel M.V. Calanus, and some of the samples were obtained by using snowmobiles on the sea ice. At Winton Bay collecting was done from M.V. Calanus and a 6.7-m canoe.

Five sets of sea ice data are included, placed at the beginning of the data tables. One was collected in May 1978, and the rest were collected in 1979.

When collecting from boats, standard collecting procedures were followed. During collecting work from the ice, the undersurface of the ice was considered as the surface depth (0 metre) and subsequent collecting depths were measured from that point. Total station depth was measured from the surface of the water in the ice hole and recorded as such in this report.

Ice core samples for nutrient and other data were taken with a 7.6-cm SIPRE (CRREL) corer. Water temperatures were measured by using an in situ probe or by plunging a calibrated immersion thermometer into the water collecting bottle immediately after it was returned to the

surface. Salinity values were determined using a Bissett Berman model 6230 laboratory salinometer or a Goldberg T/C model 10419 refractometer. Phosphate-phosphorus, nitrite-nitrogen, nitrate-nitrogen, silicate-silicon, dissolved oxygen, and chlorophyll a, b and c were analysed following Strickland and Parsons (Bull. Fish. Res. Board Can. 167, 1968). Ammonia-nitrogen was analysed following the description of G. Dal Pont et al. (Rep. Div. Fish. Oceanogr. CSIRO, Cronulla, 55, 1974). Particulate and dissolved organic carbon data and total count figures of bacteria were obtained by following techniques as described by Bunch (Fish. Mar. Serv. MS Rep. 1515, 1979).

Maps showing station positions

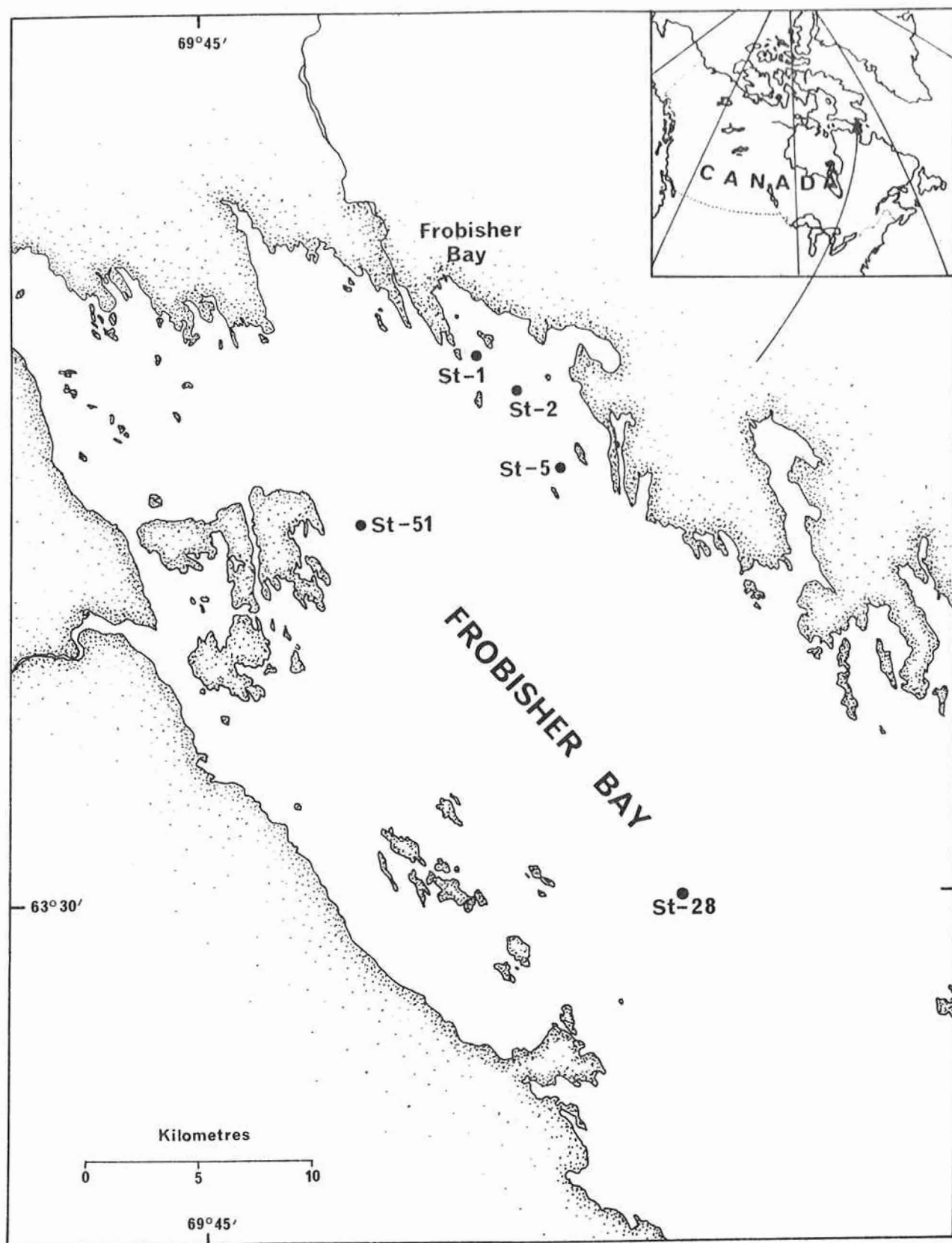


Fig. 1

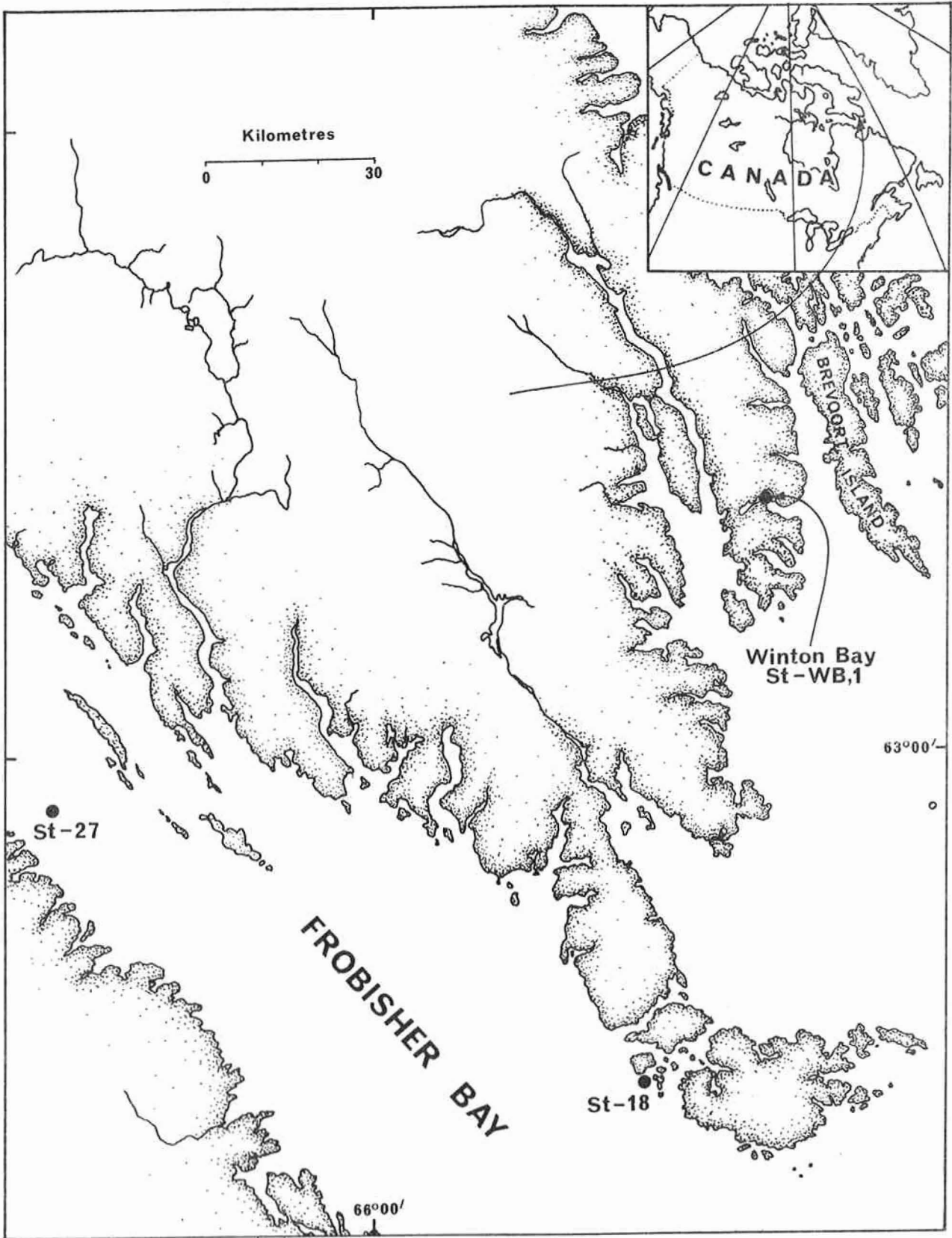


Fig. 2

Table 1. Station Locations

<u>Station</u>	<u>N. Latitude</u>	<u>W. Longitude</u>	<u>Location</u>
78-1	63°42.8'	68°30.8'	Frobisher Bay
79-1	63°42.8'	68°30.8'	Frobisher Bay
78-2	63°41.9'	68°28.1'	Frobisher Bay
78-5	63°40.2'	68°26.3'	Frobisher Bay
79-5	63°40.2'	68°26.3'	Frobisher Bay
79-18	62°28.5'	65°03.6'	Frobisher Bay
79-27	62°55.0'	67°06.4'	Frobisher Bay
79-28	63°30.0'	68°20.8'	Frobisher Bay
78-51	63°38.8'	68°35.6'	Frobisher Bay
79-51	63°38.8'	68°35.6'	Frobisher Bay
78-WB1	63°24.4'	64°37.5'	Winton Bay

Table 2. Explanations of data headings

Table headings

Time:	Local, in hours
Station depth:	Depth to bottom, in metres
Air temp.:	Air temperature, in °Celsius
Cloud:	Cover, in eighths
Wind:	Direction, in compass points; speed, in km per hour
Ice cover:	Thickness of sea ice, in centimetres
Snow cover:	Thickness of snow, in centimetres
Secchi:	Secchi disc depth, in metres

Water properties

Depth (water):	Depth of sample, in metres
Depth (ice):	Thickness and location of sample, in centimetres
Temp.:	Water temperature, in °Celsius
Salinity:	as parts per thousand, ‰
NO ₂ -N:	Nitrite, as microgram-atoms per litre
NO ₃ -N:	Nitrate, as microgram-atoms per litre
PO ₄ -P:	Phosphate, as microgram-atoms per litre
SiO ₃ -Si:	Silicate, as microgram-atoms per litre
NH ₃ -N:	Ammonia, as microgram-atoms per litre
O ₂ :	Dissolved oxygen, as millilitres per litre
POC:	Particulate organic carbon, as micrograms per litre
DOC:	Dissolved organic carbon, as milligrams per litre
Ch.a:	Chlorophyll a, as milligrams per cubic metre
Ch.b:	Chlorophyll b, as milligrams per cubic metre
Ch.c:	Chlorophyll c, as milligrams per cubic metre
Bacteria:	Total count of bacteria, as log number per litre

Table 3. Ice data, 1978-79

Station 78-1; Date 3 May 78; Time - ; Sta. depth - ; Air temp. - ;

Cloud - ; Wind - ; Ice cover 185; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0- 62	-	6	0.07	2.92	0.35	3.74	-
62-123	-	14	0.06	1.31	0.55	5.92	-
123-185	-	8	-	6.30	3.23	17.20	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0- 62	-	-	-	0.19	0.40	1.07	-
62-123	-	-	-	1.06	0.66	2.78	-
123-185	-	-	-	108.40	1.44	61.00	-

Station 79-1; Date 10 Mar 79; Time 1200; Sta. depth 43; Air temp. -30;
 Cloud - ; Wind - ; Ice cover 154; Snow cover 18; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0- 51	-	9.0	0.08	0.54	0.47	4.85	-
51-103	-	2.0	0.10	1.24	0.28	3.71	-
103-154	-	-	0.18	1.35	0.66	7.60	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0- 51	-	-	-	0.20	0.29	0.82	-
51-103	-	-	-	0.20	0.23	1.48	-
103-154	-	-	-	25.08	0.39	16.98	-

Station 79-1; Date 7 May 79; Time 1130; Sta. depth 38; Air temp. - ;
 Cloud 8; Wind - ; Ice cover 171; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0- 57	-	4.115	0.06	0.29	0.19	7.39	-
57-114	-	<2.8	0.00	0.15	0.09	5.11	-
114-161	-	4.172	0.08	1.29	1.45	0.76	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0- 57	-	-	-	0.81	1.09	3.93	-
57-114	-	-	-	0.59	1.06	2.92	-
114-161	-	-	-	4.76	2.40	8.70	-

Station 79-1; Date 16 Jun 79; Time - ; Sta. depth - ; Air temp. - ;
 Cloud - ; Wind - ; Ice cover 142; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0-137	-	-	0.02	0.75	0.37	2.11	2.64
137-142	-	-	0.04	0.43	0.70	5.07	5.12

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0-137	-	340	3.3	0.52	0.39	1.87	7.24
137-142	-	2050	4.6	1.67	0.16	1.24	7.02

Station 79-1; Date 12 Dec 79; Time 1115; Sta. depth 25; Air temp.-27;
 Cloud 3; Wind NW 34; Ice cover 62; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0-20	-	4	0.04	0.77	0.71	10.82	2.87
20-41	-	6	0.05	0.77	0.19	2.50	3.57
41-62	-	6	0.06	1.64	0.41	3.24	5.55

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0-20	-	-	-	1.05	1.04	3.06	-
20-41	-	-	-	0.91	0.71	2.52	-
41-62	-	-	-	1.94	1.10	0.00	-

Table 4. Frobisher Bay oceanographic data, 1978-79

Station: 78-1

Station: 78-1 Date: 3 May 78 Time: - Station depth: - Air temp.: -
 Cloud: - Wind: - Ice cover: 185 Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	<-1	20	0.00	6.71	0.84	8.95
1	-	-	-	-	-	-
5	<-1	30	0.08	7.11	1.07	14.45
10	<-1	-	0.10	8.79	0.96	10.47
15	<-1	32	0.10	8.70	1.12	15.21
20	<-1	32	0.03	8.89	1.13	14.12
25	<-1	32	0.08	8.70	1.13	15.54

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	2.12	0.11	1.99	-
1	0	0.3	-	-	-	8.04
5	-	-	0.32	0.15	1.19	8.38
10	-	-	0.29	0.52	1.41	8.52
15	-	-	0.42	0.36	0.43	-
20	-	-	0.22	0.03	0.84	7.77
25	-	-	0.31	0.36	1.02	-

Station: 78-1 Date: 10 Jun 78 Time: 1830 Station depth: 42 Air temp.: -1.5

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-1	-	0.06	4.80	0.64	7.03
1	-1	-	-	-	-	-
5	<-1	-	0.00	5.20	0.84	9.29
10	<-1	-	0.08	6.75	0.74	7.91
15	<-1	-	0.04	4.54	0.85	9.29
20	<-1	-	0.03	5.59	0.84	8.89
25	<-1	-	0.05	5.48	0.64	7.62
30	<-1	-	-	-	-	-
42	<-1	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	1.06	0.66	2.80	-
1	390	3.1	-	-	-	8.16
5	70	2.4	1.27	1.91	7.24	8.11
10	40	4.6	0.61	0.63	3.14	8.08
15	-	-	0.78	1.19	4.60	-
20	40	3.0	0.58	0.95	3.92	7.69
25	-	-	0.68	1.07	4.26	-
30	-	-	-	-	-	-
42	280	2.4	-	-	-	7.46

Station: 78-1 Date: 14 Jun 78 Time: 2100 Station depth: 42 Air temp.: 0.0

Cloud: 8 Wind: 35,SE Ice cover: - Snow Cover: 15 Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-1	-	0.05	7.31	0.88	10.76
1	-1	-	-	-	-	-
5	-1	-	0.10	8.64	0.89	10.47
10	<-1	-	0.05	5.18	0.90	10.96
15	<-1	-	0.06	7.23	1.05	13.51
20	<-1	-	0.01	5.05	0.99	13.81
25	<-1	-	0.07	7.25	1.09	16.46
30	<-1	-	-	-	-	-
42	<-1	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	3.19	0.61	4.40	-
1	190	1.7	-	-	-	8.07
5	80	1.4	2.50	1.71	7.04	8.11
10	60	1.5	2.15	1.04	4.27	7.93
15	-	-	0.29	0.48	1.96	-
20	80	1.4	0.88	1.31	4.94	7.91
25	-	-	0.48	0.92	2.48	-
30	50	1.5	-	-	-	7.89
42	70	1.4	-	-	-	8.00

Station: 78-1 Date: 18 Jun 78 Time: - Station depth: - Air temp.: 2.5
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-1	-	0.01	2.17	0.65	5.45
1	-1	-	-	-	-	-
5	<-1	-	0.03	5.76	1.14	15.18
10	<-1	-	0.00	6.85	1.05	15.97
15	<-1	-	0.00	7.19	1.04	14.30
20	<-1	-	0.00	5.35	0.95	12.83
25	<-1	-	0.05	7.84	0.91	11.94
30	<-1	-	-	-	-	-
40	<-1	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	5.73	1.12	6.26	-
1	120	2.0	-	-	-	8.28
5	60	1.8	0.74	0.47	2.16	8.25
10	30	1.7	0.41	0.43	1.91	8.13
15	-	-	0.67	0.95	3.32	-
20	30	1.6	0.39	0.64	1.75	8.00
25	-	-	0.59	0.84	2.98	-
30	40	1.9	-	-	-	8.16
40	20	1.5	-	-	-	7.96

Station: 78-1 Date: 22 Jun 78 Time: 1630 Station depth: 41 Air temp.: 4.0

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	0	-	0.01	7.37	0.84	12.53
1	-1	-	-	-	-	-
5	-1	-	0.00	7.49	0.89	11.25
10	-1	-	0.09	8.25	1.07	15.58
15	-1	-	0.05	6.48	1.08	15.77
20	-1	-	0.00	5.38	0.94	10.96
25	-1	-	0.07	7.03	0.97	12.83
30	-1	-	-	-	-	-
40	-1	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	0.42	0.27	1.53	-
1	30	1.5	-	-	-	8.28
5	50	2.0	0.52	0.39	1.87	8.33
10	20	1.6	0.42	0.31	0.98	7.94
15	-	-	0.32	0.15	1.19	-
20	30	1.6	0.48	0.72	2.64	8.14
25	-	-	0.32	0.20	0.64	-
30	20	2.0	-	-	-	8.07
40	20	1.9	-	-	-	8.29

Station: 78-1 Date: 26 Jun 78 Time: 0710 Station depth: 42 Air temp.: 5.5

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	-	0.00	0.96	0.07	0.73
1	-1	-	-	-	-	-
5	-1	-	0.09	7.34	0.79	9.58
10	-1	-	0.01	3.80	1.04	14.84
15	-1	-	0.05	5.49	0.87	9.39
20	-1	-	0.07	8.85	1.07	14.15
25	-1	-	0.03	7.71	0.87	9.00
30	-1	-	-	-	-	-
40	-1	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	0.20	0.19	1.23	-
1	110	1.6	-	-	-	8.06
5	50	1.8	0.12	0.00	0.50	8.43
10	40	1.5	0.22	0.08	0.29	8.19
15	-	-	0.72	0.63	2.55	-
20	30	1.4	0.31	0.40	0.47	8.26
25	-	-	-	-	-	-
30	40	1.5	-	-	-	8.26
40	50	1.4	-	-	-	8.27

Station: 78-1 Date: 30 Jun 78 Time: 1040 Station depth: Air temp.: 4.0

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	-	0.04	1.37	0.12	2.09
1	-1	-	-	-	-	-
5	-1	-	0.07	5.45	0.84	9.87
10	-1	-	0.05	7.51	1.02	12.99
15	-1	-	0.07	5.87	0.89	10.36
20	-1	-	0.03	4.02	0.85	9.00
25	-1	-	0.05	4.14	0.84	8.22
30	-1	-	-	-	-	-
40	-	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	0.30	0.31	1.57	-
1	50	1.7	-	-	-	8.07
5	60	1.5	0.42	0.36	0.42	8.69
10	70	1.8	0.32	0.20	0.64	8.20
15	-	-	0.32	0.20	0.64	-
20	30	2.3	0.33	0.03	0.25	8.34
25	-	-	0.23	0.00	0.00	-
30	40	1.8	-	-	-	8.35
40	40	2.0	-	-	-	8.34

Station: 78-1 Date: 4 Jul 78 Time: - Station depth: - Air temp.: 15.0
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	2	-	0.00	0.88	0.12	4.04
1	0	-	-	-	-	-
5	-1	-	0.06	7.23	1.00	13.67
10	-1	-	0.10	6.67	1.10	14.35
15	-1	-	0.04	3.50	0.89	7.05
20	-1	-	0.02	5.37	0.95	10.75
25	-1	32.775	0.05	4.87	0.91	9.39
30	-1	33.070	-	-	-	-
40	-1	33.084	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	0.22	0.12	0.00	-
1	110	1.5	-	-	-	8.10
5	100	1.5	0.45	0.00	0.20	8.19
10	100	1.5	0.34	0.08	0.00	8.11
15	-	-	0.28	0.68	1.80	-
20	60	1.3	0.33	0.00	0.80	8.11
25	-	-	0.34	0.08	0.00	-
30	-	1.7	-	-	-	8.18
40	50	1.8	-	-	-	8.08

Station: 78-1 Date: 8 Jul 78 Time: 1720 Station depth: - Air temp.: 8.5

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	<2.5	0.00	1.21	0.14	6.57
1	0	11.885	-	-	-	-
5	-1	31.198	0.07	5.82	0.91	13.38
10	-1	32.691	0.11	6.99	0.86	8.80
15	-1	32.875	0.08	7.79	0.83	8.71
20	-1	32.868	0.04	6.42	1.13	15.42
25	-1	33.050	0.06	6.54	1.08	14.06
30	-1	33.050	-	-	-	-
40	-1	33.027	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	-	-	-
1	140	1.8	-	-	-	8.10
5	80	1.8	0.89	0.97	0.79	8.26
10	100	1.5	0.78	0.39	1.00	7.96
15	-	-	0.55	0.73	0.54	-
20	70	1.6	-	-	-	8.19
25	-	-	0.33	0.45	0.25	-
30	120	1.5	-	-	-	8.29
40	110	1.7	-	-	-	8.24

Station: 78-1 Date: 29 Jul 78 Time: 1625 Station depth: 46 Air temp.: -

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	0	-	0.02	1.86	0.39	7.37
5	-1	-	0.00	2.31	0.48	7.56
10	-1	-	0.07	5.14	0.66	10.81
15	-1	-	0.03	4.56	0.78	9.14
20	-1	-	0.01	4.12	0.61	10.90
25	-1	-	0.00	3.00	0.68	11.30

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	10.00	0.00	6.58	-
5	-	-	9.20	0.00	5.97	-
10	-	-	5.84	0.00	3.72	-
15	-	-	2.35	0.02	1.90	-
20	-	-	1.90	0.03	1.70	-
25	-	-	1.46	0.00	1.11	-

Station: 78-1 Date: 31 Jul 78 Time: 1725 Station depth: - Air temp.: 6.9

Cloud: - Wind: - Ice cover: - Snow Cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	5	-	0.04	2.85	0.48	15.73
10	0	-	0.05	5.57	0.93	12.83

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	2.67	0.22	2.53	-
10	-	-	2.58	0.00	3.24	-

Station: 78-1 Date: 2 Aug 78 Time: 1800 Station depth: - Air temp.: -
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	7	-	0.00	0.08	0.15	4.62
5	-	-	0.00	0.06	0.38	8.64
10	-	-	0.01	2.90	0.79	12.87
15	-	-	0.05	3.99	0.81	10.90
20	-	-	0.04	6.14	0.80	10.51
25	-	-	0.05	6.02	0.89	11.10

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	7.40	0.00	5.72	-
5	-	-	9.78	0.00	6.84	-
10	-	-	4.26	0.00	3.21	-
15	-	-	2.25	0.00	1.56	-
20	-	-	1.46	0.00	1.11	-
25	-	-	1.13	0.00	0.86	-

Station: 78-1 Date: 5 Aug 78 Time: 1915 Station depth: - Air temp.: 4.0

Cloud: 8 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	4	-	0.03	0.22	0.24	1.54
1	-	-	-	-	-	-
5	2	-	0.00	0.24	0.25	1.16
10	1	-	0.01	0.48	0.37	2.51
15	1	-	0.02	0.41	0.41	3.76
20	0	-	0.05	3.35	0.64	8.78
25	0	-	0.06	4.82	0.92	11.96

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	6.26	0.04	5.24	-
1	910	2.3	-	-	-	8.68
5	-	-	10.54	0.00	7.51	-
10	-	-	13.16	0.00	8.71	-
15	-	-	15.56	0.00	9.06	-
20	-	-	8.79	0.00	5.71	-
25	-	-	4.39	0.00	2.22	-

Station: 78-1 Date: 7 Aug 78 Time: 2150 Station depth: - Air temp.: -
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	33.266	-	-	-	-
1	1	32.010	-	-	-	-
5	1	31.889	-	-	-	-
10	1	32.205	-	-	-	-
15	0	32.386	-	-	-	-
20	-1	32.630	-	-	-	-
25	-	32.487	-	-	-	-
30	-1	32.514	-	-	-	-
40	<-1	32.500	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	-	-	-
1	690	1.8	-	-	-	8.63
5	530	1.9	-	-	-	8.65
10	390	1.8	-	-	-	8.37
15	-	-	-	-	-	-
20	160	1.5	-	-	-	8.25
25	-	-	-	-	-	-
30	180	1.4	-	-	-	8.35
40	140	1.6	-	-	-	8.56

Station: 78-1 Date: 10 Aug 78 Time: 1020 Station depth: - Air temp.: -
 Cloud: 0 Wind: 0 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	-	0.00	0.10	0.21	4.13
5	-	-	0.00	0.08	0.27	1.44
10	-	-	0.09	3.57	0.72	8.04
15	-	-	0.07	4.81	0.81	9.24
20	-	-	0.07	4.79	0.82	9.24
25	-	-	0.09	5.05	0.88	9.80

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	3.01	0.09	2.39	-
5	-	-	6.61	0.00	5.10	-
10	-	-	6.61	0.00	5.10	-
15	-	-	5.16	0.00	3.06	-
20	-	-	4.83	0.00	3.36	-
25	-	-	5.73	2.98	4.20	-

Station: 78-1 Date: 11 Aug 78 Time: 0700 Station depth: - Air temp.: 13.0

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	28.869	0.00	0.17	0.17	2.37
1	1	31.622	-	-	-	-
5	1	32.331	0.00	0.24	0.33	1.72
10	1	32.473	0.00	1.67	0.57	5.71
15	0	32.476	0.01	4.34	0.56	5.16
20	0	-	0.02	4.93	0.91	9.62
25	-1	32.496	0.06	5.84	0.94	10.45
30	-1	32.608	-	-	-	-
40	<-1	32.603	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	3.10	0.33	3.61	-
1	1000	2.1	-	-	-	8.59
5	860	3.6	7.24	0.26	6.92	8.65
10	830	0.9	10.67	0.00	6.53	8.57
15	-	-	5.61	0.00	3.81	-
20	380	1.5	4.25	0.05	3.59	8.35
25	-	-	3.58	0.03	2.55	-
30	460	1.3	-	-	-	8.21
40	110	1.4	-	-	-	8.25

Station: 78-1 Date: 13 Aug 78 Time: 1113 Station depth: - Air temp.: -
 Cloud: 8 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	4	21.184	0.00	0.01	0.13	2.28
1	-	-	-	-	-	-
5	3	-	0.00	0.01	0.38	5.25
10	2	-	0.00	1.65	0.56	5.06
15	1	-	0.05	4.28	0.76	8.41
20	0	-	0.00	2.02	0.65	5.23
25	-	-	0.04	3.11	0.73	7.66
30	-	-	-	-	-	-
40	-	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	4.23	0.22	3.98	-
1	860	2.1	-	-	-	8.48
5	780	1.4	11.55	0.00	8.97	8.77
10	750	1.2	5.51	0.00	4.03	8.62
15	-	-	9.22	0.00	6.14	-
20	120	1.5	3.81	0.00	2.46	8.61
25	-	-	6.39	0.00	4.81	-
30	200	1.4	-	-	-	8.34
40	80	1.7	-	-	-	8.54

Station: 78-1 Date: 14 Aug 78 Time: - Station depth: - Air temp.: -
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	-	0.05	0.00	0.27	1.63
5	-	-	0.00	0.00	0.56	4.51
10	-	-	0.03	3.47	0.71	7.29
15	-	-	0.08	5.26	0.89	10.17
20	-	-	0.00	1.90	0.63	4.88

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	3.46	0.08	2.60	-
5	-	-	8.14	0.00	6.48	-
10	-	-	2.10	0.32	1.83	-
15	-	-	4.04	0.00	2.91	-
20	-	-	8.55	0.00	5.09	-

Station: 78-1 Date: 16 Aug 78 Time: 1305 Station depth - Air temp.: 8.0

Cloud: 6 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	4	-	0.00	0.57	0.34	4.73
1	-	-	-	-	-	-
5	3	-	0.00	2.02	0.40	6.94
10	2	-	0.01	4.71	0.70	8.49
15	2	31	0.02	5.97	0.86	10.03
20	2	-	0.06	6.16	0.81	10.80
25	2	-	0.02	6.09	0.80	10.99
30	-	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	6.94	0.00	4.80	-
1	520	1.5	-	-	-	9.33
5	560	-	7.61	0.01	5.84	9.19
10	230	2.0	6.03	2.18	14.90	9.04
15	-	-	2.78	0.13	3.04	-
20	430	1.2	2.32	0.00	0.00	8.72
25	-	-	1.56	0.00	1.45	-
30	320	2.2	-	-	-	-

Station: 78-1 Date: 18 Aug 78 Time: 1055 Station depth: - Air temp.: -
 Cloud: 0 Wind: 0 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	7	-	0.01	0.53	0.36	8.20
5	3	-	0.01	1.07	0.46	5.98
10	3	-	0.05	5.13	0.78	9.35
15	3	-	0.05	5.15	0.80	9.06
20	3	-	0.09	5.17	0.84	10.41
25	3	-	0.07	5.57	0.86	10.51

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	5.06	0.00	3.27	-
5	-	-	9.33	0.00	5.54	-
10	-	-	3.12	0.21	2.73	-
15	-	-	2.68	0.10	1.60	-
20	-	-	2.56	0.05	2.74	-
25	-	-	2.01	0.00	1.65	-

Station: 78-1 Date: 22 Aug 78 Time: 1000 Station depth: - Air temp.: 4.0

Cloud: 8 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	-	0.01	0.40	0.30	11.88
1	1	30	-	-	-	-
5	<0	-	0.00	3.98	0.73	7.11
10	<0	-	0.10	4.16	0.83	7.30
15	<0	-	0.10	4.60	0.86	7.49
20	<0	-	0.16	3.73	0.79	6.92
25	<0	-	0.03	4.51	0.89	7.31
30	<0	33	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	1.90	0.03	1.70	-
1	260	1.4	-	-	-	8.85
5	280	1.2	4.36	0.01	3.55	8.72
10	210	1.0	3.91	0.06	2.80	8.65
15	-	-	3.12	0.21	2.73	-
20	180	1.3	4.93	0.00	3.70	8.41
25	-	-	2.80	0.01	2.10	-
30	100	1.0	-	-	-	8.22

Station: 78-1 Date: 25 Aug 78 Time: 1215 Station depth: - Air temp.: 4.0
 Cloud: 8 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	-	0.00	0.22	0.25	7.08
5	-	-	0.04	0.66	0.45	3.98
10	-	-	0.08	3.14	0.72	4.66
15	-	-	0.13	3.47	0.74	4.27
20	-	-	0.09	2.41	0.80	2.91
25	-	-	0.07	3.99	0.66	4.75

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	4.26	0.00	2.66	-
5	-	-	6.96	0.00	4.97	-
10	-	-	3.93	0.00	2.41	-
15	-	-	3.35	0.16	2.09	-
20	-	-	2.23	0.07	1.94	-
25	-	-	2.35	0.02	1.90	-

Station: 78-1 Date: 26 Aug 78 Time: 0800 Station depth: - Air temp.: 2.5

Cloud: 8 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	-	-	-	-	-
1	1	-	-	-	-	-
5	1	-	-	-	-	-
10	1	-	-	-	-	-
15	1	-	-	-	-	-
20	1	-	-	-	-	-
25	1	-	-	-	-	-
30	-	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	-	-	-
1	440	-	-	-	-	9.04
5	310	1.8	-	-	-	8.83
10	270	1.1	-	-	-	8.72
15	-	-	-	-	-	-
20	150	1.2	-	-	-	8.67
25	-	-	-	-	-	-
30	120	1.6	-	-	-	8.67

Station: 78-1 Date: 28 Aug 78 Time: 1015 Station depth: - Air temp.: -
 Cloud: 5 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	-	0.00	0.61	0.21	1.18
5	-	-	0.04	0.45	0.52	3.19
10	-	-	0.08	3.84	0.89	5.10
15	-	-	0.00	2.47	0.85	4.72
20	-	-	0.07	2.44	0.78	4.53
25	-	-	0.07	3.98	0.87	4.91

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	0.77	0.14	1.39	-
5	-	-	5.48	0.06	4.24	-
10	-	-	1.68	0.00	1.40	-
15	-	-	1.35	0.00	1.15	-
20	-	-	1.22	0.17	1.04	-
25	-	-	0.90	0.00	0.40	-

Station: 78-1 Date: 30 Aug 78 Time: - Station depth: - Air temp.: 8.0
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	6	-	0.00	0.61	0.13	1.00
1	5	-	-	-	-	-
5	4	-	0.00	0.10	0.35	1.57
10	4	-	0.06	2.63	0.66	3.67
15	4	-	0.04	3.65	0.79	3.86
20	3	-	0.06	3.97	0.86	5.20
25	3	-	0.03	4.00	0.80	6.43
30	3	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	1.10	0.17	1.63	-
1	290	1.2	-	-	-	8.94
5	640	1.0	8.87	0.00	6.27	9.04
10	570	0.9	5.39	0.00	3.52	9.03
15	-	-	3.59	0.00	2.71	-
20	110	1.1	2.55	0.26	2.58	8.89
25	-	-	1.23	0.00	1.20	-
30	110	0.8	-	-	-	8.67

Station: 78-1 Date: 3 Sep 78 Time: 1100 Station depth: - Air temp.: 5.0
 Cloud: 8 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	3	-	0.00	0.20	0.24	2.38
5	3	-	0.00	0.30	0.48	1.52
10	2	-	0.00	0.13	0.53	1.24
15	2	-	0.07	2.68	0.68	2.09
20	1	-	0.05	3.32	0.64	2.28
25	-	-	0.07	4.02	0.87	3.71

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	6.38	0.00	5.20	-
5	-	-	11.74	0.11	9.49	-
10	-	-	13.80	0.00	9.43	-
15	-	-	7.03	0.03	5.53	-
20	-	-	6.25	0.02	5.68	-
25	-	-	3.93	1.07	6.56	-

Station: 78-1 Date: 6 Sep 78 Time: - Station depth: - Air temp.:
 Cloud: 4 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	3	-	0.00	0.18	0.34	2.09
1	3	-	-	-	-	-
5	2	-	0.00	0.70	0.39	0.38
10	1	-	0.06	2.57	0.68	1.24
15	1	-	0.06	2.72	0.71	1.33
20	1	-	0.05	3.25	0.79	1.71
25	<-1	-	0.05	3.32	0.75	1.71
30	<-1	-	-	-	-	-
40	<-1	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	3.65	0.48	3.66	-
1	680	2.1	-	-	-	8.84
5	520	1.5	8.84	0.02	6.50	8.77
10	360	1.5	6.86	0.00	4.08	8.76
15	-	-	6.06	0.00	4.01	-
20	410	1.5	5.38	0.00	3.90	8.57
25	-	-	5.28	0.00	3.56	-
30	320	1.7	-	-	-	-
40	400	2.0	-	-	-	8.40

Station: 78-1 Date: 9 Sep 78 Time: 1130 Station depth: - Air temp.: 6.0

Cloud: 2 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	-	0.03	0.40	0.47	0.72
5	-	-	0.04	0.92	0.47	0.53
10	-	-	0.07	2.78	0.76	1.40
15	-	-	0.07	2.18	0.76	1.40
20	-	-	0.08	2.52	0.83	1.59
25	-	-	0.07	3.82	0.85	2.46

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	7.19	0.00	4.87	-
5	-	-	8.40	0.00	6.46	-
10	-	-	4.93	0.00	3.70	-
15	-	-	4.62	0.00	3.23	-
20	-	-	3.44	0.40	3.37	-
25	-	-	2.80	0.01	2.10	-

Station: 78-1 Date: 18 Sep 78 Time: 1825 Station depth: 40 Air temp. -
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	0	33	0.06	3.01	0.98	4.57
1	0	33	-	-	-	-
5	0	32	0.09	3.87	0.80	4.57
10	0	32	0.09	3.95	0.76	4.77
15	0	32	0.10	3.94	0.90	4.57
20	0	32	0.14	3.83	0.76	4.77
25	0	32	0.06	3.85	0.76	4.48
30	0	32	-	-	-	-
38	0	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	1.33	1.26	5.69	-
1	80	1.5	-	-	-	8.62
5	50	1.4	0.96	0.07	5.92	8.65
10	40	1.3	0.85	0.33	3.21	8.67
15	-	-	0.82	0.70	3.44	-
20	30	1.5	0.69	0.00	0.82	8.45
25	-	-	0.52	0.39	1.87	-
30	60	1.2	-	-	-	8.59
38	50	1.3	-	-	-	8.65

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79

Station: 79-1

Station 79-1; Date 9 Mar 79; Time 1200; Sta. depth 43; Air temp. -30;
 Cloud 0 ; Wind NW 28; Ice cover 151; Snow cover 10; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	-1.4	32.0	0.06	2.81	0.80	15.63	-
1	-1.4	31.5	0.08	2.86	0.80	6.11	-
3	-	-	-	-	-	-	-
5	-1.4	32.0	0.06	2.94	0.80	12.04	-
7	-	-	-	-	-	-	-
10	-1.4	33.8	0.06	2.90	1.32	11.92	-
15	-1.6	34.0	0.02	2.87	0.94	17.72	-
20	-1.4	34.0	0.08	2.79	0.94	10.12	-
25	-1.4	33.8	0.06	3.14	0.85	3.29	-
30	-	33.8	0.08	2.94	0.80	4.55	-
40	-	33.0	0.04	2.85	0.71	6.41	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	60	2.0	0.29	0.57	2.35	8.10
1	-	100	2.1	0.29	0.57	2.35	8.07
3	-	-	-	-	-	-	-
5	-	70	1.5	0.19	0.48	1.28	8.31
7	-	-	-	-	-	-	-
10	-	160	2.3	0.20	0.23	1.48	7.92
15	-	120	1.9	0.19	0.48	1.28	7.97
20	-	0	1.8	0.19	0.48	1.28	8.12
25	-	70	1.9	0.19	0.23	1.48	8.02
30	-	120	1.9	0.10	0.34	0.87	7.89
40	-	120	2.0	0.31	0.43	1.23	7.92

Station 79-1; Date 4 May 79; Time 1155; Sta. depth 38; Air temp. -5;
 Cloud 5; Wind SSE 28; Ice cover 171; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	-1.8	33.522	0.08	1.73	0.75	13.59	-
1	-1.8	33.514	0.12	1.53	0.94	4.13	-
3	-	-	-	-	-	-	-
5	-1.8	33.492	0.06	1.55	0.70	6.20	-
7	-	-	-	-	-	-	-
10	-1.8	33.530	0.06	1.51	0.52	6.85	-
15	-1.8	33.533	0.04	1.49	0.80	19.46	-
20	-1.8	33.545	0.10	1.53	0.61	4.78	-
25	-	33.542	0.04	2.08	0.66	6.20	-
30	-1.8	33.545	0.04	1.55	0.61	5.65	-
35	-1.8	33.516	0.06	0.91	0.66	6.74	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	30	1.2	0.31	0.43	1.23	8.07
1	-	0	1.3	0.41	0.57	1.64	7.92
3	-	-	-	-	-	-	-
5	-	0	1.2	0.51	0.66	2.70	8.13
7	-	-	-	-	-	-	-
10	-	0	1.5	0.20	0.23	1.48	8.17
15	-	0	1.2	0.50	0.61	3.36	8.23
20	-	10	1.2	-	-	-	8.24
25	-	0	1.3	0.52	0.47	2.34	8.20
30	-	20	1.1	0.41	0.57	1.64	8.17
35	-	0	1.0	0.29	0.63	1.69	8.10

Station 79-1; Date 1 June 79; Time 0930; Sta. depth 37; Air temp. 3;
 Cloud 1, Wind NW 7; Ice cover 182; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	-0.5	24.361	0.08	5.18	0.66	73.85	-
1	-0.8	26.282	0.02	5.46	0.72	19.09	-
3	-	-	-	-	-	-	-
5	-1.2	32.217	0.05	5.34	0.77	15.45	-
7	-	-	-	-	-	-	-
10	-1.0	33.045	0.08	6.49	0.85	83.37	-
15	-1.2	33.211	0.09	6.35	1.00	14.28	-
20	-1.2	33.233	0.04	6.57	0.99	21.23	-
25	-1.2	33.188	0.04	6.81	1.00	22.73	-
30	-1.2	33.249	0.05	6.58	1.00	36.84	-
35	-1.2	33.187	0.01	5.14	1.72	23.69	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	10	1.6	1.08	1.51	6.17	7.57
1	-	20	1.9	2.17	3.10	11.24	8.05
3	-	-	-	-	-	-	-
5	-	280	2.5	3.62	3.19	12.19	8.21
7	-	-	-	-	-	-	-
10	-	40	2.0	2.24	3.55	12.36	8.29
15	-	30	1.9	2.62	4.26	15.59	7.70
20	-	50	2.0	2.26	3.38	11.97	8.27
25	-	30	1.5	2.07	2.94	11.45	7.70
30	-	0	1.7	2.53	4.02	14.32	8.13
35	-	20	1.6	2.65	3.94	14.82	7.76

Station 79-1; Date 6 Jun 79; Time 1052; Sta. depth 34; Air temp. 2;
 Cloud 7; Wind N 12; Ice cover 180; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.5	8.135	0.00	1.69	0.14	2.79	-
1	-1.0	29.436	0.00	2.00	0.48	8.59	-
3	-	-	-	-	-	-	-
5	-1.0	32.690	0.03	2.13	0.49	9.77	-
7	-	-	-	-	-	-	-
10	-1.0	33.131	0.04	2.19	0.56	14.50	-
15	-1.0	33.368	0.06	3.02	0.77	61.87	-
20	-1.0	33.369	0.03	3.41	0.77	21.16	-
25	-1.0	33.598	0.02	2.21	0.58	10.74	-
30	-1.2	33.418	0.01	2.46	0.57	6.55	-
32	-1.2	33.417	0.01	2.95	0.12	15.58	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	10	1.7	0.30	0.36	1.02	7.53
1	-	0	1.9	0.80	1.07	3.66	8.18
3	-	-	-	-	-	-	-
5	-	30	1.6	0.51	0.60	1.70	8.27
7	-	-	-	-	-	-	-
10	-	0	1.7	0.51	0.55	2.25	8.25
15	-	0	1.8	0.40	0.43	1.91	7.17
20	-	0	1.4	1.42	1.58	5.87	8.09
25	-	0	1.1	0.41	0.48	1.36	7.85
30	-	0	1.7	0.29	0.52	1.41	8.03
32	-	0	1.4	0.51	0.55	2.25	8.09

Station 79-1; Date 11 June 79; Time 1500; Sta. depth 33; Air temp. 3;
 Cloud 8; Wind N 8; Ice cover 145; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.4	<2.8	0.01	2.07	0.04	43.71	-
1	-0.6	27.898	0.02	2.18	0.75	12.46	-
3	-	-	-	-	-	-	-
5	-0.8	31.508	0.03	2.78	0.63	11.49	-
7	-	-	-	-	-	-	-
10	-0.8	32.841	0.01	2.73	0.55	46.50	-
15	-1.0	33.249	0.00	2.93	0.63	36.30	-
20	-1.0	33.151	0.06	6.66	0.95	16.00	-
25	-1.0	33.316	0.07	6.73	1.00	43.82	-
30	-1.0	33.289	0.09	7.07	0.93	34.58	-
31.5	-1.2	33.329	0.06	7.29	0.93	12.67	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	30	2.3	0.20	0.24	0.68	6.77*
1	-	130	1.4	0.51	0.60	1.70	8.43
3	-	-	-	-	-	-	-
5	-	110	2.3	0.75	0.26	2.32	8.56
7	-	-	-	-	-	-	-
10	-	60	2.1	0.55	-	-	8.12
15	-	30	1.9	0.65	0.18	1.43	8.08
20	-	160	2.4	0.64	0.39	1.27	8.28
25	-	170	2.0	0.65	0.18	1.43	7.85
30	-	270	2.0	0.30	0.23	2.67	8.22
31.5	-	110	1.9	0.55	0.06	1.09	8.31

*Count might be too low.

Station 79-1; Date 16 Jun 79; Time 1400; Sta. depth 34; Air temp.13;
 Cloud 8; Wind NE 2; Ice cover 142; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	-0.1	4.803	0.00	1.54	0.17	15.43	1.40
1	-1.4	26.796	0.01	2.68	0.65	12.68	1.61
3	-1.5	30.684	0.06	2.91	0.76	11.52	0.25
5	-1.5	31.690	0.12	6.07	0.96	14.48	0.29
7	-1.6	32.580	0.13	6.34	0.94	13.21	0.21
10	-1.6	33.014	0.16	3.57	0.74	6.24	0.33
15	-1.6	33.271	0.10	3.86	0.74	8.77	0.25
20	-1.6	33.369	0.14	4.97	0.82	10.46	0.50
25	-1.6	33.269	0.06	3.66	0.78	6.24	0.58
30	-1.6	33.446	0.09	6.75	0.96	12.16	0.41
33	-1.6	33.268	0.09	4.20	0.79	16.38	0.91

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.38	80	1.8	0.44	0.20	0.04	8.07
1	8.28	50	1.4	0.44	0.12	0.59	8.15
3	10.27	20	1.6	0.64	0.39	1.27	8.01
5	8.25	20	2.4	0.74	0.47	2.16	8.22
7	10.60	20	1.5	0.67	0.02	1.05	8.21
10	8.60	10	1.5	0.87	0.22	2.28	8.21
15	8.51	100	1.6	0.54	0.23	1.48	8.17
20	9.79	10	1.4	0.54	0.23	1.48	8.09
25	8.25	0	1.5	0.64	0.35	1.82	8.18
30	11.45	0	1.7	0.43	0.11	1.14	7.90
33	11.02	0	1.7	0.42	0.31	0.98	8.34

Station 79-1; Date 21 June 79; Time 1145; Sta. depth 41; Air temp. 9;
 Cloud 7; Wind 0; Ice cover 142; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.9	4.161	0.00	1.72	0.15	3.44	-
1	-0.5	22.918	0.03	2.72	0.55	3.10	-
3	-	-	-	-	-	-	-
5	-0.9	31.550	0.01	2.53	0.49	1.38	-
7	-	-	-	-	-	-	-
10	-1.2	32.986	0.03	2.61	0.60	0.12	-
15	-1.4	33.114	0.04	2.92	0.65	7.12	-
20	-1.4	33.132	0.10	5.85	0.95	7.58	-
25	-1.4	33.170	0.11	6.07	0.98	9.07	-
30	-1.4	33.253	0.12	6.43	1.01	5.28	-
40	-1.5	33.233	0.11	6.10	0.95	7.46	-

Depth	O ₂	POC	DOC	Ch. a	Ch. b	Ch. c	Bacteria
0	-	80	2.3	1.11	0.68	3.12	8.11
1	-	70	1.6	0.97	1.19	2.34	8.37
3	-	-	-	-	-	-	-
5	-	50	1.8	1.85	2.15	6.46	7.96
7	-	-	-	-	-	-	-
10	-	20	2.4	1.44	1.63	5.56	7.93
15	-	50	1.3	1.56	1.84	5.05	8.24
20	-	110	1.4	1.24	1.41	4.69	7.87
25	-	110	1.5	1.22	1.41	4.44	8.15
30	-	0	2.0	1.27	1.47	4.61	7.91
40	-	50	1.6	0.87	0.99	3.25	7.77

Station 79-1; Date 26 Jun 79; Time 1135; Sta. depth 46; Air temp. 2;
 Cloud 7; Wind ESE 15; Ice cover 120; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.5	5.543	0.03	1.89	0.19	6.43	-
1	-0.6	24.708	0.04	1.74	0.49	0.57	-
3	-	-	-	-	-	-	-
5	-1.1	31.344	0.06	2.58	0.69	0.80	-
7	-	-	-	-	-	-	-
10	-1.3	32.926	0.16	6.18	0.96	17.11	-
15	-1.3	33.020	0.01	3.00	0.73	24.80	-
20	-1.4	33.065	0.03	2.79	0.65	9.87	-
25	-1.5	33.098	0.15	6.22	0.96	40.41	-
30	-1.5	33.123	0.11	6.14	0.97	45.69	-
40	-1.5	33.094	0.78	5.17	0.72	58.55	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	110	2.7	1.58	1.53	6.82	8.04
1	-	100	1.6	2.43	1.99	9.67	8.07
3	-	-	-	-	-	-	-
5	-	40	2.0	1.95	1.28	5.74	8.06
7	-	-	-	-	-	-	-
10	-	110	1.6	2.34	3.14	11.09	7.81
15	-	30	2.0	1.35	1.16	4.48	8.06
20	-	30	1.8	1.51	1.78	6.40	7.61
25	-	20	1.9	1.40	1.92	7.66	7.96
30	-	10	1.4	2.27	2.57	10.33	8.25
40	-	20	2.0	1.61	1.96	7.21	8.26

Station 79-1; Date 1 Jul 79; Time 1135; Sta. depth 47; Air temp. 8;
 Cloud 7; Wind SSW 12; Ice cover 100; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.5	<2.8	0.03	1.02	0.05	2.08	-
1	0.1	14.866	0.01	0.98	0.29	4.82	-
3	-	-	-	-	-	-	-
5	-1.0	31.594	0.01	2.61	0.67	5.84	-
7	-	-	-	-	-	-	-
10	-1.3	32.821	0.06	1.60	0.50	3.60	-
15	-1.2	32.915	0.04	1.47	0.55	4.62	-
20	-1.3	32.951	0.05	1.82	0.64	3.91	-
25	-1.4	32.972	0.08	2.90	0.71	5.63	-
30	-1.4	32.988	0.06	1.88	0.54	3.60	-
40	-1.5	33.008	0.07	3.16	0.74	4.72	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	180	1.9	2.23	0.65	4.02	8.12
1	-	90	1.6	0.71	0.81	2.66	8.35
3	-	-	-	-	-	-	-
5	-	50	1.4	3.67	2.43	12.01	8.20
7	-	-	-	-	-	-	-
10	-	40	1.6	3.34	1.98	8.78	7.99
15	-	40	1.6	2.50	2.65	9.33	7.72
20	-	0	1.7	3.49	3.81	15.60	7.92
25	-	60	1.4	2.18	3.52	12.93	8.00
30	-	0	1.8	1.87	2.60	10.85	7.91
40	-	0	1.5	0.70	0.35	1.52	7.95

Station 79-1A; Date 5 Jul 79; Time 0920; Sta. depth 32; Air temp.6;
 Cloud 1; Wind SSW 8; Ice cover 75*; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	2.7	<2.8	0.02	0.75	0.06	6.33	3.88
1	1.5	3.052	0.00	0.62	0.10	7.02	0.00
3	-0.3	29.743	0.05	0.00	0.36	4.56	0.00
5	-0.6	30.877	0.03	0.00	0.48	3.09	0.00
7	-0.8	32.255	0.05	0.00	0.39	10.94	0.00
10	-1.0	32.631	0.08	0.85	0.39	4.17	0.00
20	-1.2	32.882	0.20	6.68	0.57	13.79	0.21
30	-1.3	32.896	0.20	7.05	0.85	7.02	0.21

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	0	1.6	0.44	0.05	0.67	7.97
1	-	80	1.3	1.05	0.14	1.19	8.24
3	-	520	1.2	7.14	0.22	6.78	8.34
5	-	640	1.2	11.40	0.00	7.63	8.49
7	-	470	1.3	14.31	0.00	9.96	8.12
10	-	220	1.6	9.92	0.00	7.46	8.21
20	-	40	1.7	2.82	0.40	3.04	8.24
30	-	0	1.4	1.30	0.49	2.51	8.20

*Ice breaking up at Station 79-1.

Station 79-1, Date 10 Jul 79; Time 1010; Sta. depth 39; Air temp. 9;

Cloud 0, Wind NE 8; Ice cover * ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.0	<2.8	0.02	0.60	0.04	11.83	-
1	2.4	4.692	0.01	0.30	0.06	8.59	-
3	0.3	13.463	0.04	0.03	0.13	3.68	-
5	-0.5	30.155	0.02	0.00	0.28	0.00	-
7	-0.9	29.825	0.05	0.00	0.53	4.17	-
10	-1.1	-	0.00	0.00	0.42	10.94	-
20	-1.3	-	0.05	1.73	0.49	3.68	-
30	-1.2	-	0.19	3.08	0.66	12.81	-
39	-	-	0.17	3.63	0.69	13.79	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	40	1.6	0.28	0.05	0.27	7.96
1	-	240	1.4	0.79	0.00	0.26	8.41
3	-	150	1.6	1.67	0.08	1.05	8.45
5	-	640	1.7	6.37	0.17	4.29	8.65
7	-	710	1.3	7.16	0.02	5.65	8.30
10	-	620	1.3	10.20	0.00	6.99	8.08
20	-	330	1.5	10.77	0.00	6.32	8.54
30	-	240	1.6	8.76	0.00	5.22	8.24
39	-	180	1.2	7.29	0.00	5.49	7.90

*Approximately 3/10 broken ice, scattered.

Station 79-1; Date 15 Jul 79; Time 1105; Sta. depth 46; Air temp. 5;
 Cloud 8; Wind SW 25; Ice cover * ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	3.1	17.732	-	-	-	-	2.37
1	3.0	21.850	-	-	-	-	1.32
3	2.6	22.036	-	-	-	-	1.14
5	-0.1	22.040	-	-	-	-	0.89
7	-0.5	31.748	-	-	-	-	0.96
10	-0.8	32.102	-	-	-	-	0.72
20	-1.1	-	-	-	-	-	1.98
30	-1.3	32.418	-	-	-	-	0.75
40	-1.4	32.422	-	-	-	-	1.21

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	260	1.2	1.56	0.08	1.64	8.26
1	-	290	1.6	1.89	0.11	1.89	8.24
3	-	290	1.0	1.88	0.22	1.81	8.22
5	-	610	2.8	4.78	0.33	4.52	8.45
7	-	740	2.1	7.38	0.04	5.47	8.41
10	-	710	2.4	9.62	0.02	7.22	8.39
20	-	480	1.5	9.41	0.00	6.46	8.31
30	-	330	1.1	7.95	0.00	5.63	8.41
40	-	410	2.5	7.38	0.04	5.47	8.30

*Many small, scattered pieces of ice.

Station 79-1; Date 19 Jul 79; Time 1340; Sta. depth 44; Air temp. 8;
 Cloud 7; Wind 15; Ice cover * ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	3.0	-	0.04	0.26	0.17	11.41	2.20
1	2.2	24.120	0.00	0.01	0.32	5.35	0.70
3	0.7	28.014	0.04	0.06	0.36	5.15	0.29
5	0.5	29.623	0.04	0.04	0.39	3.94	1.15
7	0.4	30.734	0.06	0.00	0.47	6.57	1.18
10	0.1	31.599	0.00	0.34	0.53	4.85	0.32
20	-1.1	32.365	0.19	2.87	0.76	7.07	0.54
30	-1.2	32.430	0.17	3.71	0.85	7.88	0.86
40	-1.2	32.408	0.13	3.85	0.86	9.80	0.89

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.51	180	2.0	1.47	1.04	4.24	8.24
1	10.01	330	1.6	2.60	0.32	2.75	8.47
3	10.01	480	1.9	3.72	0.94	5.80	8.38
5	10.28	500	1.9	4.78	0.41	4.72	8.32
7	9.91	500	1.3	6.57	0.95	7.60	8.64
10	-	460	1.5	6.86	0.80	8.03	8.24
20	9.37	200	1.3	5.59	2.54	10.30	8.27
30	9.29	160	1.2	3.59	1.14	6.23	8.17
40	8.99	160	1.5	4.66	2.17	10.24	8.21

*Station clear of ice.

Station 79-1; Date 24 Jul 79; Time 1200; Sta. depth 39; Air temp. 9;
 Cloud 7; Wind 25; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ P	SiO ₃ -Si	NH ₃ -N
0	5.5	20.250	0.00	0.03	0.11	0.25	1.15
1	3.5	20.314	0.01	0.00	0.11	0.00	0.80
3	2.2	24.207	0.02	0.00	0.24	1.37	0.61
5	0.6	30.568	0.01	0.02	0.35	4.72	0.45
7	-0.3	31.813	0.01	0.00	0.51	10.00	0.45
10	-0.7	32.146	0.00	0.03	0.56	0.36	0.67
20	-1.1	32.333	0.10	2.10	0.73	13.25	0.61
30	-1.2	32.414	0.13	2.99	0.83	12.64	1.05
39	-1.3	32.441	0.13	3.72	0.89	5.53	1.20

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.45	210	1.8	0.85	0.00	0.51	8.16
1	9.40	230	1.7	0.98	0.28	2.15	8.08
3	9.69	280	2.0	1.05	0.11	1.46	8.31
5	10.37	640	1.6	4.04	0.94	7.61	8.02
7	9.80	610	1.8	6.27	0.00	3.53	8.16
10	9.47	740	1.7	7.77	0.00	4.72	8.13
20	8.95	450	1.9	6.03	0.00	4.72	8.13
30	8.52	270	1.7	3.61	0.00	1.77	7.98
39	8.47	290	1.5	2.82	0.00	1.52	8.26

Station 79-1; Date 29 Jul 79; Time 1115; Sta. depth 32; Air temp.6;
 Cloud 8; Wind 30; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	4.4	20.024	0.00	0.09	0.18	5.71	3.29
1	3.6	23.509	0.00	0.04	0.28	5.41	0.54
3	1.2	30.601	0.00	0.04	0.37	0.70	0.45
5	0.6	31.084	0.00	0.04	0.40	1.10	0.84
7	0.5	31.278	0.00	0.14	0.50	1.20	0.51
10	0.4	31.482	0.00	0.11	0.54	1.40	0.32
20	-0.8	32.199	0.01	1.27	0.68	3.51	0.73
30	-0.9	32.278	0.06	3.75	0.83	6.61	1.05
40	-	-	-	-	-	-	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.46	100	1.3	0.50	0.05	0.37	8.40
1	9.13	140	1.3	0.78	0.13	0.37	8.02
3	9.29	360	1.2	2.36	0.00	1.15	8.09
5	9.74	480	1.4	4.95	0.34	4.65	8.20
7	9.37	490	1.6	5.77	0.00	4.21	8.22
10	9.09	530	1.8	7.14	0.00	4.98	8.09
20	8.53	200	1.8	4.38	0.00	3.16	8.07
30	8.59	200	1.5	3.53	0.00	2.65	8.15
40	8.34	-	-	-	-	-	-

Station 79-1; Date 4 Aug 79; Time 1050; Sta. depth 40; Air temp. 7;
 Cloud 8; Wind 15; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	3.7	20.933	0.02	0.15	0.16	7.92	1.26
1	3.7	20.983	0.02	0.01	0.17	8.41	1.87
3	2.6	27.748	0.01	0.00	0.22	3.16	1.79
5	1.3	30.353	0.00	0.00	0.31	1.90	0.48
7	1.2	30.392	0.00	0.00	0.42	2.09	0.78
10	-0.2	31.577	0.00	0.00	0.30	1.22	1.18
20	-1.3	32.365	0.03	3.53	0.83	6.66	1.46
30	-1.5	32.416	0.06	4.10	0.92	5.69	1.63
40	-1.4	32.445	0.06	5.36	0.90	7.92	1.56

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.34	60	1.8	0.54	0.19	0.74	8.43
1	8.42	90	2.0	0.54	0.27	0.93	8.40
3	8.87	200	1.8	0.71	0.18	1.13	8.22
5	9.17	220	1.9	1.19	0.46	2.36	8.07
7	9.20	260	1.9	1.48	0.39	1.70	8.01
10	9.30	500	1.7	3.54	0.52	3.71	7.90
20	8.07	190	1.6	2.90	0.02	3.81	7.31
30	7.96	0	1.9	1.27	0.21	1.48	7.61
40	8.00	80	1.7	1.26	0.32	1.40	7.67

Station 79-1; 8 Aug 79; Time 1130; Sta. depth 38; Air temp. 5;

Cloud 8; Wind 20; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	3.5	20.557	0.00	0.17	0.22	10.16	0.86
1	3.0	24.352	0.01	0.02	0.23	7.04	0.53
3	2.2	27.926	0.01	0.00	0.27	4.32	0.56
5	1.0	30.366	0.00	0.00	0.32	3.22	0.12
7	0.6	30.916	0.02	0.00	0.29	2.31	0.16
10	0.2	31.361	0.00	0.06	0.36	2.01	0.16
20	-0.9	32.012	0.01	0.85	0.60	2.82	0.19
30	-1.3	32.240	0.03	2.36	0.75	1.71	0.56
37	-1.4	32.319	0.05	3.10	0.83	5.23	1.23

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.23	130	2.0	0.49	0.21	0.76	8.35
1	8.29	210	2.5	0.59	0.25	0.91	8.21
3	8.84	230	2.8	0.77	0.18	0.84	8.31
5	9.15	240	2.3	1.38	0.25	2.36	8.19
7	9.21	320	2.1	1.94	0.30	1.70	8.14
10	9.27	260	2.0	2.28	0.23	2.03	7.75
20	8.67	320	1.7	5.31	0.07	3.85	7.92
30	8.29	240	1.5	4.41	0.11	3.17	7.91
37	7.89	220	1.6	2.93	0.50	2.37	7.91

Station 79-1; Date 14 Aug 79; Time 1045; Sta. depth 47; Air temp. 7;

Cloud 4; Wind 3; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	3.8	16.297	0.04	0.79	0.34	16.85	1.40
1	2.5	30.010	0.06	1.07	0.54	4.81	0.43
3	0.9	31.265	0.04	1.41	0.62	6.60	0.43
5	0.5	32.182	0.06	1.86	0.67	3.96	0.63
7	0.3	32.226	0.08	2.12	0.74	3.86	0.66
10	0.2	32.268	0.05	2.23	0.74	4.91	0.56
20	-0.5	32.183	0.10	2.89	0.80	5.44	0.93
30	-0.6	32.451	0.06	3.25	0.81	3.86	1.13
40	-0.7	32.522	0.07	3.52	0.86	7.45	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.37	40	1.9	0.48	0.17	1.31	7.82
1	8.51	180	2.0	2.01	0.07	1.84	7.99
3	8.55	190	2.0	2.56	0.09	3.49	7.79
5	8.45	150	1.8	2.22	0.10	2.69	8.04
7	8.36	150	3.2	1.73	0.00	1.85	8.11
10	8.33	160	1.7	2.07	0.46	4.80	7.82
20	8.28	100	1.5	1.38	0.10	2.26	7.87
30	8.15	110	1.7	1.27	0.15	2.31	7.88
40	8.11	100	2.2	1.21	0.26	1.23	7.88

Station 79-1; Date 16 Aug 79; Time 1005; Sta. depth 34; Air temp.7;

Cloud 7; Wind 9; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	3.1	27	0.04	0.66	0.48	5.02	1.07
1	1.0	30	0.01	0.24	0.39	1.64	0.72
3	1.2	31	0.03	0.26	0.37	0.00	0.76
5	0.3	32	0.00	0.44	0.39	4.17	1.14
7	0.1	32	0.06	1.26	0.59	7.24	1.22
10	0.1	32	0.05	0.61	0.41	1.64	0.99
20	-0.2	32	0.02	0.74	0.48	8.40	1.37
30	-0.4	33	0.04	2.39	0.73	10.41	1.87

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.48	-	-	1.54	0.27	1.75	-
1	9.47	-	-	2.15	0.43	2.47	-
3	9.51	-	-	2.71	0.38	2.62	-
5	9.55	-	-	2.66	0.32	2.45	-
7	9.18	-	-	2.45	0.33	2.35	-
10	9.33	-	-	2.44	0.22	2.43	-
20	8.63	-	-	1.09	0.30	1.28	-
30	8.60	-	-	1.75	0.42	2.24	-

Station 79-1; Date 19 Aug 79; Time 1130; Sta. depth 42; Air temp. - ;
 Cloud 8; Wind NW 15; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.0	32.240	0.02	1.49	0.51	3.16	1.33
1	0.8	32.265	0.04	1.74	0.58	1.99	1.75
3	0.3	32.285	0.02	1.87	0.61	2.19	1.83
5	0.3	32.320	0.05	2.08	0.62	5.30	1.75
7	-0.2	32.375	0.06	2.58	0.83	7.53	1.64
10	-0.5	32.529	0.01	3.31	0.87	4.03	1.71
20	-0.7	32.577	0.04	3.74	0.89	11.52	2.17
30	-0.7	32.588	0.02	3.61	0.87	8.90	2.06
40	-1.0	32.620	0.04	3.94	0.90	5.10	2.28

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	11.08	180	2.3	2.80	0.00	2.18	8.33
1	8.75	180	1.8	2.75	0.71	1.80	8.38
3	8.72	100	2.0	2.75	0.00	2.20	8.41
5	8.63	100	1.8	2.69	0.00	1.95	8.24
7	8.60	120	2.2	2.28	0.21	2.31	8.18
10	8.56	140	1.7	1.27	0.17	2.03	7.97
20	8.47	20	1.8	0.71	0.18	1.13	8.11
30	8.28	90	1.9	0.46	0.00	0.00	7.95
40	8.29	50	1.7	0.59	0.18	1.46	7.89

Station 79-1; Date 21 Aug 79; Time 0955; Sta. depth 47; Air temp. 7;
 Cloud 8; Wind SE 8; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.8	27	0.02	0.83	0.30	4.12	1.26
1	1.3	28	0.03	0.68	0.31	2.21	1.45
3	0.7	32	0.04	0.94	0.43	1.51	1.48
5	0.4	33	0.02	0.98	0.46	4.83	1.56
7	0.2	33	0.02	1.04	0.44	5.83	2.13
10	0.2	33	0.03	1.02	0.52	1.91	2.17
20	-0.1	33	0.02	1.27	0.59	10.66	2.09
30	-0.2	33	0.04	2.76	0.79	9.75	2.19
40	-0.3	33	0.04	1.50	0.59	3.42	2.70

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.02	-	-	2.62	1.85	8.12	-
1	9.07	-	-	1.83	0.22	2.11	-
3	8.83	-	-	1.67	0.12	1.79	-
5	8.71	-	-	1.79	0.00	0.02	-
7	8.64	-	-	1.40	1.63	0.72	-
10	8.63	-	-	1.47	1.81	0.78	-
20	8.43	-	-	1.30	0.41	2.32	-
30	8.05	-	-	1.78	0.71	3.27	-
40	8.38	-	-	0.80	0.21	3.87	-

Station 79-1; Date 24 Aug 79; Time 1125; Sta. depth 45; Air temp.7;

Cloud 7; Wind SW 5; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.2	31.618	0.00	2.55	0.68	3.68	1.17
1	0.3	32.091	0.00	2.20	0.65	5.17	1.01
3	0.0	32.188	0.00	1.72	0.57	3.58	0.84
5	0.0	32.428	0.00	2.39	0.66	4.17	0.97
7	0.0	32.451	0.00	2.50	0.70	4.77	1.78
10	-0.2	32.503	0.00	2.94	0.74	4.37	1.04
20	-0.3	32.667	0.00	3.03	0.79	4.67	1.38
30	-0.4	32.550	0.00	3.23	0.81	2.39	1.48
40	-0.4	32.609	0.00	3.55	0.85	5.57	1.54

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.85	70	1.7	1.73	0.00	1.85	8.35
1	8.83	170	1.6	3.18	1.06	8.12	8.02
3	8.78	170	1.8	2.57	0.00	2.27	8.14
5	8.78	120	1.9	2.41	0.00	2.23	7.60
7	8.72	90	1.7	2.12	0.00	2.35	8.18
10	9.01	100	1.5	2.12	0.63	3.60	7.96
20	9.04	50	1.7	1.16	0.15	1.61	8.06
30	9.01	30	1.9	1.38	0.84	3.71	8.13
40	8.87	80	1.8	0.81	0.30	1.48	8.19

Station 79-1; Date 1 Sep 79; Time 1015; Sta. depth 41; Air temp. 4;

Cloud 8; Wind SE 22; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	2.5	26.172	0.06	1.26	0.49	6.04	2.21
1	-0.4	29.064	0.04	1.41	0.57	5.22	2.52
3	-0.4	31.867	0.05	1.05	0.50	2.86	1.54
5	-0.4	32.222	0.04	1.06	0.54	2.05	1.38
7	-0.4	32.416	0.06	2.48	0.77	3.48	0.97
10	-0.4	32.460	0.04	1.13	0.55	1.84	1.58
20	-0.3	32.555	0.06	1.26	0.59	3.33	1.28
30	-0.2	-	0.12	1.36	0.72	0.72	1.75
35	-0.5	32.647	0.04	2.07	0.70	3.17	1.34

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.65	60	1.6	1.10	0.20	1.36	8.12
1	8.56	80	1.9	1.47	0.45	2.16	8.20
3	8.47	70	1.6	1.57	0.57	2.50	7.92
5	8.53	60	1.7	2.07	0.68	3.35	8.14
7	8.35	100	1.8	2.01	0.70	3.37	8.20
10	8.49	70	1.5	2.08	1.10	5.03	8.37
20	8.33	110	1.7	1.69	1.03	4.34	8.14
30	8.35	240	2.4	1.23	0.60	2.73	8.03
35	8.27	100	1.8	1.07	0.50	2.41	8.10

Station 79-1; Date 4 Sep 79; Time 1210; Sta. depth 42; Air temp. 6;
 Cloud - ; Wind 3; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	2.3	26.984	0.03	0.44	0.48	6.14	1.01
1	1.5	30.059	0.06	0.54	0.51	2.97	0.94
3	0.9	31.327	0.04	0.39	0.50	0.10	0.81
5	0.8	-	0.07	0.95	0.59	3.68	0.77
7	0.8	31.952	0.06	0.76	0.55	3.68	0.81
10	0.7	31.973	0.05	1.27	0.68	0.61	0.67
20	0.6	-	0.07	1.14	0.58	8.59	1.11
30	0.3	32.255	0.06	1.48	0.61	5.12	1.28
40	0.2	32.372	0.06	1.68	0.71	1.13	1.41

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.17	180	1.4	2.45	0.16	1.96	8.34
1	8.16	170	1.5	2.63	0.18	2.09	8.44
3	8.11	190	1.5	3.07	0.15	2.56	8.49
5	8.21	200	1.4	3.17	0.18	2.71	8.37
7	8.07	180	1.7	3.18	0.12	2.24	8.28
10	8.13	350	1.2	3.01	0.17	2.59	8.31
20	8.79	280	1.6	2.23	0.17	1.86	8.18
30	8.69	250	1.6	1.66	0.22	1.71	8.15
40	8.54	190	1.5	1.38	0.27	1.36	8.20

Station 79-1; Date 7 Sep 79; Time 1130; Sta. depth - ; Air temp. 4;
 Cloud 8; Wind N 18; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ Si	NH ₃ -N
0	2.0	-	-	-	-	-	-
1	1.9	-	-	-	-	-	-
3	0.7	-	-	-	-	-	-
5	0.6	-	-	-	-	-	-
7	0.4	-	-	-	-	-	-
10	0.3	-	-	-	-	-	-
20	0.1	-	-	-	-	-	-
30	0.2	-	-	-	-	-	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-

Station 79-1; Date 9 Sep 79; Time 1010; Sta. depth 51; Air temp.7;

Cloud 8; Wind 0 ; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	2.2	-	0.04	0.62	0.47	11.08	3.79
1	1.5	-	0.09	0.60	0.49	6.89	2.43
3	1.0	31.129	0.04	0.84	0.59	2.69	0.73
5	0.7	31.505	0.03	1.14	0.66	5.29	1.10
7	0.6	31.953	0.12	1.32	0.67	4.99	1.07
10	0.4	32.247	0.07	2.02	0.71	3.09	0.90
20	0.3	32.362	0.10	2.35	0.79	10.38	1.20
30	0.2	32.431	0.10	2.72	0.82	8.88	1.46
40	0.1	32.441	0.12	2.77	0.83	3.89	2.40

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.48	110	1.6	1.75	0.42	2.24	8.36
1	8.54	100	1.7	2.01	0.09	1.57	8.32
3	8.61	190	1.8	3.01	0.09	2.39	8.30
5	8.32	370	1.7	2.91	0.05	2.25	8.24
7	8.45	140	1.4	2.62	0.18	2.09	8.13
10	8.61	580	1.5	1.66	0.24	1.43	8.24
20	8.13	100	1.6	1.68	1.17	5.00	8.21
30	8.10	60	1.6	1.09	0.28	1.55	8.21
40	8.36	110	1.6	1.04	0.22	1.38	8.15

Station 79-1; Date 16 Sep 79; Time 0940; Sta. depth 43; Air temp. - ;
 Cloud 5; Wind 0 ; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	2.3	25.909	0.00	0.06	0.40	9.14	0.37
1	1.9	29.330	0.01	0.02	0.52	6.50	1.17
3	1.8	31.331	0.00	0.15	0.55	7.96	1.00
5	1.5	31.816	0.00	0.55	0.60	6.11	0.60
7	1.0	31.960	0.03	0.67	0.64	6.89	0.60
10	1.2	31.923	0.03	1.32	0.67	6.30	0.93
20	1.5	32.066	0.06	2.16	0.71	6.79	0.77
30	0.8	32.427	0.07	2.93	0.90	6.01	2.10
40	0.5	32.488	0.10	3.13	0.90	9.62	2.13

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.29	260	1.5	-	-	-	8.48
1	8.32	310	2.1	-	-	-	8.17
3	8.48	260	1.7	-	-	-	8.47
5	8.26	240	1.9	-	-	-	8.19
7	8.26	300	1.8	-	-	-	8.50
10	8.26	230	2.4	-	-	-	8.40
20	7.64	130	1.5	-	-	-	8.45
30	6.60	120	1.5	-	-	-	8.42
40	5.81	180	2.0	-	-	-	8.46

Station 79-1; Date 22 Sep 79; Time 1120; Sta. depth 46; Air temp. 1;
 Cloud 8; Wind 12; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.5	25.038	0.05	2.78	0.66	13.34	1.00
1	0.0	31.836	0.06	3.44	0.85	8.06	1.27
3	-0.1	32.424	0.07	3.54	0.87	7.77	1.33
5	-0.1	32.481	0.07	3.43	0.87	8.65	1.17
7	-0.1	32.503	0.07	3.60	0.89	10.31	1.30
10	-0.1	32.524	0.07	3.63	0.87	8.45	1.27
20	-0.2	32.528	0.07	3.72	0.89	15.39	1.56
30	-0.2	32.542	0.06	3.77	0.90	13.34	1.63
44	-0.2	32.587	0.08	4.04	0.92	9.62	1.90

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.07	170	1.6	-	-	-	8.21
1	7.73	100	1.6	-	-	-	8.36
3	7.72	60	1.5	-	-	-	8.31
5	7.71	100	1.4	-	-	-	8.37
7	7.79	100	1.7	-	-	-	8.29
10	7.72	90	1.7	-	-	-	8.24
20	7.66	90	1.7	-	-	-	8.35
30	7.60	110	1.8	-	-	-	8.38
44	7.79	120	1.8	-	-	-	8.37

Station 79-1; Date 11 Dec 79; Time 1210; Sta. depth 25; Air temp. -20
 Cloud 8; Wind NW 20; Ice cover 60; Snow cover 2.4; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	<-1	30.028	0.14	5.30	0.83	11.23	1.52
1	<-1	31.294	0.10	3.64	0.95	10.43	1.68
5	<-1	33.102	0.14	5.04	0.93	9.62	1.59
10	<-1	32.642	0.17	6.03	0.88	8.87	3.51
20	<-1	33.261	0.15	5.34	1.00	9.91	2.26
24	<-1	33.778	0.15	5.16	0.98	9.76	1.65

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	0	1.1	0.26	0.24	0.81	8.43
1	-	30	1.1	0.41	0.53	1.36	8.46
5	-	10	1.0	0.17	0.15	0.44	8.41
10	-	0	0.9	0.95	0.98	2.35	8.28
20	-	30	1.0	0.43	0.41	1.36	8.42
24	-	90	1.2	1.13	1.28	3.00	8.63

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79
Station: 78-2

Station: 78-2 Date: 29 Jul 78 Time: 1500 Station depth: 54 Air temp.: -

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ Si
0	0	-	0.00	0.13	0.37	5.30
1	-	-	-	-	-	-
5	-1	-	0.01	0.86	0.49	6.58
10	-1	-	0.01	2.50	0.61	10.02
15	-1	-	0.05	6.81	0.94	11.79
20	-1	-	0.04	4.93	0.82	11.49
25	-1	-	0.01	5.08	0.73	10.61

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	14.09	0.00	8.34	-
1	-	-	-	-	-	-
5	-	-	12.61	0.00	8.17	-
10	-	-	4.25	0.00	3.59	-
15	-	-	2.80	0.00	2.10	-
20	-	-	1.78	0.00	1.74	-
25	-	-	1.33	0.00	1.54	-

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79

Station: 78-5

Station 78-5 Date: 30 Jul 78 Time: 1155 Station depth 32 Air temp.: -

Cloud wind N,20 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	0	-	0.01	0.04	0.78	12.48
5	0	-	0.03	4.19	0.80	12.67
10	-1	-	0.06	5.35	0.68	10.81
15	-1	-	0.07	5.79	0.85	13.46
20	-1	-	0.02	6.17	0.89	12.77
25	-1	-	0.00	4.95	0.93	13.36

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	2.44	0.00	0.00	-
5	-	-	0.58	0.00	0.00	-
10	-	-	3.04	0.00	1.62	-
15	-	-	2.78	0.17	2.49	-
20	-	-	1.39	0.00	0.00	-
25	-	-	1.53	0.28	2.77	-

Station: 78-5 Date: 15 Aug 78 Time: - Station depth: - Air temp.: -
 Cloud: 8 Wind: W, 16 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ Si
0	-	-	0.00	0.20	0.15	2.41
5	-	-	0.00	0.08	0.23	2.99
10	-	-	0.00	2.36	0.57	5.88
15	-	-	0.07	4.28	0.78	7.52
20	-	-	0.06	4.77	0.81	8.68
25	-	-	0.09	5.18	0.83	9.93

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	3.46	0.08	2.60	-
5	-	-	9.71	0.28	8.23	-
10	-	-	8.19	0.00	5.62	-
15	-	-	4.04	0.00	2.36	-
20	-	-	2.91	0.00	2.05	-
25	-	-	2.12	0.15	1.44	-

Station: 78-5 Date: 26 Aug 78 Time: 1030 Station depth: 67 Air temp.: -
 Cloud: 8 Wind: 25 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ Si
0	-	32.188	0.02	0.01	0.28	1.26
5	-	-	0.03	0.14	0.45	2.43
10	-	-	0.07	2.85	0.70	3.40
15	-	32.583	0.07	3.57	0.77	3.10
20	-	-	0.08	3.64	0.80	3.98
25	-	32.705	0.09	4.09	0.77	4.17
30	-	32.649	-	-	-	-
40	-	33.147	-	-	-	-
50	-	32.708	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	9.42	0.00	6.82	-
5	-	-	9.33	0.00	6.09	-
10	-	-	4.83	0.00	2.81	-
15	-	-	2.58	0.00	1.81	-
20	-	-	1.35	0.00	1.15	-
25	-	-	1.35	0.00	1.15	-
30	-	-	-	-	-	-
40	-	-	-	-	-	-
50	-	-	-	-	-	-

Station: 78-5 Date: 28 Aug 78 Time: 1015 Station depth: - Air temp.:10.0

Cloud: 8 Wind: 0 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	-	0.02	0.01	0.31	2.05
1	-	-	-	-	-	-
5	-	-	0.00	0.04	0.33	1.29
10	-	-	0.06	2.58	0.62	3.77
15	-	-	0.03	3.68	0.56	2.91
20	-	-	0.04	2.06	0.64	2.62
25	-	-	0.05	3.81	0.82	4.53
30	-	-	-	-	-	-
45	-	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	580	1.0	4.45	0.25	4.83	-
1	680	1.0	-	-	-	8.87
5	650	1.3	8.52	0.00	5.86	8.98
10	300	1.0	1.64	1.75	5.06	8.90
15	-	-	0.81	1.00	2.18	-
20	100	0.9	1.44	0.25	1.33	8.52
25	-	-	1.12	0.05	0.70	-
30	190	1.2	-	-	-	8.21
45	480	1.8	-	-	-	8.69

Station: 78-5 Date: 6 Sep 78 Time: - Station depth: - Air temp.: -
 Cloud: 4 Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	-	0.00	0.06	0.31	1.05
5	-	-	0.02	1.30	0.56	1.43
10	-	-	0.09	2.24	0.64	1.43
15	-	-	0.12	2.85	0.68	1.52
20	-	-	0.06	3.21	0.69	2.19
25	-	-	0.06	3.40	0.74	2.57

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	2.74	0.71	3.10	-
5	-	-	8.39	0.03	6.30	-
10	-	-	7.15	0.23	5.48	-
15	-	-	4.90	0.28	4.48	-
20	-	-	4.12	0.26	4.03	-
25	-	-	3.65	0.43	4.21	-

Station: 78-5 Date: 19 Sep 78 Time: 1700 Station depth: - Air temp.: -
 Cloud: 5 Wind: 0 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	0	-	0.19	3.62	0.76	4.77
5	-	-	0.12	3.71	0.95	5.07
10	-	-	0.19	3.81	0.73	5.66
15	-	-	0.09	3.93	0.77	4.97
20	-	-	0.16	3.95	0.68	3.00
25	-	-	0.14	3.88	1.00	4.28

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	-	-	-
5	-	-	-	-	-	-
10	-	-	-	-	-	-
15	-	-	-	-	-	-
20	-	-	-	-	-	-
25	-	-	-	-	-	-

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79

Station: 79-5

Station 79-5; Date 27 Jul 79; Time 1530; Sta. depth 70; Air temp. - ;
 Cloud 7; Wind SE 28; Ice cover - ; Snow cover - ; Secchi 3

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.4	-	0.02	0.04	0.26	2.94	0.58
1	1.3	-	0.05	0.00	0.33	2.53	0.82
3	1.2	-	0.04	0.00	0.24	5.83	0.44
5	0.7	-	0.06	0.00	0.31	4.80	0.99
7	0.4	-	0.01	0.00	0.28	3.46	0.27
10	-0.2	-	0.00	0.05	0.37	3.15	0.37
20	-0.8	-	0.01	0.75	0.46	6.14	0.51
30	-0.9	-	0.00	0.82	0.48	3.36	0.48
40	-1.0	-	0.02	1.48	0.56	6.45	0.78
49	-1.1	-	-	-	-	-	-
60	-	-	0.05	2.45	0.67	8.52	1.36

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.34	540	2.0	3.33	0.24	3.58	8.25
1	9.57	490	2.2	3.62	0.23	3.38	8.26
3	9.53	490	1.7	3.50	0.25	3.70	8.26
5	9.68	470	1.4	4.20	0.02	3.15	8.69
7	9.57	530	1.5	4.52	0.06	4.42	8.28
10	9.32	390	1.6	6.21	0.00	4.80	8.07
20	8.85	250	1.9	6.80	2.20	10.75	7.99
30	8.82	240	1.7	5.48	0.00	4.33	8.01
40	8.68	150	1.8	2.97	0.00	2.30	7.96
49	-	-	-	-	-	-	-
60	8.44	150	1.9	2.22	0.21	2.61	7.85

Station 79-5; Date 7 Aug 79; Time 1600; Sta. depth 51; Air temp.6;
 Cloud 8; Wind NE 17; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.9	30.501	0.04	0.18	0.26	1.10	0.36
1	1.8	30.496	0.06	0.00	0.28	2.40	0.22
3	1.7	30.524	0.12	0.00	0.28	4.49	0.39
5	1.0	31.067	0.15	0.00	0.32	4.39	0.39
7	0.5	31.477	0.04	0.00	0.39	4.39	0.43
10	-0.4	32.029	0.09	0.86	0.53	5.09	0.39
20	-1.0	32.339	0.10	2.68	0.73	8.18	0.86
30	-1.3	32.471	0.12	3.14	0.80	7.78	1.23
40	-1.4	32.358	0.11	3.74	0.86	11.18	1.47

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.11	230	1.7	1.18	0.56	2.28	8.28
1	8.93	270	1.5	1.04	0.34	1.03	8.18
3	8.95	220	1.7	0.88	0.22	0.98	7.98
5	9.17	220	1.6	1.49	0.23	1.31	7.87
7	9.12	190	1.8	2.44	0.27	1.88	8.36
10	8.82	240	1.5	3.68	0.13	3.16	8.10
20	8.43	120	1.8	2.16	0.27	2.08	7.87
30	8.32	200	1.6	1.54	0.27	1.75	7.87
40	8.26	120	1.7	1.32	0.27	1.65	7.76

Station 79-5; Date 17 Aug 79; Time 1045; Sta. depth 47; Air temp. 4;

Cloud 8; Wind 20; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.7	31	0.00	0.00	0.40	0.21	1.18
1	1.3	31	0.00	0.00	0.33	0.60	0.84
3	1.3	31	0.00	0.13	0.27	0.69	0.76
5	0.2	32	0.04	1.00	0.41	0.64	0.38
7	-0.1	32	0.02	0.91	0.56	1.15	1.37
10	-0.4	32	0.03	2.09	0.68	0.67	1.94
20	-0.5	32	0.10	1.25	0.58	0.37	1.90
30	-0.8	33	0.08	2.15	0.74	0.39	1.56

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	9.27	310	1.8	3.04	0.39	3.14	8.52
1	9.23	260	1.9	2.95	0.19	2.61	8.47
3	9.25	300	1.9	3.38	0.40	3.67	8.33
5	9.58	300	1.9	4.47	0.17	3.34	8.31
7	9.33	220	1.7	3.35	0.12	2.64	8.34
10	8.65	120	1.8	1.70	0.36	2.07	8.29
20	8.70	220	1.9	1.03	0.38	1.77	8.18
30	8.58	10	1.8	1.05	0.77	2.71	8.14

Station 79-5; Date 27 Aug 79; Time 1125; Sta. depth 54; Air temp. 5;
 Cloud 8; Wind 3; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.3	32	0.00	0.91	0.51	1.22	0.81
1	0.6	33	0.00	0.35	0.52	0.73	0.60
3	0.4	33	0.00	0.78	0.47	1.51	0.64
5	0.3	33	0.01	0.96	0.56	1.70	0.67
7	0.3	33	0.00	1.47	0.60	1.51	0.77
10	0.1	33	0.01	1.62	0.60	1.99	0.77
20	0.0	33	0.00	2.01	0.63	1.99	0.94
30	0.0	34	0.01	2.11	0.65	1.70	1.07
40	-0.1	33	0.00	2.83	0.74	2.87	1.28

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	8.60	200	1.6	2.51	0.12	2.22	8.73
1	8.69	160	2.0	2.62	0.16	2.36	8.37
3	8.67	230	1.9	3.40	0.18	1.81	8.51
5	8.65	240	1.7	3.85	0.15	3.29	8.42
7	8.58	230	1.8	3.23	0.24	2.88	8.35
10	8.52	230	2.4	3.29	0.12	2.94	8.36
20	8.49	300	1.9	2.95	0.19	2.61	8.47
30	8.59	220	1.8	2.44	0.24	2.16	8.35
40	8.57	130	1.9	1.82	0.32	2.03	8.25

Station 79-5; Date 24 Sep 79; Time 1130; Sta. depth 57; Air temp. - ;
 Cloud 7; Wind - ; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	-0.1	32.442	-	-	-	-	-
1	0.0	32.441	-	-	-	-	-
3	0.0	32.427	-	-	-	-	-
5	0.0	32.420	-	-	-	-	-
7	-0.1	32.431	-	-	-	-	-
10	-0.2	32.457	-	-	-	-	-
20	-0.2	32.558	-	-	-	-	-
30	-0.2	32.555	-	-	-	-	-
40	-0.2	32.562	-	-	-	-	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	-	-	-	-
1	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-
40	-	-	-	-	-	-	-

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79

Station: 79-18

Station 79-18; Date 4 Aug 79; Time 1700; Sta. depth 39; Air temp. 8;
 Cloud 2; Wind 8; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.2	-	-	-	-	-	-
1	0.1	-	-	-	-	-	-
3	0.1	32	-	-	-	-	-
5	0.0	32	-	-	-	-	-
7	0.0	-	-	-	-	-	-
10	0.0	32	-	-	-	-	-
20	0.0	32	-	-	-	-	-
30	0.0	31	-	-	-	-	-
35	0.0	31	-	-	-	-	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	1.65	0.30	1.90	-
1	-	-	-	1.91	0.65	2.20	-
3	-	-	-	1.71	0.30	1.60	-
5	-	-	-	1.65	0.33	1.63	-
7	-	-	-	1.75	0.40	2.52	-
10	-	-	-	1.71	0.26	2.15	-
20	-	-	-	1.99	0.26	1.96	-
30	-	-	-	2.49	0.39	2.52	-
35	-	-	-	2.23	0.78	2.37	-

Station 79-18; Date 14 Aug 79; Time 1120; Sta. depth 38; Air temp. 10;
 Cloud 5; Wind NE 8; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.5	-	-	-	-	-	-
1	0.4	-	-	-	-	-	-
3	0.3	-	-	-	-	-	-
5	0.2	-	-	-	-	-	-
7	0.2	-	-	-	-	-	-
10	0.2	-	-	-	-	-	-
20	0.1	-	-	-	-	-	-
30	0.0	-	-	-	-	-	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	2.72	0.30	2.43	-
1	-	-	-	2.16	0.27	2.08	-
3	-	-	-	2.22	0.25	2.07	-
5	-	-	-	2.35	0.04	1.62	-
7	-	-	-	2.62	0.20	1.81	-
10	-	-	-	2.90	0.13	2.44	-
20	-	-	-	2.52	0.06	1.75	-
30	-	-	-	2.62	0.10	1.89	-

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79

Station: 79-27

Station 79-27; Date 4 Aug 79; Time 0800; Sta. depth 274; Air temp.8

Cloud 1; Wind 9; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.1	32	-	-	-	-	-
1	-0.2	32	-	-	-	-	-
3	-0.2	-	-	-	-	-	-
5	-0.3	32	-	-	-	-	-
7	-0.4	-	-	-	-	-	-
10	-0.4	32	-	-	-	-	-
20	-0.4	-	-	-	-	-	-
30	-0.5	32	-	-	-	-	-
40	-0.5	-	-	-	-	-	-
49	-0.5	31	-	-	-	-	-
100	-1.6	32	-	-	-	-	-
150	-1.3	32	-	-	-	-	-
250	-1.1	32	-	-	-	-	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	3.34	0.22	2.56	-
1	-	-	-	3.34	0.22	2.56	-
3	-	-	-	3.44	0.32	3.18	-
5	-	-	-	3.77	0.46	3.34	-
7	-	-	-	3.60	0.44	3.22	-
10	-	-	-	3.99	0.45	3.44	-
20	-	-	-	3.67	0.21	3.36	-
30	-	-	-	4.05	0.43	3.42	-
40	-	-	-	3.33	0.39	2.95	-
49	-	-	-	3.32	0.47	3.14	-
100	-	-	-	1.02	0.46	1.96	-
150	-	-	-	0.64	0.27	1.63	-
250	-	-	-	0.46	0.46	1.34	-

Station 79-27; Date 14 Aug 79; Time 1920; Sta. depth 280; Air temp. 8;
 Cloud 5; Wind 0 ; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	1.3	-	-	-	-	-	-
1	1.2	-	-	-	-	-	-
3	0.8	-	-	-	-	-	-
5	0.8	-	-	-	-	-	-
7	0.4	-	-	-	-	-	-
10	0.3	-	-	-	-	-	-
20	0.2	-	-	-	-	-	-
30	-0.2	-	-	-	-	-	-
40	-0.4	-	-	-	-	-	-
49	-0.6	-	-	-	-	-	-
100	-1.0	-	-	-	-	-	-
200	-1.3	-	-	-	-	-	-
250	-1.3	-	-	-	-	-	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	1.88	0.22	1.81	-
1	-	-	-	1.49	0.21	1.58	-
3	-	-	-	2.33	0.21	2.01	-
5	-	-	-	2.28	0.23	2.03	-
7	-	-	-	2.51	0.14	1.94	-
10	-	-	-	2.68	0.05	2.15	-
20	-	-	-	2.28	0.15	1.84	-
30	-	-	-	1.78	0.18	1.66	-
40	-	-	-	1.67	0.14	1.51	-
49	-	-	-	1.56	0.10	1.37	-
100	-	-	-	0.78	0.10	0.64	-
200	-	-	-	0.78	0.10	0.64	-
250	-	-	-	0.83	0.16	0.81	-

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79
Station: 79-28

Station 79-28; Date 2 Aug 79; Time 2045; Sta. depth 112; Air temp. 5;

Cloud 8; Wind 16; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	-	28	-	-	-	-	-
1	1.5	28	-	-	-	-	-
3	1.4	28	-	-	-	-	-
5	1.4	29	-	-	-	-	-
7	1.4	30	-	-	-	-	-
10	0.4	30	-	-	-	-	-
15	0.0	-	-	-	-	-	-
20	-0.4	31	-	-	-	-	-
30	-0.7	32	-	-	-	-	-
40	-0.9	32	-	-	-	-	-
49	-1.0	32	-	-	-	-	-
100	-1.0	32	-	-	-	-	-

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	1.10	0.22	1.04	-
1	-	-	-	1.31	0.37	1.57	-
3	-	-	-	1.15	0.28	1.25	-
5	-	-	-	1.11	0.14	0.89	-
7	-	-	-	1.36	0.41	0.02	-
10	-	-	-	4.13	0.12	2.82	-
15	-	-	-	-	-	-	-
20	-	-	-	4.54	0.54	4.26	-
30	-	-	-	2.84	0.17	2.19	-
40	-	-	-	2.10	0.32	1.80	-
49	-	-	-	1.44	0.15	1.41	-
100	-	-	-	1.33	0.13	0.99	-

Station 79-28; Date 15 Aug 79; Time 1200; Sta. depth 116; Air temp. 5;
 Cloud 3; Wind - ; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	2.4	-	0.04	0.46	0.46	2.46	0.68
1	2.1	-	0.03	0.26	0.40	1.59	1.21
3	1.5	-	0.00	0.42	0.40	1.59	0.58
5	0.9	-	0.00	0.52	0.46	2.85	0.75
7	0.7	-	0.06	0.71	0.52	3.46	1.11
10	0.4	-	0.05	0.82	0.41	3.46	0.82
20	-0.4	-	0.04	1.37	0.60	2.18	0.68
30	-0.4	-	0.04	1.32	0.59	2.82	1.25
40	-0.5	-	0.00	2.16	0.75	4.41	1.39
50	-0.6	-	0.03	1.69	0.67	3.14	4.02
100	-0.7	30	0.04	2.17	0.75	3.14	1.03

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	260	1.7	2.35	0.00	2.17	8.41
1	-	240	1.9	2.20	0.00	2.02	8.26
3	-	270	1.7	2.44	0.00	2.71	8.40
5	-	300	2.0	2.41	0.00	1.87	8.67
7	-	250	1.9	2.74	0.01	2.40	8.54
10	-	210	1.9	2.62	0.08	2.17	8.36
20	-	190	1.7	2.51	0.04	2.02	8.34
30	-	50	2.1	1.33	0.19	1.46	8.16
40	-	10	1.7	1.28	0.00	1.65	7.95
50	-	30	1.8	0.99	0.14	1.49	8.13
100	-	40	1.7	1.00	0.03	1.57	8.19

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79
Station: 78-51

Station: 78-51 Date: 30 Jul 78 Time: 1737 Station depth: 229 Air temp.: -
 Cloud: - Wind: 0 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	-	0.00	0.09	0.35	8.35
5	0	-	0.00	0.95	0.53	10.02
10	-1	-	0.03	3.77	0.56	9.04
15	-1	-	0.03	5.29	0.72	13.06
20	-1	-	0.03	6.51	0.73	9.23
25	-1	-	0.05	6.44	0.76	9.72

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	8.83	0.00	3.84	-
5	-	-	8.17	0.00	2.95	-
10	-	-	9.49	0.00	3.78	-
15	-	-	6.13	0.00	1.53	-
20	-	-	2.90	0.00	0.00	-
25	-	-	2.93	0.00	1.67	-

Station: 78-51 Date: 7 Aug 78 Time: - Station depth: - Air temp.: -
 Cloud: 0 Wind: NW,20 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	-	0.03	1.89	0.67	8.68
5	-	-	0.05	2.44	0.68	9.74
10	-	-	0.06	2.23	0.69	8.88
15	-	-	0.02	2.66	0.57	9.65
20	-	-	0.09	4.66	0.61	9.46
25	-	-	0.07	4.78	0.70	7.78

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	6.96	0.00	4.97	-
5	-	-	6.62	0.00	4.17	-
10	-	-	6.94	0.00	4.80	-
15	-	-	7.64	0.00	4.52	-
20	-	-	7.51	0.00	4.96	-
25	-	-	5.58	0.27	3.49	-

Station: 78-51 Date: 26 Aug 78 Time: 1600 Station depth: 200 Air temp. -

Cloud: 8 Wind: 15 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	29.860	0.04	0.25	0.28	3.98
5	-	31.903	0.06	0.99	0.45	4.95
10	-	32.376	0.05	2.98	0.65	5.82
15	-	32.488	0.07	3.54	0.69	6.01
20	-	32.476	0.08	3.99	0.74	6.50
25	-	32.556	0.11	3.23	0.87	7.28
30	-	32.596	-	-	-	-
40	-	32.649	-	-	-	-
50	-	-	-	-	-	-
100	-	32.719	-	-	-	-
150	-	32.801	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	7.32	0.00	4.44	-
5	-	-	7.88	0.00	4.59	-
10	-	-	6.75	0.00	4.28	-
15	-	-	5.16	0.00	3.61	-
20	-	-	3.80	0.06	3.39	-
25	-	-	2.69	0.00	2.31	-
30	-	-	-	-	-	-
40	-	-	-	-	-	-
50	-	-	-	-	-	-
100	-	-	-	-	-	-
150	-	-	-	-	-	-

Station: 78-51 Date: 20 Sep 78 Time: 1600 Station depth: 203 Air temp.: -
 Cloud: 7 Wind: 0 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	-	32.668	0.16	3.07	0.76	4.38
5	-	32.641	0.13	3.54	0.74	4.77
10	-	32.661	0.06	2.08	0.90	4.67
15	-	32.673	0.06	3.19	0.95	4.48
20	-	32.675	0.09	3.82	0.97	4.57
25	-	32.709	0.07	4.30	0.92	4.97
40	-	32.752	-	-	-	-
60	-	32.789	-	-	-	-
80	-	32.815	-	-	-	-
100	-	32.830	-	-	-	-
150	-	32.851	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	-	-	-	-	-
5	-	-	-	-	-	-
10	-	-	-	-	-	-
15	-	-	-	-	-	-
20	-	-	-	-	-	-
25	-	-	-	-	-	-
40	-	-	-	-	-	-
60	-	-	-	-	-	-
80	-	-	-	-	-	-
100	-	-	-	-	-	-
150	-	-	-	-	-	-

Table 4 (continued). Frobisher Bay oceanographic data, 1978-79
Station: 79-51

Station 79-51; Date 25 Sep 79; Time 1115; Sta. depth 223; Air temp. - ;
 Cloud 7; Wind - ; Ice cover - ; Snow cover - ; Secchi -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si	NH ₃ -N
0	0.0	32.294	0.05	2.81	0.73	3.74	0.54
1	0.0	32.275	0.08	2.68	0.77	4.15	0.33
5	0.0	32.302	0.04	2.74	0.77	6.44	0.33
10	0.0	32.295	0.06	2.78	0.77	6.02	0.21
20	-	32.329	0.08	2.94	0.77	5.19	0.54
50	-0.1	32.522	0.06	3.61	0.87	5.40	0.91
100	-0.3	32.601	0.06	3.91	0.89	7.48	1.20
200	-0.2	32.667	0.07	4.18	0.88	4.78	0.91

Depth	O ₂	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	-	120	1.7	-	-	-	8.50
1	-	80	1.4	-	-	-	8.43
5	-	80	1.7	-	-	-	8.48
10	-	90	1.6	-	-	-	8.39
20	-	80	1.8	-	-	-	8.39
50	-	60	1.4	-	-	-	8.17
100	-	80	1.8	-	-	-	8.14
200	-	80	1.7	-	-	-	8.25

Table 5. Winton Bay oceanographic data, 1978
Station: 78-WB1

Station: 78-WB1 Date: 23 Jun 78 Time: 1600 Station depth: - Air temp.: 3.0

Cloud: - Wind: - Ice cover: 164 Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
1	-1	30	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
1	160	3.7	-	-	-	8.47

Station: 78-WB1 Date: 12 Jul 78 Time: - Station depth: - Air temp.: 5.0
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	1	7.299	0.01	0.33	0.15	5.69
1	2	17.662	-	-	-	-
5	1	29.624	0.03	3.73	0.49	5.69
10	1	32.681	0.05	3.36	0.69	7.83
15	0	32.950	0.03	3.07	0.82	9.78
20	0	33.075	0.03	4.56	0.85	10.65
25	-1	33.117	0.02	3.08	0.67	7.15
30	-1	33.121	-	-	-	-
40	-1	33.132	-	-	-	-
49	-1	33.147	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	250	1.2	0.65	0.23	0.88	8.11
1	140	1.6	-	-	-	8.48
5	430	1.4	4.90	0.37	3.38	8.89
10	220	2.1	2.64	0.67	1.66	8.46
15	-	-	1.64	0.58	0.91	-
20	60	2.4	0.96	0.63	1.35	8.37
25	-	-	0.76	0.44	0.12	-
30	80	1.7	-	-	-	8.47
40	30	1.7	-	-	-	8.78
49	40	1.4	-	-	-	8.69

Station: 78-WB1 Date: 27 Jul 78 Time: - Station depth: 51 Air temp.: -
 Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	6	22.130	0.00	0.15	0.14	3.73
1	5	25.395	-	-	-	-
5	3	31.231	0.00	0.25	0.32	0.39
10	3	32.114	-0.00	0.31	0.32	0.88
15	1	32.870	0.00	0.34	0.34	0.39
20	1	33.010	0.00	0.00	0.39	1.67
25	0	33.055	0.00	0.18	0.46	1.67
30	0	33.128	-	-	-	-
35	0	-	-	-	-	-
40	-1	33.450	-	-	-	-
50	-1	33.289	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	130	1.7	0.55	0.06	1.09	8.83
1	140	1.7	-	-	-	8.68
5	260	1.6	1.45	0.04	1.50	8.69
10	310	2.1	2.25	0.00	1.56	8.54
15	-	-	2.93	0.00	1.67	-
20	410	1.4	4.17	0.00	3.41	8.72
25	-	-	6.06	0.00	4.01	-
30	440	1.5	-	-	-	8.15
35	-	-	-	-	-	-
40	220	1.6	-	-	-	8.14
50	170	1.5	-	-	-	8.10

Station: 78-WB1 Date: 2 Aug 78 Time: 1445 Station depth: 52 Air temp.: -

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	7	-	0.00	0.80	0.33	3.96
1	4	-	-	-	-	-
5	2	-	0.00	0.15	0.46	0.48
10	1	-	0.04	1.03	0.63	0.96
15	0	32.904	0.01	2.74	0.72	2.61
20	0	33.060	0.02	2.61	0.68	2.41
25	0	33.269	0.04	2.32	0.77	2.41
30	0	33.100	-	-	-	-
40	0	33.130	-	-	-	-
50	0	33.568	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	50	1.7	0.73	0.67	2.00	8.42
1	240	1.6	-	-	-	8.42
5	150	1.7	1.10	0.17	1.63	8.54
10	190	1.8	2.00	0.15	2.04	8.04
15	-	-	2.12	0.11	1.99	-
20	130	1.7	2.56	0.26	2.58	8.15
25	-	-	2.22	0.23	2.33	-
30	190	1.4	-	-	-	8.03
40	200	1.9	-	-	-	8.36
50	160	1.9	-	-	-	8.26

Station: 78-WB1 Date: 14 Aug 78 Time: 1400 Station depth: - Air temp.: 9.5

Cloud: - Wind: - Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₃ -P	SiO ₃ -Si
0	4	-	0.00	0.27	0.63	1.35
1	3	32.907	-	-	-	-
5	3	-	0.02	0.29	0.62	1.35
10	3	-	0.01	1.06	0.72	1.53
15	3	-	0.05	2.55	0.81	2.00
20	3	-	0.06	3.41	0.67	2.00
25	3	-	0.05	3.73	0.87	4.41
30	3	-	-	-	-	-
53	2	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	710	2.4	3.25	0.00	2.85	8.79
1	250	1.7	-	-	-	8.83
5	300	1.4	4.02	0.19	3.14	8.61
10	530	1.1	3.25	0.00	2.30	8.61
15	-	-	2.78	0.17	2.49	-
20	400	1.4	2.32	0.35	2.67	8.37
25	-	-	4.87	0.00	0.00	-
30	-	-	-	-	-	-
53	80	1.4	-	-	-	-

Station: 78-WB1 Date: 12 Sep 78 Time: 1630 Station depth: - Air temp.: 4.0

Cloud: - Wind: ESE 2 Ice cover: - Snow cover: - Secchi: -

Depth	Temp.	Salinity	NO ₂ -N	NO ₃ -N	PO ₄ -P	SiO ₃ -Si
0	4	-	0.01	0.15	0.46	2.36
1	4	-	-	-	-	-
5	3	-	0.00	0.06	0.37	1.30
10	3	-	0.01	0.12	0.51	1.78
15	2	-	0.00	0.11	0.43	0.82
20	2	-	0.00	0.04	0.54	0.92
25	2	-	0.00	0.15	0.50	1.30
30	2	-	-	-	-	-
50	-	-	-	-	-	-

Depth	POC	DOC	Ch.a	Ch.b	Ch.c	Bacteria
0	110	1.8	0.74	0.47	2.16	-
1	110	1.5	-	-	-	8.76
5	160	1.4	0.96	0.59	1.90	8.69
10	-	-	0.96	0.59	1.90	8.52
15	-	-	0.84	0.63	1.95	-
20	140	1.4	0.84	0.63	1.95	8.57
25	-	-	0.81	0.96	2.73	-
30	210	1.4	-	-	-	8.79
50	250	1.4	-	-	-	8.62