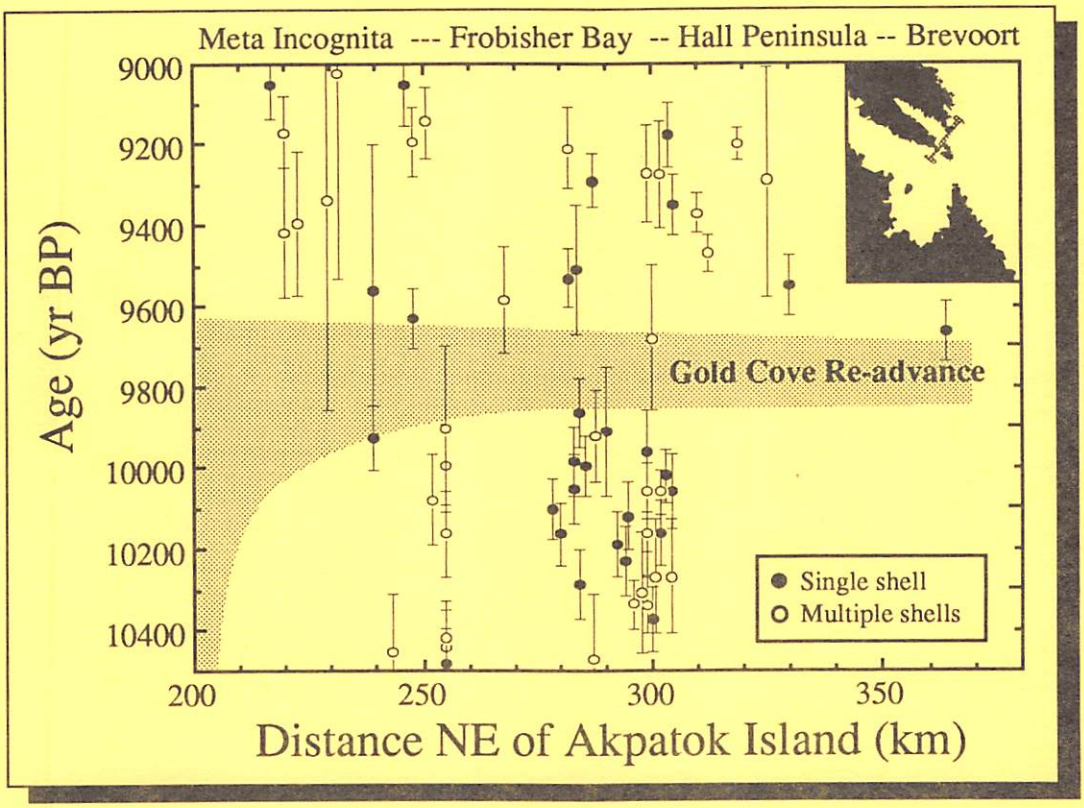
Radiocarbon Date List VII: Baffin Island, N.W.T., Canada

Compiled by D.S. Kaufman and K.M. Williams



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RADIOCARBON DATE LIST VII:
BAFFIN ISLAND, N.W.T., CANADA
including marine dates from adjacent seas and East Greenland

Compiled by D.S. Kaufman and K.M. Williams

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ABSTRACT

This Date List contains an annotated listing of 217 radiocarbon dates obtained on samples from the Canadian Arctic and East Greenland shelf. The dated material was recovered from marine cores from the Baffin Island and East Greenland shelves, collected from lake cores, and terrestrial exposures in western Hudson Strait, southeastern Baffin Island, and northern Baffin Island. The dates are used to address a variety of research questions. Some dates concern the timing and rate of paleoenvironmental changes such as sea-level, glacial, and sedimentological fluctuations; others bear on investigations into the applications and limitations of geochronological methods. Most of the dates (93%) were produced by the Accelerator Mass Spectrometer (AMS) at the University of Arizona. The prevalent use of AMS dating reflects the enhanced potential for obtaining a high-resolution chronostratigraphy using this technology, especially in arctic lake and marine environments where dateable materials are frequently scarce.

PREFACE

This is the latest in a series of radiocarbon date lists that have been published through the Institute of Arctic and Alpine Research. Darrell Kaufman and Kerstin Williams are to be congratulated in bringing together such a comprehensive document. Normally radiocarbon date lists are produced by individual laboratories. In contrast, the date lists, compiled and published by INSTAAR present in single documents the results from several laboratories that relate to one or more arctic regions. Date List VII also clearly demonstrates the significant impact that accelerator mass spectrometry (AMS) ^{14}C dating is having on arctic research. This date list includes results from the eastern Canadian Aractic, the Labrador Sea, and the margin of East Greenland.

M. M. Meier

Director, INSTAAR

ACKNOWLEDGMENTS

Funding for the dates presented in this list was provided by various research grants from the National Science Foundation, principally grants: DPP-86-19284; DPP-88-22022; EAR-86-18452; EAR-88-22292; EAR-89-05524. Dr. A.J.T. Jull of the University of Arizona AMS facility has been instrumental in our dating efforts. Samples from Canadian cores (i.e. HU-) were obtained from the Atlantic Geoscience Center, Bedford Institute of Oceanography, Halifax, Canada. This compilation was supported by NSF Grant EAR-89-05524.

INTRODUCTION

This Radiocarbon Date List is the seventh in a series that report the results of radiocarbon analyses obtained by researchers at the University of Colorado, Institute of Arctic and Alpine Research (INSTAAR) and at other institutions with shared interests in the Eastern Canadian Arctic and East Greenland shelf. This is the largest Date List yet compiled, including 219 dates acquired over the past three years, nearly twice the number of the previous list, which encompassed the same length of time. Of these dates, just over one-half are on material recovered from marine sediment cores, 36 are from lake cores, and 73 from terrestrial exposures. Nearly 90% (195) of the dates were produced by the Accelerator Mass Spectrometer (AMS) at the University of Arizona and two are from the University of Toronto AMS facility. The remaining 22 dates were analyzed by conventional radiocarbon laboratories at the Geological Survey of Canada or Geochron Inc.

The dominance of the number of AMS dates over conventional dates is indicative of the revolution in Quaternary geochronology that has accompanied the ability to obtain ages on milligram-size samples. Since the advent of AMS technology, it has become feasible to date sediments that are only sparsely organic. The technique has also enabled us to assess the age of various fractions of organic matter from a single stratigraphic horizon. Studies by Stafford and Abbott (1990), for example, have demonstrated a range of radiocarbon ages for various molecular classes of organic matter extracted from arctic lake sediments. Benthic and planktonic foraminifera samples weighing ≥1 mg have also been dated to provide chronological control for marine cores from the Baffin Island and East Greenland shelves. The technique has also allowed us to date single organisms, such as small or fragmented mollusc shells recovered from glacially reworked marine sediment. In the past, dating these deposits was problematic, because they commonly contain a mixed-age assemblage of organic matter. A conventional date on a bulk, multiple-organism sample thus yielded a weighted average of the ages of its components. A single-organism AMS date, on the other hand, provides reliable limiting ages on deposition that improves the temporal resolution of

environmental reconstructions. Using this approach, coupled with amino-acid geochronology to screen samples of mixed-age populations, we identified periods of glacier expansion and nonglacial intervals that were unresolvable using conventional dating (Miller and Kaufman, 1990; Kaufman and others, 1992).

Nearly one-half (101) of the dates are within the range of 8-11 ka ago (corrected dates; Fig. 1), a period of rapid and dramatic environmental changes over the southern Baffin Island-Labrador Sea region. Most of the dates within this time interval are on molluscs shells, with foraminifera comprising a greater proportion of the older dates. Overall, foraminifera were the most frequently dated material, representing 94 (43%) of the dated samples. The Date List compiled three years ago (Andrews and others, 1989) included only seven dates on foraminifera (6% of that list). Molluscan shells are the second most frequently dated material, with 73 samples dated (33%). Ten dates are on the humic-acid fraction of lake-sediment and soil samples (prepared according to Abbott, 1991), and 22 on the >125 μm concentrated-organic fraction (prepared according to Kihl, 1975).

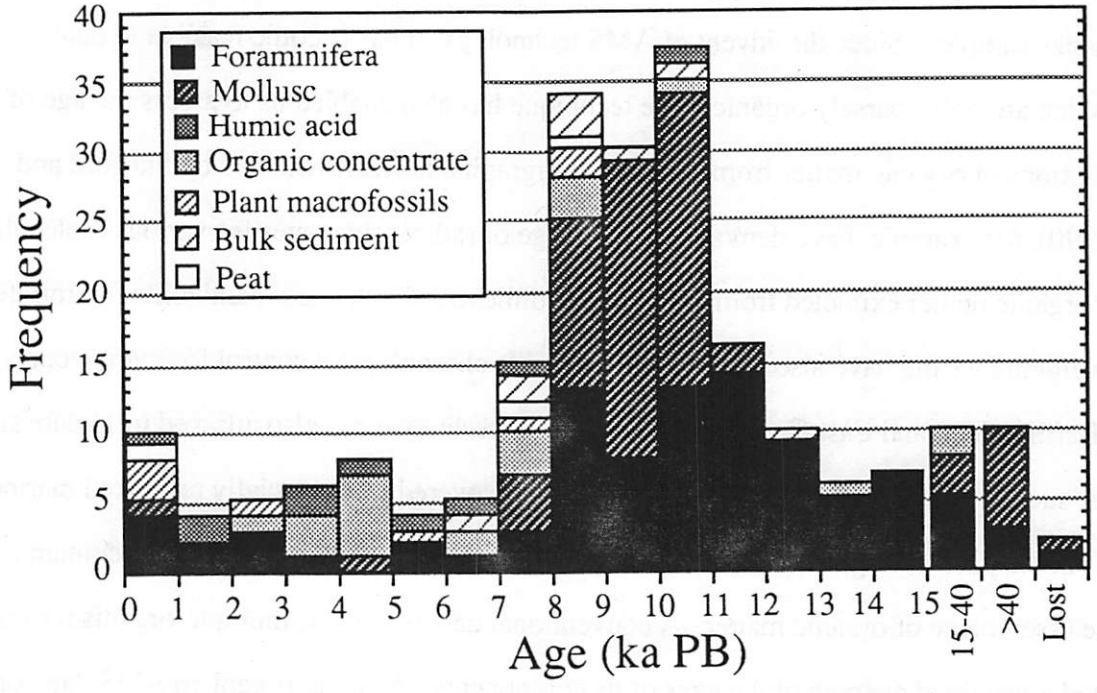

Figure 1. Frequency distribution of radiocarbon ages and dated material reported in this Date List.

Two types of ages, "reported" and "corrected," are quoted in this Date List. Reported ages are those issued by the radiocarbon laboratory. Since the mid 1970s, nearly all laboratories have adopted the convention proposed by Stuiver and Polach (1977) of accounting for isotopic fractionation in all samples, regardless of environment, by normalizing $\delta^{13}C$ to –25‰. With the exception of some dates produced by the Geological Survey of Canada (see below), the reported ages given in this Date List are in conventional radiocarbon years BP (as defined by Stuiver and Polach, 1977), and therefore are based on sample radiocarbon activities adjusted by normalizing $\delta^{13}C$ to –25‰.

Although a conventional radiocarbon age takes into account isotopic fractionation effects, it is not adjusted for differences in the ^{14}C activity of different reservoirs from which samples derived their carbon. The "corrected" ages presented here were calculated for dates on marine organisms, so that they could be compared directly to those from nonmarine sources. To calculate the corrected ages, we subtracted an estimated marine-reservoir age to account for the apparent age of the seawater in which the organisms lived. We used a reservoir correction of 450 yr for all marine dates from the Baffin Island-Labrador Sea region, and a correction of 550 yr for all dates from the Greenland Sea Shelf. These reservoir ages are based on dating historic marine shells of known age collected from the area (Mangerud and Gulliksen, 1975, for Arctic Canada; Hjort, 1973, for Greenland). We recognize that these reservoir ages are somewhat uncertain and that the apparent age of seawater may have varied throughout the period of interest. The "corrected" ages presented in this Date List may need to be refined as the temporal and spatial fluctuations in the apparent age of seawater become better known.

In addition to the marine-reservoir correction, corrected dates on marine carbonate analyzed at the Geological Survey of Canada's (GSC) laboratory require additional adjustment. The GSC calculates their dates on marine carbonate by normalizing $\delta^{13}C$ to 0‰, rather than –25‰, as is the convention with most other laboratories. The "corrected" GSC dates reported here have been adjusted by adding 410 yr to the laboratory-reported age (the difference between normalizing $\delta^{13}C$ to

0‰ rather than –25‰), and then subtracting the reservoir age (in effect, corrected GSC marine dates are 40 yr younger than reported, taking into account a 450 yr marine-reservoir age). The GSC also reports analytical errors for all dates to $\pm 2\sigma$, rather than the conventional $\pm 1\sigma$. To present all dates in a common format, errors for corrected dates from GSC have been divided by two. In the future, the GSC intends to report its dates using the same convention as in other laboratories.

Guide to this Date List

The Date List is divided into two parts: Part I incudes all dates on marine cores and Part II is dates from terrestrial sites, including lake cores. The dates are grouped into seven broad geographic regions which are presented in a rough southwest to northeast order (Fig. 2; Table of Contents). The dates are broken into groups by subregions and then arranged by collection site (core, exposure, or limited geographic area) listed from south to north. Location information and interpretive discussion are presented only once for each group of dates from a collection site. The following information is listed for each date or series of dates:

(1) **Sample location:** latitude (N); longitude (W); elevation (in meters above high tide; negative values are depth below sea level; values for lake-core dates refer to elevation of the lake surface); UTMG coordinates (for terrestrial dates only; arranged by grid, easting, northing); map-sheet name (for terrestrial dates only); and location description.

(2) **Age data:** reported date and analytical uncertainty (in radiocarbon years); radiocarbon laboratory number (see Table 1 for listing of laboratory abbreviations); and corrected date (for marine dates only; see above).

(3) **Sample information:** when applicable and available, the following information is provided: field-identification number (samples from marine cores include the following prefixes: CCa = core catcher; CCu = core cutter; GC = gravity core; LCF = long core facility; PC = piston core; TW = twigger weight); AAL and GRL numbers (laboratory numbers for the Amino Acid and Sedimentology laboratories at INSTAAR, respectively); collector's name; sample depth (depth in

core for marine and lake cores; depth below ground surface for terrestrial dates); type of material dated; species, including genus (mixed = assortment of taxa; unknown = unidentifiable); sample weight; sample notes (nature of the sample and pretreatment); and stratigraphic relations (geologic context of the sample).

(4) **Comment:** interpretive discussion of the meaning and significance of a date, or group of dates, with references to published articles or to other dates that bear on the interpretation.

Two appendices conclude the report: Appendix 1 is an index to this Date List. Part A of Appendix 1 is arranged by radiocarbon-laboratory number and includes abbreviated (one-line) information about the date. Part B of Appendix 1 is arranged by increasing (reported) radiocarbon age; it includes the date and laboratory number only. Appendix 2 is a comprehensive list of all dates that have appeared in this and previous INSTAAR Baffin Island and Labrador Date Lists. Part A is arranged by laboratory number and Part B by radiocarbon age.

The assembly of this Date List was facilitated by a database program for the Macintosh computer. The program was customized so that sample information could be used to generate radiocarbon-laboratory submission forms, or for sorting and reporting. For further information on the database program, contact Darrell Kaufman (Department of Geology, Utah State University, Logan, UT 84322-4505).

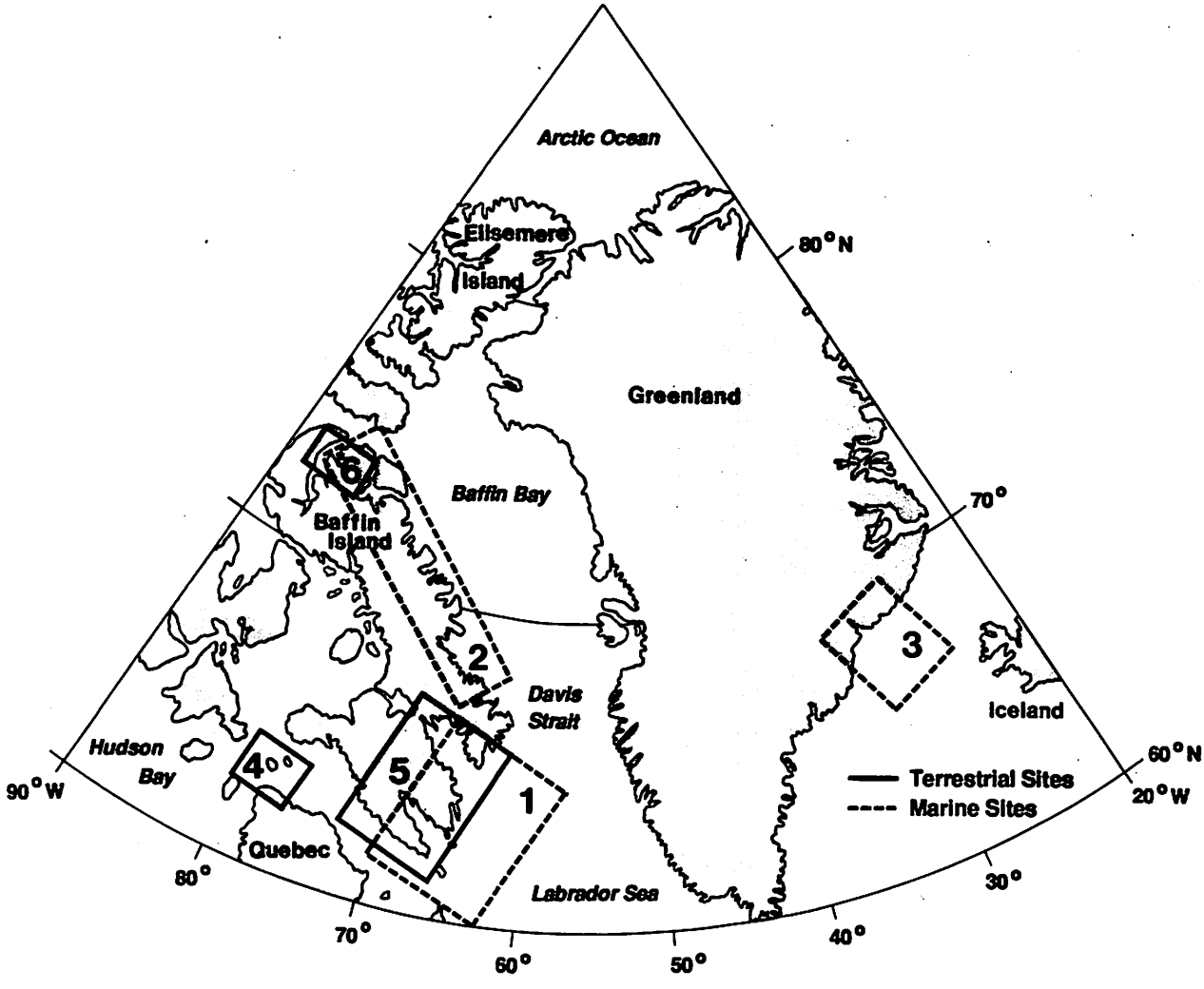

Figure 2. Regions included in this Date List and the order in which they are presented: 1, Labrador Sea and Southern Baffin Island Shelf; 2, Northern Baffin Island Shelf; 3, East Greenland Shelf; 4, Western Hudson Strait; 5, Southeastern Baffin Island; 6, Northern Baffin Island.

Table 1. Abbreviations of radiocarbon dating laboratories included in this and previous INSTAAR Radiocarbon Date Lists; those with an asterisk (*) are included in this Date List.

AA*	University of Arizona AMS Facility
Beta	Beta Analytic Inc.
BGS	Brock University, Canada
Birm	Birmingham University, U.K.
DIC	Dicarbon Corp.
GaK	Gakushuin University, Japan
Gif	Gif-sur-Yvette, Centre des Faibles Radioactivities, France
GSC*	Geological Survey of Canada
GX*	Geochron Inc.
I	Isotopes (Teledyne) Inc.
L	Lamont-Dougherty Geological Observatory
QC	Queens College, New York
QL	Quaternary Isotopes Laboratory, University of Washington
Qu	Quebec Department of Natural Resources, Canada
S	University of Saskatchewan, Canada
SI	Smithsonian Institution
St	Stockholm University, Sweden
To*	University of Toronto
Y	Yale University

PART 1: DATES FROM MARINE CORES

LABRADOR SEA
Davis Strait

HU75-009-IV-55

Lat: 61° 30.3' **Long:** 58° 38.6' **Elev:** -2440 m

Date: 4440 ± 70 **Lab no:** AA-5998 **Corrected date:** 3990 ± 70
Field ID: HU75-009-IV-55 PC **AAL:** **GRL:** 935-S
Collector: K. Tedesco **Depth:** 4-5 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 2.4 mg
Stratigraphic relations: From core top

Date: 10,850 ± 185 **Lab no:** AA-6850 **Corrected date:** 10,400 ± 185
Field ID: HU75-009-IV-55 PC **AAL:** **GRL:** 952-S
Collector: K. Tedesco **Depth:** 35-37 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 2.9 mg
Stratigraphic relations: From stratigraphic contact

Date: 13,635 ± 190 **Lab no:** AA-6851 **Corrected date:** 13,185 ± 190
Field ID: HU75-009-IV-55 PC **AAL:** **GRL:** 953-S
Collector: K. Tedesco **Depth:** 80-82 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 3.2 mg
Stratigraphic relations: From top of carbonate peak

Date: 15,010 ± 105 **Lab no:** AA-5999 **Corrected date:** 14,560 ± 105
Field ID: HU75-009-IV-55 PC **AAL:** **GRL:** 936-S
Collector: K. Tedesco **Depth:** 115-117 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 6.2 mg
Stratigraphic relations: From base of carbonate peak

Date: 19,855 ± 210 **Lab no:** AA-4700 **Corrected date:** 19,405 ± 210
Field ID: HU75-009-IV-55 PC **AAL:** **GRL:** 910-S
Collector: K. Tedesco **Depth:** 179-183 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 6.8 mg
Stratigraphic relations: From top of carbonate peak

Date: 26,015 ± 1320 **Lab no:** AA-7137 **Corrected date:** 25,565 ± 1320
Field ID: HU75-009-IV-55 PC **AAL:** **GRL:** 959-S
Collector: K. Tedesco **Depth:** 275-277 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 2.8 mg

Date: 45,500 ± 55 **Lab no:** AA-4706 **Corrected date:** 45,050 ± 55
Field ID: HU75-009-IV-55 PC **AAL:** **GRL:** 911-S
Collector: K. Tedesco **Depth:** 305-307 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 5.3 mg
Stratigraphic relations: From stratigraphic contact

Comment: (KT) HU75-55 is a key core for understanding the late Quaternary history (marine-isotope stages 1-3) of the Labrador Sea and its interrelations with the Laurentide Ice Sheet. The chronology and detrital-carbonate stratigraphy of the core are reported in Tedesco and Andrews (1991) and Tedesco (1992).

HU87-033-009

Lat: 62° 30.99' **Long:** 59° 26.82' **Elev:** -1437 m

Date: 10,630 ± 380 **Lab no:** AA-7136 **Corrected date:** 10,180 ± 380
Field ID: HU87-033-009 LCF **AAL:** **GRL:** 958-S
Collector: K. Tedesco **Depth:** 9-11 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 1.5 mg
Stratigraphic relations: From core top and top of carbonate peak

Date: 11,790 ± 275 **Lab no:** AA-8777 **Corrected date:** 11,340 ± 275
Field ID: HU87-033-009 LCF **AAL:** **GRL:** 974-S
Collector: K. Tedesco **Depth:** 20-23 cm **Material:** Foraminifera
Species: *Elphidium excavatum* **Weight:** 2.1 mg
Stratigraphic relations: From peak in *E. excavatum* and carbonate contents

Date: 10,530 ± 95 **Lab no:** AA-5032 **Corrected date:** 10,080 ± 95
Field ID: HU87-033-009 LCF **AAL:** **GRL:** 916-S
Collector: K. Tedesco **Depth:** 45-47 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 2.2 mg
Stratigraphic relations: From base of carbonate peak

Date: 11,120 ± 90 **Lab no:** AA-6001 **Corrected date:** 10,670 ± 90
Field ID: HU87-033-009 TWC **AAL:** **GRL:** 938-S
Collector: K. Tedesco **Depth:** 103-106 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 1.9 mg
Stratigraphic relations: From diatom-rich layer

Date: 11,100 ± 85 **Lab no:** AA-6000 **Corrected date:** 10,650 ± 85
Field ID: HU87-033-009 LCF **AAL:** **GRL:** 937-S
Collector: K. Tedesco **Depth:** 120-122 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 2 mg
Stratigraphic relations: From diatom-rich layer

Date: 12,110 ± 185 **Lab no:** AA-6852 **Corrected date:** 11,660 ± 185
Field ID: HU87-033-009 LCF **AAL:** **GRL:** 954-S
Collector: K. Tedesco **Depth:** 210-212 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 2.6 mg

Date: 12,975 ± 355 **Lab no:** AA-6853 **Corrected date:** 12,525 ± 355
Field ID: HU87-033-009 LCF **AAL:** **GRL:** 955-S
Collector: K. Tedesco **Depth:** 280-282 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 1.9 mg

Date: 14,850 ± 205 **Lab no:** AA-8034 **Corrected date:** 14,400 ± 205
Field ID: HU87-033-009 LCF **AAL:** **GRL:** 964-S
Collector: K. Tedesco **Depth:** 500-502 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 3.7 mg
Stratigraphic relations: From top of carbonate peak

Comment: (KT, JTA) The core is about 10 m long and shows three major pulses in magnetic susceptibility associated with detrital carbonate layers. The lowest date of 14.4 ka is from the top of the youngest carbonate layer and is correlative with an equivalent unit in core HU75-009-IV-55 (Tedesco and Andrews, 1991; Tedesco, 1992).

HU75-009-IV-60

Lat: 62° 40.6' **Long:** 59° 22.4' **Elev:** -1145 m

Date: 40,700 ± 1500 **Lab no:** AA-4703 **Corrected date:** 40,250 ± 1500
Field ID: HU75-009-IV-60 PC **AAL:** **GRL:** 908-S
Collector: K. Tedesco **Depth:** 0 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 7.3 mg
Stratigraphic relations: From core top

Date: 43,200 ± 60 **Lab no:** AA-4704 **Corrected date:** 42,750 ± 60
Field ID: HU75-009-IV-60 PC **AAL:** **GRL:** 909-S
Collector: K. Tedesco **Depth:** 61-62 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 10.1 mg

Date: 32,150 ± 1200 **Lab no:** AA-4687 **Corrected date:** 31,700 ± 1200
Field ID: HU75-009-IV-60 PC **AAL:** **GRL:** 905-S
Collector: K. Tedesco **Depth:** 128-129 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 3 mg

Date: 34,025 ± 725 **Lab no:** AA-4686 **Corrected date:** 33,575 ± 725
Field ID: HU75-009-IV-60 PC **AAL:** **GRL:** 904-S
Collector: K. Tedesco **Depth:** 260-261 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 6.2 mg

Comment: (KT, JTA) These dates do not make sense. During inspection of the working-half of the core AEJ and KMW thought that the core sections may have inverted. The results suggest that this may indeed be the case. Each pair of dates, which were from the top and bottom of individual core sections, are in correct order, but taken together they are inverted.

HU75-009-IV-58

Lat: 62° 46' **Long:** 59° 22' **Elev:** -1057 m

Date: 10,530 ± 90 **Lab no:** AA-5033 **Corrected date:** 10,080 ± 90
Field ID: HU75-009-IV-58 PC **AAL:** **GRL:** 917-S
Collector: K. Tedesco **Depth:** 7-9 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral **Weight:** 6.5 mg
Stratigraphic relations: From core top

Date: 19,070 ± 260 | **Lab no:** AA-5034 | **Corrected date:** 18,620 ± 260
Field ID: HU75-009-IV-58 PC | **AAL:** | **GRL:** 918-S
Collector: K. Tedesco | **Depth:** 157-162 cm | **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral | **Weight:** 5.6 mg

Comment: (JTA, KT) Data from this core were published by Fillon (1985). The core has a prominent peak in ash shards at about 180 cm (Ash II, ca. 50-60 ka; cf. Piper and others, 1991). The date of around 10 ka at the top of the piston core parallels that in core HU87-033-009 where sedimentation also ceased close to 10 ka.

SOUTHERN BAFFIN ISLAND SHELF
Hudson Strait, East Basin

HU77-021-154

Lat: 60° 53.6' | **Long:** 65° 25.7' | **Elev:** -933 m
Location: Eastern Basin, Hudson Strait

Date: 9000 ± 170 | **Lab no:** AA-5117 | **Corrected date:** 8550 ± 170
Field ID: HU77-021-154 PC | **AAL:** | **GRL:** 920-S
Collector: W.M. Briggs | **Depth:** 575-577 cm | **Material:** Mollusc
Species: Unknown | **Weight:** 2.7 mg
Sample notes: Fragmented bivalve

Comment: (JTA) This date is similar to a series of dates published by Fillon and others (1981) and dated by the GSC (see Andrews and others, 1991).

Hatton Basin

HU84-035-014

Lat: 60° 59.2' | **Long:** 62° 27.3' | **Elev:** -605 m
Location: East of site HU77-021-151

Date: 9355 ± 70 | **Lab no:** AA-4255 | **Corrected date:** 8905 ± 70
Field ID: HU84-035-014 PC | **AAL:** | **GRL:** 891-S
Collector: L.W. Evans | **Depth:** 200-205 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 5.2 mg | **Sample notes:** Benthics

Comment: (JTA, LWE) This date is approximately coeval with other dates in the uppermost section of cores from the middle and west Hatton Basin, i.e. in the range of 8-9 ka (Evans, 1990). Core site and geotechnical properties are outlined in Silva and others (1985) and Josenhans and others (1986).

HU77-021-151

Lat: 61° 15' | **Long:** 62° 47.17' | **Elev:** -603 m
Location: West-central Hatton Basin

Date: 8390 ± 80 | **Lab no:** AA-3481 | **Corrected date:** 7940 ± 80
Field ID: HU77-021-151 PC | **AAL:** | **GRL:**
Collector: W.M. Briggs | **Depth:** 5-7 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 6 mg
Sample notes: Benthics and planktonics

Date: 11,725 ± 125 | **Lab no:** AA-3473 | **Corrected date:** 11,275 ± 125
Field ID: HU77-021-151 PC | **AAL:** | **GRL:** 869-S
Collector: J.T. Andrews | **Depth:** 542-544 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 5.5 mg | **Sample notes:** Planktonics

Comment: (JTA) Other dates from this core are reported in Date List VI (Andrews and others, 1989) and in Andrews and others (1991). On the basis of AA-3473 and on the stable-isotopic data, it appears that the lowermost 50 cm of this core differs in age from the remainder of the core by ca. 2000 yr.

HU77-021-152

Lat: 61° 05.2' | **Long:** 63° 16.9' | **Elev:** -600 m

Date: 9010 ± 100 | **Lab no:** AA-3678 | **Corrected date:** 8560 ± 100
Field ID: HU77-021-152 PC | **AAL:** | **GRL:** 876-S
Collector: W.M. Briggs | **Depth:** 128-130 cm | **Material:** foraminifera
Species: Mixed | **Weight:** 5.9 mg
Sample notes: *Cassidulina teretis, Islandiella norcrossi,* and *Islandiella helenae*

Comment: (JTA) Only one date was obtained from this core. The date suggests that the period of sediment accumulation was coeval with the upper 4.8 m or so in HU77-021-151, which was sampled farther east in Hatton Basin (Evans, 1990; Andrews and others, 1991).

HU77-021-150

Lat: 61° 23' | **Long:** 61° 0.8' | **Elev:** -543 m
Location: Eastern margin, Hatton Basin, near the shelf break

Date: 7425 ± 60 | **Lab no:** AA-3850 | **Corrected date:** 6975 ± 60
Field ID: HU77-021-150 PC | **AAL:** | **GRL:** 883-S
Collector: W.M. Briggs | **Depth:** 0-2 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 7 mg | **Sample notes:** Planktonics

Date: 13,180 ± 100 | **Lab no:** AA-4917 | **Corrected date:** 12,730 ± 100
Field ID: HU77-021-150 PC | **AAL:** | **GRL:** 914-S
Collector: W.M. Briggs | **Depth:** 75-77 cm | **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* | **Weight:** 10.4 mg

Date: Insufficient material | **Lab no:** AA-6846 | **Corrected date:**
Field ID: HU77-021-150 PC | **AAL:** | **GRL:** 945-S
Collector: W.M. Briggs | **Depth:** 100-102 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 4 mg

Sample notes: Assorted benthics; insufficient sample size to date; resubmitted as GRL-965-S, AA-8035; reported date is 13,450 ± 220 yr

Date: 13,450 ± 220
Field ID: HU77-021-150 PC
Collector: R. Fillon
Species: *Neogloboquadrina pachyderma*
Sample notes: 361 specimens

Lab no: AA-8035
AAL:
Depth: 100-102 cm

Corrected date: 13,000 ± 220
GRL: 965-S
Material: Foraminifera
Weight: 3.3 mg

Comment: (JTA) Sedimentation appears to have been continuous between ca. 7 and 13 ka. This site thus restricts the extent of ice-stream surges out of Hudson Strait (Evans, 1990; Andrews and others, 1991).

Resolution Basin

HU82-034-057

Lat: 61° 46.8'

Long: 63° 49.7'

Elev: -549 m

Date: 8300 ± 65
Field ID: HU82-034-057 PC
Collector: I. Hardy & W. Briggs
Species: Mixed

Lab no: AA-4160
AAL:
Depth: 3.7 cm
Weight: 3.8 mg

Corrected date: 7850 ± 65
GRL: 890-S
Material: Foraminifera
Sample notes: Benthics

Date: 11,020 ± 120
Field ID: HU82-034-057 PC
Collector: I. Hardy & W. Briggs
Species: Mixed

Lab no: AA-3746
AAL:
Depth: 78 cm
Weight: 20.4 mg

Corrected date: 10,570 ± 120
GRL: 878-S
Material: Foraminifera
Sample notes: Benthics

Date: 12,425 ± 125
Field ID: HU82-034-057 PC
Collector: I. Hardy & W. Briggs
Species: Mixed
Sample notes: Benthics and planktonics

Lab no: AA-5994
AAL:
Depth: 110 cm

Corrected date: 11,975 ± 125
GRL: 931-S
Material: Foraminifera

Date: 11,555 ± 85
Field ID: HU82-034-057 PC
Collector: I. Hardy & W. Briggs
Species: Mixed

Lab no: AA-3784
AAL:
Depth: 227 cm
Weight: 5.9 mg

Corrected date: 11,105 ± 85
GRL: 879-S
Material: Foraminifera
Sample notes: Benthics

Date: 12,675 ± 100
Field ID: HU82-034-057 PC
Collector: I. Hardy & W. Briggs
Species: Mixed
Sample notes: Benthics and planktonics

Lab no: AA-5995
AAL:
Depth: 275 cm

Corrected date: 12,225 ± 100
GRL: 932-S
Material: Foraminifera

Date: 13,625 ± 150
Field ID: HU82-034-057 PC
Collector: I. Hardy & W. Briggs
Species: *Neogloboquadrina pachyderma*

Lab no: AA-5063
AAL:
Depth: 320-325 cm

Corrected date: 13,175 ± 150
GRL: 919-S
Material: Foraminifera
Weight: 5.6 mg

Date: 14,455 ± 110 **Lab no:** AA-5992 **Corrected date:** 14,005 ± 110
Field ID: HU82-034-057 PC **AAL:** **GRL:** 929-S
Collector: I. Hardy & W. Briggs **Depth:** 320-325 cm **Material:** Foraminifera
Species: Mixed
Sample notes: *Neogloboquadrina pachyderma* and assorted benthics

Date: 15,365 ± 250 **Lab no:** AA-7138 **Corrected date:** 14,915 ± 250
Field ID: HU82-034-057 PC **AAL:** **GRL:** 960-S
Collector: I. Hardy & W. Briggs **Depth:** 400-410 cm **Material:** Foraminifera
Species: Mixed **Weight:** 2.9 mg
Sample notes: Benthics and *Neogloboquadrina pachyderma*

Comment: (JTA) A basal date of ca. 24 ka was reported for this core (Praeg and others, 1986). Our results expand the chronological control for events in the Resolution Basin (cf. Andrews and others, 1987, 1990, 1991; Evans, 1990). There is evidence in the core for a change in the style of sedimentation at 325 cm. The two dates on either side of this event differ by about 1 ka. The date at ca. 405 cm of 14.9 ka is the oldest date obtained so far on the southeast Baffin Shelf from the glacial-interglacial transition.

HU84-035-008

Lat: 61° 47.2' **Long:** 63° 49.9' **Elev:** -580 m

Date: 9425 ± 150 **Lab no:** AA-5291 **Corrected date:** 8975 ± 150
Field ID: HU84-035-008 PC **AAL:** **GRL:** 882-S
Collector: L.W. Evans **Depth:** 0-5 cm **Material:** Foraminifera
Species: Mixed **Weight:** 2.9 mg **Sample notes:** Benthics

Date: 10,870 ± 90 **Lab no:** AA-5996 **Corrected date:** 10,420 ± 90
Field ID: HU84-035-008 PC **AAL:** **GRL:** 933-S
Collector: L.W. Evans **Depth:** 105 cm **Material:** Foraminifera
Species: *Nonionellina labradorica* **Weight:**

Date: 10,930 ± 85 **Lab no:** AA-3584 **Corrected date:** 10,480 ± 85
Field ID: HU84-035-008 PC **AAL:** **GRL:** 873-S
Collector: L.W. Evans **Depth:** 325 cm **Material:** Mollusc
Species: *Astarte* **Weight:** 18 mg

Date: Lost **Lab no:** AA-3809 **Corrected date:**
Field ID: HU84-035-008 PC **AAL:** **GRL:** 880-S
Collector: L.W. Evans **Depth:** 548 cm **Material:** Mollusc
Species: *Axinopsis orbiculata* **Weight:** 2 mg

Date: 11,315 ± 75 **Lab no:** AA-3810 **Corrected date:** 10,865 ± 75
Field ID: HU84-035-008 PC **AAL:** **GRL:** 881-S
Collector: J.T. Andrews **Depth:** 625-630 cm **Material:** Foraminifera

Date: 11,760 ± 170 **Lab no:** AA-5292 **Corrected date:** 11,310 ± 170
Field ID: HU84-035-008 PC **AAL:** **GRL:** 924-S
Collector: L.W. Evans **Depth:** 730 cm **Material:** Foraminifera
Species: Mixed **Weight:** **Sample notes:** Benthics

Date: 12,740 ± 100 | **Lab no:** AA-5997 | **Corrected date:** 12,290 ± 100
Field ID: HU84-035-008 PC | **AAL:** | **GRL:** 934-S
Collector: L.W. Evans | **Depth:** 805 cm | **Material:** Foraminifera
Species: *Nonionellina labradorica* | **Weight:**

Comment: (JTA) There is an "old" basal date (>30 ka; MacLean, pers. commun., 1990) from this core which parallels other "old" dates at the bases of HU77-021-156 and HU82-033-057 (Praeg and others, 1986; Osterman and others, 1985). The dates above 822 cm indicate a rapid rate of sediment accumulation between 9 and 12.3 ka. There is no evidence that ice overrode the site during the northward advances across Hudson Strait (Miller and others, 1988; Andrews and others, 1990, 1991; Evans, 1990; Miller and Kaufman, 1990).

HU90-023-030

Lat: 61° 47.31' | **Long:** 63° 49.56' | **Elev:** -572 m

Date: 10,355 ± 205 | **Lab no:** AA-7141 | **Corrected date:** 9905 ± 205
Field ID: HU90-023-030 TWC | **AAL:** | **GRL:** 963-S
Collector: W.M. Briggs | **Depth:** 5-7 cm | **Material:** Foraminifera
Species: *Nonionellina labradorica* | **Weight:** 1.9 mg

Date: 10,445 ± 100 | **Lab no:** AA-6468 | **Corrected date:** 9995 ± 100
Field ID: HU90-023-030 LCF | **AAL:** | **GRL:** 941-S
Collector: W.M. Briggs | **Depth:** 8-10 cm | **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* sinistral | **Weight:** 10.3 mg

Date: 10,895 ± 95 | **Lab no:** AA-6866 | **Corrected date:** 10,445 ± 95
Field ID: HU90-023-030 TWC | **AAL:** | **GRL:** 957-S
Collector: W.M. Briggs | **Depth:** 150-152 cm | **Material:** Foraminifera
Species: *Nonionellina labradorica* | **Weight:** 5.2 mg | **Sample notes:** 200 specimens

Date: 11,065 ± 105 | **Lab no:** AA-6469 | **Corrected date:** 10,615 ± 105
Field ID: HU90-023-030 LCF | **AAL:** | **GRL:** 942-S
Collector: W.M. Briggs | **Depth:** 440-442 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 4.6 mg

Date: 13,160 ± 115 | **Lab no:** AA-6470 | **Corrected date:** 12,510 ± 115
Field ID: HU90-023-030 LCF | **AAL:** | **GRL:** 943-S
Collector: W.M. Briggs | **Depth:** 735-737 cm | **Material:** Foraminifera
Species: *Nonionellina labradorica* | **Weight:** 6.5 mg

Date: 12,925 ± 130 | **Lab no:** AA-6471 | **Corrected date:** 12,475 ± 130
Field ID: HU 90-023-030 LCF | **AAL:** | **GRL:** 944-S
Collector: W.M. Briggs | **Depth:** 775-777 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 2.1 mg

Date: 13,285 ± 105 | **Lab no:** AA-8326 | **Corrected date:** 12,835 ± 105
Field ID: HU90-023-030 LCF | **AAL:** | **GRL:** 946-S
Collector: W.M. Briggs | **Depth:** 835-837 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 3 mg | **Sample notes:** Benthics

Comment: (JTA) This core was collected close to sites HU82-034-057 and HU84-035-008 (Praeg and others, 1986; Andrews and others, 1990; Evans, 1990). The date from the top of the trigger core confirms that sedimentation on the shelf ceased by about 10 ka.

HU77-021-156

Lat: 61° 51.05' **Long:** 64° 12.03' **Elev:** -497 m

Date: 2370 ± 70
Field ID: HU77-021-156 PC
Collector: W.M. Briggs
Species: Mixed
Lab no: AA-3890
AAL:
Depth: 7.5 cm
Weight: 6.4 mg
Corrected date: 1920 ± 70
GRL: 884-S
Material: Foraminifera
Sample notes: Benthics

Comment: (JTA) This core has been well studied (Osterman, 1982; 1984; Osterman and others, 1985). Its basal date of >27,000 ka is similar to basal dates from HU84-008 and HU82-057 (Praeg and others, 1986; Andrews and others, 1991). HU77-156 differs from other cores from Resolution Basin in that a thin postglacial unit is preserved at the top of the core, whereas other cores have core-top dates of ±8 ka.

Labrador Sea Slope

HU77-021-149

Lat: 61° 27.9' **Long:** 60° 24.7' **Elev:** -1317 m
Location: Upper Slope, east of Hatton Basin

Date: 11,990 ± 100
Field ID: HU77-021-149 TWC
Collector: K.M. Williams
Species: Mixed
Lab no: AA-4665
AAL:
Depth: 25 cm
Weight: 8.2 mg
Corrected date: 11,450 ± 100
GRL: 899-S
Material: Foraminifera
Sample notes: Benthics

Date: 12,030 ± 85
Field ID: HU77-021-149 TWC
Collector: L.W. Evans
Species: *Neogloboquadrina pachyderma*
Lab no: AA-4709
AAL:
Depth: 100-102 cm
Corrected date: 11,580 ± 85
GRL: 912-S
Material: Foraminifera
Weight: 5.8 mg

Date: 11,895 ± 130
Field ID: HU77-021-149 TWC
Collector: L.W. Evans
Species: *Neogloboquadrina pachyderma*
Lab no: AA-4689
AAL:
Depth: 100-102 cm
Corrected date: 11,455 ± 130
GRL: 906-S
Material: Foraminifera
Weight: 8.3 mg

Date: 10,625 ± 170
Field ID: HU77-021-149 TWC
Collector: L.W. Evans
Species: Unknown
Lab no: AA-3583B
AAL:
Depth: 144 cm
Weight: 7.5 g
Corrected date: 10,175 ± 170
GRL: 871-S
Material: Mollusc
Sample notes: AA-3583A and AA-3583B are splits of the same sample

Date: 10,600 ± 75
Field ID: HU77-021-149 TWC
Lab no: AA-3583A
AAL:
Corrected date: 10,150 ± 75
GRL: 871-S

Collector: K.M. Williams **Depth:** 144 cm **Material:** Mollusc
Species: Unknown
Sample notes: AA-3583A and AA-3583B are splits of the same sample

Date: 11,550 ± 75 **Lab no:** AA-4702 **Corrected date:** 11,100 ± 75
Field ID: HU77-021-149 TWC **AAL:** **GRL:** 907-S
Collector: K.M. Williams **Depth:** 169 cm **Material:** Foraminifera
Species: Mixed **Weight:** **Sample notes:** Planktonics

Date: 11,550 ± 75 **Lab no:** AA-4702 **Corrected date:** 11,100 ± 75
Field ID: HU77-021-149 TWC **AAL:** **GRL:** 907-S
Collector: L.W. Evans **Depth:** 160-170 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* **Weight:** 7.6 mg

Comment: (JTA, LWE) The results from this core are discussed in Evans (1990) and Andrews and others (1991). It appears that the core site has been affected by debris slides on the steep continental slope.

Frobisher Bay

HU82-034-068

Lat: 62° 13.3' **Long:** 65° 40.2' **Elev:** -311 m

Date: 8280 ± 120 **Lab no:** AA-4916 **Corrected date:** 7830 ± 120
Field ID: HU82-034-068 **AAL:** **GRL:**
Collector: W.M. Briggs **Depth:** 9.0-10.5 cm **Material:** Foraminifera

Date: 9000 ± 90 **Lab no:** AA-8392 **Corrected date:** 8650 ± 90
Field ID: HU82-034-068 **AAL:** 6744A **GRL:**
Collector: D. Kaufman & W. Briggs **Depth:** 450-452 cm **Material:** Foraminifera
Species: *Nonionellina labradorica* **Weight:** 4.5 mg
Sample notes: ca. 140 whole individuals free of matrix; sonicated in purified H_2O for ca. 1 min

Date: 10,090 ± 75 **Lab no:** AA-8391 **Corrected date:** 9640 ± 75
Field ID: HU82-034-068 **AAL:** 6743A **GRL:**
Collector: J. Andrews & W. Briggs **Depth:** 510-512 cm **Material:** Mollusc
Species: *Portlandia arctica* **Weight:** 11.8 mg
Sample notes: One angular fragmented valve, good surface ornamentation, glossy underside, periostracum intact; acid leached 50% by weight

Date: 10,375 ± 80 **Lab no:** AA-4916 **Corrected date:** 9925 ± 80
Field ID: HU82-034-068 **AAL:** **GRL:** 913-S
Collector: W.M. Briggs **Depth:** 540-542 cm **Material:** Foraminifera

Comment: (DSK, JTA, WMB) Four new AMS dates provide improved chronological control for this well-studied core (Praeg et al., 1986). The core site is located up glacier from ice-flow indicators on Hall Peninsula which indicate that the site must have been overridden by ice during the Gold Cove advance (Miller and Kaufman, 1990). The core chronology thus offers a basis for correlating on- and offshore records. The oldest date (9.9 ka; AA-4916) on a mollusc from near the base of the core indicates that outer Frobisher Bay was free of glacial ice just prior to the Gold Cove

readvance. A shell recovered from 30 cm higher in the core dates to the ice-free interval following Gold Cove time (9.6 ka; AA-8391), indicating that either the pre-Gold Cove deposits are preserved below post-Gold Cove deposits, or that the older shell was reworked into younger sediment. The two new mollusc dates are incompatible with an unpublished date (MacLean, pers. commun., 1986) of 12 ka on foraminifera from higher in the core. The date on foraminifera from 450-452 cm depth is consistent with its stratigraphic order and with the dates on the molluscs deeper in the core. It is also compatible with a previously published date, but with a large analytical uncertainty, on a mollusc shell from near the same level (9560 ± 360; AA-0886; Andrews and others, 1989).

HU90-023-009

Lat: 62° 29.9' **Long:** 66° 18' **Elev:** -463 m

Date: 8525 ± 80 **Lab no:** AA-6464 **Corrected date:** 8075 ± 80
Field ID: HU90-023-009 LCF **AAL:** **GRL:**
Collector: J.A. Stravers **Depth:** 184 cm **Material:** Mollusc
Species: *Siphonodentalium lobatum* **Weight:** 56 mg
Sample notes: In situ paired bivalves

Date: 10,080 ± 75 **Lab no:** AA-6854 **Corrected date:** 9630 ± 75
Field ID: HU90-023-009 LCF **AAL:** **GRL:** 956-S
Collector: J.A. Stravers **Depth:** 717 cm **Material:** Mollusc
Species: *Yoldiella* **Weight:**
Sample notes: Paired valves of substantial size

Comment: (JAS) Total core length is 739 cm, although much of the interval between 600 and 700 cm was disturbed during coring. Dates from this core were taken to determine sediment accumulation rates in the York Sound region.

HU90-023-007

Lat: 62° 31.8' **Long:** 66° 11' **Elev:** -397 m
Location: Just north of York Sound

Date: 9645 ± 85 **Lab no:** AA-6465 **Corrected date:** 9195 ± 85
Field ID: HU90-023-007 LCF **AAL:** **GRL:**
Collector: J.A. Stravers **Depth:** 22 cm **Material:** Mollusc
Species: *Macoma calcarea* **Weight:** 724 mg
Sample notes: Single unabraded valve

Date: 9310 ± 100 **Lab no:** AA-6473 **Corrected date:** 8860 ± 100
Field ID: HU90-023-007 LCF **AAL:** **GRL:**
Collector: J.A. Stravers **Depth:** 100-105 cm **Material:** Foraminifera
Species: Mixed **Weight:** 4 mg
Sample notes: All foraminifera from the core interval

Comment: (JAS) Total core length is 238 cm. It consists of 40 cm of fossiliferous marine mud overlying pebbly and stoney mud (clast sizes range to 9 cm). Random clast orientations suggest that they are drop stones. The marine mud is barren of foraminifera below 105 cm. Dates from this core were taken to determine the age of sediments overlying the marine mud, which contains abundant

pebbles and cobbles, and to determine sediments accumulation rates in the York Sound region.

HU90-023-001

Lat: 62° 53.7' **Long:** 67° 9.9' **Elev:** -538 m
Location: Offshore from Ney Harbour

Date: 10,035 ± 130 **Lab no:** AA-6472 **Corrected date:** 9585 ± 130
Field ID: HU90-023-001 LCF **AAL:** **GRL:**
Collector: J.A. Stravers **Depth:** 1300-1305 cm **Material:** Foraminifera
Species: Mixed **Weight:** 3.5 mg
Sample notes: All foraminifera from the core interval

Comment: (JAS) Total core length is 1702 cm. The core site is near HU77-159 and was selected in an attempt to retrieve a longer stratigraphic record using the AGC Long Core Facility. Sample interval at 1300 cm was in gray bioturbated silty clay. From 1386 cm to the base of the core most of the sediment is disturbed and "suck in" is suspected. The date from this core was taken to determine if the undisturbed sediment at 1300 cm was older than the base of core HU77-159.

Brevoort Basin

HU90-023-022

Lat: 63° 8.24' **Long:** 64° 21.2' **Elev:** -396 m
Location: Just off the east coast of Hall Peninsula

Date: 5230 ± 60 **Lab no:** AA-6466 **Corrected date:** 4780 ± 60
Field ID: HU90-023-022 LCF **AAL:** **GRL:**
Collector: J.A. Stravers **Depth:** 159 cm **Material:** Mollusc
Species: *Yoldia* **Weight:**
Sample notes: Paired bivalves, possibly in growth position

Date: 8195 ± 65 **Lab no:** AA-6463 **Corrected date:** 7745 ± 65
Field ID: HU90-023-022 LCF **AAL:** **GRL:**
Collector: J.A. Stravers **Depth:** 357 cm **Material:** Mollusc
Species: *Clinocardium ciliatum* **Weight:** 111 mg
Sample notes: Paired bivalves, possibly in growth position

Date: 9890 ± 85 **Lab no:** AA-6462 **Corrected date:** 9440 ± 85
Field ID: HU90-023-022 LCF **AAL:** **GRL:**
Collector: J.A. Stravers **Depth:** 673 cm **Material:** Mollusc
Species: *Yoldia* **Weight:** 73 mg
Sample notes: Paired bivalves, possibly in growth position

Date: 10,115 ± 75 **Lab no:** AA-6452 **Corrected date:** 9665 ± 75
Field ID: HU90-023-022 LCF **AAL:** **GRL:**
Collector: J.A. Stravers **Depth:** 756 cm **Material:** Mollusc
Species: *Portlandia arctica* (?) **Weight:**
Sample notes: Paired bivalves, possibly in growth position.

Comment: (JAS) This core was collected from Brevoort Basin, a small sedimentary basin off Hall Peninsula. The surrounding shelf consists of scoured bedrock surfaces containing little or no sedimentary cover. The core sampled organic-rich bioturbated marine muds overlying what are interpreted from seismic data to be ice-proximal sediments. The latter sediments can be traced in seismic profile to a small moraine along the southern margin of the basin. The core is rich in organics and displays abundant well-preserved bioturbation structures. The base of the core (843 cm) is barren of foraminifera and shows an increase in coarse sediment but it is uncertain if the core intercepted the top of the ice-proximal sediments. Dates from this core were taken to determine the age of deglaciation and to document early Holocene sedimentation rates.

Cumberland Sound

85027-029

Lat: 65° 2.57' **Long:** 64° 59.51' **Elev:** -814 m

Date: 10,705 ± 70 **Lab no:** AA-3940 **Corrected date:** 10,255 ± 70
Field ID: 85027-029 PC **AAL:** **GRL:** 886-S
Collector: A.E. Jennings **Depth:** 469-499 cm **Material:** Foraminifera
Species: Mixed **Weight:** 2.2 mg
Sample notes: All foraminifera from the >63 μm fraction; contains corroded specimens; floated in CCl_4

Date: 10,010 ± 110 **Lab no:** AA-3585&6 **Corrected date:** 9560 ± 110
Field ID: 85027-029 PC **AAL:** **GRL:** 874-S and 875-S
Collector: A.E. Jennings **Depth:** 996-998 cm **Material:** Forams and Mollusc
Species: *Cassidulina reniforme* **Weight:** 4.17 mg
Sample notes: 970 *Cassidulina reniforme* and 1 articulated *Portlandia frigida*
Stratigraphic relations: From the lower part of Lithofacies C, ice-proximal sediment of the Davis Strait Silt

Comment: (AEJ) AA-3585&6 constrains the age of deglaciation at site 029 in Cumberland Sound. The foraminifera and mollusc shell are from ice-proximal sediments (Lithofacies C) of the Davis Strait Silt. Deglaciation was underway by 10,200 yr ago based on extrapolation of this age 1 m downsection to the top of the till. AA-3940 was submitted to constrain the age of the Davis Strait Silt/Tiniktartuq Silt and Clay boundary where the acoustic architecture changes from conformable to onlapping basin fill. The foraminiferal fauna changes from calcareous to agglutinated and the sediment color changes from dark gray to olive gray. These changes record the transition from ice-distal to nonglacial conditions. AA-3940 (10,255 ± 70 yr) from 469 cm is reworked; it is older than two dates obtained much deeper in the core (AA-1916 and AA-3585&6) and was obtained on a mixed genera foraminiferal assemblage containing corroded specimens, some of which were probably reworked from older deposits. Reworking of sediment is expected in onlapping basin-fill sediments. AA-1916 and AA-3585&6 were obtained on more reliable material. See Jennings (1989).

85027-031

Lat: 65° 23.3' **Long:** 65° 30.53' **Elev:** -896 m

Date: 8720 ± 70 | **Lab no:** AA-3941 | **Corrected date:** 8270 ± 70
Field ID: 85027-031 PC | **AAL:** | **GRL:** 887-S
Collector: A.E. Jennings | **Depth:** 129-131 cm | **Material:** Mollusc
Species: *Astarte striata* | **Weight:** 307 mg | **Sample notes:** Broken valve
Stratigraphic relations: From postglacial Lithofacies E, the Tiniktartuq Silt and Clay

Date: 10,920 ± 250 | **Lab no:** AA-3939 | **Corrected date:** 10,470 ± 70
Field ID: 85027-031 PC | **AAL:** | **GRL:** 885-S
Collector: A.E. Jennings | **Depth:** 278-285 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 2 mg
Sample notes: Ice-proximal assemblage: *Islandiella norcrossi, Cassidulina reniforme, Elphidium excavatum, Stainforthia concava, Fucsenkoina fusiformis*
Stratigraphic relations: From ice-proximal Lithofacies C of the Davis Strait Silt

Comment: (AEJ) AA-3941 provides age control on the deposition of the uppermost sediment unit in Cumberland Sound, Lithofacies E of the Tiniktartuq Silt and Clay. The date is significantly older than two other dates (AA-2631 and AA-1915) from the same Lithofacies. Sedimentological evidence shows reworking of older sediments into Lithofacies E at this site. The shell was probably not in situ as originally thought, but was carried to the site from erosion of older sediments. AA-3939 was obtained from ice-proximal Lithofacies C of the Davis Strait Silt. The age is 200 yr greater than AA-3585&6 (from site 029), indicating that either site 031 was deglaciated earlier than site 029, or that the sample contained reworked foraminifera. See Jennings (1989).

NORTHERN BAFFIN ISLAND SHELF
Home Bay

HU80-028-079

Lat: 68° 52.5' | **Long:** 65° 38' | **Elev:** -6 m

Date: 9670 ± 245 | **Lab no:** AA-7139 | **Corrected date:** 9220 ± 245
Field ID: HU80-028-079 TWC | **AAL:** | **GRL:** 961-S
Collector: I. Hardy | **Depth:** 107-110 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 1.3 mg | **Sample notes:** Benthics

Comment: (JTA) Foraminifera were recovered from different levels in the piston core, but we could not extract sufficient numbers for an AMS date. Still, this date is important as it is only the second on marine carbonates from the northern Baffin Shelf; all other dates are on the acid-insoluble organic fraction which require some degree of correction (Andrews and others, 1985; Osterman and Nelson, 1989).

Strathcona Sound

HU77-026-35

Lat: 73° 04.6' | **Long:** 84° 21.78' | **Elev:** -230 m

Date: 2070 ± 70 **Lab no:** AA-7012 **Corrected date:**
Field ID: HU77-026-35 PC15 **AAL:** **GRL:**
Collector: J.T. Andrews **Depth:** 35-39 cm **Material:** Plant macrofossils
Sample notes: CHEM 327
Stratigraphic relations: Uppermost sample in core

Date: 6380 ± 90 **Lab no:** AA-5290 **Corrected date:** 5830 ± 90
Field ID: HU77-026-35 PC15 **AAL:** **GRL:** 921-S
Collector: J.T. Andrews **Depth:** 345-351 cm **Material:** Foraminifera
Species: Mixed **Weight:** 3 mg
Stratigraphic relations: From the mid-core section

Date: 9380 ± 80 **Lab no:** AA-5987 **Corrected date:** 8930 ± 80
Field ID: HU77-026-35 **AAL:** **GRL:** 922-S
Collector: J.T. Andrews **Depth:** 845-851 cm **Material:** Foraminifera
Species: Mixed **Weight:** 1 mg **Sample notes:** Benthics
Stratigraphic relations: From the core base

Comment: (JTA) The dates correlate well with others on shell and whale bone from the region. They indicate that seasonally open water was present to the west by 10,000 yr BP and to the east by about 9,400 yr BP, coincident with the retreat of the Laurentide Ice Sheet from the southern arctic channels. Because there were few calcareous foraminifera in the upper sediments of the core, plant fragments were used. An age of 500± yr is assumed for the top of the core.

EAST GREENLAND SHELF
Kangerdlugssuaq Trough

BS11-91-K18B

Lat: 65° 57.77' **Long:** 30° 38' **Elev:** -470 m

Date: 12,470 ± 205 **Lab no:** AA-8330 **Corrected date:** 11,920 ± 205
Field ID: BS11-91-K18B CCu **AAL:** **GRL:** 970-S
Collector: A.E. Jennings **Depth:** ≥150 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* **Weight:** 1.62 mg

Date: 12,085 ± 115 **Lab no:** AA-8331 **Corrected date:** 11,535 ± 115
Field ID: BS11-91-K18B CCu **AAL:** **GRL:** 971-S
Collector: A.E. Jennings **Depth:** ≥150 cm **Material:** Foraminifera
Species: *Neogloboquadrina pachyderma* **Weight:** 3.17 mg
Sample notes: 310 *N. pachyderma*, 8 dextral and 302 sinistral; floated

Date: 12,865 ± 305 **Lab no:** AA-8329 **Corrected date:** 12,315 ± 305
Field ID: BS11-91-K18B CCu **AAL:** **GRL:** 969-S
Collector: A.E. Jennings **Depth:** ≥150 cm **Material:** Foraminifera
Species: Mixed **Weight:** 1.76 mg
Sample notes: 32 *Buccella frigida*, 28 *Cassidulina reniforme*, 27 *Cibicides lobatulus*, 46 *Islandiella norcrossi*, 24 *Melonis zaandamae*, 10 *Nonionella auricula* and 8 *Nonionellina labradorica*

Comment: (AEJ) The three basal dates from BS11-91-K18B were obtained to: (1) compare benthic and planktonic foraminiferal ages as a measure of the reservoir effect; and (2) compare floated (CCl_4) versus unfloated samples to determine the effect of CCl_4 on radiocarbon dating. The reservoir effect was evaluated as the difference between the planktonic (12,280 ± 235 yr, mean of two) and benthic (12,315 ± 305 yr) foraminifera dates. At ± 1σ, the benthic age is ca. 50 yr older than the planktonic age. We expect a reservoir age of ca. 550 yr based on the work of Hjort (1973). The comparison of the ages of floated and unfloated planktonic foraminifera yielded the surprising result that the floated sample is ca. 65 yr younger than the unfloated sample at ±1σ. The samples are the same age at ±2σ, however. Additional dates on larger samples (with smaller analytical errors) are needed to test these findings.

BS88-06-17B

Lat: 65° 19.15' **Long:** 30° 59.68' **Elev:** -999 m
Location: Upper slope of Kangerdlugssuaq Trough

Date: 2855 ± 80 **Lab no:** AA-4336 **Corrected date:** 2305 ± 80
Field ID: BS88-06-17B GC **AAL:** **GRL:** 893-S
Collector: K.M. Williams **Depth:** 0-2 cm **Material:** Foraminifera
Species: Mixed **Weight:** 10.9 mg **Sample notes:** Benthics
Stratigraphic relations: From gray-clay section of core

Date: 13,700 ± 145 **Lab no:** AA-4531 **Corrected date:** 13,150 ± 145
Field ID: BS88-06-17B GC **AAL:** **GRL:** 898-S
Collector: K.M. Williams **Depth:** 25 cm **Material:** Foraminifera
Species: Mixed **Weight:** 9.4 mg **Sample notes:** Benthics

Date: 8755 ± 80 **Lab no:** AA-4027 **Corrected date:** 8405 ± 80
Field ID: BS88-06-17B GC **AAL:** **GRL:** 901-S
Collector: K.M. Williams **Depth:** 77-81 cm **Material:** Foraminifera
Species: Mixed **Weight:** 4.1 mg **Sample notes:** Benthics
Stratigraphic relations: From gray-clay section of core

Comment: See below

BS88-06-10A

Lat: 66° 12.19' **Long:** 30° 39.29' **Elev:** -469 m
Location: Off Kangerdlugssuaq Fjord

Date: 3210 ± 70 **Lab no:** AA-6829 **Corrected date:** 2660 ± 70
Field ID: BS88-06-10A GC **AAL:** **GRL:** 947-S
Collector: K.M. Williams **Depth:** 6.5-7.5 cm **Material:** Foraminifera
Species: Mixed **Weight:** 7 mg

Date: 9270 ± 80 **Lab no:** AA-4530 **Corrected date:** 8720 ± 80
Field ID: BS88-06-10A GC **AAL:** **GRL:** 897-S
Collector: K.M. Williams **Depth:** 21-23 cm **Material:** Foraminifera
Species: Mixed **Weight:** 5.8 mg

Date: 13,585 ± 110 | **Lab no:** AA-4026 | **Corrected date:** 13,035 ± 110
Field ID: BS88-06-10A GC | **AAL:** | **GRL:** 900-S
Collector: K.M. Williams | **Depth:** 100.5-102.5 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 6.9 mg

Comment: See below

BS88-06-08

Lat: 66° 27.53' | **Long:** 29° 41.09' | **Elev:** -299 m

Date: 3010 ± 50 | **Lab no:** AA-5988 | **Corrected date:** 2460 ± 50
Field ID: BS88-06-08 GC | **AAL:** | **GRL:** 925-S
Collector: K.M. Williams | **Depth:** 0-2 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 9 mg | **Sample notes:** Mostly benthics

Date: 10,375 ± 75 | **Lab no:** AA-5989 | **Corrected date:** 9825 ± 75
Field ID: BS88-06-08 GC | **AAL:** | **GRL:** 926-S
Collector: K.M. Williams | **Depth:** 15-17 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 6 mg | **Sample notes:** Benthics

Date: 15,025 ± 95 | **Lab no:** AA-4335 | **Corrected date:** 14,475 ± 95
Field ID: BS88-06-08 GC | **AAL:** | **GRL:** 892-S
Collector: K.M. Williams | **Depth:** 41-43, 47-49 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 11.4 mg
Stratigraphic relations: From gray-clay section of core

Comment: See below

PO175/1-5-1

Lat: 66° 46' | **Long:** 30° 50' | **Elev:** -501 m
Location: Outer Kangerdlugssuaq Trough

Date: 1300 ± 55 | **Lab no:** AA-6847 | **Corrected date:** 750 ± 55
Field ID: PO175/1-5-1 GC | **AAL:** | **GRL:** 948-S
Collector: K.M. Williams | **Depth:** 0-6 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 7 mg | **Sample notes:** Benthics

Date: 13,300 ± 145 | **Lab no:** AA-6849 | **Corrected date:** 12,750 ± 145
Field ID: PO175/1-5-1 GC | **AAL:** | **GRL:** 951-S
Collector: K.M. Williams | **Depth:** 94-96 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 6 mg | **Sample notes:** Benthics

Date: 14,465 ± 200 | **Lab no:** AA-7140 | **Corrected date:** 13,915 ± 200
Field ID: PO175/1-5-1 GC | **AAL:** | **GRL:** 962-S
Collector: K.M. Williams | **Depth:** 194-196 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 5 mg | **Sample notes:** Benthics

Date: 14,845 ± 190 | **Lab no:** AA-6848 | **Corrected date:** 14,295 ± 190
Field ID: PO175/1-5-1 GC | **AAL:** | **GRL:** 950-S

Collector: K.M. Williams
Species: Mixed

Depth: 310-312 cm
Weight: 4.8 mg

Material: Foraminifera
Sample notes: Benthics

Comment: See below

BS88-06-07

Lat: 67° 5.26'

Long: 30° 52.32'

Elev: -688 m

Date: 11,575 ± 135
Field ID: BS88-06-07 GC
Collector: K.M. Williams
Species: *Neogloboquadrina pachyderma*
Sample notes: Mainly *Neogloboquadrina pachyderma*
Stratigraphic relations: From gray-clay section of core

Lab no: AA-4667
AAL:
Depth: 86-90 cm

Corrected date: 11,025 ± 135
GRL: 903-S
Material: Foraminifera
Weight: 3.5 mg

Comment: See below

BS88-06-05A

Lat: 67° 7.54'

Long: 30° 54.26'

Elev: -707 m

Date: 985 ± 50
Field ID: BS88-06-05A GC
Collector: K.M. Williams
Species: Mixed

Lab no: AA-4338
AAL:
Depth: 0-4 cm
Weight: 6.2 mg

Corrected date: 435 ± 50
GRL: 895-S
Material: Foraminifera

Date: 5835 ± 60
Field ID: BS88-06-05A GC
Collector: K.M. Williams
Species: Mixed

Lab no: AA-4529
AAL:
Depth: 27-29 cm
Weight: 8.7 mg

Corrected date: 5285 ± 60
GRL: 896-S
Material: Foraminifera

Date: 8965 ± 110
Field ID: BS88-06-05A GC
Collector: K.M. Williams
Species: Mixed

Lab no: AA-3976
AAL:
Depth: 73.5-75.0 cm
Weight: 8.9 mg

Corrected date: 8415 ± 110
GRL: 889-S
Material: Foraminifera

Comment: See below

BS88-06-03

Lat: 67° 24.59'

Long: 31° 3.98'

Elev: -624 m

Date: 1382 ± 65
Field ID: BS88-06-03 GC
Collector: K.M. Williams
Species: Mixed
Sample notes: *Neogloboquadrina pachyderma* and *Globigerina bulloides*

Lab no: AA-6830
AAL:
Depth: 0 cm
Weight: 3.5 mg

Corrected date: 832 ± 65
GRL: 949-S
Material: Foraminifera

Date: 8615 ± 75
Field ID: BS88-06-03 GC
Collector: K.M. Williams

Lab no: AA-5990
AAL:
Depth: 78-80 cm

Corrected date: 8065 ± 75
GRL: 927-S
Material: Foraminifera

Species: Mixed | **Weight:** 2.5 mg | **Sample notes:** Benthics

Date: 9375 ± 70 | **Lab no:** AA-4666 | **Corrected date:** 8825 ± 70
Field ID: BS88-06-03 GC | **AAL:** | **GRL:** 902-S
Collector: K.M. Williams | **Depth:** 134-138 cm | **Material:** Foraminifera
Species: Mixed | **Weight:** 12.6 mg
Sample notes: 130 *Glogobulimina auriculata* and 351 *Nonionellian labradorica*
Stratigraphic relations: From gray-clay section of core

Comment: (KMW) These seven cores form a transect from the inner to outer shelf in Kangerdlugssuaq Trough. The cores record fluctuating glacial environments and relative surface-water temperatures from about 14,000 yr BP to the present. See Williams (1991) and Mienert et al. (1992) for a discussion.

BS11-91-K5

Lat: 67° 24.59' | **Long:** 31° 3.98' | **Elev:** -622 m

Date: 9105 ± 142 | **Lab no:** AA-8333 | **Corrected date:** 8555 ± 142
Field ID: BS11-91-K5 CCu | **AAL:** | **GRL:** 973-S
Collector: A.E. Jennings | **Depth:** ≥210 cm | **Material:** Foraminifera
Species: *Globobulimina auriculata arctica* | **Weight:** 2.51 mg
Sample notes: 54 specimens; floated in CCl_4 and picked one half

Comment: (AEJ) Sedimentation rates on the eastern Greenland shelf are between 40 and 80 yr/cm, much slower than those in Nansen Fjord. The shelf cores extend to the latest Pleistocene/early Holocene.

Mikis Fjord

BS11-91-K12

Lat: 68° 6.69' | **Long:** 31° 25.54' | **Elev:** -224 m

Date: 4850 ± 55 | **Lab no:** AA-8324 | **Corrected date**
Field ID: BS11-91-K12 CC | **AAL:** | **GRL:** 864-O
Collector: J.T. Andrews | **Depth:** ≥112 cm | **Material:** Organic Concentrate
Species: | **Weight:** 5 mg
Sample notes: >125 μm fraction, prepared according to Kihl (1975).

Date: 4010 ± 50 | **Lab no:** AA-8325 | **Corrected date:**
Field ID: BS11-91-K12 CC | **AAL:** | **GRL:** 864-O
Collector: J.T. Andrews | **Depth:** ≥112 cm | **Material:** Organic Concentrate
Species: | **Weight:** 740 mg
Sample notes: >125 μm fraction, prepared according to Kihl (1975).

Comment: Although different at the ±2σ level, these two dates on organic fractions are "reasonable". Paired dates are required on foram/organics from East Greenland.

BS11-91-K11B

Lat: 68° 6.94' **Long:** 31° 25.9' **Elev:**

Date: 9435 ± 50 **Lab no:** AA-8327 **Corrected date:** 8885 ± 50
Field ID: **AAL:** **GRL:** 967-S
Collector: J.T. Andrews **Depth:** 67 cm **Material:** Foraminifera
Species: Mixed **Weight:** 4.6 mg
Sample notes: Benthics; preservation ranges from excellent to poor; probably some reworked

Comment: Very slow sedimenation rate (ca. 130 yr/cm) is even slower than on the outer shelf. It may reflect reworking of sediments.

Nansen Fjord

BS11-91-K14

Lat: 68° 11.49' **Long:** 29° 35.74' **Elev:** -459 m

Date: 1798 ± 111 **Lab no:** AA-8332 **Corrected date:** 1248 ± 111
Field ID: BS11-91-14 CCu **AAL:** **GRL:** 972-S
Collector: A.E. Jennings **Depth:** ≥170 cm **Material:** Foraminifera
Species: Mixed **Weight:** 1.36 mg
Sample notes: 3 ostracode valves and mixed benthics; floated in CCl_4

Comment: See below

BS11-91-K13A

Lat: 68° 18.65' **Long:** 29° 47.19' **Elev:** -307 m

Date: 1125 ± 50 **Lab no:** AA-8328 **Corrected date:** 575 ± 50
Field ID: BS11-91-K13A CCa **AAL:** **GRL:** 968-S
Collector: A.E. Jennings **Depth:** >130 cm **Material:** Foraminifera
Species: **Weight:** 5.2 mg

Comment: (AEJ) The two dates from Nansen Fjord indicate sedimentation rates of <5 yr/cm, ca. 8-16 times higher than on the Greenland Shelf. The cores from this fjord will provide a short duration, high-resolution sediment record.

PART 2: DATES FROM TERRESTRIAL SITES

WESTERN HUDSON STRAIT
Nottingham Island

Lat: 63° 27' **Long:** 78° 02' **Location:** North shore of Nottingham Island

Date: 44,200 ± 2300 **Lab no:** AA-3254 **Corrected date:** 43,750 ± 2300
Field ID: CL84-No-T55 **AAL:** 5321A **GRL:**
Collector: C.A. Laymon **Depth:** 50 cm **Material:** Mollusc
Species: Unknown **Weight:** 9.5 mg
Sample notes: Small fragment from 4-8 mm fraction, remarkably fresh; 30% acid leach
Stratigraphic relations: From carbonate-rich (28% $CaCO_3$) till above the marine limit

Comment: (CAL) Because this age is beyond the range of reliability for the radiocarbon dating method, it should be regarded as a minimum age. See Laymon (1991) for a full discussion.

SOUTHEASTERN BAFFIN ISLAND
Meta Incognita Peninsula

Nanook Harbour

Lat: 61° 03' **Long:** 66° 38' **UTMG:** FU 258 715 **Map sheet:** 25J-Grinnell Glacier
Elev: **Location:** Large inlet ca. 16 km east-southeast Sister Islets; head of small inlet on southeast side

Date: 37,090 ± 1100 **Lab no:** AA-4244A **Corrected date:** 36,640 ± 1100
Field ID: M81-BSh51 **AAL:** 5378A **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 14.4 mg
Sample notes: Angular, lightly or unabraded fragments; 94% acid leach
Stratigraphic relations: From till deposited by northeast-flowing continental ice

Date: 40,630 ± 1400 **Lab no:** AA-4244B **Corrected date:** 40,180 ± 1400
Field ID: M81-BSh51 **AAL:** 5378B **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 13.9 mg
Sample notes: Angular, lightly or unabraded fragments; 92% acid leach
Stratigraphic relations: From till deposited by northeast-flowing continental ice

Comment: (GHM) This sample and several others were part of an attempt to provide limiting ages on the onset of the last glacier advance to cross southeastern Baffin Island from a Labradorean source area. In all cases the radiocarbon dates are in excess of 35 ka, and are best interpreted as limiting ages, not as finite ages. The lack of any clearly finite shell, despite extensive screening by amino acids, suggests that Hudson Strait was ice covered for much of the time between ca. 40 ka and 10 ka, or that erosion of sediments of that age was complete and the associated shells were carried beyond Meta Incognita Peninsula, and only older shells were deposited along southeast Baffin Island. The first alternative is the most likely.

Sister Islets

Lat: 62° 03' **Long:** 67° 23 ' **UTMG:** FU 85 823 **Map Sheet:** 25J-Grinnell Glacier
Elev: 2 m **Loction:** Near the head of large inlet that trends northwest from Sister Islets

Date: 35,685 ± 805 **Lab no:** AA-6298 **Corrected date:** 35,235 ± 805
Field ID: M86-BS64 **AAL:** 6426A **GRL:**
Collector: G.H. Miller **Depth:** **Material:** Mollusc
Species: *Portlandia arctica* **Weight:** 7.4 mg
Sample notes: Shell fragment; mechanical cleaning and 52% HCl leach
Stratigraphic relations: From surface of wave-eroded glacial-marine silt. Sample has been buried beneath 3 m of silt until recently

Comment: (GHM) Either the deposit is related to a pre-Late Foxe deglaciation, or old shells have been incorporated as erratics into the drift. The high concentration of free amino acids and high D/L ratio (0.175) in the free fraction of the sample supports an "old" age.

Pritzler Harbour

Lat: 62° 05' **Long:** 67° 15 ' **UTMG:** EU 995 934 **Map Sheet:** 25J-Grinnell Glacier
Elev: 23 m **Location:** Foreland plain at the outer reaches of Pritzler Harbour, southeast side

Date: 43,000 ± 3000 **Lab no:** AA-2348 **Corrected date:** 42,850 ± 3000
Field ID: M86-BS18 **AAL:** 5004 **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 126 mg
Sample notes: Single partial valve; not clearly in situ; 50% acid leach
Stratigraphic relations: From the surface of frost boil 23 m aht, the highest possible postglacial shell yet found along 300 km of southeast Baffin Island coast. The shell was an isolated find on the surface of a silty foreland plain

Comment: (GHM) A low D/L ratio suggested that this shell is probably of postglacial age, but radiocarbon indicates a much older age. The shell was not definitely in situ, hence it is now assumed that it was transported by the last ice advance and was subsequently reworked out of the drift cover during the Holocene. The low D/L ratio indicates that the shell was probably above sea level since shortly after it died, otherwise the relative warmth of ocean waters would have led to more racemization than was observed. Date is considered a minimum age.

Lat: 62° 08' **Long:** 67° 22' **UTMG:** EU 848 925 **Map sheet:** 25J-Grinnell Glacier
Elev: ca. -3 m **Location:** Northeast head of Pritzler Harbour at mouth of outflow of small lake

Date: 8365 ± 75 **Lab no:** AA-6299 **Corrected date:** 7915 ± 75
Field ID: M86-BS48 **AAL:** 6427A **GRL:**
Collector: G.H. Miller **Depth:** **Material:** Mollusc
Species: *Mya* (?) **Weight:** 8 mg
Sample notes: Tiny fragments remaining from previous amino acid preparations; mechanical cleaning and 49% HCl leach
Stratigraphic relations: Excavated from over-consolidated drift below high tide

Date: 8500 ± 90 **Lab no:** AA-2349 **Corrected date:** 8050 ± 90
Field ID: M86-BS46 **AAL:** **GRL:**
Collector: G.H. Miller **Depth:** 30 cm **Material:** Mollusc
Species: *Portlandia arctica* **Weight:** 8.6 mg
Sample notes: Single, whole, delicate shell, with periostracum, not recovered intact; 10% HCl leach with sonication
Stratigraphic relations: Excavated from bottom-set silty clay 2.5 m below high tide

Date: 9460 ± 95 **Lab no:** AA-6301 **Corrected date:** 9010 ± 95
Field ID: M86-BS44 **AAL:** 6429A **GRL:**
Collector: G.H. Miller **Depth:** **Material:** Mollusc
Species: Unknown **Weight:** 3.9 mg
Sample notes: Tiny fragments remaining from previous amino acid preparations; mechanical cleaning and 33% HCl leach
Stratigraphic relations: Excavated from over-consolidated drift 30 cm below high tide

Comment: (GHM) This series of three dates on shells in stratigraphic superposition provides information on the onset and recession of the last ice advance in outer Hudson Strait. The lowest sample (M86-BS44) is presumed to be an erratic in the drift and thus predates the last ice advance, which flowed north-northwest from a Labradorean source area, overtopping southeast Meta Incognita Peninsula. This supports earlier dates from marine cores in outer Hudson Strait indicating open water in Hudson Strait as early as 9 ka. The next higher sample (M86-BS46) was collected from stratified bottom-set carbonate-rich silty clay below high tide that was deposited in proximity to a retreating glacier margin. The date indicates that the Cockburn advance of Labradorean ice onto southeast Baffin Island had pulled back off the south coast, and normal marine water had entered Hudson Strait by 8050 yr BP. *Portlandia* is common in ice-proximal environments. Sample M86-BS48, collected 1 m higher in the section, but from similar sediment, is only 135 yr younger, indicating sedimentation rates were high during deglaciation as expected. The only inference that can be drawn regarding relative sea level is that the marine-limit phase, ca. 35 m asl, must be about 8 ka BP.

Kendall Strait

Lat: 62° 06' **Long:** 65° 52' **UTMG:** FU 692 908 **Map sheet:** 25J-Grinnell Glacier
Elev: 65 m **Location:** Highest region of Potter Island, Kendall Strait area

Date: 9090 ± 90 **Lab no:** AA-2223 **Corrected date:** 8640 ± 90
Field ID: M81-BSh75 **AAL:** 4649C **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya* or *Hiatella* **Weight:** 63 mg
Sample notes: Relatively unabraded, angular fragments; cleaned in distilled H_2O
Stratigraphic relations: From active frost boil in till above marine limit

Comment: (GHM) This date, along with several others on shells in till above marine limit in the Kendall Strait area that are between 8.6 and 9.5 ka, indicate that the strait was deglaciated about 9 ka ago, and was subsequently overridden by a readvance of Labrador ice during Cockburn time.

Lat: 62° 07' **Long:** 65° 00' **UTMG:** FU 538 907 **Map sheet:** 25J-Grinnell Glacier
Elev: 15 m **Location:** South side of first inlet along the mainland north from the mouth of Nobel Inlet

Date: 9500 ± 90 **Lab no:** AA-2350 **Corrected date:** 9050 ± 90
Field ID: M86-BS79 **AAL:** **GRL:**
Collector: G.H. Miller **Depth:** 5 m **Material:** Mollusc
Species: *Portlandia* **Weight:** 5.7 mg
Sample notes: Single hinge fragment; 20% acid leach
Stratigraphic relations: From stream-eroded freshly exposed face cut into bottom-set silt that had been glacial transported and emplaced in valley-side position, overlain by glacial-fluvial sediment

Date: 1.12% Modern **Lab no:** AA-2351 **Corrected date:**
Field ID: M86-BS79 **AAL:** **GRL:**
Collector: G.H. Miller **Depth:** 5 m **Material:** Plant macrofossils
Species: *Salix* **Weight:**
Sample notes: Leaf; sonicated in dilute HCl
Stratigraphic relations: From same collection as *Portlandia* shell of same Field ID

Comment: (GHM) The postbomb age for the willow leaf suggests that it was blown into a desiccation crack in the bottomset mud sometime during the last three decades, and that subsequent rehydration obscured the original crack giving the appearance of an in-place leaf.

Bond Inlet

Lat: 62° 13' **Long:** 67° 43' **UTMG:** EU 645 978 **Map sheet:** 25J-Grinnell Glacier
Elev: 11 m **Location:** Largest inlet about half way up the north side of Bond Inlet

Date: 39,000 ± 1800 **Lab no:** AA-2224 **Corrected date:** 38,550 ± 1800
Field ID: M86-BS28 **AAL:** 5005B **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 490 mg
Sample notes: Fragments; washed in distilled H_2O
Stratigraphic relations: From surface of active frost boils developed in silty bottom-set muds. Surrounding uplands are mantled by shelly drift emplaced by ice moving north-northeast out of Hudson Strait

Date: 7765 ± 105 **Lab no:** AA-2625 **Corrected date:** 7315 ± 105
Field ID: M86-BS28 **AAL:** 5005A **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 430 mg
Sample notes: Fragments; washed in distilled H_2O
Stratigraphic relations: From the same collection as AA-2224

Comment: (GHM) The AMS dating of two different shells from this collection (AAL-5005) was designed to test the discriminating potential of amino acid D/L ratios. The D/L ratios suggested that the collection, which in the field appeared to be all of a single age and related to postglacial bottom-set mud sedimentation, actually consisted of two different age populations. One shell from each population was submitted for dating. The shell with high D/L ratio has a radiocarbon age of 38,550 ± 1800 yr BP (AA-2224), whereas the shell with a lower, typical postglacial ratio has a radiocarbon age of 7315 ± 105 yr BP (AA-2625), thus demonstrating the reliability of the D/L ratios to identify mixed-age populations. The radiocarbon date of the older shell is considered a minimum age. The exercise also illustrates the danger of dating bulk samples where it cannot be shown that

the shells are in situ. There were no obvious physical differences (e.g. abrasion, pitting) between the "old" and "young" shells in this collection.

Lake INSTAAR

Lat: 62° 17.3' **Long:** 66° 17' **UTMG:** FV 437 085 **Map sheet:** 25J-Grinnell Glacier
Elev: 10 m **Location:** Jackman Sound area

Date: 3600 ± 75 **Lab no:** AA-3783 **Corrected date:**
Field ID: **AAL:** **GRL:** 792-O
Collector: W. Mode & K. Williams **Depth:** 33.5-39.0 cm **Material:** Organic concentrate
Weight: 13.05 g **Sample notes:** <125 μm fraction

Date: 4794 ± 70 **Lab no:** AA-3277 **Corrected date:**
Field ID: **AAL:** **GRL:** 783-O
Collector: W. Mode & K. Williams **Depth:** 43-48 cm **Material:** Organic concentrate
Weight: 16.8 g **Sample notes:** <125 μm fraction

Date: 7805 ± 70 **Lab no:** AA-3278 **Corrected date:**
Field ID: **AAL:** **GRL:** 784-O
Collector: W. Mode & K. Williams **Depth:** 83-88 cm **Material:** Organic concentrate
Weight: 12.4 g **Sample notes:** <125 μm fraction

Date: 8630 ± 70 **Lab no:** AA-3280 **Corrected date:**
Field ID: **AAL:** **GRL:** 785-O
Collector: W. Mode & K. Williams **Depth:** 96-101 cm **Material:** Organic concentrate
Weight: 21.51 g **Sample notes:** <125 μm fraction

Comment: (WNM) Samples are from a 1.08-m sediment core. Sediment is lacustrine throughout, though it presumably is underlain,within as little as 5 cm (Williams, 1990), by marine sediment. These dates provide the chronology for the bio- and lithostratigraphy of the lacustrine sequence (Williams, 1990; Abbott, 1992). The basal date limits the date of isostatic emergence (Williams, 1990; Andrews, 1991).

Lake Mercer

Lat: 62° 16.8' **Long:** 66° 15' **UTMG:** FV 433 038 **Map sheet:** 25J-Grinnell Glacier
Elev: 1 m **Location:** Jackman Sound area

Date: 3285 ± 55 **Lab no:** AA-3273 **Corrected date:**
Field ID: Core 1 **AAL: GRL:**
Collector: W. Mode & K. Williams **Depth:** 26.5-51.5 cm **Material:** Organic concentrate
Sample notes: >125 μm fraction

Date: 3620 ± 55 **Lab no:** AA-3274 **Corrected date:**
Field ID: Core 1 **AAL: GRL:**
Collector: W. Mode & K. Williams **Depth:** 26.5-51.5 cm **Material:** Organic concentrate
Sample notes: <125 μm fraction

Date: 4650 ± 60 **Lab no:** AA-3818 **Corrected date:**
Field ID: Core 2 **AAL:** **GRL:** 794-O
Collector: W. Mode & K. Williams **Depth:** 22-26 cm **Material:** Organic concentrate
Weight: 43.8 g **Sample notes:** <125 μm fraction

Date: 6170 ± 55 **Lab no:** AA-3275 **Corrected date:**
Field ID: Core 1 **AAL:** **GRL:**
Collector: W. Mode & K. Williams **Depth:** 93.5-98.5 cm **Material:** Organic concentrate
Sample notes: <125 μm fraction

Date: 7410 ± 60 **Lab no:** AA-3495 **Corrected date:**
Field ID: Core 2 **AAL:** **GRL:** 788-O
Collector: W. Mode & K. Williams **Depth:** 56-61 cm **Material:** Organic concentrate
Weight: 28.09 g **Sample notes:** >125 μm fraction

Date: 8485 ± 60 **Lab no:** AA-3494 **Corrected date:**
Field ID: Core 2 **AAL:** **GRL:** 788-O
Collector: W. Mode & K. Williams **Depth:** 56-61 cm **Material:** Organic concentrate
Weight: 28.09 g **Sample notes:** <125 μm fraction

Date: 10,980 ± 70 **Lab no:** AA-3819 **Corrected date:**
Field ID: Core 2 **AAL:** **GRL:** 795-O
Collector: W. Mode & K. Williams **Depth:** 87-90 cm **Material:** Organic concentrate
Weight: 32.7 g **Sample notes:** <125 μm fraction

Date: 9655 ± 90 **Lab no:** AA-3975 **Corrected date:** 9205 ± 90
Field ID: Core 2 **AAL:** **GRL:** 888-S
Collector: W. Mode & K. Williams **Depth:** 91-92 cm **Material:** Foraminifera
Species: Mixed **Weight:** 4 mg **Sample notes:** Benthics
Stratigraphic relations: From the marine section

Comment: (WNM) Samples are from replicate sediment cores (Cores 1 and 2) collected 10 m apart. Length of Core 1 is 1.08 m, comprising entirely lacustrine sediment. Length of Core 2 is 0.93 m, comprising 0.60 m of lacustrine sediment overlying 0.33 m of marine sediment (Williams, 1990). These dates provide the chronology for the bio- and lithostratigraphy of the lacustrine sequence (Williams, 1990; Abbott, 1992; Mode, in prep.). In addition, the last three dates help control the timing of deglaciation, marine inundation, and finally, isostatic emergence of the lake (Andrews, 1991). The paired dates (one pair from 46.5 to 51.5 cm in Core 1 and the other pair from 56 to 61 cm in Core 2) were part of an experiment (along with paired dates cited above from Lake INQUA) to compare the age of the fine (<125 μm, acid-insoluble) versus coarse (>125 μm) fractions of organic concentrate from bulk-sediment samples from lakes. See Lake INQUS dates for more information.

Lake INQUA

Lat: 62° 16.1' **Long:** 66° 14' **UTMG:** FV 423 060 **Map sheet:** 25J-Grinnell Glacier
Elev: 34 m **Location:** Jackman Sound area

Date: 2210 ± 50 **Lab no:** AA-3098 **Corrected date:**
Field ID: **AAL:** **GRL:** 777-O
Collector: W. Mode & K. Williams **Depth:** 25-30 cm **Material:** Organic concentrate

Weight: 10.15 g | **Sample notes:** <125 μm fraction

Date: 4205 ± 50 | **Lab no:** AA-3101 | **Corrected date:**
Field ID: | **AAL:** | **GRL:** 771-O
Collector: W. Mode & K. Williams | **Depth:** 103-108 cm | **Material:** Organic concentrate
Weight: | **Sample notes:** >125 μm fraction

Date: 4461 ± 50 | **Lab no:** AA-3099 | **Corrected date:**
Field ID: | **AAL:** | **GRL:** 771-O
Collector: W. Mode & K. Williams | **Depth:** 103-108 cm | **Material:** Organic concentrate
Weight: 8.04 g | **Sample notes:** <125 μm fraction

Date: 7960 ± 105 | **Lab no:** AA-8570 | **Corrected date:**
Field ID: | **AAL:** | **GRL:**
Collector: W. Mode & K. Williams | **Depth:** 163-165 cm | **Material:** wood
Sample notes: twig

Date: 8650 ± 75 | **Lab no:** AA-3102 | **Corrected date:**
Field ID: | **AAL:** | **GRL:** 772-O
Collector: W. Mode & K. Williams | **Depth:** 195-200 cm | **Material:** Organic concentrate
Weight: 28.41 g | **Sample notes:** <125 μm fraction

Comment: (WNM) Samples are from a 3-m sediment core from Lake INQUA (previously known as "Lake A"). The upper 2 m of sediment is lacustrine, the lower 1 m is marine. These dates provide the chronology for the bio- and lithostratigraphy of the lacustrine sequence (Williams, 1990; Abbott, 1992). In addition, AA-3102 dates isostatic emergence of the lake (Andrews, 1991), and along with AA-3104, a molluscan shell date from the marine sediment at 230 cm (Andrews and others, 1989), provides chronology for the pre- lake history of the basin. The pair of dates (AA-3101 and AA-3099) from the same level (103-108 cm) were part of an experiment (along with paired dates cited below from Lake Mercer) to compare the age of the fine (<125 μm, acid-insoluble) versus coarse (>125 μm) fractions organic concentrate from bulk-sediment samples from lakes. Material composing the coarse-fraction samples that were dated was primarily moss macrofossils, predominantly *Drepanocladus exannulatus*. Coarse-fraction dates are consistently younger than fine-fraction dates (Mode, 1989).

Terra Nivea

Lat: 62° 21' **Long:** 66° 33' **UTMG:** FV 265 135 **Map sheet:** 25J-Grinnell Glacier
Elev: ~30 m **Location:** Immediately (100 m) in front of an active glacier in the Jackman Sound area

Date: 108% Modern | **Lab no:** AA-2352 | **Corrected date:**
Field ID: M86-BS85 | **AAL:** | **GRL:**
Collector: G.H. Miller | **Depth:** 0 cm | **Material:** Mollusc
Species: Unknown | **Weight:** 40 mg
Sample notes: Single small fragment; 20% acid leach
Stratigraphic relations: Found on fluvial sand which has only been deglaciated in the past 15 yr and is 4 km inside the Little Ice Age terminal moraine

Comment: (GHM) Postbomb radiocarbon activity indicates that this shell was brought to the collection site after deglaciation, most likely by a bird dropping it on a stone to break open the shell.

Watts Bay

Lat: 62° 40' **Long:** 66° 59' **UTMG:** FV 33 475 **Map sheet:** 25J-Grinnell Glacier
Elev: 3 m **Location:** Head of Watts Bay

Date: 9500 ± 105 **Lab no:** AA-6305 **Corrected date:** 9050 ± 105
Field ID: M77-BSh3 **AAL:** 6424A **GRL:**
Collector: G.H. Miller **Depth:** 25 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 6 mg
Sample notes: Angular, unabraded fragment; good surface ornamentation; thick walled, but not in situ; mechanical cleaning and 62% HCl leach
Stratigraphic relations: Excavated from 20-30 cm below the surface in pebbly, sandy silt. Limestone is common. Deposit is probably glacial-marine drift. Shell-bearing strata is covered by oxidized sand

Comment: (GHM) The age suggests that the limestone in the beach deposit was either from reworking of older drift or from iceberg rafting at this time. Shells of the same age at the head of Delano Bay preclude an outlet glacier from Meta Incognita, and Kendall Strait was also ice free at this time.

Loks Land

Type Lokslandian

Lat: 62° 24' **Long:** 64° 39' **UTMG:** ME 235 195 **Map sheet:** 25I-Loks Land
Elev: 3 m **Location:** Second inlet northeast from Queen Elizabeth Foreland

Date: 10,555 ± 75 **Lab no:** AA-5835 **Corrected date:** 10,105 ± 75
Field ID: M89-BS28 **AAL:** 5931A **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0.5 m **Material:** Mollusc
Species: *Mya truncata* **Weight:** 27.2 mg
Sample notes: Small fragment; mechanical cleaning and 84% HCl leach
Stratigraphic relations: From compact, limestone-bearing diamicton interpreted as basal till

Date: 10,615 ± 75 **Lab no:** AA-5836 **Corrected date:** 10,165 ± 75
Field ID: M89-BS28 **AAL:** 5931B **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0.5 m **Material:** Mollusc
Species: *Mya truncata* **Weight:** 23 mg
Sample notes: Small fragment; mechanical cleaning and 88% HCl leach
Stratigraphic relations: From compact, limestone-bearing diamicton interpreted as basal till

Comment: (GHM, DSK) A reexamination of the type Lokslandian deposits (Miller, 1985) in 1989 revealed a till overlying the interstadial beds, whereas the original interpretation of Miller (1979; 1980) was that the interstadial beds had not been glacially overridden. These two dates provide maximum-limiting ages on an ice advance that flowed northward onto Loks Land, but did not completely remove the underlying interstadial deposits.

Loks Land Summit

Lat: 62° 26' **Long:** 64° 30' **UTMG:** ME 230 220 **Map sheet:** 25I-Loks Land
Elev: 329 m **Location:** Southeastern most summit of Loks Land

Date: 10,315 ± 85 **Lab no:** AA-5837 **Corrected date:** 9965 ± 85
Field ID: M89-BS18 **AAL:** 5929B **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 11.4 mg
Sample notes: Centimeter-size angular fragment; mechanical cleaning and 12% HCl leach
Stratigraphic relations: From carbonate-rich drift in a frost boil

Date: 10,435 ± 85 **Lab no:** AA-6309 **Corrected date:** 9985 ± 85
Field ID: M89-BS18 **AAL:** 5929D **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 23.9 mg
Sample notes: Centimeter-size angular fragment; mechanical cleaning and 30-50% HCl leach
Stratigraphic relations: From carbonate-rich drift in a frost boil

Date: 10,505 ± 85 **Lab no:** AA-5838 **Corrected date:** 10,045 ± 85
Field ID: M89-BS18 **AAL:** 6044B **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 **Material:** Mollusc
Species: Unknown **Weight:** 11.8 mg
Sample notes: Centimeter-size angular fragment; mechanical cleaning and 28% HCl leach
Stratigraphic relations: From carbonate-rich drift in a frost boil

Date: 10,740 ± 85 **Lab no:** AA-6307 **Corrected date:** 10,290 ± 85
Field ID: M89-BS18 **AAL:** 5929E **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 12.3 mg
Sample notes: Centimeter-size angular fragment; mechanical cleaning and 30-50% HCl leach
Stratigraphic relations: From carbonate-rich drift in a frost boil

Comment: (DSK, GHM) The four dates on shell fragments from carbonate-rich drift collected from the >300 m asl on Loks Land provide maximum-limiting ages on the timing of an ice advance that overtopped the island. The dates are indistinguishable from other maximum-limiting ages on the Gold Cove readvance from the Gold Cove/Countess of Warwick Sound area.

Loks Land Radio Site

Lat: 62° 27' **Long:** 64° 25' **UTMG:** ME 276 235 **Map sheet:** 25I-Loks Land
Elev: 19 m **Location:** Southeast shore of an unnamed bay west of Morris Island, south of Osborn Bay, eastern Loks Land

Date: 9980 ± 210 **Lab no:** GSC-5340 **Corrected date:** 9940 ± 105
Field ID: M89-BS21 **AAL:** 5930C **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** ~7 g
Sample notes: Whole, well-preserved, robust valve; no pretreatment
Stratigraphic relations: From frost boils near top of a small bouldery terrace close to the marine

limit. Shells are abundant, angular, and unabraded. Lack of proximal sediment source indicates that the sediments are ice-proximal

Date: 10,400 ± 140 **Lab no:** GSC-5328 **Corrected date:** 10,360 ± 70
Field ID: M89-BS21 **AAL:** 5930E **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** ~16 g
Sample notes: Whole, well-preserved, robust valve; no pretreatment
Stratigraphic relations: From the same collection as the other two dated shells with the same Field ID

Date: 10,920 ± 160 **Lab no:** GX-15278 **Corrected date:** 10,470 ± 160
Field ID: M89-BS21 **AAL:** **GRL:**
Collector: D. Kaufman & G. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:**
Sample notes: Well-preserved; 10% acid leach
Stratigraphic relations: From the same collection as the other two dated shells with the same Field ID

Comment: (DSK, GHM) The three shells date to an interval when outer Frobisher Bay was free of glacier ice. They provide a maximum-limiting age for the onset of the Gold Cove advance onto Loks Land.

Beare Sound

Lat: 62° 30' **Long:** 64° 50' **UTMG:** ME 725 295 **Map sheet:** 25I-Loks Land
Elev: 40 m **Location:** Small cove on south side of Beare Sound, where the channel projects southeast into western Loks Land

Date: 9550 ± 320 **Lab no:** GSC-5299 **Corrected date:** 9510 ± 160
Field ID: DK91-34 **AAL:** **GRL:**
Collector: D. Kaufman, W. Manley **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** ~9 g
Sample notes: 1 robust, angular hinge fragment; some surface weathering and spalling; no pretreatment
Stratigraphic relations: From silty, carbonate-rich drift near the marine limit

Date: 10,560 ± 75 **Lab no:** AA-8388 **Corrected date:** 10,110 ± 75
Field ID: M89-BS41 **AAL:** 6604A **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 108.7 mg
Sample notes: 1 large angular fragment; mechanical cleaning and 66% HCl leach
Stratigraphic relations: From silty, carbonate-rich drift near the marine limit

Date: 11,075 ± 85 **Lab no:** AA-8389 **Corrected date:** 10,625 ± 85
Field ID: DK91-34 **AAL:** 6697A **GRL:**
Collector: D. Kaufman, W. Manley **Depth:** 0 cm **Material:** Mollusc
Species: *Portlandia arctica* **Weight:** 22.2 mg
Sample notes: 1 articulated, well-preserved valve. 40% acid leach
Stratigraphic relations: From silty, carbonate-rich drift near the marine limit

Date: 11,590 ± 180 **Lab no:** AA-6300 **Corrected date:** 11,140 ± 180
Field ID: M89-BS41 **AAL:** 6428A **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Portlandia arctica* **Weight:** 9.9 mg
Sample notes: One small fragment from hinge area; mechanical cleaning and 56% HCl leach
Stratigraphic relations: From silty, carbonate-rich drift near the marine limit

Date: 11,685 ± 90 **Lab no:** AA-7559 **Corrected date:** 11,235 ± 90
Field ID: M89-BS41 **AAL:** 6428C **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Portlandia arctica* **Weight:** 8.7 mg
Sample notes: Centimeter-size angular fragment; mechanical cleaning and 46% HCl leach
Stratigraphic relations: From silty, carbonate-rich drift near the marine limit

Date: 40,950 ± 2100 **Lab no:** AA-7557 **Corrected date:** 40,500 ± 2100
Field ID: M89-BS41 **AAL:** 6603A **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 111.1 mg
Sample notes: Centimeter-size angular fragment; mechanical cleaning and 62% HCl leach
Stratigraphic relations: From silty, carbonate-rich drift near the marine limit

Date: >38,900 **Lab no:** AA-7558 **Corrected date:** >38,450
Field ID: M89-BS41 **AAL:** 6428B **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Portlandia arctica* **Weight:** 9.2 mg
Sample notes: Centimeter-size angular fragment; mechanical cleaning and 47% HCl leach
Stratigraphic relations: From silty, carbonate-rich drift near the marine limit

Comment: (DSK, GHM) The texture and composition of deposits and molluscan fauna at this site indicate ice-proximal glacial-marine sediment. The dates indicate the presence of four distinct ages: >38.5, 11.2-11.1; 10.6-10.1; and 9.5 ka. The shells with ages of 11 ka are the oldest finite shells yet discovered on southeastern Baffin Island. They date an interval when outer Frobisher Bay was, at least in part, open to the sea and provide a close limiting age on the time of ice-proximal sedimentation on western Loks Land. The 11 ka dates provide important evidence for a pre-Gold Cove advance of north-flowing ice onto southeastern Baffin Island (the Beare Sound advance of Kaufman and others, 1992) that may correlate with an ice-covered interval recognized in marine cores from Resolution Basin (Andrews and others, 1990). The nonfinite shells must have been reworked into the younger deposits. The younger shells were deposited at the site just prior to and after the Gold Cove advance. We interpret the deposit as a pocket of ice-proximal glacial-marine sediment that, because of its protected location at the foot of a prominent lee-side escarpment, escaped erosion by ice of the Gold Cove advance. Marine-limit indicators are anomalously high near the site (46 m aht, or about 10 m higher then the regional marine limit), and well-preserved striae are oriented N30W, more westerly than the regional pattern related to the Gold Cove advance. This evidence supports the idea that the site contains primary pre-Gold Cove deposits.

Hall Peninsula

Willows Island

Lat: 62° 47' **Long:** 65° 29' **UTMG:** LE 738 635 **Map sheet:** 25I-Loks Land
Elev: 90 m **Location:** Near summit of Willows Island

Date: 10,570 ± 85 **Lab no:** AA-5841 **Corrected date:** 10,120 ± 85
Field ID: M89-BS1 **AAL:** 6043A **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 10.2 mg
Sample notes: Angular half valve; mechanical cleaning and 86% HCl leach
Stratigraphic relations: From fresh, limestone-rich drift cover

Date: 10,635 ± 80 **Lab no:** AA-6308 **Corrected date:** 10,185 ± 80
Field ID: M89-BS1 **AAL:** 6042C **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 36.4 mg
Sample notes: Robust, spalling hinge fragment; mechanical cleaning and ca. 50% HCl leach
Stratigraphic relations: From fresh, limestone-rich drift cover

Date: 10,680 ± 85 **Lab no:** AA-5840 **Corrected date:** 10,230 ± 85
Field ID: M89-BS1 **AAL:** 6042D **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 29.7 mg
Sample notes: Robust, spalling hinge fragment; mechanical cleaning and ca. 50% HCl leach
Stratigraphic relations: From fresh, limestone-rich drift cover

Comment: (DSK, GHM) The three dates on two molluscan genera from drift mantling Willows Island are indistinguishable at ±1σ. They provide a maximum-limiting age on the timing of the most recent ice advance (Gold Cove) that completely overtopped the island.

Cape Farrington

Lat: 62° 49' **Long:** 64° 45' **UTMG:** ME 095 718 **Map sheet:** 25I-Loks Land
Elev: 0.5-1.5 m **Location:** Small group of islands in the channel that separates Cape Farrington from Hall Peninsula

Date: 10,000 ± 75 **Lab no:** AA-7560 **Corrected date:** 9550 ± 75
Field ID: M77-BSh41 **AAL:** 6430C **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 25.3 mg
Sample notes: Centimeter-size, angular, unabraded fragment; good surface ornamentation; mechanical cleaning and 62% HCl leach
Stratigraphic relations: From present beach. Possibly eroded from old till, glacial-marine drift, or marine reworked drift; other beaches do not have shells. Not in situ

Comment: (GHM) The northwestern limit of the Gold Cove readvance is well constrained by marine cores and land-based mapping on Brevoort Island. The readvance terminated in the Brevoort Basin, just south of Brevoort Island, and well northwest of Cape Farrington. This sample provides evidence that deglaciation from the maximum extent of the Gold Cove readvance occurred by 9500

yr BP.

Countess of Warwick Sound

Lat: 62° 49.7' **Long:** 65° 31' **UTMG:** LE 724 690 **Map sheet:** 25I-Loks Land
Elev: 60-62 m **Location:** Well-dated sand body located above the left bank of outflow from large lake on north side of outer Countess of Warwick Sound

Date: 10,200 ± 100 **Lab no:** GSC-5037 **Corrected date:** 10,160 ± 50
Field ID: M77-BSh27 **AAL:** **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 117.3 g
Sample notes: Excellent preservation, 5 whole valves
Stratigraphic relations: From an excavation into sandy strata in a stream-cut terrace

Date: 10,400 ± 90 **Lab no:** GSC-5036 **Corrected date:** 10,360 ± 45
Field ID: M77-BSH27 **AAL:** **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 100.1 g
Sample notes: Excellent preservation, 11 whole valves
Stratigraphic relations: From an excavation into sandy strata in a stream-cut terrace

Comment: (DSK, GHM) With the addition of these two dates, we now have six radiocarbon dates from four laboratories on paired shells from this site. The weighted mean and weighted uncertainty of these six dates is 10,290 ± 30 yr. The deposit was originally interpreted as the distal facies of a delta formed at the marine limit by breaching of a moraine-dammed lake shortly after deglaciation from the Hall moraines (Miller, 1980). More recent work (Miller and Kaufman, 1990), however, shows that the deposit was formed prior to the Gold Cove readvance; it was overrun by Gold Cove ice, but was not completely removed. The age of a shell fragment collected from carbonate-rich drift exposed in a bluff across the river (10,375 ± 80 yr; AA-6303) is indistinguishable from the age of these shells, thus confirming that they pre-date the Gold Cove readvance.

Lat: 62° 50' **Long:** 65° 32' **UTMG:** LE 720 695 **Map sheet:** 25I-Loks Land
Elev: 56.5 m **Location:** Right bank of river flowing from large lake north of outer Countess of Warwick Sound, just upstream from small tributary that enters from the west

Date: 10,825 ± 80 **Lab no:** AA-6303 **Corrected date:** 10,375 ± 80
Field ID: DK90-22a **AAL:** 6420A **GRL:**
Collector: D.S. Kaufman **Depth:** 3.5 m **Material:** Mollusc
Species: *Mya truncata* **Weight:** 10 mg
Sample notes: Robust, angular fragment; mechanical cleaning and 63% HCl leach
Stratigraphic relations: Found in drift (basal till ?) underlying 3 m of stratified sand and silty sand, 1.5 m above present river level

Comment: (DSK) The date is in close agreement with numerous other dates on shells found in drift of the Gold Cove readvance. The important aspect of this date is that it confirms that the well-dated sand body ("delta" of Miller, 1980) situated just across the river was, in fact, overridden during the Gold Cove readvance. The fluvial sand overlying the drift at this site records river migration prior to downcutting. Till overlying the well-dated sand must have been removed by river terracing.

Lat: 62° **Long:** 65° **UTMG:** **Map sheet:** 25I-Loks Land
Elev: 119 m **Location:** Near the mouth of large lake on the northwest side of uther Countess of Warwick Sound

Date: 8320 ± 105 **Lab no:** AA-4250B **Corrected date:** 7870 ± 105
Field ID: **AAL:** 5583B **GRL:**
Collector: R. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:**
Stratigraphic relations: From frost boils in till above the marine limit

Date: 9270 ± 110 **Lab no:** AA-4249 **Corrected date:** 8820 ± 110
Field ID: **AAL:** 5582A **GRL:**
Collector: R. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 14.1 mg
Sample notes: Mechanical cleaning and 92% HCl leach
Stratigraphic relations: From frost boils in till above the marine limit

Date: 10,015 ± 120 **Lab no:** AA-4250A **Corrected date:** 9565 ± 120
Field ID: **AAL:** 5583A **GRL:**
Collector: R. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 15.1 mg
Sample notes: Mechanical cleaning and 89% HCl leach
Stratigraphic relations: From frost boils in till above the marine limit

Comment: (DSK, GHM) The ages of these three shells are difficult to reconcile with other shell dates from the same region. The three shells were collected from above the marine limit, and must therefore pre-date the last ice advance. Numerous other dates indicate that the last advance terminated at ca. 9.5 ka. Although the oldest date in this collection (AA-4250A) is broadly consistent with the regional glacial history, the other two are much too young to be compatible. Until other information indicating that the Countess of Warwick Sound area was overridden by ice younger than 8 ka comes to light, we consider this group of three dates suspect and do not use them in our chronostratigraphy.

Kujatu Lake

Lat: 62° 51' **Long:** 65° 26' **UTMG:** **Map sheet:** 25I-Loks Land
Elev: 86 m **Location:** North side of outer Countess of Warwick Sound

Date: 8075 ± 145 **Lab no:** AA-3814 **Corrected date:**
Field ID: **AAL:** **GRL:** 793-O
Collector: J. Jacobs and R. Miller **Depth:** 65-66 cm **Material:** Plant macrofossils
Sample notes: Moss fragments and other plant macrofossils
Stratigraphic relations: From the base of a two-section core

Date: 8320 ± 95 **Lab no:** AA-3815 **Corrected date:**
Field ID: **AAL:** **GRL:** 793-O
Collector: J. Jacobs and R. Miller **Depth:** 65-66 cm **Material:** Plant macrofossils
Sample notes: Moss fragments and other plant macrofossils
Stratigraphic relations: From the base of a two-section core

Comment: (RM) Based on pollen and magnetic stratigraphy, it appears that there is little overlap between the two sections of this core. The dates are concordant at ±2σ. The date of ca. 8.2 ka from the base of the lacustrine section indicates that the sediments were deposited after the area was deglaciated at ca. 9.5 ka. Sedimentary analysis of the cores confirms this observation (Miller, 1992).

Baby Tuktu Lake, Core 1

Lat: 62° 52' **Long:** 65° 22' **UTMG:** **Map sheet:** 25I-Loks Land
Elev: 41 m **Location:** North side of inner Countess of Warwick Sound; core is from the center the lake in 9 m of water

Date: 1045 ± 55	**Lab no:** AA-6026	**Corrected date:**
Field ID: BT1-0.5	**AAL:**	**GRL:**
Collector: R. Miller and M. Abbott	**Depth:** 0-1 cm	**Material:** Humic acids
Date: 3015 ± 55	**Lab no:** AA-6027	**Corrected date:**
Field ID: BT1-40.5	**AAL:**	**GRL:**
Collector: R. Miller and M. Abbott	**Depth:** 40-41 cm	**Material:** Humic acids
Date: 5675 ± 95	**Lab no:** AA-6028	**Corrected date:**
Field ID: BT1-71.5	**AAL:**	**GRL:**
Collector: R. Miller and M. Abbott	**Depth:** 71-72 cm	**Material:** Humic acids
Date: 6160 ± 90	**Lab no:** AA-6029	**Corrected date:**
Field ID: BT1-76.5	**AAL:**	**GRL:**
Collector: R. Miller and M. Abbott	**Depth:** 76-77 cm	**Material:** Humic acids

Comment: (RM, MA) These four dates define the chronostratigraphy for Core 1 from Baby Tuktu Lake. AA-6026 indicates the recurring problem of losing the top 1000 yr of sediment using the Livingstone or gravity corer. The basal date, AA-6029, defines the beginning of sedimentation in the basin, which was considerably later than in the main Tuktupingushuk Lake basin only 200 m away. See Abbott (1991) and Miller (1992) for discussion.

Tuktupingushuk Lake, Core 2

Lat: 62° 52' **Long:** 65° 22' **UTMG:** **Map sheet:** 25I-Loks Land
Elev: 20 m **Location:** North side of inner Countess of Warwick Sound; the core is from 20 m water depth in the center of the lake

Date: 1010 ± 50	**Lab no:** AA-6523	**Corrected date:**
Field ID: TG2-01	**AAL:**	**GRL:**
Collector: M. Abbott and R. Miller	**Depth:** 0-2 cm	**Material:** Humic acids
Date: 5660 ± 100	**Lab no:** AA-7008	**Corrected date:**
Field ID: TG2-01a	**AAL:**	**GRL:**
Collector: M. Abbott and R. Miller	**Depth:** 1 cm	**Material:** Plant macrofossils
Date: 7430 ± 230	**Lab no:** AA-6522	**Corrected date:**
Field ID: TG2-30	**AAL:**	**GRL:**

Collector: M. Abbott and R. Miller **Depth:** 29-31 cm **Material:** Humic acids

Comment: See below

Tuktupingushuk Lake, Core 3

Lat: 62° 52' **Long:** 65° 22' **UTMG:** **Map sheet:** 25I-Loks Land
Elev: 31 m **Location:** North side of Countess of inner Warwick Sound; the core was taken from the lake margin in 9 m of water

Date: 8260 ± 80 **Lab no:** AA-4574 **Corrected date:**
Field ID: T3-20 **AAL:** **GRL:**
Collector: R. Miller and M. Abbott **Depth:** 18-22 cm **Material:** Bulk sediment
Sample notes: Acid insoluble fraction, <125µm

Date: 8925 ± 105 **Lab no:** AA-4575 **Corrected date:**
Field ID: T3-40 **AAL:** **GRL:**
Collector: R. Miller and M. Abbott **Depth:** 38-42 cm **Material:** Bulk sediment

Date: 10,415 ± 240 **Lab no:** AA-6521 **Corrected date:**
Field ID: T3-74 **AAL:** **GRL:**
Collector: R. Miller and M. Abbott **Depth:** 73-75 cm **Material:** Humic acids

Comment: (RM, MA) Dating of the Tuktupingushuk Lake cores is problematic. AA-4574, AA-4575 and AA-6521 are from Core 3 taken in 9 m of water using a Livingstone corer. They indicate that the top of the core dates to ca. 7 ka. We attribute this to sediment reworking, possibly due to a lowering of the lake level, rather than loss of the core top during coring (see Abbot, 1991; Miller, 1992). The basal date (AA-6521) indicates that the area was ice free before 10.4 ka when the lowest sediments were deposited. The basal 1 cm of the core contains lacustrine diatoms and is overlain by a thin (1-2 cm) layer containing a marine assemblage, then reverts to a lacustrine assemblage (KMW). This suggests that the area became ice free before eustatic sea level rose to its peak. The date provides data from a lacustrine environment on the timing of ice retreat which can be compared and correlated with those from the marine environment recording the same event. AA-6522, AA-6523, and AA-7008 are from Core 2, a gravity core from 20 m water depth in the center of the lake. AA-6523 is from the top of the core. Similar to many other cores from southern Baffin Island lakes, it dates to ca. 1000 yr BP. We believe that sediments <1 ka are too liquid to be collected using Livingstone or gravity coring devices. When compared with AA-4574, this date suggests that sediment in the lake did not cease after 7 ka, but continued to the present and that the loss of record from Core 3 is attributed to reworking. AA-7008 contained reworked material from the margins of the lake which has an age of approximately 5-6 ka. AA-6522, from the base of the gravity core, indicates that sedimentation rates in the center of the lake were considerably slower than at the margins.

Wiswell Inlet

Lat: 62° 53' **Long:** 65° 38' **UTMG:** LE 658 785 **Map sheet:** 25I-Loks Land
Elev: 18 m **Location:** West shore of large embayment at the mouth of Wiswell Inlet

Date: 10,470 ± 65 **Lab no:** AA-7891 **Corrected date:** 10,020 ± 65
Field ID: DK90-18 **AAL:** 6435B **GRL:**

Collector: D.S. Kaufman **Depth:** 15 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 74.1 mg
Sample notes: Robust hinge fragment; mechanical cleaning and 60% HCl leach
Stratigraphic relations: From shallow pit in carbonate-rich silt that forms a prominent terrace at 18 m aht

Comment: (DSK) The lateral continuity, preservation, and age of low-laying (5-15 m asl) terraces in the mid-Frobisher Bay region indicate that they were formed upon deglaciation. The age of this shell, however, indicates that either some of the benches are pre-Gold Cove in age, or, more likely, that they contain reworked, pre-Gold Cove material.

Lat: 62° 56' **Long:** 65° 44' **UTMG:** **Map sheet:** 25I-Loks Land
Elev: 65 m **Location:** Near highlands at prominent bend on the east side of Wiswell Inlet

Date: 10,200 ± 160 **Lab no:** GSC-4948 **Corrected date:** 10,160 ± 80
Field ID: M89-BS62 **AAL:** **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** ~20 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 14 g
Sample notes: Paired valves, excellent preservation
Stratigraphic relations: From a block of marine sand incorporated within carbonate-rich drift

Date: 10,720 ± 140 **Lab no:** GX-15279 **Corrected date:** 10,270 ± 140
Field ID: M89-BS62 **AAL:** **GRL:**
Collector: D. Kaufman & G. Miller **Depth:** ~20 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:**
Sample notes: Whole valves, excellent preservation; 10% acid leach
Stratigraphic relations: From a block of marine sand incorporated within carbonate-rich drift

Comment: (GHM, DSK) The two dates on paired valves from this deposit analyzed at two laboratories are not significantly different. And, they agree with numerous other dates on shells from Gold Cove drift. The shells lived during an ice-free interval within Frobisher Bay and were overrun by north-flowing ice during the Gold Cove readvance. Extreme abundance and excellent preservation of shells over a restricted area suggests that the shells were not transported far.

Gold Cove

Lat: 62° 57' **Long:** 65° 51' **UTMG:** LE 565 838 **Map sheet:** 25I-Loks Land
Elev: 247 m **Location:** Plateau between Gold Cove and the huge triangular-shaped moraine

Date: 10,510 ± 90 **Lab no:** AA-5839 **Corrected date:** 10,060 ± 90
Field ID: M89-BS28 **AAL:** 5935A **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 22.3 mg
Sample notes: Well-preserved hinge fragment; mechanical cleaning and 85% HCl leach
Stratigraphic relations: From outer and upper limit of carbonate-rich drift at Gold Cove

Comment: (DSK, GHM) The date provides a maximum age on the timing of the most-recent ice advance to reach its maximum extent in the Gold Cove area. This date agrees well with numerous other maximum-limiting dates on the Gold Cove readvance.

Hamlen Bay

Lat: 63° 03' **Long:** 66° 29' **UTMG:** FV 290 935 **Map sheet:** 25O-Ward Inlet
Elev: 8 m **Location:** East shore of Hamlen Bay near mouth, just south of prominent inlet that heads in an isthmus

Date: 8580 ± 70 **Lab no:** AA-6312 **Corrected date:** 8130 ± 70
Field ID: DK90-31c **AAL:** 6422A **GRL:**
Collector: D.S. Kaufman **Depth:** 9 m **Material:** Mollusc
Species: *Mya truncata* **Weight:** 6.5 mg
Sample notes: Whole, well-preserved valve; mechanical cleaning and 63% HCl leach
Stratigraphic relations: From well-sorted medium sand with pebbles and cobbles (including limestone), horizontally stratified; contains paired *Macoma*; collection from highest occurrence of shells on bluff face. Sandy gravel overlies muddy diamicton (glacial-marine drift ?)

Date: 9350 ± 75 **Lab no:** AA-6302 **Corrected date:** 8900 ± 75
Field ID: DK90-31a **AAL:** 6421A **GRL:**
Collector: D.S. Kaufman **Depth:** 11 m **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 6.5 mg
Sample notes: Whole, well-preserved valve from a paired set; mechanical cleaning and 63% HCl leach
Stratigraphic relations: From muddy diamicton (glacial-marine drift ?) containing striated limestone clasts. Diamicton underlies sandy gravel that forms a 17-m-high coastal terrace. Rich molluscan fauna, including pectin, brachiopod, limpet, *Macoma*, *Balanus*, *Astarte*, and *Mya* found as float at and below this level

Comment: See below

Lat: 63° 04' **Long:** 66° 29' **UTMG:** FV 290 973 **Map sheet:** 25O-Ward Inlet
Elev: 9 m **Location:** Bed of river following into the head of Hamlen Bay cove

Date: 9630 ± 80 **Lab no:** AA-6306 **Corrected date:** 9180 ± 80
Field ID: M77-BSh9 **AAL:** 6425A **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Macoma calcarea* **Weight:** 7.8 mg
Sample notes: Single valve; mechanical cleaning and 59% HCl leach
Stratigraphic relations: From a gully at the base of a prominent (46-m-high) delta

Comment: See below

Lat: 63° 05' **Long:** 66° 29' **UTMG:** FV 285 975 **Map sheet:** 25O-Ward Inlet
Elev: 7 m **Location:** East shore of Hamlen Bay near mouth; wave-cut bank on north side of isthmus

Date: 9800 ± 75 **Lab no:** AA-6311 **Corrected date:** 9350 ± 75
Field ID: DK90-35b **AAL:** 6423A **GRL:**
Collector: D.S. Kaufman **Depth:** 2 m **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 7 mg
Sample notes: Whole valve from paired set found in sediment lump; well preserved; mechanical cleaning and 63% HCl leach
Stratigraphic relations: From bouldery, compact, diamicton (basal till ?) with striated limestone

clasts overlying sorted medium and fine sand. Bedding of underlying sand is wavy with relief of 3-5 m over a distance of 30 m. Convolution suggests overriding by glacier ice, supporting basal till diagnosis. Rich molluscan fauna, including pectin, *Macoma*, *Balanus*, and *Mya* found as float at and below this level

Comment: (DSK) If the glaciogenic interpretation of the diamictons at the two nearby sites (DK90-31 and DK90-35) is correct, then this is the first indication that glaciers lingered in the outer Hamlen Bay region until after 9 ka. At present (7-92), it is unclear where this ice could have been derived; neither up-bay or across-bay sources seem reasonable. The diamicton may have been derived from submarine slumps several thousand years after deglaciation. Note however, that in 1989, GHM and DSK found cross-cutting striations nearby at Brewster Point indicating a post-Gold Cove advance derived from the west. AA-6311 (9350 ± 75 yr) is old enough to have been deposited during the late stages of the Gold Cove advance. The two dates from site DK90-31 (8900 ± 75 yr (AA-6302) and 8130 ± 70 yr (AA-6312)) are somewhat younger, but are in correct stratigraphic order. They indicate that 2 m of sediment was deposited in ca. 800 yr. It is unclear how the fourth date (9,180 ± 80 yr (AA-6306)) fits in with regional or local chronostratigraphy. The shell was found out of stratigraphic context and could have been reworked from an older deposit.

Newton Fiord

Lat: 63° 07' **Long:** 66° 13' **UTMG:** **Map sheet:** 25N-Frobisher
Elev: 19 m **Location:** About half-way up the right side of the fiord at outlet of large lake

Date: 9410 ± 100 **Lab no:** GSC-5149 **Corrected date:** 9370 ± 50
Field ID: M77-BSh21 **AAL:** **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: *Mya* and *Hiatella* **Weight:** 51.5 g
Sample notes: *Mya*.valves are paired
Stratigraphic relations: From face of raised marine delta, delta lip at 27 m. Found at about the same level as GSC-2750 (9470 ± 45 yr) in adjacent Peter Force Sound

Comment: (GHM) This date supports the interpretation previously made on the basis of a single date from the head of the fiord that deglaciation was well underway by 9500 yr BP, and that initial isostatic recovery was rapid. The Gold Cove readvance was at its maximum limit 9700 yr BP, and the regional marine limit in Newton Fiord is ca. 70 m asl, thereby indicating that sea level fell 30 m in ca. 200 radiocarbon years, or 15 m/100 yr. The occurrence of prominent deltas below the marine limit at the fiord head at this site suggest either a brief halt in emergence, or a rapid pulse of sedimentation due to regional climate change. The two rivers drain very different areas, thus the changes are unlikely to be related to local events in their catchments.

Inner Cyrus Field Bay

Lat: 62° 58' **Long:** 65° 15' **UTMG:** LE 860 838 **Map sheet:** 25I-Loks Land
Elev: ~20 m **Location:** West bank of Frenchman Cove, near mouth of small stream south of larger stream that heads in low pass to Napoleon Bay

Date: 43,450 ± 2100 **Lab no:** AA-6304 **Corrected date:** 43,000 ± 2100
Field ID: M77-BSh37 **AAL:** 6419A **GRL:**
Collector: G.H. Miller **Depth:** 0 cm **Material:** Mollusc
Species: Unknown **Weight:** 8.5 mg

Sample notes: Single, angular fragment with good surface ornamentation; mechanical cleaning and 63% HCl leach
Stratigraphic relations: From a cut bank of a river dissecting a 40 m delta; cutbank surface is 15 m aht, grading to at least 24 m; sample may or may not be from 40 m delta

Comment: (GHM) The shell must have been reworked from an older deposit. High concentration of free amino acids and high D/L ratio (0.22 in Free fraction) are consistent with antiquity. Date should be considered nonfinite.

Lat: 62° 58' **Long:** 65° 16' **UTMG:** **Map sheet:** 25I-Loks Land
Elev: 2 m **Location:** Stream-eroded exposure in inner Cyrus Field Bay, landward of the reversing waterfall

Date: 8690 ± 90 **Lab no:** GSC-5163 **Corrected date:** 8650 ± 45
Field ID: M77-BSh39 **AAL:** **GRL:**
Collector: G.H. Miller **Depth:** **Material:** Mollusc
Species: *Mya truncata* **Weight:** 26.6 g
Sample notes: Exclusively paired valves, many in growth position with siphons extended; 20% acid leach
Stratigraphic relations: From finely laminated silt and sandy silt; not ice proximal

Comment: (GHM) The lack of evidence for ice nearby suggests that ice of the Cockburn readvance did not reach this site, although the abundance of sediment of Cockburn age suggests that there were glaciers farther up in the catchment. The region was covered by ice during the Gold Cove readvance, but apparently has been ice free since about 9500 yr BP.

Cyrus Field Lake

Lat: 63° 11' **Long:** 65° 32' **UTMG:** LF 713 75 **Map sheet:** 25P-Beekman Pen
Elev: ~60 m **Location:** Ice-contact delta damming the mouth of the large lake in the valley that heads Cyrus Field Bay

Date: 30,600 ± 1900 **Lab no:** GX-16635 **Corrected date:**
Field ID: M90-BS11 **AAL:** **GRL:** 852-O
Collector: G. Miller & D. Kaufman **Depth:** **Material:** Organic Concentrate
Species: **Weight:** 39 g
Sample notes: <125 μm, 5.6% organic matter by weight; prepared according to procedure outlined by Kihl (1975)
Stratigraphic relations: Organic-rich silt pellets found in ice-contact stratified drift composed of coarse sand and gravel

Comment: (DSK, GHM) The date should be considered a minimum age due to the large surface area of the sample relative to its mass of carbon. As a maximum age on glaciation, it does little to limit the timing of ice advance in the Cyrus Field Bay area. The sample contains abundant lacustrine diatoms (KMW) and a warm (interglacial) pollen flora (WNM); leaf fragments are abundant. This is the first discovery of interglacial deposits on southeast Baffin Island. Abundance of rip-up material suggests that old interglacial deposits may still be preserved under till at the lake bottom. An effort should be made to date individual leaf fragments; the bulk date may be too old due to the presence of inherited organics, or it may be contaminated by younger carbon.

Frobisher Bay Channel Islands

Gabriel Island

Lat: 62° 54' **Long:** 66° 32' **UTMG:** FV 313 74 **Map sheet:** 25J-Grinnell Glacier
Elev: 5 m **Location:** South shore of prominent embayment on northeast shore of Gabriel Island

Date: 9250 ± 200 **Lab no:** GSC-5320 **Corrected date:** 9210 ± 100
Field ID: DK91-24B **AAL:** **GRL:**
Collector: D. Kaufman & M. Duvall **Depth:** 10 m **Material:** Mollusc
Species: *Mya truncata* **Weight:** ~15 g
Sample notes: Three pristine paired valves collected in situ; no pretreatment
Stratigraphic relations: From a 15-m-high beach-cliff exposure containing marine and glacial marine deposits

Date: 9980 ± 70 **Lab no:** AA-7896 **Corrected date:** 9530 ± 70
Field ID: DK91-24C **AAL:** 6685A **GRL:**
Collector: D. Kaufman & M. Duvall **Depth:** 10 m **Material:** Mollusc
Species: *Macoma calcaria* **Weight:** 33.5 mg
Sample notes: Pristine paired valve collected in situ; mechanical cleaning and 60% HCl leach
Stratigraphic relations: From a 15-m-high beach-cliff exposure containing marine and glacial marine deposits

Comment: (DSK) The two dates, from two laboratories, are both on paired valves collected in situ. They overlap at ±2σ and are presumed to be contemporaneous. The dates provide a minimum age for the retreat of Gold Cove ice.

Lat: 62° 55' **Long:** 66° 32' **UTMG:** FV 250 793 **Map sheet:** 25J-Grinnell Glacier
Elev: 112 m **Location:** Northeasternmost summit of Gabriel Island

Date: 10,445 ± 75 **Lab no:** AA-6310 **Corrected date:** 9995 ± 75
Field ID: DK90-04 **AAL:** 6434A **GRL:**
Collector: D.S. Kaufman **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 13.7 mg
Sample notes: Whole, robust valve; mechanical cleaning and 50% HCl leach
Stratigraphic relations: From fresh, limestone-rich drift

Comment: (DSK) This date provides a maximum-limiting age on the most recent ice advance (Gold Cove) that completely overtopped Gabriel Island. The date is indistinguishable from numerous other dates on shells found in Gold Cove drift and establishes that Gold Cove ice reached as far up bay as northernmost Gabriel Island.

Chase Island

Lat: 63° 02' **Long:** 66° 53' **UTMG:** FV 73 911 **Map sheet:** 25O-Ward Inlet
Elev: 17 m **Location:** East shore of central Chase Island

Date: 9740 ± 65 **Lab no:** AA-7895 **Corrected date:** 9290 ± 65
Field ID: DK91-18 **AAL:** 6684A **GRL:**
Collector: D. Kaufman & M. Duvall **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 52.2 mg
Sample notes: Whole, well-preserved valve; mechanical cleaning and 60% HCl leach
Stratigraphic relations: From a concentrated surface lag of shells; sediment is silty clay with limestone clasts. Forms crude terrace levels up to 20 m aht

Comment: See below

Lat: 63° 06' **Long:** 66° 59' **UTMG:** FV 32 938 **Map sheet:** 25O-Ward Inlet
Elev: 67 m **Location:** About 5 km southeast of Cape Mills, northern Chase Island, along the axis of the island

Date: 9270 ± 60 **Lab no:** AA-7894 **Corrected date:** 8820 ± 60
Field ID: DK91-11 **AAL:** 6683A **GRL:**
Collector: D. Kaufman & M. Duvall **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 52.2 mg
Sample notes: Worn hinge fragment; mechanical cleaning and 60% HCl leach
Stratigraphic relations: Collected from the surface of a dried pond below the marine limit. Depression contained cryoturbated, carbonate-rich glacial-marine drift

Comment: See below

Lat: 63° 06' **Long:** 66° 58' **UTMG:** **Map sheet:** 25O-Ward Inlet
Elev: 51 m **Location:** North end of small lake, northern Chase Island

Date: 9385 ± 75 **Lab no:** AA-8390 **Corrected date:** 8935 ± 75
Field ID: DK91-09 **AAL:** 6696A **GRL:**
Collector: D. Kaufman & M. Duvall **Depth:** 0 cm **Material:** Mollusc
Species: *Mya truncata* **Weight:** 42.2 mg
Sample notes: Single, robust, worn hinge fragment; mechanical cleaning and 76% HCl leach
Stratigraphic relations: From an enriched zone of concentrated angular shell fragments

Comment: (DSK) The three dated shells from northern Chase Island were collected from below the marine limit and provide a minimum-limiting age deglaciation from the Gold Cove advance and a maximum-age limit on emergence. The highest-elevation (67 m asl) shell produced the youngest age, although its age is indistinguishable from the shell collected 16 m lower. These dates indicate that relative sea level over Chase Island was at least 67 m higher than present as recently as 8.8 ka.

Southwestern Brevoort Island

Lat: 63° 23' **Long:** 64° 16' **UTMG:** MF 355 282 **Map sheet:** 25P-Beekman Pen
Elev: -1.2 m **Location:** Head of protected bay on the southwest coast of Brevoort Island

Date: 670 ± 70 **Lab no:** GSC-5122 **Corrected date:** 670 ± 35
Field ID: M90-BS2 **AAL:** **GRL:**
Collector: G. Miller & D. Kaufman **Depth:** 20 cm **Material:** Peat
Species: **Weight:** 6.6 g
Sample notes: >125 μm fraction of salt-marsh peat

Stratigraphic relations: Excavated from base of fresh cut face exposed below high tide. Peat remnant eroded by current marine transgression

Comment: (GHM) This date supports our earlier contention (summarized in Miller and others, 1977) that the outer southeast coast of Baffin Island is currently experiencing a relative sea level rise. The date is similar to several others that fall between 500 and 2000 yr BP.

Inner Frobisher Bay

Upper Meech Lake, Core 4

Lat: 63° 39' **Long:** 68° 21' **UTMG:** **Map sheet:** 25N-Frobisher
Elev: 15.5 m **Location:** Inner Frobisher Bay; core from the center of the lake in 3.5 m of water

Date: 970 ± 150 **Lab no:** AA-6524 **Corrected date:**
Field ID: M4-01 **AAL:** **GRL:**
Collector: R. Miller and M. Abbott **Depth:** 0-2 cm **Material:** Humic acids

Date: 3605 ± 75 **Lab no:** AA-6525 **Corrected date:**
Field ID: M4-24 **AAL:** **GRL:**
Collector: R. Miller and M. Abbott **Depth:** 23-25 cm **Material:** Humic acids

Date: 4905 ± 100 **Lab no:** AA-6526 **Corrected date:**
Field ID: M4-79 **AAL:** **GRL:**
Collector: R. Miller and M. Abbott **Depth:** **Material:** Humic acids

Comment: (RM, MA) The dates from Core 4 indicate that the Meech Lake basin was formed sometime prior to 5 ka, considerably later than other lakes farther south on Hall Peninsula. AA-6524, like other dates from lake-core tops (AA-6523 from Tuktupingushuk Lake and AA-6526 from Baby Tuktu Lake), shows that ca. 1000 yr of sedimentary record is lost during core recovery using Livingstone or gravity corers. See Abbott (1991) and Miller (1992) for discussion.

Cumberland Peninsula

Pangnirtung Ice-Cored Moraine

Lat: 66° 09' **Long:** 65° 43' **UTMG:** **Map sheet:** 26-I
Elev: 140 m **Location:** Mt. Duval near the village of Pangnirtung

Date: 109% Modern ± 0.67 **Lab no:** TO-2195 **Corrected date:**
Field ID: 90-7 **AAL:** **GRL:**
Collector: J.A. Hyatt **Depth:** 4.3 m **Material:** Plant macrofossils
Sample notes: Dispersed mosses collected frozen then thawed at ca. 5°C
Stratigraphic relations: Collected from stratified sand and gravel found within the buried, debris-rich ice core of a moraine

Date: 52,460 ± 1430 **Lab no:** TO-2196 **Corrected date:** 52,010 ± 1430
Collector: J.A. Hyatt **Depth:** 3 m **Material:** Mollusc
Species: *Hiatella* (?) **Weight:** 137 mg
Sample notes: Shell fragments collected frozen then thawed at ca. 5° C; 20% acid leach

Stratigraphic relations: From ice-rich sediments interpreted as basal debris-rich glacier ice preserved beneath a cover of ablation till. The shell fragments were most likely transported from Pangnirtung Fiord to the site by a glacier of Wisconsin age

Comment: (JAH) Although the shell date may be nonfinite, it is consistent with existing chronology and indicates that the ice-rich sediments are old, perhaps mid-Wisconsinan in age. The modern mosses are thought to have been collected from a cavity infilling structure, most likely created during a period of recent thermal erosion and subterranean conduit flow.

NORTHERN BAFFIN ISLAND
Borden Peninsula

Arctic Bay '82 Section

Lat: 72° 03' **Long:** 85° 02' **UTMG:** ES 63 05 **Map sheet:** 48C-Arctic Bay
Elev: 61 m **Location:** Saddle between Arctic and Victor Bays, ca. 2.5 km east of the settlement of Arctic Bay

Date: 7790 ± 65 **Lab no:** AA-3974 **Corrected date:**
Field ID: AB-9 **AAL:** **GRL:** 800-O
Collector: S. Short & E. Rowen **Depth:** 255-260 cm **Material:** Plant macrofossils
Species: **Weight:** 528 mg
Sample notes: Hand-picked moss fragments
Stratigraphic relations: From same level as GX-10628

Comment: (SKS) This date, along with others (AA-6453, GX-13795) from the 1987 organic sections, cast serious doubts on the validity of the >10,000 yr BP radiocarbon dates from the Arctic Bay region. See Short and Andrews (1988) for discussion.

George V Section

Lat: 73° 02' **Long:** 85° 03' **UTMG:** ES 63 02 **Map sheet:** 48C
Elev: 46 m **Location:** Below George V Mountain, ca. 3 km southeast of settlement of Arctic Bay

Date: 6770 ± 205 **Lab no:** GX-13799 **Corrected date:**
Field ID: GV-1 **AAL:** **GRL:**
Collector: S. Short & E. Rowen **Depth:** 85-90 cm **Material:** Bulk sediment
Sample notes: Includes some rootlets that do not appear modern
Stratigraphic relations: From middle of organic-rich section

Date: 7730 ± 180 **Lab no:** GX-13801 **Corrected date:**
Field ID: GV-3 **AAL:** **GRL:**
Collector: S. Short & E. Rowen **Depth:** **Material:** Bulk sediment
Stratigraphic relations: Discontinuous peaty section believed to be slumped below presumed basal sample at 163-166 cm (GX-13800)

Date: 8460 ± 245 **Lab no:** GX-13800 **Corrected date:**
Field ID: GV-2 **AAL:** **GRL:**
Collector: S. Short & E. Rowen **Depth:** 163-166 cm **Material:** Bulk sediment

Stratigraphic relations: From base of section

Comment: (SKS) Samples GX-13799 and GX-13800 are in correct stratigraphic order, but GX-13799, from 85-90 cm, seems too old relative to GX-13800 from 163-166 cm. The latter date appears to be accurate based on stratigraphy and the presumed deglacial and marine history. The problems associated with dating other terrestrial sections in the region suggests that this date should be treated with caution. These dates indicate that GX-13801 is indeed younger than GX-13800, located higher in the section, and that the field interpretation, that this sample as collected from a slump, was accurate.

Fish Lake 2

Lat: 73° 02.08' **Long:** 85° 13' **UTMG:** ES 56 05 **Map sheet:** 48C
Elev: 91 m **Location:** Uluksan Peninsula, ca. 5 km west of the settlement of Arctic Bay

Date: 375 ± 65 **Lab no:** AA-3997 **Corrected date:**
Field ID: FL2-4 **AAL:** **GRL:** 801-O
Collector: S. Short & E. Rowen **Depth:** 6-7 cm **Material:** Plant macrofossils
Species: **Weight:** 200 mg
Sample notes: >125 μm fraction; includes moss fragments; prepared according to procedure outlined by Kihl (1975)
Stratigraphic relations: Uppermost of four dates in Fish Lake 2 core

Date: 6155 ± 155 **Lab no:** AA-3286 **Corrected date:**
Field ID: FL2-2 **AAL:** **GRL:** 786-O
Collector: S. Short & E. Rowen **Depth:** 22-27 cm **Material:** Organic concentrate
Species: **Weight:** 430 mg
Sample notes: <125 μm fraction; prepared according to procedure outlined by Kihl (1975)
Stratigraphic relations: Second of four dates from Fish Lake 2 core; mid-core location

Date: 13,720 ± 95 **Lab no:** AA-3256 **Corrected date:**
Field ID: FL2-1 **AAL:** **GRL:** 773-O
Collector: S. Short & E. Rowen **Depth:** 45-50 cm **Material:** Organic concentrate
Species: **Weight:** 310 mg
Sample notes: <125 μm fraction; prepared according to procedure outlined by Kihl (1975)
Stratigraphic relations: From base of core

Date: 17,020 ± 170 **Lab no:** AA-3995 **Corrected date:**
Field ID: FL2-3 **AAL:** **GRL:** 802-O
Collector: S. Short & E. Rowen **Depth:** 35-38 cm **Material:** Organic concentrate
Species: **Weight:** 900 mg
Sample notes: <125 μm fraction; prepared according to procedure outlined by prepared according to procedure outlined by Kihl (1975)

Comment: (SKS) The dates from Fish Lake 2 are on the acid-insoluble organic-matter fraction; contamination of this fraction in lake sediments is possible from a variety of sources. Pre-Quaternary palynomorphs-- an indicator of contamination by old carbon --were not recorded during pollen analyses. Black shale does outcrop in the region, however, and could be a source of contamination. Also, the lake sediments contain a large amount of carbonate, and it is possible that the regional surficial deposits are rich in "old" carbon. Therefore, based on the low organic content of the Fish Lake 2 core, we believe that all dates >10,000 yr must be treated with caution. AA-3997 from 6-7

cm appears too young relative to AA-3286 from 22-27 cm.

Saddle Section I

Lat: 73° 02.08' **Long:** 85° 04' **UTMG:** ES 63 05 **Map sheet:** 48C
Elev: 61 m **Location:** Saddle between Arctic and Victor Bays, ca. 2 km east of the settlement of Arctic Bay

Date: 7685 ± 260 **Lab no:** GX-13795 **Corrected date:**
Field ID: ABI-2 **AAL:** **GRL:**
Collector: S. Short & E. Rowen **Depth:** 60-63 cm **Material:** Peat
Sample notes: Modern rootlets observed
Stratigraphic relations: From the base of the section

Date: 8770 ± 260 **Lab no:** GX-13794 **Corrected date:**
Field ID: ABI-1 **AAL:** **GRL:**
Collector: S. Short & E. Rowen **Depth:** 26-30 cm **Material:** Peat
Sample notes: Modern rootlets observed
Stratigraphic relations: From middle of 63 cm peat layer

Comment: (SKS) The two dates for this section are stratigraphically reversed. Contamination by old carbon is possible; pre-Cambrian black shales crop out upvalley.

Saddle Section II

Lat: 73° 02.08' **Long:** 85° 04' **UTMG:** ES 63 05 **Map sheet:** 48C
Elev: 61 m **Location:** Saddle between Arctic and Victor bays, ca. 2 km east of settlement of Arctic Bay

Date: 9715 ± 295 **Lab no:** GX-13796 **Corrected date:**
Field ID: ABII-1 **AAL:** **GRL:**
Collector: S. Short & E. Rowen **Depth:** 23-27 cm **Material:** Bulk sediment
Sample notes: Modern rootlets observed
Stratigraphic relations: Uppermost of four dates from this section

Date: 10,595 ± 380 **Lab no:** GX-13797 **Corrected date:**
Field ID: ABII-2 **AAL:** **GRL:**
Collector: S. Short & E. Rowen **Depth:** 190 cm **Material:** Bulk sediment
Stratigraphic relations: From middle of organic-rich exposure

Date: 7800 ± 70 **Lab no:** AA-6453 **Corrected date:**
Field ID: ABII-4 **AAL:** **GRL:** 904-O
Collector: S. Short & E. Rowen **Depth:** 420 cm **Material:** Bulk sediment
Stratigraphic relations: From basal levels of organic-rich section

Date: 12,720 ± 670 **Lab no:** GX-13798 **Corrected date:**
Field ID: ABII-3 **AAL:** **GRL:**
Collector: S. Short & E. Rowen **Depth:** 435-440 cm **Material:** Bulk sediment
Stratigraphic relations: From basal levels of organic-rich section

Comment: (SKS) The accuracy of the conventional radiocarbon dates is in doubt. The AMS date (AA-6453) suggests that the conventional date (GX-13798) from nearly the same level is in error, and indeed suggests that the two dates up-section (GX-13796 and GX-13797) need to be treated with caution. In addition, both of the up-section dates appear too old for the sample depth. The AMS date casts doubt on all of the dates >10 ka in the region. We believe that none of the samples can be reliably dated as >9,000 yr, a probable date on deglaciation of the area.

Victor Bay

Lat: 73° 03' **Long:** 85° 05' **UTMG:** ES 66 07 **Map sheet:** 48C
Elev: 50 m **Location:** Stream cut east of Victor Bay, 1.4 km inland and 2.35 km northeast of settlement of Arctic Bay

Date: 8600 ± 160 **Lab no:** GSC-5223 **Corrected date:** 8560 ± 80
Field ID: Victor Bay 1 **AAL:** **GRL:**
Collector: S.K. Short **Depth:** 3 m **Material:** Mollusc
Species: *Hiatella arctica* **Weight:** 8.4 g
Sample notes: Fragile specimens, mostly paired; 10% acid leach
Stratigraphic relations: From a 10- to 15-cm-thick lens of shell-rich sand ca. 8 m above stream level and 3 m below the top of a stream-cut exposure through a glaciomarine delta; the first terrace below the marine-limit terrace.

Comment: (JTA) The delta was probably built by glacial meltwater when Arctic Bay was ice covered. Radiocarbon dates on shell and whale bone indicate that seasonally open water was present in the Bylot Island region by about 9400 yr BP (A.S. Dyke, Person. Commun. 1991). The results of the terrestrial-dating program in the Arctic Bay region indicate that none of our material can be reliably dated as >9000 yr BP, a probable date on deglaciation of the region. This sample confirms our hypothesis. See Short and Andrews (1988) for discussion.

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Appendix 1A. Abbreviated date list, indexed by laboratory number.

Lab no.	Reported	Corrected	Location	Site	Material
AA 2223	9,090 ± 90	8,640	Meta Incognita Pen	Kendall Strait	Mollusc
AA 2224	39,000 ± 1,800	38,550	Meta Incognita Pen	Bond Inlet	Mollusc
AA 2348	43,300 ± 3,000	42,850	Meta Incognita Pen	Pritzler Harbour	Mollusc
AA 2349	8,500 ± 90	8,050	Meta Incognita Pen	Pritzler Harbour	Mollusc
AA 2350	9,500 ± 90	9,050	Meta Incognita Pen	Kendall Strait	Mollusc
AA 2351	Modern		Meta Incognita Pen	Kendall Strait	Plant Macrofossils
AA 2352	Modern		Meta Incognita Pen	Jackman Sound	Mollusc
AA 2625	7,765 ± 105	7,315	Meta Incognita Pen	Bond Inlet	Mollusc
AA 3098	2,210 ± 50		Meta Incognita Pen	Lake Inqua	Organic Concentrate
AA 3099	4,461 ± 50		Meta Incognita Pen	Lake Inqua	Organic Concentrate
AA 3102	8,650 ± 75		Meta Incognita Pen	Lake Inqua	Organic Concentrate
AA 3101	4,205 ± 50		Meta Incognita Pen	Lake Inqua	Organic Concentrate
AA 3254	44,200 ± 2,300	43,750	Western Hudson Str	Nottingham Island	Mollusc
AA 3256	13,720 ± 95		Borden Peninsula	Fish Lake core 2	Organic Concentrate
AA 3273	3,285 ± 55		Meta Incognita Pen	Lake Mercer	Organic Concentrate
AA 3274	3,620 ± 55		Meta Incognita Pen	Lake Mercer	Organic Concentrate
AA 3275	6,170 ± 55		Meta Incognita Pen	Lake Mercer	Organic Concentrate
AA 3277	4,794 ± 70		Meta Incognita Pen	Lake Instaar	Organic Concentrate
AA 3278	7,805 ± 70		Meta Incognita Pen	Lake Instaar	Organic Concentrate
AA 3280	8,630 ± 70		Meta Incognita Pen	Lake Instaar	Organic Concentrate
AA 3286	6,155 ± 155		Borden Peninsula	Fish Lake core 2	Organic Concentrate
AA 3473	11,725 ± 125	11,275	Hatton Basin	HU77-021-151	Foraminifera
AA 3481	8,390 ± 80	7,940	Hatton Basin	HU77-021-151	Foraminifera
AA 3494	8,485 ± 60		Meta Incognita Pen	Lake Mercer	Organic Concentrate
AA 3495	7,410 ± 60		Meta Incognita Pen	Lake Mercer	Organic Concentrate
AA 3583A	10,600 ± 75	10,150	Labrador Sea Slope	HU77-021-149	Mollusc
AA 3583B	10,625 ± 170	10,175	Labrador Sea Slope	HU77-021-149	Mollusc
AA 3584	10,930 ± 85	10,480	Resolution Basin	HU84-035-008	Mollusc
AA 3585&6	10,010 ± 110	9,560	Cumberland Sound	85027-029 PC	Foram and Mollusc
AA 3678	9,010 ± 100	8,560	Hatton Basin	HU77-021-152	Foraminifera
AA 3746	11,020 ± 120	10,570	Resolution Basin	HU82-034-057	Foraminifera
AA 3783	3,600 ± 75		Meta Incognita Pen	Lake Instaar	Organic Concentrate
AA 3784	11,555 ± 85	11,105	Resolution Basin	HU82-034-057	Foraminifera
AA 3809	Lost		Resolution Basin	HU84-035-008	Mollusc
AA 3810	11,315 ± 75	10,865	Resolution Basin	HU84-035-008	Foraminifera
AA 3814	8,075 ± 145		Hall Peninsula	Kujatu Lake	Plant Macrofossils
AA 3815	8,320 ± 95		Hall Peninsula	Kujatu Lake	Plant Macrofossils
AA 3818	4,650 ± 60		Meta Incognita Pen	Lake Mercer	Organic Concentrate
AA 3819	10,980 ± 70		Meta Incognita Pen	Lake Mercer	Organic Concentrate
AA 3850	7,425 ± 60	6,975	Hatton Basin	HU77-021-150	Foraminifera
AA 3890	2,370 ± 70	1,920	Resolution Basin	HU77-021-156	Foraminifera
AA 3939	10,920 ± 250	10,470	Cumberland Sound	85027-031 PC	Foraminifera
AA 3940	10,705 ± 70	10,255	Cumberland Sound	85027-029 PC	Foraminifera
AA 3941	8,720 ± 70	8,270	Cumberland Sound	85027-031 PC	Mollusc
AA 3974	7,790 ± 65		Borden Peninsula	Arctic Bay '82 Sec	Plant Macrofossils
AA 3975	9,655 ± 90	9,205	Meta Incognita Pen	Lake Mercer	Foraminifera
AA 3976	8,965 ± 110	8,515	Kangerdlugssuaq	BS88-06-05A GC	Foraminifera
AA 3995	17,020 ± 170		Borden Peninsula	Fish Lake core 2	Organic Concentrate
AA 3997	375 ± 65		Borden Peninsula	Fish Lake core 2	Plant Macrofossils

Appendix 1A. Continued

Lab no.	Reported	Corrected	Location	Site	Material
AA 4026	13,585 ± 110	13,135	Kangerdlugssuaq	BS88-06-10A GC	Foraminifera
AA 4027	8,755 ± 80	8,305	Kangerdlugssuaq	BS88-06-17B GC	Foraminifera
AA 4160	8,300 ± 65	7,850	Resolution Basin	HU82-034-057	Foraminifera
AA 4244A	37,090 ± 1,100	36,640	Meta Incognita Pen	Nanook Harbour	Mollusc
AA 4244B	40,630 ± 1,400	40,180	Meta Incognita Pen	Nanook Harbour	Mollusc
AA 4249	9,270 ± 110	8,820	Hall Peninsula	Warwick Sound	Mollusc
AA 4250A	10,015 ± 120	9,565	Hall Peninsula	Warwick Sound	Mollusc
AA 4250B	8,320 ± 105	7,870	Hall Peninsula	Warwick Sound	Mollusc
AA 4255	9,355 ± 70	8,905	Hatton Basin	HU84-035-014	Foraminifera
AA 4335	15,025 ± 95	14,575	Kangerdlugssuaq	BS88-06-08 GC	Foraminifera
AA 4336	2,855 ± 80	2,405	Kangerdlugssuaq	BS88-06-17B GC	Foraminifera
AA 4338	985 ± 50	535	Kangerdlugssuaq	BS88-06-05A GC	Foraminifera
AA 4529	5,835 ± 60	5,385	Kangerdlugssuaq	BS88-06-05A GC	Foraminifera
AA 4530	9,270 ± 80	8,820	Kangerdlugssuaq	BS88-06-10A GC	Foraminifera
AA 4531	13,700 ± 145	13,250	Kangerdlugssuaq	BS88-06-17B GC	Foraminifera
AA 4574	8,260 ± 80		Hall Peninsula	Tuktupingushuk Lake	Bulk Sediment
AA 4575	8,925 ± 105		Hall Peninsula	Tuktupingushuk Lake	Bulk Sediment
AA 4665	11,990 ± 100	11,540	Labrador Sea Slope	HU77-021-149	Foraminifera
AA 4666	9,375 ± 70	8,925	Kangerdlugssuaq	BS88-06-03	Foraminifera
AA 4667	11,575 ± 135	11,125	Kangerdlugssuaq	BS88-06-07	Foraminifera
AA 4686	34,025 ± 725	33,575	Davis Strait	HU75-009-IV-60	Foraminifera
AA 4687	32,150 ± 1,200	31,700	Davis Strait	HU75-009-IV-60	Foraminifera
AA 4689	11,895 ± 130	11,455	Labrador Sea Slope	HU77-021-149	Foraminifera
AA 4700	19,855 ± 210	19,405	Davis Strait	HU75-009-IV-55	Foraminifera
AA 4702	11,550 ± 75	11,100	Labrador Sea Slope	HU77-021-149	Foraminifera
AA 4702	11,550 ± 75	11,100	Labrador Sea Slope	HU77-021-149	Foraminifera
AA 4703	40,700 ± 1,500	40,250	Davis Strait	HU75-009-IV-60	Foraminifera
AA 4704	43,200 ± 60	42,750	Davis Strait	HU75-009-IV-60	Foraminifera
AA 4706	45,500 ± 55	45,050	Davis Strait	HU75-009-IV-55	Foraminifera
AA 4709	12,030 ± 85	11,580	Labrador Sea Slope	HU77-021-149	Foraminifera
AA 4916	8,280 ± 120	7,830	Frobisher Bay	HU82-034-068	Foraminifera
AA 4916	10,375 ± 80	9,925	Frobisher Bay	HU82-034-068	Foraminifera
AA 4917	13,180 ± 100	12,730	Hatton Basin	HU77-021-150	Foraminifera
AA 5032	10,530 ± 95	10,080	Davis Strait	HU87-033-009	Foraminifera
AA 5033	10,530 ± 90	10,080	Davis Strait	HU75-009-IV-58	Foraminifera
AA 5034	19,070 ± 260	18,620	Davis Strait	HU75-009-IV-58	Foraminifera
AA 5063	13,625 ± 150	13,175	Resolution Basin	HU82-034-057	Foraminifera
AA 5117	9,000 ± 170	8,550	East Basin	HU77-021-154	Mollusc
AA 5290	6,380 ± 90	5,830	Borden Peninsula	HU77-026-35	Foraminifera
AA 5291	9,425 ± 150	8,975	Resolution Basin	HU84-035-008	Foraminifera
AA 5292	11,760 ± 170	11,310	Resolution Basin	HU84-035-008	Foraminifera
AA 5835	10,555 ± 75	10,105	Loks Land	Type Lokslandian	Mollusc
AA 5836	10,615 ± 75	10,165	Loks Land	Type Lokslandian	Mollusc
AA 5837	10,315 ± 85	9,965	Loks Land	Loks Land summit	Mollusc
AA 5838	10,505 ± 85	10,045	Loks Land	Loks Land summit	Mollusc
AA 5839	10,510 ± 90	10,060	Hall Peninsula	Gold Cove	Mollusc
AA 5840	10,680 ± 85	10,230	Hall Peninsula	Willows Island	Mollusc
AA 5841	10,570 ± 85	10,120	Hall Peninsula	Willows Island	Mollusc
AA 5987	9,380 ± 80	8,930	Borden Peninsula	HU77-026-35	Foraminifera

Appendix 1A. Continued

Lab no.	Reported	Corrected	Location	Site	Material
AA 5988	3,010 ± 50	2,560	Kangerdlugssuaq	BS88-06-08 GC	Foraminifera
AA 5989	10,375 ± 75	9,925	Kangerdlugssuaq	BS88-06-08 GC	Foraminifera
AA 5990	8,615 ± 75	8,165	Kangerdlugssuaq	BS88-06-03	Foraminifera
AA 5992	14,455 ± 110	14,005	Resolution Basin	HU82-034-057	Foraminifera
AA 5994	12,425 ± 125	11,975	Resolution Basin	HU82-034-057	Foraminifera
AA 5995	12,675 ± 100	12,225	Resolution Basin	HU82-034-057	Foraminifera
AA 5996	10,870 ± 90	10,420	Resolution Basin	HU84-035-008	Foraminifera
AA 5997	12,740 ± 100	12,290	Resolution Basin	HU84-035-008	Foraminifera
AA 5998	4,440 ± 70	3,990	Davis Strait	HU75-009-IV-55	Foraminifera
AA 5999	15,010 ± 105	14,560	Davis Strait	HU75-009-IV-55	Foraminifera
AA 6000	11,100 ± 85	10,650	Davis Strait	HU87-033-009	Foraminifera
AA 6001	11,120 ± 90	10,670	Davis Strait	HU87-033-009	Foraminifera
AA 6026	1,045 ± 55		Hall Peninsula	Baby Tuktu Lake	Humic Acids
AA 6027	3,015 ± 55		Hall Peninsula	Baby Tuktu Lake	Humic Acids
AA 6028	5,675 ± 95		Hall Peninsula	Baby Tuktu Lake	Humic Acids
AA 6029	6,160 ± 90		Hall Peninsula	Baby Tuktu Lake	Humic Acids
AA 6298	35,685 ± 805	35,235	Meta Incognita Pen	Sister Islets	Mollusc
AA 6299	8,365 ± 75	7,915	Meta Incognita Pen	Pritzler Harbour	Mollusc
AA 6300	11,590 ± 180	11,140	Loks Land	Beare Sound	Mollusc
AA 6301	9,460 ± 95	9,010	Meta Incognita Pen	Pritzler Harbour	Mollusc
AA 6302	9,350 ± 75	8,900	Hall Peninsula	Outer Hamlen Bay	Mollusc
AA 6303	10,825 ± 80	10,375	Hall Peninsula	Warwick Sound	Mollusc
AA 6304	43,450 ± 2,100	43,000	Hall Peninsula	Frenchman Cove	Mollusc
AA 6305	9,500 ± 105	9,050	Meta Incognita Pen	Watts Bay	Mollusc
AA 6306	9,630 ± 80	9,180	Hall Peninsula	Outer Hamlen Bay	Mollusc
AA 6307	10,740 ± 85	10,290	Loks Land	Loks Land summit	Mollusc
AA 6308	10,635 ± 80	10,185	Hall Peninsula	Willows Island	Mollusc
AA 6309	10,435 ± 85	9,985	Loks Land	Loks Land summit	Mollusc
AA 6310	10,445 ± 75	9,995	Mid Frobisher Bay	Gabriel Island	Mollusc
AA 6311	9,800 ± 75	9,350	Hall Peninsula	Outer Hamlen Bay	Mollusc
AA 6312	8,580 ± 70	8,130	Hall Peninsula	Outer Hamlen Bay	Mollusc
AA 6452	10,115 ± 75	9,665	Brevoort Basin	HU90-023-022	Mollusc
AA 6453	7,800 ± 70		Borden Peninsula	Saddle Section II	Bulk Sediment
AA 6462	9,890 ± 85	9,440	Brevoort Basin	HU90-023-022	Mollusc
AA 6463	8,195 ± 65	7,745	Brevoort Basin	HU90-023-022	Mollusc
AA 6464	8,525 ± 80	8,075	Frobisher Bay	HU90-023-009	Mollusc
AA 6465	9,645 ± 85	9,195	Frobisher Bay	HU90-023-007	Mollusc
AA 6466	5,230 ± 60	4,780	Brevoort Basin	HU90-023-022	Mollusc
AA 6468	10,445 ± 100	9,995	Resolution Basin	HU90-023-030	Foraminifera
AA 6469	11,065 ± 105	10,615	Resolution Basin	HU90-023-030	Foraminifera
AA 6470	13,160 ± 115	12,510	Resolution Basin	HU90-023-030	Foraminifera
AA 6471	12,925 ± 130	12,475	Resolution Basin	HU90-023-030	Foraminifera
AA 6472	10,035 ± 130	9,585	Frobisher Bay	HU90-023-001	Foraminifera
AA 6473	9,310 ± 100	8,860	Frobisher Bay	HU90-023-007	Foraminifera
AA 6521	10,415 ± 240		Hall Peninsula	Tuktupingushuk Lake	Humic Acids
AA 6522	7,430 ± 230		Hall Peninsula	Tuktupingushuk Lake	Humic Acids
AA 6523	1,010 ± 50		Hall Peninsula	Tuktupingushuk Lake	Humic Acids
AA 6524	970 ± 150		Hall Peninsula	Upper Meech Lake	Humic Acids
AA 6525	3,605 ± 75		Hall Peninsula	Upper Meech Lake	Humic Acids

Appendix 1A. Continued

Lab no.	Reported	Corrected	Location	Site	Material
AA 6526	4,905 ± 100		Hall Peninsula	Upper Meech Lake	Humic Acids
AA 6829	3,210 ± 70	2,760	Kangerdlugssuaq	BS88-06-10A GC	Foraminifera
AA 6830	1,382 ± 65	932	Kangerdlugssuaq	BS88-06-03	Foraminifera
AA 6846	Too Small		Hatton Basin	HU77-021-150	Foraminifera
AA 6847	1,300 ± 55	850	Kangerdlugssuaq	PO175/1-5-1 GC	Foraminifera
AA 6848	14,845 ± 190	14,395	Kangerdlugssuaq	PO175/1-5-1 GC	Foraminifera
AA 6849	13,300 ± 145	12,850	Kangerdlugssuaq	PO175/1-5-1 GC	Foraminifera
AA 6850	10,850 ± 185	10,400	Davis Strait	HU75-009-IV-55	Foraminifera
AA 6851	13,635 ± 190	13,185	Davis Strait	HU75-009-IV-55	Foraminifera
AA 6852	12,110 ± 185	11,660	Davis Strait	HU87-033-009	Foraminifera
AA 6853	12,975 ± 355	12,525	Davis Strait	HU87-033-009	Foraminifera
AA 6854	10,080 ± 75	9,630	Frobisher Bay	HU90-023-009	Mollusc
AA 6866	10,895 ± 95	10,445	Resolution Basin	HU90-023-030	Foraminifera
AA 7008	5,660 ± 100		Hall Peninsula	Tuktupingushuk Lake	Plant Macrofossils
AA 7012	2,070 ± 70		Borden Peninsula	HU77-026-35	Plant Macrofossils
AA 7136	10,630 ± 380	10,180	Davis Strait	HU87-033-009	Foraminifera
AA 7137	26,015 ± 1,320	25,565	Davis Strait	HU75-009-IV-55	Foraminifera
AA 7138	15,365 ± 250	14,915	Resolution Basin	HU82-034-057	Foraminifera
AA 7139	9,670 ± 245	9,220	Home Bay	HU80-028-079	Foraminifera
AA 7140	14,465 ± 200	14,015	Kangerdlugssuaq	PO175/1-5-1 GC	Foraminifera
AA 7141	10,355 ± 205	9,905	Resolution Basin	HU90-023-030	Foraminifera
AA 7557	40,950 ± 2,100	40,500	Loks Land	Beare Sound	Mollusc
AA 7558	>38,900	>38,450	Loks Land	Beare Sound	Mollusc
AA 7559	11,685 ± 90	11,235	Loks Land	Beare Sound	Mollusc
AA 7560	10,000 ± 75	9,550	Hall Peninsula	Cape Farrington	Mollusc
AA 7891	10,470 ± 65	10,020	Hall Peninsula	Wiswell Inlet	Mollusc
AA 7894	9,270 ± 60	8,820	Mid Frobisher bay	Chase Island	Mollusc
AA 7895	9,740 ± 65	9,290	Mid Frobisher bay	Chase Island	Mollusc
AA 7896	9,980 ± 70	9,530	Mid Frobisher Bay	Gabriel Island	Mollusc
AA 8034	14,850 ± 205	14,400	Davis Strait	HU87-033-009	Foraminifera
AA 8035	13,450 ± 220	13,000	Hatton Basin	HU77-021-150	Foraminifera
AA 8324	4,850 ± 55		East Greenland Shelf	Mikis Fjord	Organic Concentrate
AA 8325	4,010 ± 50		East Greenland Shelf	Mikis Fjord	Organic Concentrate
AA 8326	13,285 ± 105	12,835	Resolution Basin	HU90-023-030	Foraminifera
AA 8327	9,435 ± 50	8,985	East Greenland Shelf	Mikis Fjord	Foraminifera
AA 8328	1,125 ± 50	575	Nansen Fjord	BS11-91-K13A	Foraminifera
AA 8329	12,865 ± 305	12,315	Kangerdlugssuaq	BS11-91-K18B	Foraminifera
AA 8330	12,470 ± 205	11,920	Kangerdlugssuaq	BS11-91-K18B	Foraminifera
AA 8331	12,085 ± 115	11,535	Kangerdlugssuaq	BS11-91-K18B	Foraminifera
AA 8332	1,798 ± 111	1,248	Nansen Fjord	BS11-91-K14	Foraminifera
AA 8333	9,105 ± 142	8,555	Kangerdlugssuaq	BS11-91-K5	Foraminifera
AA 8388	10,560 ± 75	10,110	Loks Land	Beare Sound	Mollusc
AA 8389	11,075 ± 85	10,625	Loks Land	Beare Sound	Mollusc
AA 8390	9,385 ± 75	8,935	Mid Frobisher bay	Chase Island	Mollusc
AA 8391	10,090 ± 75	9,640	Outer Frobisher Bay	HU82-034-068	Mollusc
AA 8392	9,000 ± 90	8,650	Outer Frobisher Bay	HU82-034-068	Foraminifera
AA 8570	7,960 ± 105		Meta Incongita Pen	Lake Inqua	Organic Concentrate
AA 8777	11,790 ± 275	11,340	Davis Strait	HU87-033-009	Foraminifera

Appendix 1A. Continued

Lab no.	Reported	Corrected	Location	Site	Material
GSC 4948	10,200 ± 160	10,160	Hall Peninsula	Wiswell Inlet	Mollusc
GSC 5036	10,400 ± 90	10,360	Hall Peninsula	Warwick Sound	Mollusc
GSC 5037	10,200 ± 100	10,160	Hall Peninsula	Warwick Sound	Mollusc
GSC 5122	670 ± 70		Hall Peninsula	Brevoort Island	Peat
GSC 5149	9,410 ± 100	9,370	Hall Peninsula	Newton Fiord	Mollusc
GSC 5163	8,690 ± 90	8,650	Hall Peninsula	Inner Cyrus Field Bay	Mollusc
GSC 5223	8,600 ± 160	8,150	Borden Peninsula	Victor Bay	Mollusc
GSC 5299	9,550 ± 320	9,510	Loks Land	Beare Sound	Mollusc
GSC 5320	9,250 ± 200	9,210	Mid Frobisher Bay	Gabriel Island	Mollusc
GSC 5328	10,400 ± 140	10,360	Loks Land	Loks Land radio site	Mollusc
GSC 5340	9,980 ± 210	9,940	Loks Land	Loks Land radio site	Mollusc
GX 13794	8,770 ± 260		Borden Peninsula	Saddle Section I	Peat
GX 13795	7,685 ± 260		Borden Peninsula	Saddle Section I	Peat
GX 13796	9,715 ± 295		Borden Peninsula	Saddle Section II	Bulk Sediment
GX 13797	10,595 ± 380		Borden Peninsula	Saddle Section II	Bulk Sediment
GX 13798	12,720 ± 670		Borden Peninsula	Saddle Section II	Bulk Sediment
GX 13799	6,770 ± 205		Borden Peninsula	George V Section	Bulk Sediment
GX 13800	8,460 ± 245		Borden Peninsula	George V Section	Bulk Sediment
GX 13801	7,730 ± 180		Borden Peninsula	George V Section	Bulk Sediment
GX 15278	10,920 ± 160	10,470	Loks Land	Loks Land radio site	Mollusc
GX 15279	10,720 ± 140	10,270	Hall Peninsula	Wiswell Inlet	Mollusc
GX 16635	30,600 ± 1,900		Hall Peninsula	Cyrus Field Lake	Organic Concentrate
TO 2195	Modern		Cumberland Pen	Pangnirtung moraine	Plant Macrofossils
TO 2196	52,460 ± 1,430	52,010	Cumberland Pen	Pangnirtung moraine	Mollusc

Appedix 1B. Index of radiocarbon dates arranged by increasing age.

Date	Lab no.
Modern	AA 2351
Modern	AA 2352
Modern	TO 2195
375 ± 65	AA 3997
670 ± 70	GSC 5122
970 ± 150	AA 6524
985 ± 50	AA 4338
1,010 ± 50	AA 6523
1,045 ± 55	AA 6026
1,125 ± 50	AA 8328
1,300 ± 55	AA 6847
1,382 ± 65	AA 6830
1,798 ± 111	AA 8332
2,070 ± 70	AA 7012
2,210 ± 50	AA 3098
2,370 ± 70	AA 3890
2,855 ± 80	AA 4336
3,010 ± 50	AA 5988
3,015 ± 55	AA 6027
3,210 ± 70	AA 6829
3,285 ± 55	AA 3273
3,600 ± 75	AA 3783
3,3620 ± 55	AA 3274
3,605 ± 75	AA 6525
4,010 ± 50	AA 8325
4,205 ± 50	AA 3101
4,440 ± 70	AA 5998
4,461 ± 50	AA 3099
4,650 ± 60	AA 3818
4,794 ± 70	AA 3277
4,850 ± 55	AA 8324
4,905 ± 100	AA 6526
5,230 ± 60	AA 6466
5,660 ± 100	AA 7008
5,675 ± 95	AA 6028
5,835 ± 60	AA 4529
6,155 ± 155	AA 3286
6,160 ± 90	AA 6029
6,170 ± 55	AA 3275
6,380 ± 90	AA 5290
6,770 ± 205	GX 13799
7,410 ± 60	AA 3495
7,425 ± 60	AA 3850
7,430 ± 230	AA 6522
7,685 ± 260	GX 13795
7,730 ± 180	GX 13801
7,765 ± 105	AA 2625
7,790 ± 65	AA 3974
7,800 ± 70	AA 6453
7,805 ± 70	AA 3278
7,960 ± 105	AA 8570
8,075 ± 145	AA 3814
8,195 ± 65	AA 6463
8,260 ± 80	AA 4574
8,280 ± 120	AA 4916
8,300 ± 65	AA 4160
8,320 ± 95	AA 3815
8,320 ± 105	AA 4250B
8,365 ± 75	AA 6299
8,390 ± 80	AA 3481
8,460 ± 245	GX 13800
8,485 ± 60	AA 3494
8,500 ± 90	AA 2349
8,525 ± 80	AA 6464
8,580 ± 70	AA 6312
8,600 ± 160	GSC 5223
8,615 ± 75	AA 5990
8,630 ± 70	AA 3280
8,650 ± 75	AA 3102
8,690 ± 90	GSC 5163
8,720 ± 70	AA 3941
8,755 ± 80	AA 4027
8,770 ± 260	GX 13794
8,925 ± 105	AA 4575
8,965 ± 110	AA 3976
9,000 ± 170	AA 5117
9,000 ± 90	AA 8392
9,010 ± 100	AA 3678
9,090 ± 90	AA 2223
9,105 ± 142	AA 8333
9,250 ± 200	GSC 5320
9,270 ± 110	AA 4249
9,270 ± 80	AA 4530
9,270 ± 60	AA 7894
9,310 ± 100	AA 6473
9,350 ± 75	AA 6302
9,355 ± 70	AA 4255
9,375 ± 70	AA 4666
9,380 ± 80	AA 5987
9,385 ± 75	AA 8390
9,410 ± 100	GSC 5149
9,425 ± 150	AA 5291
9,435 ± 50	AA 8327
9,460 ± 95	AA 6301
9,500 ± 90	AA 2350
9,500 ± 105	AA 6305
9,550 ± 320	GSC 5299
9,630 ± 80	AA 6306
9,645 ± 85	AA 6465
9,655 ± 90	AA 3975
9,670 ± 245	AA 7139
9,715 ± 295	GX 13796
9,740 ± 65	AA 7895
9,800 ± 75	AA 6311
9,890 ± 85	AA 6462
9,980 ± 70	AA 7896
9,980 ± 210	GSC 5340
10,000 ± 75	AA 7560
10,010 ± 110	AA 3585,6
10,015 ± 120	AA 4250A
10,035 ± 130	AA 6472
10,080 ± 75	AA 6854
10,090 ± 75	AA 8391
10,115 ± 75	AA 6452
10,200 ± 160	GSC 4948
10,200 ± 100	GSC 5037
10,315 ± 85	AA 5837
10,355 ± 205	AA 7141
10,375 ± 80	AA 4916
10,375 ± 75	AA 5989
10,400 ± 90	GSC 5036
10,400 ± 140	GSC 5328
10,415 ± 240	AA 6521
10,435 ± 85	AA 6309
10,445 ± 75	AA 6310
10,445 ± 100	AA 6468
10,470 ± 65	AA 7891
10,505 ± 85	AA 5838
10,510 ± 90	AA 5839
10,530 ± 95	AA 5032
10,530 ± 90	AA 5033
10,555 ± 75	AA 5835
10,560 ± 75	AA 8388
10,570 ± 85	AA 5841
10,595 ± 380	GX 13797
10,600 ± 75	AA 3583A
10,615 ± 75	AA 5836

Appendix 1B. Continued

Date	Lab no.
10,625 ± 170	AA 3583B
10,630 ± 380	AA 7136
10,635 ± 80	AA 6308
10,680 ± 85	AA 5840
10,705 ± 70	AA 3940
10,720 ± 140	GX 1527
10,740 ± 85	AA 6307
10,825 ± 80	AA 6303
10,850 ± 185	AA 6850
10,870 ± 90	AA 5996
10,895 ± 95	AA 6866
10,920 ± 250	AA 3939
10,920 ± 160	GX 15278
10,930 ± 85	AA 3584
10,980 ± 70	AA 3819
11,020 ± 120	AA 3746
11,065 ± 105	AA 6469
11,075 ± 85	AA 8389
11,100 ± 85	AA 6000
11,120 ± 90	AA 6001
11,315 ± 75	AA 3810
11,550 ± 75	AA 4702
11,550 ± 75	AA 4702
11,555 ± 85	AA 3784
11,575 ± 135	AA 4667
11,590 ± 180	AA 6300
11,685 ± 90	AA 7559
11,725 ± 125	AA 3473

Date	Lab no.
11,760 ± 170	AA 5292
11,790 ± 275	AA 8777
11,895 ± 130	AA 4689
11,990 ± 100	AA 4665
12,030 ± 85	AA 4709
12,085 ± 115	AA 8331
12,110 ± 185	AA 6852
12,425 ± 125	AA 5994
12,470 ± 205	AA 8330
12,675 ± 100	AA 5995
12,720 ± 670	GX 13798
12,740 ± 100	AA 5997
12,865 ± 305	AA 8329
12,925 ± 130	AA 6471
12,975 ± 355	AA 6853
13,160 ± 115	AA 6470
13,180 ± 100	AA 4917
13,285 ± 105	AA 8326
13,300 ± 145	AA 6849
13,450 ± 220	AA 8035
13,585 ± 110	AA 4026
13,625 ± 150	AA 5063
13,635 ± 190	AA 6851
13,700 ± 145	AA 4531
13,720 ± 95	AA 3256
14,455 ± 110	AA 5992

Date	Lab no.
14,465 ± 200	AA 7140
14,845 ± 190	AA 6848
14,850 ± 205	AA 8034
15,010 ± 105	AA 5999
15,025 ± 95	AA 4335
15,365 ± 250	AA 7138
17,020 ± 170	AA 3995
19,070 ± 260	AA 5034
19,855 ± 210	AA 4700
26,015 ± 1,320	AA 7137
30,600 ± 1,900	GX 16635
32,150 ± 1,200	AA 4687
34,025 ± 725	AA 4686
35,685 ± 805	AA 6298
37,090 ± 1,100	AA 4244A
>38,900	AA 7558
39,000 ± 1,800	AA 2224
40,630 ± 1,400	AA 4244B
40,700 ± 1,500	AA 4703
40,950 ± 2,100	AA 7557
43,200 ± 60	AA 4704
43,300 ± 3,000	AA 2348
43,450 ± 2,100	AA 6304
44,200 ± 2,300	AA 3254
45,500 ± 55	AA 4706
52,460 ± 1,430	TO 2196
Lost	AA 3809
Lost	AA 6846

Appendix 2A. Comprehensive list of dates included in this and previous radiocarbon Date Lists for Baffin Island and Labrador, arranged by laboratory number, 1967-1992.

Lab no.	Reported date	Material
AA-0190	12,890 ± 290	<125 µm Orgnc
AA-0191	8,425 ± 375	Mollusc
AA-0244 A	9,085 ± 290	Mollusc
AA-0244 B	5,740 ± 290	Mollusc
AA-0244 C	7,650 ± 290	Mollusc
AA-0263	>27,000	Foraminifera
AA-0264	10,490 ± 360	Mollusc
AA-0347	Modern	Mollusc
AA-0348	12,190 ± 430	<125 µm Orgnc
AA-0412	9,450 ± 360	Mollusc
AA-0413	7,790 ± 230	Mollusc
AA-0650	4,540 ± 300	<125 µm Orgnc
AA-0651	10,250 ± 390	<125 µm Orgnc
AA-0652	10,410 ± 380	<125 µm Orgnc
AA-0653	16,700 ± 900	<125 µm Orgnc
AA-0654	19,200 ± 1100	<125 µm Orgnc
AA-0655A,B	10,610 ± 300	Mollusc
AA-0712	5,600 ± 330	Mollusc
AA-0886	10,010 ± 360	Mollusc
AA-0935	13,500 ± 700	<125 µm Orgnc
AA-0936	2,145 ± 80	<125 µm Orgnc
AA-1004	7,580 ± 140	< 2µm Orgnc
AA-1005	3,430 ± 70	<125 µm Orgnc
AA-1011	2,820 ± 100	<125 µm Orgnc
AA-1012	12,970 ± 225	<125 µm Orgnc
AA-1181	7,230 ± 90	Mollusc
AA-1272	Lost	Mollusc
AA-1273	20,650 ± 260	<2 µm Orgnc
AA-1507	7,020 ± 80	<125 µm Orgnc
AA-1508	4,060 ± 90	< 2µm Orgnc
AA-1523	15,800 ± 400	< 2µm Orgnc
AA-1800	6,990 ± 70	Mollusc
AA-1801	4,780 ± 80	Mollusc
AA-1825	7,950 ± 100	<125 µm Orgnc
AA-1915	2,900 ± 110	Mollusc
AA-1916	9,300 ± 100	Mollusc
AA-1917	3,920 ± 60	Mollusc
AA-1918	10,380 ± 120	<125 µm Orgnc
AA-2084	720 ± 220	Mollusc
AA-2219	1,700 ± 100	<125 µm Orgnc
AA-2223	9,090 ± 90	Mollusc
AA-2224	39,000 ± 1800	Mollusc
AA-2275	8,160 ± 125	<125 µm Orgnc
AA-2276	5,084 ± 70	<125 µm Orgnc
AA-2348	43,300 ± 3000	Mollusc
AA-2349	8,500 ± 90	Mollusc
AA-2350	9,500 ± 90	Mollusc
AA-2351	Modern	Plant Macros
AA-2352	Modern	Mollusc
AA-2496	10,360 ± 160	Mollusc
AA-2624	45,000 ± 4000	Mollusc
AA-2625	7,765 ± 105	Mollusc
AA-2631	5,160 ± 60	Fish bone
AA-2632	>45,000	Mollusc
AA-2633	9,450 ± 95	Mollusc
AA-2637	9,200 ± 200	Foraminifera
AA-2641	8,850 ± 120	Mollusc
AA-3098	2,210 ± 50	Organic Conc
AA-3099	4,461 ± 50	Organic Conc
AA-3101	4,205 ± 50	Organic Conc
AA-3102	8,650 ± 75	Organic Conc
AA-3103	8,730 ± 80	Mollusc
AA-3104	8,660 ± 65	Mollusc
AA-3108	3,440 ± 60	Foraminifera
AA-3109	9,380 ± 140	Foraminifera
AA-3254	44,200 ± 2300	Mollusc
AA-3256	13,720 ± 95	Organic Conc
AA-3273	3,285 ± 55	Organic Conc
AA-3274	3,620 ± 55	Organic Conc
AA-3275	6,170 ± 55	Organic Conc
AA-3277	4,794 ± 70	Organic Conc
AA-3278	7,805 ± 70	Organic Conc
AA-3280	8,630 ± 70	Organic Conc
AA-3286	6,155 ± 155	Organic Conc
AA-3338	21,500 ± 240	Foraminifera
AA-3465	9,620 ± 90	Foraminifera
AA-3466	9,870 ± 160	Foraminifera
AA-3467	11,725 ± 125	Foraminifera
AA-3473	11,725 ± 125	Foraminifera
AA-3481	8,390 ± 80	Foraminifera
AA-3494	8,485 ± 60	Organic Conc
AA-3495	7,410 ± 60	Organic Conc
AA-3583A	10,600 ± 75	Mollusc
AA-3583B	10,625 ± 170	Mollusc
AA-3584	10,930 ± 85	Mollusc
AA-3585,6	10,010 ± 110	Foram & Mollusc
AA-3678	9,010 ± 100	foraminifera
AA-3746	11,020 ± 120	Foraminifera
AA-3783	3,600 ± 75	Organic Conc
AA-3784	11,555 ± 85	Foraminifera
AA-3809	Lost	Mollusc
AA-3810	11,315 ± 75	Foraminifera
AA-3814	8,075 ± 145	Plant Macros
AA-3815	8,320 ± 95	Plant Macros
AA-3818	4,650 ± 60	Organic Conc
AA-3819	10,980 ± 70	Organic Conc

Appendix 2A. Continued

Lab no.	Reported date	Material
AA-3850	7,425 ± 60	Foraminifera
AA-3890	2,370 ± 70	Foraminifera
AA-3939	10,920 ± 250	Foraminifera
AA-3940	10,705 ± 70	Foraminifera
AA-3941	8,720 ± 70	Mollusc
AA-3974	7,790 ± 65	Plant Macros
AA-3975	9,655 ± 90	Foraminifera
AA-3976	8,965 ± 110	Foraminifera
AA-3995	17,020 ± 170	Organic Conc
AA-3997	375 ± 65	Plant Macros
AA-4026	13,585 ± 110	Foraminifera
AA-4027	8,755 ± 80	Foraminifera
AA-4160	8,300 ± 65	Foraminifera
AA-4244A	37,090 ± 1100	Mollusc
AA-4244B	40,630 ± 1400	Mollusc
AA-4249	9,270 ± 110	Mollusc
AA-4250A	10,015 ± 120	Mollusc
AA-4250B	8,320 ± 105	Mollusc
AA-4255	9,355 ± 70	Foraminifera
AA-4335	15,025 ± 95	Foraminifera
AA-4336	2,855 ± 80	Foraminifera
AA-4338	985 ± 50	Foraminifera
AA-4529	5,835 ± 60	Foraminifera
AA-4530	9,270 ± 80	Foraminifera
AA-4531	13,700 ± 145	Foraminifera
AA-4574	8,260 ± 80	Bulk Sediment
AA-4575	8,925 ± 105	Bulk Sediment
AA-4665	11,990 ± 100	Foraminifera
AA-4666	9,375 ± 70	Foraminifera
AA-4667	11,575 ± 135	Foraminifera
AA-4686	34,025 ± 725	Foraminifera
AA-4687	32,150 ± 1200	Foraminifera
AA-4689	11,895 ± 130	Foraminifera
AA-4700	19,855 ± 210	Foraminifera
AA-4702	11,550 ± 75	Foraminifera
AA-4702	11,550 ± 75	Foraminifera
AA-4703	40,700 ± 1500	Foraminifera
AA-4704	43,200 ± 60	Foraminifera
AA-4706	45,500 ± 55	Foraminifera
AA-4709	12,030 ± 85	Foraminifera
AA-4916	8,280 ± 120	Foraminifera
AA-4916	10,375 ± 80	
AA-4917	13,180 ± 100	Foraminifera
AA-5032	10,530 ± 95	Foraminifera
AA-5033	10,530 ± 90	Foraminifera
AA-5034	19,070 ± 260	Foraminifera
AA-5063	13,625 ± 150	Foraminifera
AA-5117	9,000 ± 170	Mollusc
AA-5290	6,380 ± 90	Foraminifera
AA-5291	9,425 ± 150	Foraminifera
AA-5292	11,760 ± 170	Foraminifera
AA-5835	10,555 ± 75	Mollusc
AA-5836	10,615 ± 75	Mollusc
AA-5837	10,315 ± 85	Mollusc
AA-5838	10,505 ± 85	Mollusc
AA-5839	10,510 ± 90	Mollusc
AA-5840	10,680 ± 85	Mollusc
AA-5841	10,570 ± 85	Mollusc
AA-5987	9,380 ± 80	Foraminifera
AA-5988	3,010 ± 50	Foraminifera
AA-5989	10,375 ± 75	Foraminifera
AA-5990	8,615 ± 75	Foraminifera
AA-5992	14,455 ± 110	Foraminifera
AA-5994	12,425 ± 125	Foraminifera
AA-5995	12,675 ± 100	Foraminifera
AA-5996	10,870 ± 90	Foraminifera
AA-5997	12,740 ± 100	Foraminifera
AA-5998	4,440 ± 70	Foraminifera
AA-5999	15,010 ± 105	Foraminifera
AA-6000	11,100 ± 85	Foraminifera
AA-6001	11,120 ± 90	Foraminifera
AA-6026	1,045 ± 55	Humic Acids
AA-6027	3,015 ± 55	Humic Acids
AA-6028	5,675 ± 95	Humic Acids
AA-6029	6,160 ± 90	Humic Acids
AA-6298	35,685 ± 805	Mollusc
AA-6299	8,365 ± 75	Mollusc
AA-6300	11,590 ± 180	Mollusc
AA-6301	9,460 ± 95	Mollusc
AA-6302	9,350 ± 75	Mollusc
AA-6303	10,825 ± 80	Mollusc
AA-6304	43,450 ± 2100	Mollusc
AA-6305	9,500 ± 105	Mollusc
AA-6306	9,630 ± 80	Mollusc
AA-6307	10,740 ± 85	Mollusc
AA-6308	10,635 ± 80	Mollusc
AA-6309	10,435 ± 85	Mollusc
AA-6310	10,445 ± 75	Mollusc
AA-6311	9,800 ± 75	Mollusc
AA-6312	8,580 ± 70	Mollusc
AA-6452	10,115 ± 75	Mollusc
AA-6453	7,800 ± 70	Bulk Sediment
AA-6462	9,890 ± 85	Mollusc
AA-6463	8,195 ± 65	Mollusc
AA-6464	8,525 ± 80	Mollusc
AA-6465	9,645 ± 85	Mollusc
AA-6466	5,230 ± 60	Mollusc
AA-6468	10,445 ± 100	foraminifera

Appendix 2A. Continued

Lab no.	Reported date	Material
AA-6469	11,065 ± 105	Foraminifera
AA-6470	13,160 ± 115	Foraminifera
AA-6471	12,925 ± 130	Foraminifera
AA-6472	10,035 ± 130	Foraminifera
AA-6473	9,310 ± 100	Foraminifera
AA-6521	10,415 ± 240	Humic Acids
AA-6522	7,430 ± 230	Humic Acids
AA-6523	1,010 ± 50	Humic Acids
AA-6524	970 ± 150	Humic Acids
AA-6525	3,605 ± 75	Humic Acids
AA-6526	4,905 ± 100	Humic Acids
AA-6829	3,210 ± 70	Foraminifera
AA-6830	1,382 ± 65	Foraminifera
AA-6846	Too small	Foraminifera
AA-6847	1,300 ± 55	Foraminifera
AA-6848	14,845 ± 190	Foraminifera
AA-6849	13,300 ± 145	Foraminifera
AA-6850	10,850 ± 185	Foraminifera
AA-6851	13,635 ± 190	Foraminifera
AA-6852	12,110 ± 185	Foraminifera
AA-6853	12,975 ± 355	Foraminifera
AA-6854	10,080 ± 75	Mollusc
AA-6866	10,895 ± 95	Foraminifera
AA-7008	5,660 ± 100	Plant Macros
AA-7012	2,070 ± 70	Plant Macros
AA-7136	10,630 ± 380	Foraminifera
AA-7137	26,015 ± 1320	Foraminifera
AA-7138	15,365 ± 250	Foraminifera
AA-7139	9,670 ± 245	Foraminifera
AA-7140	14,465 ± 200	Foraminifera
AA-7141	10,355 ± 205	Foraminifera
AA-7557	40,950 ± 2100	Mollusc
AA-7558	>38,900	Mollusc
AA-7559	11,685 ± 90	Mollusc
AA-7560	10,000 ± 75	Mollusc
AA-7891	10,470 ± 65	Mollusc
AA-7894	9,270 ± 60	Mollusc
AA-7895	9,740 ± 65	Mollusc
AA-7896	9,980 ± 70	Mollusc
AA-8034	14,850 ± 205	Foraminifera
AA-8035	13,450 ± 220	Foraminifera
AA-8324	4,850 ± 55	Orgnc Conc
AA-8325	4,010 ± 50	Orgnc Conc
AA-8326	13,285 ± 105	Foraminifera
AA-8327	9,435 ± 50	Foraminifera
AA-8328	1,125 ± 50	Foraminifera
AA-8329	12,865 ± 305	Foraminifera
AA-8330	12,470 ± 205	Foraminifera
AA-8331	12,085 ± 115	Foraminifera
AA-8332	1,798 ± 111	Foraminifera
AA-8333	9,105 ± 142	Foraminifera
AA-8388	10,560 ± 75	Mollusc
AA-8389	11,075 ± 85	Mollusc
AA-8390	9,385 ± 75	Mollusc
AA-8391	10,090 ± 75	Mollusc
AA-8392	9,000 ± 90	Foraminifera
AA-8570	8,650 ± 105	Oraganic Conc
AA-8777	11,790 ± 275	Foraminifera
Beta-1087	2,035 ± 70	Peat
Beta-1227	>30,000	Foraminifera
Beta-1622	1,460 ± 70	Peat
Beta-1705	2,940 ± 145	Peaty sand
Beta-1806	905 ± 100	Peat
Beta-1871	7,140 ± 115	Mollusc
Beta-1872	7,595 ± 130	Mollusc
Beta-2362	7,640 ± 125	Mollusc
BGS-267	970 ± 80	Soil
BGS-268	1,500 ± 80	Soil
BGS-269	2,450 ± 90	Organic mud
BGS-270	1,810 ± 90	>125 µm Orgnc
BGS-271	3,260 ± 100	Soil
BGS-272	890 ± 90	>125 µm Orgnc
BGS-295	150 ± 100	Bulk sediment
BGS-304	33,640 ± 1300	Mollusc
BGS-305	38,470 ± 2450	Mollusc
BGS-306	40,710 ± 5500	Mollusc
BIRM 370	1,480 ± 160	Peat
BIRM 380	2,500 ± 170	Peat
BIRM 535	1,970 ± 200	Peat
BIRM 536	2,240 ± 190	Peat
DIC-0327	850 ± 65	>125 µm Orgnc
DIC-0328	3,840 ± 55	>125 µm Orgnc
DIC-0331	Modern	Bulk sediment
DIC-0332	8,650 ± 80	Mollusc
DIC-0333	2,980 ± 190	>125 µm Orgnc
DIC-0334	7,610 ± 65	Mollusc
DIC-0335	5,710 ± 80	Mollusc
DIC-0374	9,480 ± 165	Organic lense
DIC-0375	8,610 ± 185	Moss
DIC-0378	4,260 ± 475	Peat
DIC-0390	1,500 ± 85	>125 µm Orgnc
DIC-0401	850 ± 75	Bulk sediment
DIC-0402	3,070 ± 75	>125 µm Orgnc
DIC-0648	2,830 ± 235	Peat

Appendix 2A. Continued

Lab no.	Reported date	Material
DIC-0649	2,730 +1290 -1540	Peat
DIC-0515	2,470 ± 390	>125 µm Orgnc
DIC-0597	3,830 ± 75	Soil Orgnc
GaK-2566	7,950 ± 170	Mollusc
GaK-2567	29,000 ± 3500	Mollusc
GaK-2568	29,000 +2000 -2200	Mollusc
GaK-2569	>29,000	Mollusc
GaK-2570	>29,000	Mollusc
GaK-2571	90 ± 320	Mollusc
GaK-2572	>20,000	Mollusc
GaK-2573	9,850 ± 250	Mollusc
GaK-2574	10,000 ± 1000	Mollusc
GaK-2575	1,670 ± 90	Peat
GaK-2771	2,090 ± 100	Peat
GaK-2792	730 ± 70	Peat
GaK-2799	28,200 ± 1500	Mollusc
GaK-2983	350 ± 100	Peat
GaK-3090	8,230 ± 160	Mollusc
GaK-3091	4,950 ± 140	Mollusc
GaK-3092	8,290 ± 170	Mollusc
GaK-3093	7,870 ± 150	Mollusc
GaK-3094	850 ± 110	Peat
GaK-3096	930 ± 100	Buried soil
GaK-3097	160 ± 80	Peat
GaK-3098	680 ± 90	Peat
GaK-3099	330 ± 90	Moss
GaK-3100	Modern ± 90	Lichen
GaK-3101	770 ± 70	Bone
GaK-3160	1,260 ± 150	Buried soil
GaK-3365	7,100 ± 140	Mollusc
GaK-3677	7,950 ± 140	Mollusc
GaK-3678	7,560 ± 130	Mollusc
GaK-3685	1,480 ± 110	Leaves
GaK-3686	1,170 ± 330	Soil
GaK-3687	1,480 ± 110	>125 µm Orgnc
GaK-3722	680 ± 80	Bone
GaK-3723	5,200 ± 100	Mollusc
GaK-3724	4,810 ± 110	Mollusc
GaK-3725	1,010 ± 100	Orgnc
GaK-3726	450 ± 130	Orgnc
GaK-3860	840 ± 110	Orgnc
GaK-3861	Modern	Organic mat
GaK-3862	8,440 ± 150	Mollusc
GaK-4306	6,150 ± 250	Mollusc
GaK-4307	1,290 ± 100	Buried soil
GaK-4308	1,610 ± 120	Buried soil
GaK-4309	1,070 ± 90	Orgnc
GaK-4440	5,750 ± 110	Mollusc

Lab no.	Reported date	Material
GaK-4835	120 ± 70	Dead moss
GaK-4836	5,250 ± 105	Buried peat/soil
GaK-4837	7,990 ± 170	Mollusc
GaK-4838	Modern	Peat
GaK-4839	970 ± 70	Orgnc
GaK-4840	Modern ± 70	Peaty sand
GaK-5251	5,550 ± 120	<125 µm Orgnc
GaK-5282	650 ± 230	Peaty sand
GaK-5282	650 ± 140	>125 µm Orgnc
GaK-5411	1,990 ± 180	>125 µm Orgnc
GaK-5411	2,060 ± 85	>125 µm Orgnc
GaK-5449	640 ± 155	>125 µm Orgnc
GaK-5450	960 ± 200	>125 µm Orgnc
GaK-5479	8,980 ± 180	Mollusc
Gif-3493	1,870 ± 90	Peat
Gif-3494	2,660 ± 100	Peat
Gif-3864	980 ± 80	Peat
Gif-3865	2,660 ± 90	Peat
Gif-3866	5,370 ± 130	Organic matter
Gif-3956	3,170 ± 100	Moss
Gif-4243	2,680 ± 90	Soil Orgnc
Gif-4245	880 ± 80	Soil
GSC-0122	10,940 ± 240	Fine Orgnc
GSC-0209	>39,600	Wood
GSC-0259	>36,900	Woody peat
GSC-0328	6,410 ± 150	Mollusc
GSC-0427	>34,800	Peat
GSC-0528	30,320 ± 820	Mollusc
GSC-0556	7,740 ± 140	Mollusc
GSC-0557	4,000 ± 140	Mollusc
GSC-0564	3,100 ± 150	Mollusc
GSC-0583	2,770 ± 140	Mollusc
GSC-0584	3,450 ± 170	Plant debris
GSC-0599	7,000 ± 150	Mollusc
GSC-0630	8,000 ± 150	Mollusc
GSC-0631	6,220 ± 140	Mollusc
GSC-0633	6,270 ± 150	Mollusc
GSC-0654	2,780 ± 140	Mollusc
GSC-0707	9,180 ± 1140	Mollusc
GSC-0739	6,930 ± 150	Mollusc
GSC-1507	3,570 ± 140	Peat
GSC-1638	8,410 ± 340	Mollusc
GSC-1845	1,130 ± 80	Plant fragments
GSC-1969	9,100 ± 140	Marine algae
GSC-2001	8,690 ± 90	Mollusc
GSC-2008	Modern ± 140	Wood
GSC-2083	8,480 ± 270	Mollusc

Appendix 2A. Continued

Lab no.	Reported date	Material
GSC-2084	1,790 ± 80	Soil
GSC-2111	7,770 ± 100	Mollusc
GSC-2103	5,550 ± 0	Mollusc
GSC-2138	5,800 ± 70	Mollusc
GSC-2175	6,510 ± 70	Wood frags
GSC-2183	8,660 ± 110	Mollusc
GSC-2199	5,340 ± 170	Mollusc
GSC-2201	9,880 ± 200	Moss
GSC-2211	6,120 ± 90	Mollusc
GSC-2215	9,110 ± 160	Mollusc
GSC-2258	6,060 ± 170	Mollusc
GSC-2283	8,290 ± 90	Mollusc
GSC-2384	8,730 ± 120	Mollusc
GSC-2466	8,660 ± 160	Mollusc
GSC-2474	3,010 ± 80	Mollusc
GSC-2478	8,680 ± 140	Mollusc
GSC-2479	9,280 ± 120	Mollusc
GSC-2506	8,320 ± 140	Mollusc
GSC-2508	8,750 ± 100	Mollusc
GSC-2568	8,890 ± 100	Mollusc
GSC-2582	9,240 ± 80	Mollusc
GSC-2618	9,230 ± 100	Mollusc
GSC-2684	8,580 ± 120	Seaweed
GSC-2716	>38,000 ±	Seaweed
GSC-2725	10,100 ± 110	Mollusc
GSC-2731	9,600 ± 100	Peat
GSC-2750	9,510 ± 90	Mollusc
GSC-2752	9,960 ± 230	Mollusc
GSC-2771	7,380 ± 220	Mollusc
GSC-2778	10,200 ± 210	Mollusc
GSC-2797	>39,000	Mollusc
GSC-2813	10,000 ± 200	Mollusc
GSC-2982	8,950 ± 160	Mollusc
GSC-2991	8,790 ± 380	Mollusc
GSC-3015	8,480 ± 280	Mollusc
GSC-3157	8,690 ± 120	Mollusc
GSC-3404	8,220 ± 90	Mollusc
GSC-3404	8,240 ± 90	Mollusc
GSC-3468	8,660 ± 110	Mollusc
GSC-3469	8,580 ± 150	Mollusc
GSC-3603	8,030 ± 80	Mollusc
GSC-3648	8,600 ± 110	Mollusc
GSC-3666	8,560 ± 100	Mollusc
GSC-3951	8,640 ± 100	Mollusc
GSC-3959	7,720 ± 100	Mollusc
GSC-3991	7,200 ± 80.	Wood
GSC-4038	7,350 ± 90	Mollusc
GSC-4152	5,780 ± 80	Mollusc
GSC-4162	6,920 ± 90	Mollusc
GSC-4578	8,210 ± 180	Mollusc
GSC-4602	8,680 ± 110	Mollusc
GSC-4607	8,810 ± 8790	Mollusc
GSC-4948	10,200 ± 160	Mollusc
GSC-5036	10,400 ± 90	Mollusc
GSC-5037	10,200 ± 100	Mollusc
GSC-5122	670 ± 70	Peat
GSC-5149	9,410 ± 100	Mollusc
GSC-5163	8,690 ± 90	Mollusc
GSC-5223	8,600 ± 160	Mollusc
GSC-5299	9,550 ± 320	Mollusc
GSC-5320	9,250 ± 200	Mollusc
GSC-5328	10,400 ± 140	Mollusc
GSC-5340	9,980 ± 210	Mollusc
GX-08194	9,190 ± 195	Mollusc
GX-08943	9,385 ± 280	Mollusc
GX-09030	16,849 ± 860	Peaty sand
GX-09290	8,645 ± 315	Mollusc
GX-09291	9,785 ± 525	Mollusc
GX-09292	9,475 ± 505	Mollusc
GX-09293	9,110 ± 470	Mollusc
GX-0930	8,435 ± 105	Mollusc
GX-09302	8,635 ± 565	Peaty sand
GX-09304	14,185 ± 490	Peaty sand
GX-09324	15,650 ± 1880	<125 µm Orgnc
GX-09328	9,060 ± 330	Mollusc
GX-09430	7,900 ± 225	<125 µm Orgnc
GX-09431	12,350 ± 950	<125 µm Orgnc
GX-09432	11,365 ± 365	<125 µm Orgnc
GX-09433	22,720 ± 1300	<125 µm Orgnc
GX-09434	10,430 ± 1250	<125 µm Orgnc
GX-09685	Modern	Peaty sand
GX-09686	5,075 ± 210	Peaty sand
GX-09766	9,310 ± 220	Mollusc
GX-09865	8,010 ± 255	Mollusc
GX-09866	7,250 ± 240	Mollusc
GX-09867	3,295 ± 185	Mollusc
GX-09889	Modern	Mollusc
GX-09890	Modern	Mollusc
GX-09918	Modern	Mollusc
GX-09996	7,850 ± 290	Mollusc
GX-09xxx	4,295 ± 100	<125 µm Orgnc
GX-10081	6,885 ± 250	Mollusc
GX-10107	9,380 ± 260	Mollusc
GX-10290	7,830 ± 230	Peaty sand
GX-10374	1,230 ± 110	Coarse Orgnc
GX-10860	7,230 ± 120	Mollusc
GX-10861	5,865 ± 170	Mollusc

Appendix 2A. Continued

Lab no.	Reported date	Material
GX-10628	15,810 ± 490	Peaty sand
GX-10858	6,000 ± 165	Mollusc
GX-10859	5,330 ± 100	Mollusc
GX-11335	5,185 ± 425	<125 µm Orgnc
GX-11548	8,170 ± 245	Mollusc
GX-11549	0 ± 100	Peat
GX-12035	7,370 ± 95	Mollusc
GX-12036	6,220 ± 240	Mollusc
GX-12037	7,725 ± 190	Mollusc
GX-12482	Too Small	<125 µm Orgnc
GX-12852	6,720 ± 390	Peaty sand
GX-12858	10,130 ± 180	Mollusc
GX-12859	11,680 ± 130	Mollusc
GX-13683	4,180 ± 80	Mollusc
GX-13720	45,600 +4100 -2700	Mollusc
GX-13794	8,770 ± 260	Peat
GX-13795	7,685 ± 260	Peat
GX-13796	9,715 ± 295	Bulk Sediment
GX-13797	10,595 ± 380	Bulk Sediment
GX-13798	12,720 ± 670	Bulk Sediment
GX-13799	6,770 ± 205	Bulk Sediment
GX-13800	8,460 ± 245	Bulk Sediment
GX-13801	7,730 ± 180	Bulk Sediment
GX-13805	5,420 ± 100	Mollusc
GX-15278	10,920 ± 160	Mollusc
GX-15279	10,720 ± 140	Mollusc
GX-16635	30,600 ± 1900	Organic Conc
GX-1675	>29,000	Mollusc,
GX-1676	5,120 ± 400	Mollusc
GX-1677	>28,000	Mollusc
GX-1681	Modern	Peat/charcoal
GX-1812	1,205 ± 120	Peat
GX-1824	5,330 ± 450	Mollusc
GX-3271	2,080 ± 190	Buried soil
GX-3272	2,660 ± 230	Orgnc
GX-5318	>24,550	>125 µm Orgnc
GX-5319	14,435 ± 450	>125 µm Orgnc
GX-5527	2,290 ± 170	>125 µm Orgnc
GX-5623	8,815 ± 275	>125 µm Orgnc
GX-5624	7,220 ± 250	>125 µm Orgnc
GX-5625	4,765 ± 200	>125 µm Orgnc
GX-5777	770 ± 135	>125 µm Orgnc
GX-5778	1,900 ± 110	>125 µm Orgnc
GX-5779	1,865 ± 115	>125 µm Orgnc
GX-5780	2,215 ± 105	->125 µm Orgnc
GX-5781	3,030 ± 170	>125 µm Orgnc
GX-6280	11,770 ± 550	Mollusc
GX-6292	2,565 ± 190	Detrital Orgnc
GX-6293	5,700 ± 240	Detrital Orgnc
GX-6352	10,685 ± 385	>125 µm Orgnc
GX-6371	1,775 ± 210	Organic lense
GX-6603	7,285 ± 200	Mollusc
GX-6607	7,105 ± 720	>125 µm Orgnc
GX-6608	16,360 ± 650	>125 µm Orgnc
GX-6835	3,430 ± 135	Moss
GX-6836	4,190 ± 140	Moss
GX-6837	8,810 ± 205	Moss
GX-6838	3,650 ± 160	>125 µm Orgnc
GX-6839	8,070 ± 250	>125 µm Orgnc
GX-6840	8,000 ± 320	>125 µm Orgnc
GX-7091	4,560 ± 180	>125 µm Orgnc
GX-7119	11,910 ± 380	>125 µm Orgnc
GX-7458	17,065 ± 665	>125 µm Orgnc
GX-7880	15,080 ± 620	>125 µm Orgnc
GX-7881	2,745 ± 145	>125 µm Orgnc
GX-7882	10,025 ± 225	>125 µm Orgnc
GX-7883	27,255 ± 1250	>125 µm Orgnc
GX-8159	8,450 ± 190	Mollusc
GX-8160	7,060 ± 175	Mollusc
GX-8194	9,190 ± 195	Mollusc
GX-8240	>34,200	Mollusc
GX-8241	>28,200	Mollusc
GX-8380	955 ± 130	Peaty sand
GX-8381	475 ± 125	Orgnc
GX-8382	420 ± 125	Peaty sands&
GX-8383	905 ± 130	Peaty sands
GX-8384	1,345 ± 135	Peaty sands&
GX-8385	2,575 ± 140	Peaty sands
GX-8504	6,935 ± 220	Colloidal mud
GX-8591	>32,500	Mollusc
GX-8607	3,915 ± 165	Colloidal mud
GX-8608	6,220 ± 220	Colloidal mud
GX-8671	8,845 ± 265	Mollusc
GX-8751	9,480 ± 565	>125 µm Orgnc
GX-8753	9,570 ± 370	>125 µm Orgnc
GX-8754	10,915 ± 600	>125 µm Orgnc
GX-8755	8,285 ± 285	>125 µm Orgnc
GX-8756	12,035 ± 600	>125 µm Orgnc
GX-8825	2,400 ± 140	Necron mud
GX-8826	2,745 ± 160	Fine Orgnc, moss
GX-8897	3,420 ± 160	Organic mud
GX-8898	4,150 ± 170	Colloidal mud
GX-8899	1,940 ± 150	>125 µm Orgnc
GX-8939	2,225 ± 155	Silty necron mud
GX-8940	4,240 ± 185	Colloidal mud
GX-8941	3,650 ± 180	Silty mud
I-0407	4,375 ± 200	Mollusc

Appendix 2A. Continued

Lab no.	Reported date	Material
I-0405	6,050 ± 250	Mollusc
I-0406	6,725 ± 250	Mollusc
I-0484	4,025 ± 190	Mollusc
I-0485	4,000 ± 180	Mollusc
I-0486	5,750 ± 250	Mollusc
I-0487	4,700 ± 210	Mollusc
I-0489	2,050 ± 70	Mollusc
I-0724	8,350 ± 300	Mollusc
I-0725	17,800 ± 500	Mollusc
I-0731	24,600 ± 500	Woody peat
I-0839	30,000 ± 1200	Peat
I-1204	330 ± 75	Dead moss
I-1233	14,400 ± 400	Detrital veg
I-1234	>5000	Plant remains
I-1235	>40,000	Leaves
I-1238	5,070 ± 200	Mollusc
I-1240	>35,000	Plant root/stem
I-1241	>30,000	Peat
I-1242	19,000 ± 1000	Mollusc
I-1243	5,560 ± 250	Mollusc
I-1244	5,070 ± 450	Mollusc
I-1245	4,875 ± 350	Mollusc
I-1246	7,930 ± 300	Mollusc
I-1247	3,550 ± 200	Leaves & twigs
I-1314	18,700 ± 1200	Mollusc
I-1315	9,360 ± 230	Peat
I-1316	8,250 ± 750	Mollusc
I-1317	3,600 ± 480	Mollusc
I-1318	4,400 ± 490	Mollusc
I-1319	5,710 ± 200	Mollusc
I-1320	4,010 ± 440	Mollusc
I-1321	5,390 ± 150	Mollusc
I-1553	7,500 ± 200	Mollusc
I-1554	7,030 ± 190	Mollusc
I-1555	2,800 ± 140	Mollusc
I-1556	6,240 ± 140	Mollusc
I-1596	6,150 ± 170	Mollusc
I-1597	4,090 ± 150	Mollusc
I-1598	7,200 ± 150	Mollusc
I-1599	2,990 ± 140	Mollusc
I-1600	3,520 ± 230	Mollusc
I-1601	3,530 ± 130	Mollusc
I-1602	7,900 ± 210	Mollusc
I-1603	170 ± 105	Willow roots
I-1668	3,830 ± 140	Mollusc
I-1669	4,770 ± 140	Mollusc
I-1670	4,770 ± 140	Mollusc
I-1671	4,270 ± 140	Mollusc
I-1672	7,080 ± 170	Mollusc
I-1673	7,970 ± 340	Mollusc
I-1674	<200	Moss & lichens
I-1812	>39,000	Mollusc
I-1813	>39,000	Mollusc
I-1814	>39,000	Mollusc
I-1815	32,300 +2100 -1600	Mollusc
I-1816	>39,000	Mollusc
I-1829	>41,000	Mollusc
I-1830	1,950 ± 100	Mollusc
I-1831	5,570 ± 130	Mollusc
I-1832	34,900 +2100 -1700	Mollusc
I-1833	5,270 ± 140	Mollusc
I-1834	785 ± 105	Peat
I-1835	1,860 ± 110	Peat
I-1931	4,920 ± 180	Mollusc
I-1932	7,940 ± 130	Mollusc
I-1933	8,210 ± 130	Mollusc
I-1934	6,560 ± 125	Mollusc
I-1983	8,180 ± 130	Mollusc
I-2410	6,270 ± 210	Mollusc
I-2411	5,380 ± 185	Mollusc
I-2412	5,900 ± 130	Mollusc
I-2413	4,420 ± 110	Mollusc
I-2414	1,360 ± 105	Peat
I-2442	4,990 ± 175	Mollusc
I-2546	4,050 ± 130	Mollusc
I-2548	5,580 ± 130	Mollusc
I-2549	5,100 ± 120	Mollusc
I-2581	36,250 +3600 -2000	Mollusc
I-2582	4,590 ± 115	Mollusc
I-2583	6,130 ± 120	Mollusc
I-2584	4,430 ± 110	Mollusc
I-2585	3,850 ± 105	Mollusc
I-2586	3,890 ± 107	Mollusc
I-2611	8,300 ± 135	Mollusc
I-2669	5,190 ± 120	Mollusc
I-2695	6,560 ± 125	Mollusc
I-2831	7,750 ± 135	Mollusc
I-2961	4,830 ± 120	Vegetation
I-2962	6,520 ± 150	Vegetation fragmts
I-3200	32,200 +1700 -1400	Mollusc
L-762c	5,400 ± 200	Mollusc
QC-0446	>41,900	Mollusc
QC-0447	9,370 ± 140	Mollusc
QC-0448	9,395 ± 100	Mollusc
QC-0449	9,100 ± 100	Mollusc
QC-0450	9,725 ± 120	Mollusc
QC-0451	9,935 ± 165	Peat

Appendix 2A. Continued

Lab no.	Reported date	Material
QC-0452	8,025 ± 110	Peat
QC-0453	9,950 ± 185	Peat
QC-0454	9,092 ± 150	Mollusc
QC-0455	6,215 ± 90	Mollusc
QC-0456	4,310 ± 95	Mollusc
QC-0457	8,050 ± 115	Mollusc
QC-0479	1,510 ± 240	Peat
QC-0480 A	10,720 ± 140	Mollusc
QC-0480 C	10,760 ± 150	Mollusc
QC-0501	6,030 ± 80	Peat
QC-0513	4,285 ± 90	Mollusc
QC-0543	12,150 ± 140	Mollusc
QC-0544	9,725 ± 130	Mollusc
QC-0618	1,450 ± 105	Orgnc
QC-0619	4,000 ± 110	Peat
QC-0653	965 ± 145	Peat
QC-0654	3,110 ± 100	Peat
QC-0661	255 ± 100	Peat
QC-0683B	5,490 ± 180	Buried soil
QC-0879	8,400 ± 160	Mollusc
QC-0880	8,160 ± 145	Mollusc
QC-0881	7,075 ± 215	Mollusc
QC-0882	8,140 ± 250	Mollusc
QC-0883	8,135 ± 210	Mollusc
QC-0901	7,340 ± 135	Mollusc
QC-0902	7,510 ± 320	Mollusc
QC-0903	9,875 ± 130	Mollusc
QC-0904	7,985 ± 130	Mollusc
QC-0905	7,800 ± 150	Mollusc
QC-1052	2,800 ± 95	Peat
QC-1137	7,865 ± 250	Mollusc
QC-1138	7,185 ± 120	Mollusc
QL-0060	36,300 ± 300	Mollusc
QL-0136	33,600 ± 300	Mollusc
QL-0177	45,200 ± 800	Mollusc
QL-0178	45,500 ± 600	Mollusc
QL-0179	45,400 ± 600	Mollusc
QL-0180	39,600 ± 500	Mollusc
QL-0181	44,800 ± 500	Mollusc
QL-0182	36,000 ± 300	Mollusc
QL-0183	47,700 ± 700	Mollusc
QL-0184	40,000 ± 300	Mollusc
QL-0185	36,600 ± 350	Mollusc
QL-0186	41,400 ± 500	Mollusc
QL-0187	8,210 ± 50	Orgnc
QL-0188	50,400 ± 1000	Sandy peat
QL-0973	45,800 ± 1000	Mollusc
QL-0974	44,400 ± 1000	Mollusc

Lab no.	Reported date	Material
QL-0976-1	2,360 ± 100	Whale Bone
QL-0976-2	47,000 +1400 -1200	Whale bone
QL-0979	37,200 ± 800	Mollusc
QL-1086	48,700 +1400 -1000	Peat
QL-1087	47,500 +1000 -1200	Peat
QL-1173	10,790 ± 70	Mollusc
QL-1174	10,510 ± 70	Mollusc
QL-1179	50,700 +2000 -1600	Organic matter
QL-1180	42,400 ± 800	Fine Orgnc
QL-1181	47,800 +1300 -1100	Mollusc
Qu-0240	1,560 ± 120	Whale bone
Qu-0241	770 ± 80	Whale bone
Qu-0299	6,800 ± 600	Peat
Qu-0301	1,170 ± 150	Peat
Qu-0302	2,120 ± 80	Peaty sand
Qu-0303	1,640 ± 130	Peat
Qu-0304	4,460 ± 210	Peat
Qu-0305	830 ± 70	Buried soil
Qu-0307	1,610 ± 230	Peat
Qu-0308	620 ± 210	Peat
S-0012	3,670 ± 270	Mollusc
S-0013	5,600 ± 300	Mollusc
S-0458	>32000	Mollusc
S-0459	24,000 ± 850	Mollusc
SI-0620	7,780 ± 115	Mollusc
SI-1335	46,950 ± 2050	Mollusc
SI-1336	42,700 ± 2250	Mollusc
SI-1688	190 ± 90	Bone
SI-1689	2,160 ± 115	Buried Orgnc
SI-1690	7,365 ± 410	Peaty sands
SI-1691	2,355 ± 145	Peaty sands
SI-1692	Modern	Organic sands
SI-1693	660 ± 130	Buried Orgnc
SI-1694A	505 ± 155	<125 µm Orgnc
SI-1694B	Modern	>125 µm Orgnc
SI-1695A	180 ± 105	<125 µm Orgnc
SI-1695B	Modern	>125 µm Orgnc
SI-1696	745 ± 115	Organics
SI-1697	370 ± 105	Organic sands
SI-1698	Too small	Peat
SI-1699	4,660 ± 90	Peat
SI-1700	2,015 ± 60	Buried soil
SI-1701	? ± 55	Peat
SI-1702A	2,025 ± 105	Buried soil
SI-1702B	365 ± 270	>125 µm Orgnc
SI-1703	1,740 ± 70	<125 µm Orgnc

Appendix 2A. Continued

Lab no.	Reported date	Material
SI-2548	Modern	Salix twigs
SI-2549	810 ± 80	Peat
SI-2550	1,025 ± 100	Moss
SI-2555	2,570 ± 75	Peat
SI-2556	3,650 ± 200	>125 µm Orgnc
SI-2557	2,090 ± 175	>125 µm Orgnc
SI-2610	9,550 ± 90	Mollusc
SI-2611	7,505 ± 100	Orgnc seds
SI-2612	10,095 ± 95	Mollusc
SI-2613	6,110 ± 170	Mollusc
SI-2614	11,360 ± 320	Organic lense
SI-2617	6,835 ± 100	Mollusc
SI-2618	Modern	Plant Macros
SI-2621	Modern	Organic sands
SI-2949	830 ± 60	Peat
SI-2950	2,825 ± 65	Peat
SI-2951	3,525 ± 60	Peat
SI-3455	Modern	Peat
SI-3456	2,575 ± 75	Peat
SI-3457	3,320 ± 80	Peat
SI-3678	6,320 ± 130	Moss
SI-4180	Modern	Mollusc
SI-4181	7,980 ± 175	Mollusc
SI-4368	8,820 ± 110	Mollusc
SI-4752	3,175 ± 150	Mud & moss
SI-4755	4,840 ± 200	Mud & moss
SI-4757	5,825 ± 235	Mud & moss
SI-5170	9,595 ± 90	Mollusc
SI-5172	9,845 ± 175	Mollusc
SI-5173	8,660 ± 175	Mollusc
SI-5758	10,530 ± 110	Mollusc
SI-5759	10,950 ± 145	Mollusc
St-3816	8,760 ± 350	Mollusc
St-3829	1,185 ± 120	Bone
TO-2195	Modern	Plant Macros
TO-2196	52,460 ± 1430	Mollusc
Y-1702	>50,000	Mollusc
Y-1703	>54,000	Mollusc
Y-1705	8,,190 ± 120	Mollusc
Y-1830	8,430 ± 140	Mollusc
Y-1831	3,580 ± 120	Mollusc
Y-1832	9,180 ± 180	Mollusc
Y-1833	7,960 ± 140	Mollusc
Y-1834	7,820 ± 140	Mollusc
Y-1835	7,290 ± 120	Mollusc

Appendix 2B. Comprehensive Date List, arranged by radiocarbon age, 1967-1992.

Reported date	Lab no.	Material
Modern	AA-0347	Mollusc
Modern	AA-2352	Mollusc
Modern	DIC-0331	Bulk sediment
Modern ± 90	GaK-3100	Lichen
Modern	GaK-3861	Orgnc mat
Modern	GaK-4838	Peat
Modern ± 70	GaK-4840	Peaty sand
Modern ± 140	GSC-2008	Wood
Modern	GX-09685	Peaty sand
Modern	GX-09889	Mollusc
Modern	GX-09890	Mollusc
Modern	GX-09918	Mollusc
Modern	GX-1681	Peat/charcoal
Modern	SI-1692	Orgnc sands
Modern	SI-1694B	>125 µm orgnc
Modern	SI-1695B	>125 µm orgnc
Modern	SI-2548	Salix twigs
Modern	SI-2618	Macros
Modern	SI-2621	Orgnc sands
Modern	SI-3455	Peat
Modern	SI-4180	Mollusc
Modern	TO-2195	Plant Macros
Modern ± 100	GX-11549	Peat
Modern	AA-2351	Plant Macros
90 ± 320	GaK-2571	Mollusc
120 ± 70	GaK-4835	Dead moss
150 ± 100	BGS-295	Bulk sediment
160 ± 80	GaK-3097	Peat
170 ± 105	I-1603	Willow roots
180 ± 105	SI-1695A	<125 µm orgnc
190 ± 90	SI-1688	Bone
<200	I-1674	Moss & lichens
255 ± 100	QC-0661	Peat
330 ± 90	GaK-3099	Moss
330 ± 75	I-1204	Dead moss
350 ± 100	GaK-2983	Peat
365 ± 270	SI-1702B	>125 µm orgnc
370 ± 105	SI-1697	Orgnc sands
375 ± 65	AA-3997	Plant Macros
420 ± 125	GX-8382	Peaty sands&
450 ± 130	GaK-3726	Orgnc
475 ± 125	GX-8381	Orgnc
505 ± 155	SI-1694A	<125 µm orgnc
620 ± 210	Qu-0308	Peat
640 ± 155	GaK-5449	>125 µm orgnc
650 ± 230	GaK-5282	Peaty sand
650 ± 140	GaK-5282	>125 µm orgnc
660 ± 130	SI-1693	Buried orgnc
670 ± 70	GSC-5122	Peat
680 ± 90	GaK-3098	Peat
680 ± 80	GaK-3722	Bone
720 ± 220	AA-2084	Mollusc
730 ± 70	GaK-2792	Peat
745 ± 115	SI-1696	Orgnc
770 ± 70	GaK-3101	Bone
770 ± 135	GX-5777	>125 µm orgnc
770 ± 80	Qu-0241	Whale bone
785 ± 105	I-1834	Peat
810 ± 80	SI-2549	Peat
830 ± 70	Qu-0305	Buried soil
830 ± 60	SI-2949	Peat
840 ± 110	GaK-3860	Orgnc
850 ± 65	DIC-0327	>125 µm orgnc
850 ± 75	DIC-0401	Bulk sediment
850 ± 110	GaK-3094	Peat
880 ± 80	Gif-4245	Soil
890 ± 90	BGS-272	>125 µm orgnc
905 ± 100	Beta-1806	Peat
905 ± 130	GX-8383	Peaty sands
930 ± 100	GaK-3096	Buried soil
955 ± 130	GX-8380	Peaty sand
960 ± 200	GaK-5450	>125 µm orgnc
965 ± 145	QC-0653	Peat
970 ± 150	AA-6524	Humic Acids
970 ± 80	BGS-267	Soil
970 ± 70	GaK-4839	Orgnc
980 ± 80	Gif-3864	Peat
985 ± 50	AA-4338	Foraminifera
1,010 ± 50	AA-6523	Humic Acids
1,010 ± 100	GaK-3725	Orgnc
1,025 ± 100	SI-2550	Moss
1,045 ± 55	AA-6026	Humic Acids
1,070 ± 90	GaK-4309	Orgnc
1,125 ± 50	AA-8328	Foraminifera
1,130 ± 80	GSC-1845	Plant fragments
1,170 ± 330	GaK-3686	Soil
1,170 ± 150	Qu-0301	Peat
1,185 ± 120	St-3829	Bone
1,205 ± 120	GX-1812	Peat
1,230 ± 110	GX-10374	Coarse orgnc
1,260 ± 150	GaK-3160	Buried soil
1,290 ± 100	GaK-4307	Buried soil
1,300 ± 55	AA-6847	Foraminifera
1,345 ± 135	GX-8384	Peaty sands
1,360 ± 105	I-2414	Peat
1,382 ± 65	AA-6830	Foraminifera
1,450 ± 105	QC-0618	Orgnc

Appendix 2B. Continued

Reported date	Lab no.	Material
1,460 ± 70	Beta-1622	Peat
1,480 ± 160	BIRM 370	Peat
1,480 ± 110	GaK-3685	Leaves
1,480 ± 110	GaK-3687	>125 µm orgnc
1,500 ± 80	BGS-268	Soil
1,500 ± 85	DIC-0390	>125 µm orgnc
1,510 ± 240	QC-0479	Peat
1,560 ± 120	Qu-0240	Whale bone
1,610 ± 120	GaK-4308	Buried soil
1,610 ± 230	Qu-0307	Peat
1,640 ± 130	Qu-0303	Peat
1,670 ± 90	GaK-2575	Peat
1,700 ± 100	AA-2219	<125 µm orgnc
1,740 ± 70	SI-1703	<125 µm orgnc
1,775 ± 210	GX-6371	Orgnc lense
1,790 ± 80	GSC-2084	Soil
1,798 ± 111	AA-8332	Foraminifera
1,810 ± 90	BGS-270	>125 µm orgnc
1,860 ± 110	I-1835	Peat
1,865 ± 115	GX-5779	>125 µm orgnc
1,870 ± 90	Gif-3493	Peat
1,900 ± 110	GX-5778	>125 µm orgnc
1,940 ± 150	GX-8899	>125 µm orgnc
1,950 ± 100	I-1830	Mollusc
1,970 ± 200	BIRM 535	Peat
1,990 ± 180	GaK-5411	>125 µm orgnc
2,015 ± 60	SI-1700	Buried soil
2,025 ± 105	SI-1702A	Buried soil
2,035 ± 70	Beta-1087	Peat
2,050 ± 70	I-0489	Mollusc
2,060 ± 85	GaK-5411	>125 µm orgnc
2,070 ± 70	AA-7012	Plant Macros
2,080 ± 190	GX-3271	Buried soil
2,090 ± 100	GaK-2771	Peat
2,090 ± 175	SI-2557	>125 µm orgnc
2,120 ± 80	Qu-0302	Peaty sand
2,145 ± 80	AA-0936	<125 µm orgnc
2,160 ± 115	SI-1689	Buried orgnc
2,210 ± 50	AA-3098	Orgnc Conc
2,215 ± 105	GX-5780	>125 µm orgnc
2,225 ± 155	GX-8939	Silty mud
2,240 ± 190	BIRM 536	Peat
2,290 ± 170	GX-5527	>125 µm orgnc
2,355 ± 145	SI-1691	Peaty sands
2,360 ± 100	QL-0976-1	Whale Bone
2,370 ± 70	AA-3890	Foraminifera
2,400 ± 140	GX-8825	Necron mud
2,450 ± 90	BGS-269	Orgnc mud

Reported date	Lab no.	Material
2,470 ± 390	DIC-0515	>125 µm orgnc
2,500 ± 170	BIRM 380	Peat
2,565 ± 190	GX-6292	Detrital orgnc
2,570 ± 75	SI-2555	Peat
2,575 ± 140	GX-8385	Peaty sands
2,575 ± 75	SI-3456	Peat
2,660 ± 100	Gif-3494	Peat
2,660 ± 90	Gif-3865	Peat
2,660 ± 230	GX-3272	Orgnc
2,680 ± 90	Gif-4243	Soil orgnc
2,730 +1290 -1540	DIC-0649	Peat
2,745 ± 145	GX-7881	>125 µm orgnc
2,745 ± 160	GX-8826	Orgnc & moss
2,770 ± 140	GSC-0583	Mollusc
2,780 ± 140	GSC-0654	Mollusc
2,800 ± 140	I-1555	Mollusc
2,800 ± 95	QC-1052	Peat
2,820 ± 100	AA-1011	<125 µm orgnc
2,825 ± 65	SI-2950	Peat
2,830 ± 235	DIC-0648	Peat
2,855 ± 80	AA-4336	Foraminifera
2,900 ± 110	AA-1915	Mollusc
2,940 ± 145	Beta-1705	Peaty sand
2,980 ± 190	DIC-0333	>125 µm orgnc
2,990 ± 140	I-1599	Mollusc
3,010 ± 50	AA-5988	Foraminifera
3,010 ± 80	GSC-2474	Mollusc
3,015 ± 55	AA-6027	Humic Acids
3,030 ± 170	GX-5781	>125 µm orgnc
3,070 ± 75	DIC-0402	>125 µm orgnc
3,100 ± 150	GSC-0564	Mollusc
3,110 ± 100	QC-0654	Peat
3,170 ± 100	Gif-3956	Moss
3,175 ± 150	SI-4752	Fine orgnc, moss
3,210 ± 70	AA-6829	Foraminifera
3,260 ± 100	BGS-271	Soil
3,285 ± 55	AA-3273	Orgnc conc
3,295 ± 185	GX-09867	Mollusc
3,320 ± 80	SI-3457	Peat
3,420 ± 160	GX-8897	Orgnc mud
3,430 ± 70	AA-1005	<125 µm orgnc
3,430 ± 135	GX-6835	Moss
3,440 ± 60	AA-3108	Foraminifera
3,450 ± 170	GSC-0584	Plant debris
3,520 ± 230	I-1600	Mollusc
3,525 ± 60	SI-2951	Peat
3,530 ± 130	I-1601	Mollusc
3,550 ± 200	I-1247	Leaves and twigs

Appendix 2B. Continued

Reported date	Lab no.	Material
3,570 ± 140	GSC-1507	Peat
3,580 ± 120	Y-1831	Mollusc
3,600 ± 75	AA-3783	Orgnc Conc
3,600 ± 480	I-1317	Mollusc
3,605 ± 75	AA-6525	Humic Acids
3,620 ± 55	AA-3274	Orgnc conc
3,650 ± 160	GX-6838	>125 µm orgnc
3,650 ± 180	GX-8941	Silty mud
3,650 ± 200	SI-2556	>125 µm orgnc
3,670 ± 270	S-0012	Mollusc
3,830 ± 75	DIC-0597	Soil orgnc
3,830 ± 140	I-1668	Mollusc
3,840 ± 55	DIC-0328	>125 µm orgnc
3,850 ± 105	I-2585	Mollusc
3,890 ± 107	I-2586	Mollusc
3,915 ± 165	GX-8607	Colloidal mud
3,920 ± 60	AA-1917	Mollusc
4,000 ± 140	GSC-0557	Mollusc
4,000 ± 180	I-0485	Mollusc
4,000 ± 110	QC-0619	Peat
4,010 ± 50	AA-8325	Orgnc Conc
4,010 ± 440	I-1320	Mollusc
4,025 ± 190	I-0484	Mollusc
4,050 ± 130	I-2546	Mollusc
4,060 ± 90	AA-1508	<2 µm orgnc
4,090 ± 150	I-1597	Mollusc
4,150 ± 170	GX-8898	Colloidal mud
4,180 ± 80	GX-13683	Mollusc
4,190 ± 140	GX-6836	Moss
4,205 ± 50	AA-3101	Orgnc Conc
4,240 ± 185	GX-8940	Colloidal mud
4,260 ± 475	DIC-0378	Peat
4,270 ± 140	I-1671	Mollusc
4,285 ± 90	QC-0513	Mollusc
4,295 ± 100	GX-09xxx	<125 µm orgnc
4,310 ± 95	QC-0456	Mollusc
4,375 ± 200	I-0407	Mollusc
4,400 ± 490	I-1318	Mollusc
4,420 ± 110	I-2413	Mollusc
4,430 ± 110	I-2584	Mollusc
4,440 ± 70	AA-5998	Foraminifera
4,460 ± 210	Qu-0304	Peat
4,461 ± 50	AA-3099	Orgnc Conc
4,540 ± 300	AA-0650	<125 µm orgnc
4,560 ± 180	GX-7091	>125 µm orgnc
4,590 ± 115	I-2582	Mollusc
4,650 ± 60	AA-3818	Orgnc Conc
4,660 ± 90	SI-1699	Peat
4,700 ± 210	I-0487	Mollusc
4,765 ± 200	GX-5625	>125 µm orgnc
4,770 ± 140	I-1669	Mollusc
4,770 ± 140	I-1670	Mollusc
4,780 ± 80	AA-1801	Mollusc
4,794 ± 70	AA-3277	Orgnc Conc
4,810 ± 110	GaK-3724	Mollusc
4,830 ± 120	I-2961	Vegetation
4,840 ± 200	SI-4755	Mud & moss
4,850 ± 55	AA-8324	Orgnc Conc
4,875 ± 350	I-1245	Mollusc
4,905 ± 100	AA-6526	Humic Acids
4,920 ± 180	I-1931	Mollusc
4,950 ± 140	GaK-3091	Mollusc
4,990 ± 175	I-2442	Mollusc
5,070 ± 200	I-1238	Mollusc
5,070 ± 450	I-1244	Mollusc
5,075 ± 210	GX-09686	Peaty sand
5,084 ± 70	AA-2276	<125 µm orgnc
5,100 ± 120	I-2549	Mollusc
5,120 ± 400	GX-1676	Mollusc
5,160 ± 60	AA-2631	Fish bone
5,185 ± 425	GX-11335	<125 µm orgnc
5,190 ± 120	I-2669	Mollusc
5,200 ± 100	GaK-3723	Mollusc
5,230 ± 60	AA-6466	Mollusc
5,250 ± 105	GaK-4836	Buried peat/soil
5,270 ± 140	I-1833	Mollusc
5,330 ± 100	GX-10859	Mollusc
5,330 ± 450	GX-1824	Mollusc
5,340 ± 170	GSC-2199	Mollusc
5,370 ± 130	Gif-3866	Orgnc matter
5,380 ± 185	I-2411	Mollusc
5,390 ± 150	I-1321	Mollusc
5,400 ± 200	L-762c	Mollusc
5,420 ± 100	GX-13805	Mollusc
5,490 ± 180	QC-0683B	Buried soil
5,550 ± 120	GaK-5251	<125 µm orgnc
5,550 ± 0	GSC-2103	Mollusc
5,560 ± 250	I-1243	Mollusc
5,570 ± 130	I-1831	Mollusc
5,580 ± 130	I-2548	Mollusc
5,600 ± 330	AA-0712	Mollusc
5,600 ± 300	S-0013	Mollusc
5,660 ± 100	AA-7008	Plant Macros
5,675 ± 95	AA-6028	Humic Acids
5,700 ± 240	GX-6293	Detrital orgnc
5,710 ± 80	DIC-0335	Mollusc

Appendix 2B. Continued

Reported date	Lab no.	Material
5,710 ± 200	I-1319	Mollusc
5,740 ± 290	AA-0244 B	Mollusc
5,750 ± 110	GaK-4440	Mollusc
5,750 ± 250	I-0486	Mollusc
5,780 ± 80	GSC-4152	Mollusc
5,800 ± 70	GSC-2138	Mollusc
5,825 ± 235	SI-4757	Mud & moss
5,835 ± 60	AA-4529	Foraminifera
5,865 ± 170	GX-10861	Mollusc
5,900 ± 130	I-2412	Mollusc
6,000 ± 165	GX-10858	Mollusc
6,030 ± 80	QC-0501	Peat
6,050 ± 250	I-0405	Mollusc
6,060 ± 170	GSC-2258	Mollusc
6,110 ± 170	SI-2613	Mollusc
6,120 ± 90	GSC-2211	Mollusc
6,130 ± 120	I-2583	Mollusc
6,150 ± 250	GaK-4306	Mollusc
6,150 ± 170	I-1596	Mollusc
6,155 ± 155	AA-3286	Orgnc Conc
6,160 ± 90	AA-6029	Humic Acids
6,170 ± 105	AA-3275	Orgnc conc
6,215 ± 90	QC-0455	Mollusc
6,220 ± 140	GSC-0631	Mollusc
6,220 ± 240	GX-12036	Mollusc
6,220 ± 220	GX-8608	Collodal mud
6,240 ± 140	I-1556	Mollusc
6,270 ± 150	GSC-0633	Mollusc
6,270 ± 210	I-2410	Mollusc
6,320 ± 130	SI-3678	Moss
6,380 ± 90	AA-5290	Foraminifera
6,410 ± 150	GSC-0328	Mollusc
6,510 ± 70	GSC-2175	Wood fragments
6,520 ± 150	I-2962	Vegetation frags
6,560 ± 125	I-1934	Mollusc
6,560 ± 125	I-2695	Mollusc
6,720 ± 390	GX-12852	Peaty sand
6,725 ± 250	I-0406	Mollusc
6,770 ± 205	GX-13799	Bulk Sediment
6,800 ± 600	Qu-0299	Peat
6,835 ± 100	SI-2617	Mollusc
6,885 ± 250	GX-10081	Mollusc
6,920 ± 90	GSC-4162	Mollusc
6,930 ± 150	GSC-0739	Mollusc
6,935 ± 220	GX-8504	Mud & moss
6,990 ± 70	AA-1800	Mollusc
7,000 ± 150	GSC-0599	Mollusc
7,020 ± 80	AA-1507	<125 µm orgnc
7,030 ± 190	I-1554	Mollusc
7,060 ± 175	GX-8160	Mollusc
7,075 ± 215	QC-0881	Mollusc
7,080 ± 170	I-1672	Mollusc
7,100 ± 140	GaK-3365	Mollusc
7,105 ± 720	GX-6607	>125 µm orgnc
7,140 ± 115	Beta-1871	Mollusc
7,185 ± 120	QC-1138	Mollusc
7,200 ± 80	GSC-3991	Wood
7,200 ± 150	I-1598	Mollusc
7,220 ± 250	GX-5624	>125 µm orgnc
7,230 ± 90	AA-1181	Mollusc
7,230 ± 120	GX-10860	Mollusc
7,250 ± 240	GX-09866	Mollusc
7,285 ± 200	GX-6603	Mollusc
7,290 ± 120	Y-1835	Mollusc
7,340 ± 135	QC-0901	Mollusc
7,350 ± 90	GSC-4038	Mollusc
7,365 ± 410	SI-1690	Peaty sands
7,370 ± 95	GX-12035	Mollusc
7,380 ± 220	GSC-2771	Mollusc
7,410 ± 60	AA-3495	Orgnc Conc
7,425 ± 60	AA-3850	Foraminifera
7,430 ± 230	AA-6522	Humic Acids
7,500 ± 200	I-1553	Mollusc
7,505 ± 100	SI-2611	Orgnc in sand/silt
7,510 ± 320	QC-0902	Mollusc
7,560 ± 130	GaK-3678	Mollusc
7,580 ± 140	AA-1004	< 2µm orgnc
7,595 ± 130	Beta-1872	Mollusc
7,610 ± 65	DIC-0334	Mollusc
7,640 ± 125	Beta-2362	Mollusc
7,650 ± 290	AA-0244 C	Mollusc
7,685 ± 260	GX-13795	Peat
7,720 ± 100	GSC-3959	Mollusc
7,725 ± 190	GX-12037	Mollusc
7,730 ± 180	GX-13801	Bulk Sediment
7,740 ± 140	GSC-0556	Mollusc
7,750 ± 135	I-2831	Mollusc
7,765 ± 105	AA-2625	Mollusc
7,770 ± 100	GSC-2111	Mollusc
7,780 ± 115	SI-0620	Mollusc
7,790 ± 230	AA-0413	Mollusc
7,790 ± 65	AA-3974	Plant Macros
7,800 ± 70	AA-6453	Bulk Sediment
7,800 ± 150	QC-0905	Mollusc
7,805 ± 70	AA-3278	Orgnc Conc
7,820 ± 140	Y-1834	Mollusc

Appendix 2B. Continued

Reported date	Lab no.	Material
7,830 ± 230	GX-10290	Peaty sand
7,850 ± 290	GX-09996	Mollusc
7,865 ± 250	QC-1137	Mollusc
7,870 ± 150	GaK-3093	Mollusc
7,900 ± 225	GX-09430	<125 µm orgnc
7,900 ± 210	I-1602	Mollusc
7,930 ± 300	I-1246	Mollusc
7,940 ± 130	I-1932	Mollusc
7,950 ± 100	AA-1825	<125 µm orgnc
7,950 ± 170	GaK-2566	Mollusc
7,950 ± 140	GaK-3677	Mollusc
7,960 ± 105	AA-8570	Orgnc conc
7,960 ± 140	Y-1833	Mollusc
7,970 ± 340	I-1673	Mollusc
7,980 ± 175	SI-4181	Mollusc
7,985 ± 130	QC-0904	Mollusc
7,990 ± 170	GaK-4837	Mollusc
8,000 ± 150	GSC-0630	Mollusc
8,000 ± 320	GX-6840	>125 µm orgnc
8,010 ± 255	GX-09865	Mollusc
8,025 ± 110	QC-0452	Peat
8,030 ± 80	GSC-3603	Mollusc
8,050 ± 115	QC-0457	Mollusc
8,070 ± 250	GX-6839	>125 µm orgnc
8,075 ± 145	AA-3814	Plant Macros
8,135 ± 210	QC-0883	Mollusc
8,140 ± 250	QC-0882	Mollusc
8,160 ± 125	AA-2275	<125 µm orgnc
8,160 ± 145	QC-0880	Mollusc
8,170 ± 245	GX-11548	Mollusc
8,180 ± 130	I-1983	Mollusc
8,190 ± 120	Y-1705	Mollusc
8,195 ± 65	AA-6463	Mollusc
8,210 ± 180	GSC-4578	Mollusc
8,210 ± 130	I-1933	Mollusc
8,210 ± 50	QL-0187	Orgnc
8,220 ± 90	GSC-3404	Mollusc
8,230 ± 160	GaK-3090	Mollusc
8,240 ± 90	GSC-3404	Mollusc
8,250 ± 750	I-1316	Mollusc
8,260 ± 80	AA-4574	Bulk Sediment
8,280 ± 120	AA-4916	Foraminifera
8,285 ± 285	GX-8755	>125 µm orgnc
8,290 ± 170	GaK-3092	Mollusc
8,290 ± 90	GSC-2283	Mollusc
8,300 ± 65	AA-4160	Foraminifera
8,300 ± 135	I-2611	Mollusc
8,320 ± 95	AA-3815	Plant Macros
8,320 ± 105	AA-4250B	Mollusc
8,320 ± 140	GSC-2506	Mollusc
8,350 ± 300	I-0724	Mollusc
8,365 ± 75	AA-6299	Mollusc
8,390 ± 80	AA-3481	Foraminifera
8,400 ± 160	QC-0879	Mollusc
8,410 ± 340	GSC-1638	Mollusc
8,425 ± 375	AA-0191	Mollusc
8,430 ± 140	Y-1830	Mollusc
8,435 ± 105	GX-0930	Mollusc
8,440 ± 150	GaK-3862	Mollusc
8,450 ± 190	GX-8159	Mollusc
8,460 ± 245	GX-13800	Bulk Sediment
8,480 ± 270	GSC-2083	Mollusc
8,480 ± 280	GSC-3015	Mollusc
8,485 ± 60	AA-3494	Orgnc Conc
8,500 ± 90	AA-2349	Mollusc
8,525 ± 80	AA-6464	Mollusc
8,560 ± 100	GSC-3666	Mollusc
8,580 ± 70	AA-6312	Mollusc
8,580 ± 120	GSC-2684	Seaweed
8,580 ± 150	GSC-3469	Mollusc
8,600 ± 110	GSC-3648	Mollusc
8,600 ± 160	GSC-5223	Mollusc
8,610 ± 185	DIC-0375	Moss
8,615 ± 75	AA-5990	Foraminifera
8,630 ± 70	AA-3280	Orgnc Conc
8,635 ± 565	GX-09302	Peaty sand
8,640 ± 100	GSC-3951	Mollusc
8,645 ± 315	GX-09290	Mollusc
8,650 ± 75	AA-3102	Orgnc Conc
8,650 ± 80	DIC-0332	Mollusc
8,660 ± 65	AA-3104	Mollusc
8,660 ± 110	GSC-2183	Mollusc
8,660 ± 160	GSC-2466	Mollusc
8,660 ± 110	GSC-3468	Mollusc
8,660 ± 175	SI-5173	Mollusc
8,680 ± 140	GSC-2478	Mollusc
8,680 ± 110	GSC-4602	Mollusc
8,690 ± 90	GSC-2001	Mollusc
8,690 ± 120	GSC-3157	Mollusc
8,690 ± 90	GSC-5163	Mollusc
8,720 ± 70	AA-3941	Mollusc
8,730 ± 80	AA-3103	Mollusc
8,730 ± 120	GSC-2384	Mollusc
8,750 ± 100	GSC-2508	Mollusc
8,755 ± 80	AA-4027	Foraminifera
8,760 ± 350	St-3816	Mollusc
8,770 ± 260	GX-13794	Peat

Appendix 2B. Continued

Reported date	Lab no.	Material
8,790 ± 380	GSC-2991	Mollusc
8,810 ± 205	GX-6837	Moss
8,810 ± 8790	GSC-4607	Mollusc
8,815 ± 275	GX-5623	>125 µm orgnc
8,820 ± 110	SI-4368	Mollusc
8,845 ± 265	GX-8671	Mollusc
8,850 ± 120	AA-2641	Mollusc
8,890 ± 100	GSC-2568	Mollusc
8,925 ± 105	AA-4575	Bulk Sediment
8,950 ± 160	GSC-2982	Mollusc
8,965 ± 110	AA-3976	Foraminifera
8,980 ± 180	GaK-5479	Mollusc
9,000 ± 170	AA-5117	Mollusc
9,000 ± 90	AA-8392	Foraminifera
9,010 ± 100	AA-3678	foraminifera
9,060 ± 330	GX-09328	Mollusc
9,085 ± 290	AA-0244 A	Mollusc
9,090 ± 90	AA-2223	Mollusc
9,092 ± 150	QC-0454	Mollusc
9,100 ± 140	GSC-1969	Marine algae
9,100 ± 100	QC-0449	Mollusc
9,105 ± 142	AA-8333	Foraminifera
9,110 ± 160	GSC-2215	Mollusc
9,110 ± 470	GX-09293	Mollusc
9,180 ± 1140	GSC-0707	Mollusc
9,180 ± 180	Y-1832	Mollusc
9,190 ± 195	GX-08194	Mollusc
9,190 ± 195	GX-8194	Mollusc
9,200 ± 200	AA-2637	Foraminifera
9,230 ± 100	GSC-2618	Mollusc
9,240 ± 80	GSC-2582	Mollusc
9,250 ± 200	GSC-5320	Mollusc
9,270 ± 110	AA-4249	Mollusc
9,270 ± 80	AA-4530	Foraminifera
9,270 ± 60	AA-7894	Mollusc
9,280 ± 120	GSC-2479	Mollusc
9,300 ± 100	AA-1916	Mollusc
9,310 ± 100	AA-6473	Foraminifera
9,310 ± 220	GX-09766	Mollusc
9,350 ± 75	AA-6302	Mollusc
9,355 ± 70	AA-4255	Foraminifera
9,360 ± 230	I-1315	Peat
9,370 ± 140	QC-0447	Mollusc
9,375 ± 70	AA-4666	Foraminifera
9,380 ± 140	AA-3109	Foraminifera
9,380 ± 80	AA-5987	Foraminifera
9,380 ± 260	GX-10107	Mollusc
9,385 ± 75	AA-8390	Mollusc
9,385 ± 280	GX-08943	Mollusc
9,395 ± 100	QC-0448	Mollusc
9,410 ± 100	GSC-5149	Mollusc
9,425 ± 150	AA-5291	Foraminifera
9,435 ± 50	AA-8327	Foraminifera
9,450 ± 360	AA-0412	Mollusc
9,450 ± 95	AA-2633	Mollusc
9,460 ± 95	AA-6301	Mollusc
9,475 ± 505	GX-09292	Mollusc
9,480 ± 165	DIC-0374	Orgnc lense
9,480 ± 565	GX-8751	>125 µm orgnc
9,500 ± 90	AA-2350	Mollusc
9,500 ± 105	AA-6305	Mollusc
9,510 ± 90	GSC-2750	Mollusc
9,550 ± 320	GSC-5299	Mollusc
9,550 ± 90	SI-2610	Mollusc
9,570 ± 370	GX-8753	>125 µm orgnc
9,595 ± 90	SI-5170	Mollusc
9,600 ± 100	GSC-2731	Peat
9,620 ± 90	AA-3465	Foraminifera
9,630 ± 80	AA-6306	Mollusc
9,645 ± 85	AA-6465	Mollusc
9,655 ± 90	AA-3975	Foraminifera
9,670 ± 245	AA-7139	Foraminifera
9,715 ± 295	GX-13796	Bulk Sediment
9,725 ± 120	QC-0450	Mollusc
9,725 ± 130	QC-0544	Mollusc
9,740 ± 65	AA-7895	Mollusc
9,785 ± 525	GX-09291	Mollusc
9,800 ± 75	AA-6311	Mollusc
9,845 ± 175	SI-5172	Mollusc
9,850 ± 250	GaK-2573	Mollusc
9,870 ± 160	AA-3466	Foraminifera
9,875 ± 130	QC-0903	Mollusc
9,880 ± 200	GSC-2201	Moss
9,890 ± 85	AA-6462	Mollusc
9,935 ± 165	QC-0451	Peat
9,950 ± 185	QC-0453	Peat
9,960 ± 230	GSC-2752	Mollusc
9,980 ± 70	AA-7896	Mollusc
9,980 ± 210	GSC-5340	Mollusc
10,000 ± 75	AA-7560	Mollusc
10,000 ± 1000	GaK-2574	Mollusc
10,000 ± 200	GSC-2813	Mollusc
10,010 ± 360	AA-0886	Mollusc
10,010 ± 110	AA-3585,6	Foram & Mollusc
10,015 ± 120	AA-4250A	Mollusc
10,025 ± 225	GX-7882	>125 µm orgnc

Appendix 2B. Continued

Reported date	Lab no.	Material
10,035 ± 130	AA-6472	Foraminifera
10,080 ± 75	AA-6854	Mollusc
10,090 ± 75	AA-8391	Mollusc
10,095 ± 95	SI-2612	Mollusc
10,100 ± 110	GSC-2725	Mollusc
10,115 ± 75	AA-6452	Mollusc
10,130 ± 180	GX-12858	Mollusc
10,200 ± 210	GSC-2778	Mollusc
10,200 ± 160	GSC-4948	Mollusc
10,200 ± 100	GSC-5037	Mollusc
10,250 ± 390	AA-0651	<125 µm orgnc
10,315 ± 85	AA-5837	Mollusc
10,355 ± 205	AA-7141	Foraminifera
10,360 ± 160	AA-2496	Mollusc
10,375 ± 80	AA-4916	
10,375 ± 75	AA-5989	Foraminifera
10,380 ± 120	AA-1918	<125 µm orgnc
10,400 ± 90	GSC-5036	Mollusc
10,400 ± 140	GSC-5328	Mollusc
10,410 ± 380	AA-0652	<125 µm orgnc
10,415 ± 240	AA-6521	Humic Acids
10,430 ± 1250	GX-09434	<125 µm orgnc
10,435 ± 85	AA-6309	Mollusc
10,445 ± 75	AA-6310	Mollusc
10,445 ± 100	AA-6468	foraminifera
10,470 ± 65	AA-7891	Mollusc
10,490 ± 360	AA-0264	Mollusc
10,505 ± 85	AA-5838	Mollusc
10,510 ± 90	AA-5839	Mollusc
10,510 ± 70	QL-1174	Mollusc
10,530 ± 95	AA-5032	Foraminifera
10,530 ± 90	AA-5033	Foraminifera
10,530 ± 110	SI-5758	Mollusc
10,555 ± 75	AA-5835	Mollusc
10,560 ± 75	AA-8388	Mollusc
10,570 ± 85	AA-5841	Mollusc
10,595 ± 380	GX-13797	Bulk Sediment
10,600 ± 75	AA-3583A	Mollusc
10,610 ± 300	AA-0655A,B	Mollusc
10,615 ± 75	AA-5836	Mollusc
10,625 ± 170	AA-3583B	Mollusc
10,630 ± 380	AA-7136	Foraminifera
10,635 ± 80	AA-6308	Mollusc
10,680 ± 85	AA-5840	Mollusc
10,685 ± 385	GX-6352	>125 µm orgnc
10,705 ± 70	AA-3940	Foraminifera
10,720 ± 140	GX-15279	Mollusc
10,720 ± 140	QC-0480 A	Mollusc
10,740 ± 85	AA-6307	Mollusc
10,760 ± 150	QC-0480 C	Mollusc
10,790 ± 70	QL-1173	Mollusc
10,825 ± 80	AA-6303	Mollusc
10,850 ± 185	AA-6850	Foraminifera
10,870 ± 90	AA-5996	Foraminifera
10,895 ± 95	AA-6866	Foraminifera
10,915 ± 600	GX-8754	>125 µm orgnc
10,920 ± 250	AA-3939	Foraminifera
10,920 ± 160	GX-15278	Mollusc
10,930 ± 85	AA-3584	Mollusc
10,940 ± 240	GSC-0122	Fine orgnc
10,950 ± 145	SI-5759	Mollusc
10,980 ± 70	AA-3819	Orgnc Conc
11,020 ± 120	AA-3746	Foraminifera
11,065 ± 105	AA-6469	Foraminifera
11,075 ± 85	AA-8389	Mollusc
11,100 ± 85	AA-6000	Foraminifera
11,120 ± 90	AA-6001	Foraminifera
11,315 ± 75	AA-3810	Foraminifera
11,360 ± 320	SI-2614	Orgnc lense
11,365 ± 365	GX-09432	<125 µm orgnc
11,550 ± 75	AA-4702	Foraminifera
11,550 ± 75	AA-4702	Foraminifera
11,555 ± 85	AA-3784	Foraminifera
11,575 ± 135	AA-4667	Foraminifera
11,590 ± 180	AA-6300	Mollusc
11,680 ± 130	GX-12859	Mollusc
11,685 ± 90	AA-7559	Mollusc
11,725 ± 125	AA-3467	Foraminifera
11,725 ± 125	AA-3473	Foraminifera
11,760 ± 170	AA-5292	Foraminifera
11,770 ± 550	GX-6280	Mollusc
11,790 ± 275	AA-8777	Foraminifera
11,895 ± 130	AA-4689	Foraminifera
11,910 ± 380	GX-7119	>125 µm orgnc
11,990 ± 100	AA-4665	Foraminifera
12,030 ± 85	AA-4709	Foraminifera
12,035 ± 600	GX-8756	>125 µm orgnc
12,085 ± 115	AA-8331	Foraminifera
12,110 ± 185	AA-6852	Foraminifera
12,150 ± 140	QC-0543	Mollusc
12,190 ± 430	AA-0348	<125 µm orgnc
12,350 ± 950	GX-09431	<125 µm orgnc
12,425 ± 125	AA-5994	Foraminifera
12,470 ± 205	AA-8330	Foraminifera
12,675 ± 100	AA-5995	Foraminifera
12,720 ± 670	GX-13798	Bulk Sediment

Appendix 2B. Continued

Reported date	Lab no.	Material
12,740 ± 100	AA-5997	Foraminifera
12,865 ± 305	AA-8329	Foraminifera
12,890 ± 290	AA-0190	<125 µm orgnc
12,925 ± 130	AA-6471	Foraminifera
12,970 ± 225	AA-1012	<125 µm orgnc
12,975 ± 355	AA-6853	Foraminifera
13,160 ± 115	AA-6470	Foraminifera
13,180 ± 100	AA-4917	Foraminifera
13,285 ± 105	AA-8326	Foraminifera
13,300 ± 145	AA-6849	Foraminifera
13,450 ± 220	AA-8035	Foraminifera
13,500 ± 700	AA-0935	<125 µm orgnc
13,585 ± 110	AA-4026	Foraminifera
13,625 ± 150	AA-5063	Foraminifera
13,635 ± 190	AA-6851	Foraminifera
13,700 ± 145	AA-4531	Foraminifera
13,720 ± 95	AA-3256	Orgnc Conc
14,185 ± 490	GX-09304	Peaty sand
14,400 ± 400	I-1233	Detrital veg
14,435 ± 450	GX-5319	>125 µm orgnc
14,455 ± 110	AA-5992	Foraminifera
14,465 ± 200	AA-7140	Foraminifera
14,845 ± 190	AA-6848	Foraminifera
14,850 ± 205	AA-8034	Foraminifera
15,010 ± 105	AA-5999	Foraminifera
15,025 ± 95	AA-4335	Foraminifera
15,080 ± 620	GX-7880	>125 µm orgnc
15,365 ± 250	AA-7138	Foraminifera
15,650 ± 1880	GX-09324	<125 µm orgnc
15,800 ± 400	AA-1523	< 2µm orgnc
15,810 ± 490	GX-10628	Peaty sand
16,360 ± 650	GX-6608	>125 µm orgnc
16,700 ± 900	AA-0653	<125 µm orgnc
16,849 ± 860	GX-09030	Peaty sand
17,020 ± 170	AA-3995	Orgnc Conc
17,065 ± 665	GX-7458	>125 µm orgnc
17,800 ± 500	I-0725	Mollusc
18,700 ± 1200	I-1314	Mollusc
19,000 ± 1000	I-1242	Mollusc
19,070 ± 260	AA-5034	Foraminifera
19,200 ± 1100	AA-0654	<125 µm orgnc
19,855 ± 210	AA-4700	Foraminifera
20,650 ± 260	AA-1273	<2 µm orgnc
21,500 ± 240	AA-3338	Foraminifera
22,720 ± 1300	GX-09433	<125 µm orgnc
24,000 ± 850	S-0459	Mollusc
24,600 ± 500	I-0731	Woody peat
26,015 ± 1320	AA-7137	Foraminifera
27,255 ± 1250	GX-7883	>125 µm Orgnc
28,200 ± 1500	GaK-2799	Mollusc
29,000 ± 3500	GaK-2567	Mollusc
29,000 +2000 -2200	GaK-2568	Mollusc
30,000 ± 1200	I-0839	Peat
30,320 ± 820	GSC-0528	Mollusc
30,600 ± 1900	GX-16635	Orgnc Conc
32,150 ± 1200	AA-4687	Foraminifera
32,200 +1700 -1400	I-3200	Mollusc
32,300 +2100 -1600	I-1815	Mollusc
33,600 ± 300	QL-0136	Mollusc
33,640 ± 1300	BGS-304	Mollusc
34,025 ± 725	AA-4686	Foraminifera
34,900 +2100 -1700	I-1832	Mollusc
35,685 ± 805	AA-6298	Mollusc
36,000 ± 300	QL-0182	Mollusc
36,250 +3600 -2000	I-2581	Mollusc
36,300 ± 300	QL-0060	Mollusc
36,600 ± 350	QL-0185	Mollusc
37,090 ± 1100	AA-4244A	Mollusc
37,200 ± 800	QL-0979	Mollusc
38,470 ± 2450	BGS-305	Mollusc
39,000 ± 1800	AA-2224	Mollusc
39,600 ± 500	QL-0180	Mollusc
40,000 ± 300	QL-0184	Mollusc
40,630 ± 1400	AA-4244B	Mollusc
40,700 ± 1500	AA-4703	Foraminifera
40,710 ± 5500	BGS-306	Mollusc
40,950 ± 2100	AA-7557	Mollusc
41,400 ± 500	QL-0186	Mollusc
42,400 ± 800	QL-1180	Fine orgnc
42,700 ± 2250	SI-1336	Mollusc
43,200 ± 60	AA-4704	Foraminifera
43,300 ± 3000	AA-2348	Mollusc
43,450 ± 2100	AA-6304	Mollusc
44,200 ± 2300	AA-3254	Mollusc
44,400 ± 1000	QL-0974	Mollusc
44,800 ± 500	QL-0181	Mollusc
45,000 ± 4000	AA-2624	Mollusc
45,200 ± 800	QL-0177	Mollusc
45,400 ± 600	QL-0179	Mollusc
45,500 ± 55	AA-4706	Foraminifera
45,500 ± 600	QL-0178	Mollusc
45,600 +4100 -2700	GX-13720	Mollusc
45,800 ± 1000	QL-0973	Mollusc
47,000 +1400 -1200	QL-0976-2	Whale bone

Appendix 2B. Continued

Reported date	Lab no.	Material
47,500 +1000 -1200	QL-1087	Peat
47,700 ± 700	QL-0183	Mollusc
46,950 ± 2050	SI-1335	Mollusc
47,800 +1300 -1100	QL-1181	Mollusc
48,700 +1400 -1000	QL-1086	Peat
50,400 ± 1000	QL-0188	Sandy peat
50,700 +2000 -1600	QL-1179	Orgnc matter
52,460 ± 1430	TO-2196	Mollusc
>5000	I-1234	Plant remains
>20,000	GaK-2572	Mollusc
>24,550	GX-5318	>125 µm orgnc
>27,000	AA-0263	Foraminifera
>28,000	GX-1677	Mollusc
>28,200	GX-8241	Mollusc
>29,000	GaK-2569	Mollusc
>29,000	GaK-2570	Mollusc
>29,000	GX-1675	Mollusc
>30,000	Beta-1227	Foraminifera
>30,000	I-1241	Peat
>32,000	S-0458	Mollusc
>32,500	GX-8591	Mollusc
>34,800	GSC-0427	Peat
>34,200	GX-8240	Mollusc
>35,000	I-1240	Plant root/stem
>36,900	GSC-0259	Woody peat
>38,000	GSC-2716	Seaweed
>38,900	AA-7558	Mollusc
>39,000	GSC-2797	Mollusc
>39,600	GSC-0209	Wood
>39,000	I-1812	Mollusc
>39,000	I-1813	Mollusc
>39,000	I-1814	Mollusc
>39,000	I-1816	Mollusc
>40,000	I-1235	Leaves
>41,000	I-1829	Mollusc
>41,900	QC-0446	Mollusc
>45,000	AA-2632	Mollusc
>50,000	Y-1702	Mollusc
>54,000	Y-1703	Mollusc
Lost	AA-1272	Mollusc
Lost	AA-3809	Mollusc
Too small	AA-6846	Foraminifera
Too small	GX-12482	<125 µm orgnc
Too small	SI-1698	Peat
? ± 55	SI-1701	Peat

INSTITUTE OF ARCTIC AND ALPINE RESEARCH, UNIVERSITY OF COLORADO
OCCASIONAL PAPERS

Numbers 1 through 5, and 9, 11, 12, 16, 17, 18, 21, 23, 31, 37, and 39 are out of print. A second edition of Number 1 is available from the author. Numbers 2, 3, 4, 5, 9, and 11 are available from National Technical Information Service, U.S. Department of Commerce. For details, please write to INSTAAR.

6. *Guide to the Mosses of Colorado*. By W.A. Weber. 1973. 48 pp. Order from the author, University of Colorado Museum, Boulder, Colorado 80309. $2.50.
7. *A Climatological Study of Strong Downslope Winds in the Boulder Area*. By W.A.R. Brinkmann. 1973. 228 pp. Order from the author, Institute for Environmental Studies, University of Wisconsin, 1225 West Dayton Street, Madison, Wisconsin 53706.
8. *Environmental Inventory and Land Use Recommendations for Boulder County, Colorado*. Edited by R.F. Madole. 1973. 228 pp. 7 plates. $6.
10. *Simulation of the Atmospheric Circulation Using the NCAR Global Circulation Model With Present Day and Glacial Period Boundary Conditions*. By J.H. Williams. 1974. 328 pp. $4.75.
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