Natural Resources Canada / Ressources naturelles Canada

FIELD NUMBER (89 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
41	●				4.5-5	1640±70	S-3225
42	●				25	5070±90	S-3226
43	●				25	4465±80	S-3227
44	●				20	3880±80	S-3228
45	●				20	4500±60	TO-5010
46	●				20	4440±80	S-3229
48	●				19.5	5870±70	S-3230
50	●				4.5	1500±60	S-3231
51	●				28	5870±80	S-3232
52	●				31	5640±70	S-3233
53	●				18	3820±60	S-3234
55	●				4	1300±50	S-3235
58		●			78	8050±90	GSC-4886
60	●				3	1290±50	S-3236
62	●				3.5-4.0	320±60	S-3140
63	●				5	2090±70	S-3141
64	●				5	1570±60	S-3237
65	●				18	3740±80	S-3142
66	●				53.5	6920±100	S-3143
67	●				16	3680±90	S-3144
68	●				40.5	6420±90	S-3145
69	●				29.5	5610±90	S-3238
79	●				25	5000±80	S-3146
81		●			90	8060±70	GSC-4888
88	●				29	5690±80	S-3147
89	●				9	2870±60	S-3148
90	●				21.5	4370±80	S-3149
91	●				31	5180±70	S-3150
92	●				28	4670±80	S-3151
94	●				38	5850±120	S-3152
95	●				16.5-17	3660±80	S-3239
96	●				20	5390±80	S-3153
97	●				7-8	1950±90	S-3154
108	●				12	2900±80	S-3127
109	●				18	3920±80	S-3240
110	●				27	4990±90	S-3241
111	●				20	3950±70	S-3242

Tikiraq River Series

FIELD NUMBER (88 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
77	●				10.1	2940±70	S-3089
78	●				18.9-20.4	4470±80	S-3060
81	●				11.5	2720±80	S-3104
83	●				70.4	8650±110	S-3065

Fitzgerald Bay Series

* see map 1963A for continuation of this series

FIELD NUMBER (88 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
405		●			15	6600±80	GSC-4777
409		●			92	8240±110	GSC-4695

North-Central Bernier Bay Series

FIELD NUMBER (90 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
39	●				4	1390±70	S-3293
40	●				11.5-13	3220±80	S-3294
41	●				19-20	3740±70	S-3311
43	●				19-20	3640±60	S-3295
45	●				21.5	4050±80	S-3296
48	●				18	3870±80	S-3297
53	●				20.5	3670±130	S-3312
56	●				18.5-19.5	3650±60	S-3298
58	●				31	4920±80	S-3299
60	●				30.5	4850±100	S-3313
62	●				15	3040±60	S-3300
63	●				26	4250±80	S-3301
65	●				19.5	3720±80	S-3314
66	●				17.5	4370±60	S-3302
69		●			60-66	6620±90	GSC-5073
71	●				15	3040±70	S-3315
75	●				3	1280±70	S-3303
78	●				10	2180±70	S-3304
79	●				11	2820±70	S-3316
83	●				19.5	3600±80	S-3317
86	●				27-31	4500±80	S-3305
102	●				14	3250±80	S-3306
103	●				38.5	5390±90	S-3307
104		●			1-3	2900±60	GSC-5084

Jungersen Bay Series

FIELD NUMBER (90 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
106	●				4	1130±60	S-3318
107	●				9.5	2850±60	S-3319
108	●				2.5	1400±60	S-3320
110	●				15	3670±70	S-3321
113	●				10.5	2820±70	S-3322
114	●				1.5-2	1320±60	S-3323
117	●				1	480±60	S-3324
121	●				16.5	3650±70	S-3325
122	●				19.5	3990±80	S-3326
124	●				7.5-8	2310±70	S-3327
126		●			74	>31 000	GSC-5082
127		●			76	30 400±660	GSC-5214
130	●				17	3860±80	S-3328
132	●				12	3820±80	S-3329
137	●				8.5-9.5	2580±70	S-3330
138	●				11	2410±70	S-3331
140	●				15.5-16	3700±70	S-3332
141	●				17.5	3930±70	S-3333
144	●				14.5	3450±70	S-3334
145	●				18.5	4310±60	S-3335
146	●				18.5	4100±80	S-3336
147	●				21	4380±60	S-3337
149	●				17.5	3860±50	S-3338
150	●				6.0-6.5	2720±40	S-3339
154		●			40-44	6430±70	GSC-5173

Sunday Bay Series

FIELD NUMBER (90 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
438	●				18.5	3340±80	S-3347
440	●				18	3280±80	S-3348
445	●				20.5	4090±80	S-3349
451	●				20.5	3700±80	S-3350
453	●				23	4010±80	S-3351
459		●			68.5	6840±140	GSC-5088
460		●			64	6860±100	GSC-5089

Berlinguet River Series

FIELD NUMBER (90 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
466	●				9	2290±70	S-3352
469	●				18.5	3880±80	S-3353
471	●				20.5	3740±80	S-3354
473	●				27.5	4530±80	S-3355
474	●				17	3330±100	S-3356
475	●				19	3780±80	S-3357
476	●				30	4860±80	S-3358
488	●				47	6150±90	S-3359
491		●			92.5	7910±120	GSC-5090
500		●			80.5	7640±110	GSC-5091
504	●				37	5200±90	S-3360

Northeast Bernier Bay Series

FIELD NUMBER (89 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
466	●				26.5	4300±110	S-3124
472	●				18	3320±80	S-3258
477	●				17	2800±70	S-3259
497	●				19	4220±80	S-3181
498	●				20.5	3870±80	S-3182
499	●				33	4520±100	S-3125
502	●				16	3990±80	S-3183
503	●				12	2310±80	S-3260

Berlinguet Inlet East Series

FIELD NUMBER (88 DCA)	MATERIAL: WHALE BONE	SHELLS	DRIFTWOOD	WALRUS TUSK	ELEVATION (m)	RADIOCARBON AGE (BP)	LABORATORY NUMBER
537	●				21	3950±70	S-3043
540	●				24	4350±70	S-3074
541	●				30	5220±80	S-3100
542	●				23	4380±70	S-3046
546	●				34	5600±90	S-3042
549	●				5	2175±130	S-3041
566		●			95	8140±110	GSC-4754
569		●			120	8630±90	GSC-4742

Morin Point Series

Dates are reported in the tables according to the reporting protocols of the various laboratories. All dates on terrestrial materials are normalized to the -25 per mil PDB standard. However, dates on marine materials are reported inconsistently. GSC marine dates are reported with a 400 year reservoir correction. TO and CAMS dates are reported without a reservoir correction. S dates are reported without normalization and without a reservoir correction.

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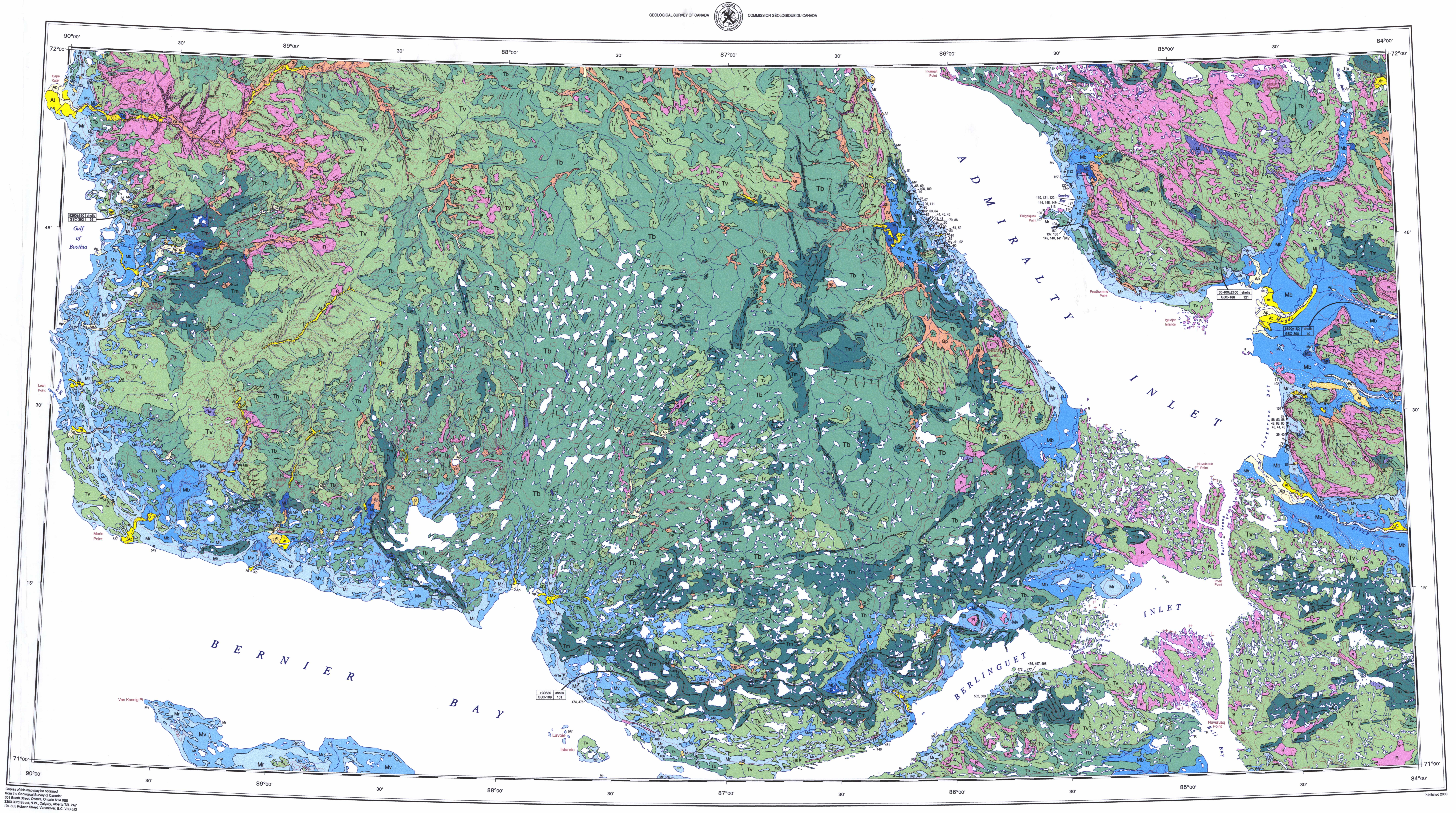

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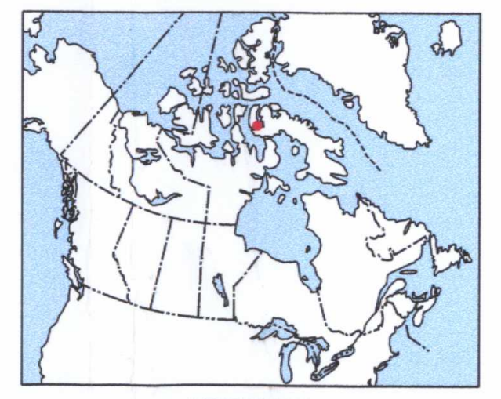

LOCATION MAP

Geology by A.S. Dyke 1988, 1989 and 1990 and M.J.G. Hooper 1988 and 1989

Digital cartography by Y.F. St Pierre Savard, Geoscience Information Division

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Digital base map from data compiled by Geomatics Canada, modified by the Geoscience Information Division

Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area Mean magnetic declination 2000, 43°28′W, decreasing 30.1′ annually. Readings vary from 33°50′W in the SW corner to 50°34′W in the NE corner of the map

Elevations in feet above mean sea level

MAP 1960A

SURFICIAL GEOLOGY

BERLINGUET INLET AND BOURASSA BAY

BAFFIN ISLAND

NUNAVUT

Scale 1:250 000/Échelle 1/250 000

kilometres 5 0 5 10 15 20 kilomètres

Universal Transverse Mercator Projection
North American Datum 1983
© Her Majesty the Queen in Right of Canada, 2000

Projection transverse universelle de Mercator
Système de référence géodésique nord-américain, 1983
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REFERENCES

Dyke, A.S.
1993: Landscapes of cold-centred Late Wisconsinan ice caps, Arctic Canada; Progress in Physical Geography, v. 17, p. 223–247.

Jackson, G.D. and Sangster, D.F.
1987: Geology and resources potential of a proposed national park, Bylot Island and northwest Baffin Island, Northwest Territories; Geological Survey of Canada, Paper 87-17, 31 p.

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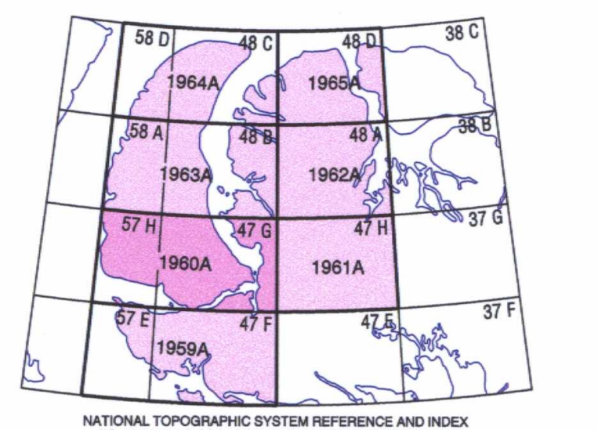

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

LEGEND

This legend is common to maps 1959A, 1960A, 1961A, 1962A, 1963A, 1964A and 1965A. Coloured legend blocks indicate map units that appear on this map. Not all map symbols shown in the legend necessarily appear on this map.

SURFICIAL DEPOSITS
QUATERNARY
HOLOCENE

▨	***Ice:*** *glacier*
	COLLUVIUM: *block and rubble accumulations, 1-50 m thick*
Ca	***Talus:*** *active block and rubble accumulations as much as 50 m thick forming talus (scree) aprons and fans below cliffs resulting from rock falls and debris flows; commonly crossed by debris flow channels and levées*
Cr	***Rock glacier debris:*** *talus, generally 10-50 m thick, deformed by active flow of interstitial or buried ice to form rock (talus) glaciers with transverse ridges and furrows, and pits, and with steep, unstable sides and fronts*
	FLUVIAL SEDIMENTS: *alluvium; gravel and sand, 2-20 m thick*
Ap	*Alluvial plains; active braided floodplains; includes active proglacial outwash*
At	*Alluvial terraces*
Af	*Alluvial fans*
	MARINE AND GLACIAL MARINE SEDIMENTS: *gravel, sand, silt, and clay, 1-20 m thick, deposited in deltaic and beach environments during regression of the postglacial sea*
Mr	***Beach sediments:*** *gravel and sand, 1-5 m thick, forming ridges and swales*
Mt	***Deltaic sediments:*** *clay, silt, sand, and gravel, 5-20 m thick, forming coarsening upward sequences under dissected terraces*
Mv	***Deepwater proglacial silt veneers:*** *silt, clay silt, and fine sand with dropstones, 1-2 m thick*
Mb	***Deepwater proglacial silt blankets:*** *silt, clay silt, and fine sand with dropstones and minor gravel, 2-10 m thick*
	GLACIAL LACUSTRINE SEDIMENTS: *clay, silt, sand, and gravel deposited in glacier dammed lakes in deepwater and deltaic environments*
Lt	***Deltaic sediments:*** *clay, silt, sand, and gravel, 5-20 m thick, forming coarsening upward sequences under dissected terraces*
Lv	***Deepwater proglacial silt veneers:*** *silt, clay silt, and fine sand with dropstones, 1-2 m thick*
Lb	***Deepwater proglacial silt blankets:*** *silt, clay silt, and fine sand with dropstones, 2-5 m thick*
	GLACIOFLUVIAL SEDIMENTS: *gravel and sand, 1-10 m thick, deposited behind, at, and in front of the ice margin*
Gp,t,f	***Proglacial outwash:*** *gravel and sand, 1-10 m thick, forming braided floodplains,* Gp; *terraces,* Gt; *and fans,* Gf
Gr,h	***Ice contact stratified drift:*** *gravel and sand, 1-5 m thick, forming eskers,* Gr; *and kames,* Gh

EARLY HOLOCENE AND WISCONSINAN

	TILL: *nonsorted stony muds, 0.5-60 m thick, deposited in subglacial and ice marginal environments; lithic composition generally reflects underlying bedrock*
Tm	***End moraines:*** *5-60 m high, composed of or mantled by till, extensively kettled in places; large features mainly cored by debris-rich relict glacier ice*
Tv	***Till veneer:*** *0.5-2 m thick and discontinuous*
Tb	***Till blanket:*** *2-10 m thick forming an undulating blanket with drumlins and ribbed moraines in places*

PRE-QUATERNARY

R	***ROCK:*** *rock of various compositions and ages (Jackson and Sangster, 1987) variously modified by glacial erosion during the Quaternary; hilly and hummocky surfaces, ice moulded in places, with lake basins in subglacially scoured regions; smooth surfaces exhibiting little or no sign of glacial erosion in peninsular interiors (Dyke, 1993); cliffs resulting from glacial over-steepening*

Geological boundary
Areas covered by perennial icefields during the Little Ice Age (indicated by a white pattern)
Area of active wind erosion; minor attached dunes (indicated by a white pattern)
Direction of eroding wind - - - →
Small rock glacier
Pingo
Kettle (large,small)
Glacial lake spillway
Glacial lake limit
Marine limit
Bouldery ridge; subglacially deformed felsenmeer
Lateral meltwater channel; barb on upslope side
Subglacial and proglacial meltwater channel (large, small)
Esker
Ice contact face
Ribbed moraines
Lateral moraine
End moraine
Lateral shear moraine
Margin of dispersal train; teeth toward axis, steep side of teeth face down ice
Drumlinoid hill
Crag and tail
Ice moulded bedrock
Striae (ice flow direction known, unknown)
Cirque
Cliff in bedrock
Radiocarbon date

Date	Material
Lab no	Elevation (m)

Radiocarbon date with field number 176 ▼

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Recommended citation:
Dyke, A.S. and Hooper, M.J.G.
2000: Surficial geology, Berlinguet Inlet and Bourassa Bay, Baffin Island, Nunavut; Geological Survey of Canada, Map 1960A, scale 1:250 000.

1960A

Canada

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