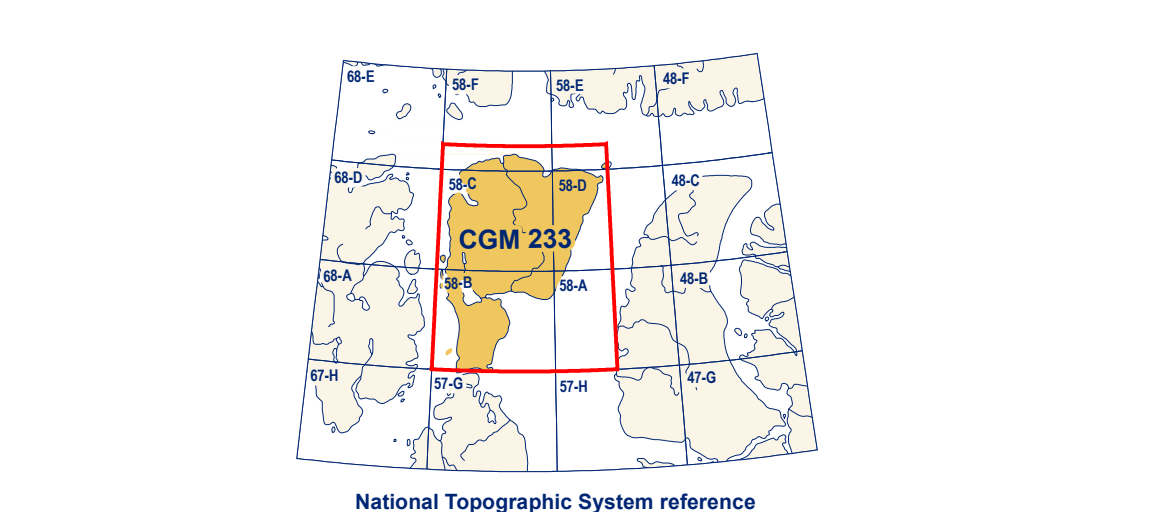


References and additional citation data:
Coring, R.B., DeBorde, C., Kerr, D.E., Campbell, J.E., Eagles, S., Everett, D., Hurley, D.H., Ingh, E., Lavoie, A., Parent, M., Proulx, A., Robertson, L., St-Onge, D.A., and Waples, A., 2015. Surface Data Model, version 2.1.0.
Geological Survey of Canada, Open File 7741, 279 p. doi:10.4095/292628

Open File 7741, 279 p. doi:10.4095/292628
Data: 1:5, 1983, Surficial geology, Somerset Island, District of Franklin, Northwest Territories, Geological Survey of Canada, Map 1556A, scale 1:250 000, doi:10.4095/119720

Abstract
This new surficial geology map product represents the conversion of Map 1556A and its legend, using the Geospatial Survey of Canada's Surface Data Model (SDM version 2.1) which can be found in Open File 7741. All geospatial knowledge and information from Map 1556A are preserved in the new SDM version 2.1.
Résumé
Ce nouveau produit cartographique de la géologie des lambeaux superficiels correspond au processus de la conversion de la Carte 1556A et de sa légende, en se servant du Modèle de données pour les lambeaux superficiels (MDS version 2.1) de la Commission géospatiale du Canada. Le savoir et l'information sont préservés dans le nouveau produit, 7741. Toutes les connaissances et l'information de nature géospatiale de la Carte 1556A qui sont en contenance dans le modèle de données ont été conservées pendant le processus de conversion. Ce fait de cette conversion de cartes publiées antérieurement suit un langage scientifique commun à une légende commune est de permettre et de faciliter la consultation, l'interprétation, le gestion et la diffusion efficace de l'information géospatiale au public. Cette façon de faire offre un outil efficace de gestion des connaissances relatives à l'état de la géologie des lambeaux superficiels au public.
National Topographic System reference

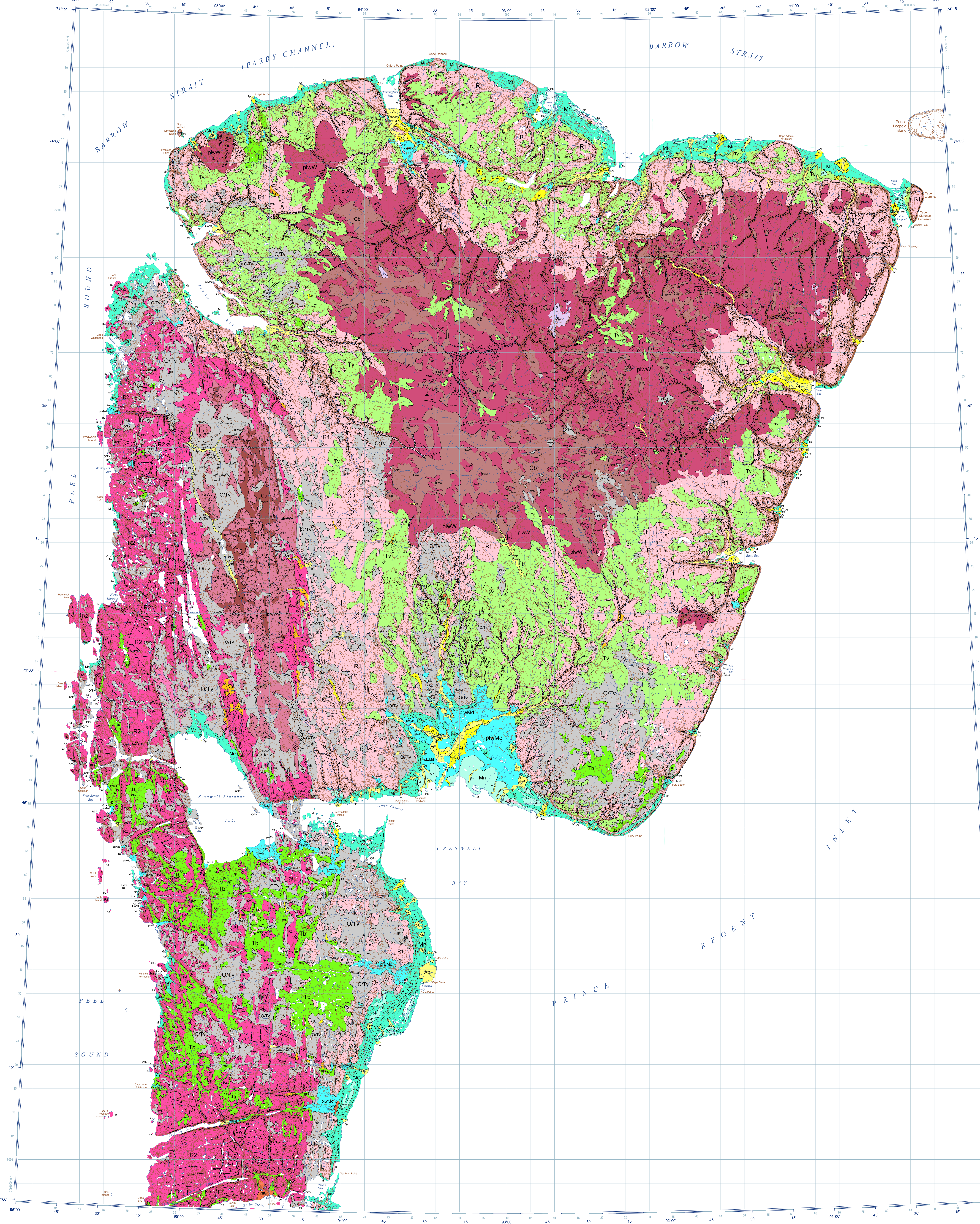


Catalogue No. M183-1323-2015E-PDF
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CANADIAN GEOSCIENCE MAP 233 SURFICIAL GEOLOGY SOMERSET ISLAND

Nunavut
NTS 58-B, NTS 58-C, and parts of NTS 58-A, NTS 58-D, NTS 58-E, NTS 58-F
1:250 000



- QUATERNARY POST-GLACIAL ENVIRONMENT
Organic deposits, undifferentiated: vegetation cover, variable thickness, generally occurs in 20-30 m cover over 10 acres.
Colluvial deposits: unsorted debris, 1-10 m thick, marking lower slopes and valley floors, eroded and washed from upland weathered rock areas, deposited active areas degradation but basal sediments primarily case from earlier glacial intervals.
Colluvial apron: muddy sands, 1-10 m thick, derived from weathered gravels (pwW).
Colluvial blanket: slightly stony sandy muds, 1-10 m thick, derived from weathered carbonates (pwV).
Alluvial sediments: gravel and sand, 2-20 m thick, deposited on floodplains and fans.
Floodplain sediments: gravel and sand, 2-20 m thick, seasonally flooded.
Terraced sediments: gravel and sand, 2-20 m thick, above present flood zone.
MARINE SEDIMENTS: gravel, sand, silt, and clay, 1-100 m thick, deposited in deltas, beach, and nearshore environments during regression of the glacial sea.
Beach sediments: gravel and sand, 1-5 m thick, forming ridges and washes.
Deltaic sediments: clay, silt, sand, and gravel, coarsening upward sequences, 10-100 m thick, with flat terraces, dissected, or gullied surfaces, thought to predominate the location on the basis of elevation and reduction-related attributes.
Nearshore sediments: silt and fine sand, 1-5 m thick, forming plains.
LAST GLACIAL (LATE WISCONSIN)
PROGLACIAL AND GLACIAL ENVIRONMENT
Glaciolacustrine veneer: clay, silt, and sand, less than 1 m thick, deposited in ice-dammed lakes, surface remains form of underlying weathered rock or caliche.
GLACIOLACIAL SEDIMENTS: gravel and sand, 1-100 m thick, deposited beneath and in front of the marginal zone of a glacier.
Outwash plain sediments: gravel and sand, 1-10 m thick, proglacial, terraced, deposited on floodplains and fans.
Ice-contact sediments: gravel and sand, 5-100 m thick, forming terraces, conical hills, and ridges.
GLACIAL SEDIMENTS (TILL): unsorted debris, 0.5-20 m thick, with contrasting vegetation covers reflecting contrasting compositional differences in its dominant lodgment till.
Till veneer: direction, 0.5-2 m thick, surface remains form of underlying rock surface, some areas have 1-6 m vegetation cover.
Till blanket: direction, 2-20 m thick, gently rolling surface, fused in places, 30-60 m vegetation cover.
PRE-GLACIAL (PRE-LATE WISCONSIN)
NONGLACIAL AND PERIGLACIAL ENVIRONMENT
Marine deltaic sediments: clay, silt, sand, and gravel, coarsening upward sequences, 10-100 m thick, with flat terraces, dissected, or gullied surfaces, thought to predominate the location on the basis of elevation and reduction-related attributes.
WEATHERED BEDROCK OR RESIDUAL (RESIDUAL): residual soils of various textures, about 1 m thick, covering metamorphic and sedimentary rocks on smooth, gentle slopes interrupted by low, cryoplanation terraces, and meadow hollows.
Regolith veneer: loesslike, composed of blocks 1-2 m across, with interstitial grit, about 1 m thick, marking gullies.
Regolith, undifferentiated: pale brown and silty, sandy siltstone about 1 m thick, marking limestone, dolomite, and sandstone, minor gravel mantling conglomerate.

- PRE-QUATERNARY
BEDROCK: rock of various lithologies and ages; hilly and hummocky with basins, steep slopes, and cliffs produced by glacial scouring.
Sedimentary bedrock: limestone, dolomite, and sandstone, Late Proterozoic to Early Devon age, with discontinuous veneer of siltstone and silt about 0.5 m thick.
Igneous and metamorphic bedrock: gneiss, granite, and minor quartzite of Proterozoic age, various unmetamorphosed.
Bedrock, undifferentiated: unconsolidated sedimentary rock, quartz sandstone of Late Cretaceous to Early Tertiary age, unweathered.
A stratigraphic relationship is shown with a maximum of two map-unit designators separated by a slash (/) (e.g. OTv designates organic deposits overlying IV veneer).

- Area of low, 1-5 m high
Area of meltwater channels, outwash and esters formed by small neoglacial ice caps
Geological contact, defined
Geological contact, approximate (gradational)
Cryoplanation terrace scars, in bedrock, 1-2 m high
Beach crest, 1-3 m high
Marine limit of submergence recorded as washing limit on till
Minor meltwater channel, direction known, subglacial, 1-5 m deep
Lateral meltwater channel, 1-5 m deep in bedrock, residual, or till; barb on up-slope side
Esker (direction of flow known, inferred)
Dune/ridge
Crag-and-tail
Fluted bedrock, direction known, more than 500 m long
Cirque headwall, large rivation hollow
Bedrock scarp, 10-300 m in height
Lineament in bedrock, 1-10 m deep fractures
Retrospective flow foliation
Kame, small conical gravel hill
Stratigraphic ice flow direction unknown
Stratigraphic ice flow direction known

Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area.
Mean magnetic declination 2015, 233°W, decreasing 32°E annually. Readings vary from 14°W to the SW corner to 31°W in the NE corner of the map.
This map is not to be used for navigational purposes.
The Geological Survey of Canada welcomes corrections or additional information from users.
Data may include additional observations not portrayed on this map. See documentation accompanying the data.
Additional references are included in the map information document.
This publication is available for free download through GEOCAN (http://geocan.nrcan.gc.ca/).

Revised edition
Geological Survey of Canada, 2015. Surficial geology, Somerset Island, Nunavut, NTS 58-B, NTS 58-C, and parts of NTS 58-A, NTS 58-D, NTS 58-E, NTS 58-F. Geological Survey of Canada, Canadian Geoscience Map 233 (Preliminary, Surficial Data Model v. 2.1 conversion of Map 1556A, scale 1:250 000, doi:10.4095/292628)

Preliminary publications in this series have not been scientifically edited.

CANADIAN GEOSCIENCE MAP 233 SURFICIAL GEOLOGY SOMERSET ISLAND

Nunavut
NTS 58-B, NTS 58-C, and parts of NTS 58-A, NTS 58-D, NTS 58-E, NTS 58-F

