YOUNG INLET - SCORESBY HILLS

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SYMBOL	LANDSCAPE TYPE	GEOMORPHICAL FACIES
Qa	Quaternary Alluvium:	2. Fine Sand 3. Coarse Sand 4. Sand and Gravel
Qm	Quaternary Materials	2. Thick Till BML[1] 3. Thick Till AML[2] 4. Sand and Gravel BML
KTi	Igneous Intrusives:	2. Igneous Intrusives BML 3. Igneous Intrusives AML
KTe	Eureka Sound	2. Sand BML
K22a	Clay	2. Clay BML 3. Clay AML
Jj	Jaeger	1. Jaeger Alluvium 2. Jaeger Sandstone BML
Trh	Heiberg	1. Heiberg Alluvium 2. Heiberg Sandstone BML
Trs	Schei Point	1. Schei Point Alluvium 2. Schei Pt. Calcareous Sandstone BML
Trb	Bjorne	1. Bjorne Alluvium 2. Bjorne Sandstone BML
Ptf	Teold Fiord	2. Teold Fiord Sandstone BML 3. Teold Fiord Sandstone AML
Pbc	Belcher Channel	3. Belcher Channel Limestone AML
Dmg	Griper Bay	1. Griper Bay Alluvium 2. Griper Bay Rubble Sandstone BML 3. Griper Bay Green Sandstone BML 4. Griper Bay Brown Sandstone BML 5. Griper Bay Rubble Sandstone AML 6. Griper Bay Green Sandstone AML 7. Griper Bay Brown Sandstone AML
Dmh	Hecla Bay	1. Hecla Bay Alluvium 2. Hecla Bay Rubble Sandstone BML 3. Hecla Bay Sand BML 4. Hecla Bay Rubble Sandstone AML 5. Hecla Bay Sand AML
Dbi	Bird Fiord	1. Bird Alluvium 2. Bird Sandy Limestone BML 3. Bird Sandy Limestone AML
Dbl	Blue Fiord	2. Blue Fiord Limestone BML 3. Blue Fiord Limestone AML
De	Eids	1. Alluvium 2. Eids Shale BML 3. Resistant Eids BML 4. Eids Shale AML 5. Resistant Eids AML
Ddb	Disappointment Bay	1. Alluvium 2. Disappointment Bay Dolomite BML 3. Disappointment Bay Dolomite AML
Dst	Stuart Bay	1. Alluvium 2. Stuart Bay Siltstone BML 3. Stuart Bay Siltstone AML
Dba	Bathurst Island	1. Alluvium 2. Calcareous Sandstone BML 3. Flaggy Sandstone BML 4. Calcareous Sandstone AML 5. Flaggy Sandstone AML
D	Stuart/Bathurst (undiff.)	1. Alluvium 2. Siltstone BML 3. Siltstone AML
Dx	Devonian (undiff.)	2. Masked Devonian BML
ODcp	Cape Phillips	2. Cape Phillips Siltstone BML 3. Cape Phillips Siltstone AML
Octi	Irene Bay-Thumb Mtn.	2. Limestone BML 3. Limestone AML
Ocb	Bay Fiord	2. Anhydrite BML 3. Anhydrite AML

[1] BML Below marine limit
[2] AML Above marine limit

GENERAL CONDITIONS

1. All terrain is in the continuous permafrost zone.
2. Active layer depths vary with vegetation cover, slope angle and aspect but do not exceed one metre.
3. Some mass movement is virtually ubiquitous; where identified in a map-unit it is a predominant process.
4. Bedrock terrain units are not completely devoid of weathered mantle but it is judged to be minor in amount.
5. Discontinuous veneers identified indicate the underlying bedrock is locally visible.

Note: Bedrock boundaries based on Kerr GSC Memoir 378 (1974).

HIERARCHY OF UNITS

KEY TO LINE WEIGHTS

Landscape Type
Geobotanical Facies
(marine limit)
Terrain Unit

TERRAIN UNIT TERMINOLOGY

LANDFORMS AND LOCALIZED DEPOSITS (.00x)

.001 Alluvial Terraces: poorly vegetated: Raised fluvial deposits paralleling river, with gently sloping surface and steep slope facing the channel. Coarser materials drain well. May contain potential aggregate materials. Vegetation cover less 20%. Surface subject to deflation and deposition.

.002 Alluvial Terraces: partially vegetated: Raised fluvial deposits paralleling river, with gently sloping surface and steep slope facing channel. Coarser materials drain well. May contain potential aggregate materials. Vegetation cover between 20 and 50%. Increasing probability of dissection with height above river. Some surfaces subject to deflation and deposition.

.003 Alluvial Terraces: well vegetated: Raised fluvial deposits paralleling river, with gently sloping surface and steep slope facing the channel. Coarser materials drain well. May contain potential aggregate materials. Vegetation cover greater than 50%. If at any one flight of terraces, this is likely to be the highest and most dissected.

.005 Braided Channels: Broad water courses composed of several intersecting channels separated by channel bars and subject to seasonal snowmelt flood. Channels rapidly change pattern. Bottom sediment, which varies in composition, often has low bearing strength down to frozen surface in summer.

.006 Dendritic Drainage: Area dominated by well defined, irregularly branched, tributary streams on slopes less than 15°. Implies uniformity of substrate properties.

.007 Gorge/ravine: Steep-sided, deep channel with moderate to steep long profile. Includes some glacial drainage channels.

.008 Lake (exceeding 500 m): Water body of sufficient size to be mappable as single unit.

COASTAL UNITS (.02x)

.020 Beach ridges: Sequence of linear, quasi-parallel, poorly vegetated deposits of beach material and intervening better vegetated swales. Occasional ponds may occur in swales.

.021 Coastal zone, intermediate slope, well drained: Uniform sloping area adjacent to the coast, lacks identifiable raised beaches; slope angle 5-20°; drainage dominated by 1st order drainage.

.022 Cliffed coast: Steep linear bedrock slope facing water ranging from precipitous to sheer. May have scree accumulation at base and/or narrow coastal lowland. Little or no vegetation.

PERIGLACIAL UNITS (.04x)

.040 Tundra ponds: Groups of shallow, water-filled depressions, including pools in low centre polygons. Usually very well vegetated by wet meadow communities.

.041 Thermokarst: Low relief area disrupted by irregularly spaced, steep-sided closed depressions which may contain shallow ponds. Depressions are caused by melting of ground ice.

.042 Major multiple slump zone: Area characterized by numerous, active, earth failures usually found in fine grained materials and sufficiently large to be visible on 1:60,000 air photographs.

.043 High centre polygons: Extensive areas of polygonal forms, 10-30 m diameter, visible on 1:60,000 air photographs, resulting from ice segregation of unconsolidated, coarse grained material of varying size. Pattern defined by troughs formed by melting ice wedges.

.044 Sorted stripes, garlands and polygons: Sorted boulders and cobbles with local sands. Pattern depends on regional slope with stripes on the steeper slopes, garlands on the intermediate slopes and polygons on lowest angle slopes.

.045 Felsenmeer: Debris mantle of sub-angular blocks, usually on flat or very gently sloping terrain. Vegetation cover usually less than 20%. Local drainage is subsurface. Fines generally absent at surface.

.046 Frost Shattered Bedrock: Partial debris mantle of sub-angular particles of varying size on flat or very gently sloping terrain. Vegetation cover usually <70%. Fines locally abundant.

.047 Disaggregated Mantled Bedrock: Almost complete mantle of weathered bedrock particles partially disaggregated into primary constituents. Usually occurs on flat to gently sloping terrain above the local marine limit.

GLACIAL UNITS (.06x)

.062 Cirque: Glacial upland landform with amphitheatre shape.

.063 Undulating topography: thick till - well drained: Unit reserved for till with integrated drainage.

.065 Undulating bouldery upland with ponds: morainic topography: Vegetation cover less than 50%. Coarse debris mantle of single lithology material (lacking recognizable erratics) yet with characteristic glacial topography, occurs several hundred feet above sea level.

.066 Sand and Gravel Till: Thick till deposit composed primarily of sand and gravel sized particles of mixed lithology. Generally well drained and poorly to moderately vegetated.

.067 Fine Grained Till: Thick till deposit composed of a matrix with fine sand or silt sized particles. Occasional pebbles and cobbles of mixed lithology occur. Generally poorly vegetated and slow draining. Subject to gradual downslope movement over large tracts.

BEDROCK CONTROLLED UNITS (.08x)

.080 Scarp face: Steep bedrock face often gullied or dissected by many short, steep, parallel streams. Common surface to carry lateral snowbed. Lower part often masked by colluvium. Occurs in association with .081.

.081 Scarp crest: Summit elevation of bedrock outcrop as linear ridge standing appreciably above adjacent terrain. Occurs in association with .080.

.082 Structurally controlled valley: Drainage along strike or other weakness with many short, sub-parallel, ephemeral tributaries. Valley has usually gentle long profile.

.083 Wet lineated upland: Flat upland, usually fine-grained, sandstone; outcrop with high-angle, closely-spaced bedding planes with surface water standing in the microrelief troughs.

.084 High water table: coastal lowland with wet meadow: Coastal, with extremely low relief, with water table extremely close to surface characterized by a grassy vegetation cover greater than 75% cover. Substrate usually fine grained, and does not dry out in summer. Desiccated skin with cracks may occur on bare surface but cracks contain water.

.085 Undulating bedrock terrain with ponds: bedrock knobs with intervening hollows often pebbly, some of which contain shallow ponds. Vegetation absent from knobs and sparse to moderate around ponds.

LOCALIZED DEPOSITS (.09x)

.090 Gravel - high level residuals: Coarse grained material of potential utility as aggregate. Vegetation cover less than 20%. Deposits on topographic highs.

.091 Raised marine/lacustrine residual deposits: Localized sorted accumulation greater than 2 m thick. Material varies in composition and often deltaic in origin. Fine grained units carry less than 20% vegetation.

.092 Till-bedrock complex: Complex of undulating discontinuous till and till veneer with intervening colluvial slopes and bedrock outcrops. Occasional ponds occur.

VENEERED UNITS (.1xx)

.101 Discontinuous marine veneer-poorly vegetated: Thin, patchy, usually fine grained material often with properties difficult to distinguish from those of underlying material. Vegetation cover less than 20%.

.102 Discontinuous marine veneer-partially vegetated: Thin, patchy, usually fine-grained material, often with properties difficult to distinguish from those of underlying material. Vegetation cover 20-60%.

.103 Discontinuous marine veneer-well vegetated: Thin, patchy, usually fine grained material, often with properties difficult to distinguish from those of underlying material. Vegetation cover greater than 60%.

.104 Coastal lowland - discontinuous marine veneer-wet meadow: Thin, patchy, usually fine-grained material, often with properties difficult to distinguish from those of underlying material. Vegetation cover greater than 75%, usually dominated by wet meadow.

.105 Colluvium: Thin, local, unconsolidated deposit accumulating on the lower parts of a slope. Continuing movement of material is inherent.

.106 Till veneer: Accumulation of till up to 2 m thick, resting on material with different characteristics.

.107 Clay veneer: Accumulation of fine-grained (dominantly clay) material up to 2 m thick. Usually local deposit below marine limit, resting on material with different characteristics.

.108 Fluvial veneer: Linear deposit of fluvial origin, less than 2 m thick, along water course usually just downstream from a distinctive bedrock contact.

.109 Rubble veneer: lag deposit differing in properties from the underlying material. Less than 2 m thick.

.110 Sand & gravel veneer: Localized deposit of sand and gravel less than 2 m thick, resting on material with differing properties.

.111 Silt veneer: Localized deposit with silty character, less than 2 m thick, resting on material with differing properties.

.112 Veneer, undifferentiated (e.g. till): Mantling deposit with unknown properties. .112t probably till; .112a probably ΣΣ2a.

.113 Sand veneer: Dominantly sand size cover, up to 2 m thick resting on material with different properties.

.114 Gravel veneer: Dominantly gravel size material, up to 2 m thick resting on materials with different properties.

GEOBOTANICAL PATTERNS (.2xx)

.202 Poorly vegetated, lightly dissected bedrock: Vegetation cover less than 20%; slope angles generally between 10 and 20°.

.202 Poorly vegetated, moderately dissected bedrock: Vegetation cover less than 20%; slope angles generally between 10 and 20°.

.203 Poorly vegetated, deeply dissected bedrock: Vegetation cover less than 20%; slope angles generally greater than 20°. Dissection sufficient to impede travel.

.203 Poorly vegetated, deeply dissected with boulders: Valley former with steep to precipitous walls. Intermediate and low slope angles mantled with sand. Vegetation cover less than 20%.

.205 Partially vegetated, lightly dissected bedrock: Vegetation cover between 20 and 60%; slope angles generally less than 5°.

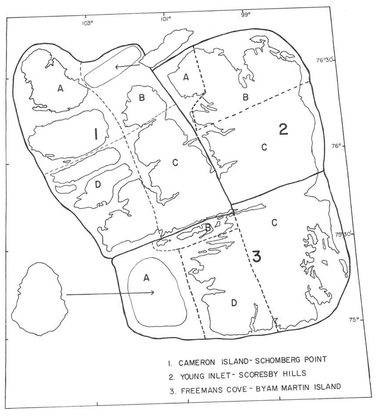
.206 Partially vegetated, moderately dissected bedrock: Vegetation cover between 20 and 60%; slope angle generally between 10 and 20°.

.207 Partially vegetated, deeply dissected bedrock: Vegetation cover between 20 and 60%; slope angles generally greater than 20°. Dissection sufficient to impede travel.

.208 Well vegetated, lightly dissected bedrock: Vegetation cover greater than 60%; slope angles generally less than 5°.

.209 Well vegetated, moderately dissected bedrock: Vegetation cover greater than 60%; slope angles generally between 10 and 20°.

.210 Well vegetated, deeply dissected bedrock: Vegetation cover greater than 60%; slope angles generally greater than 20°. Dissection sufficient to impede travel.



1 0 1 2 3 4 5 MILES (approx)
1 0 1 2 3 4 Km.

GEOLOGICAL SURVEY OF CANADA — COMMISSION GÉOLOGIQUE DU CANADA

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