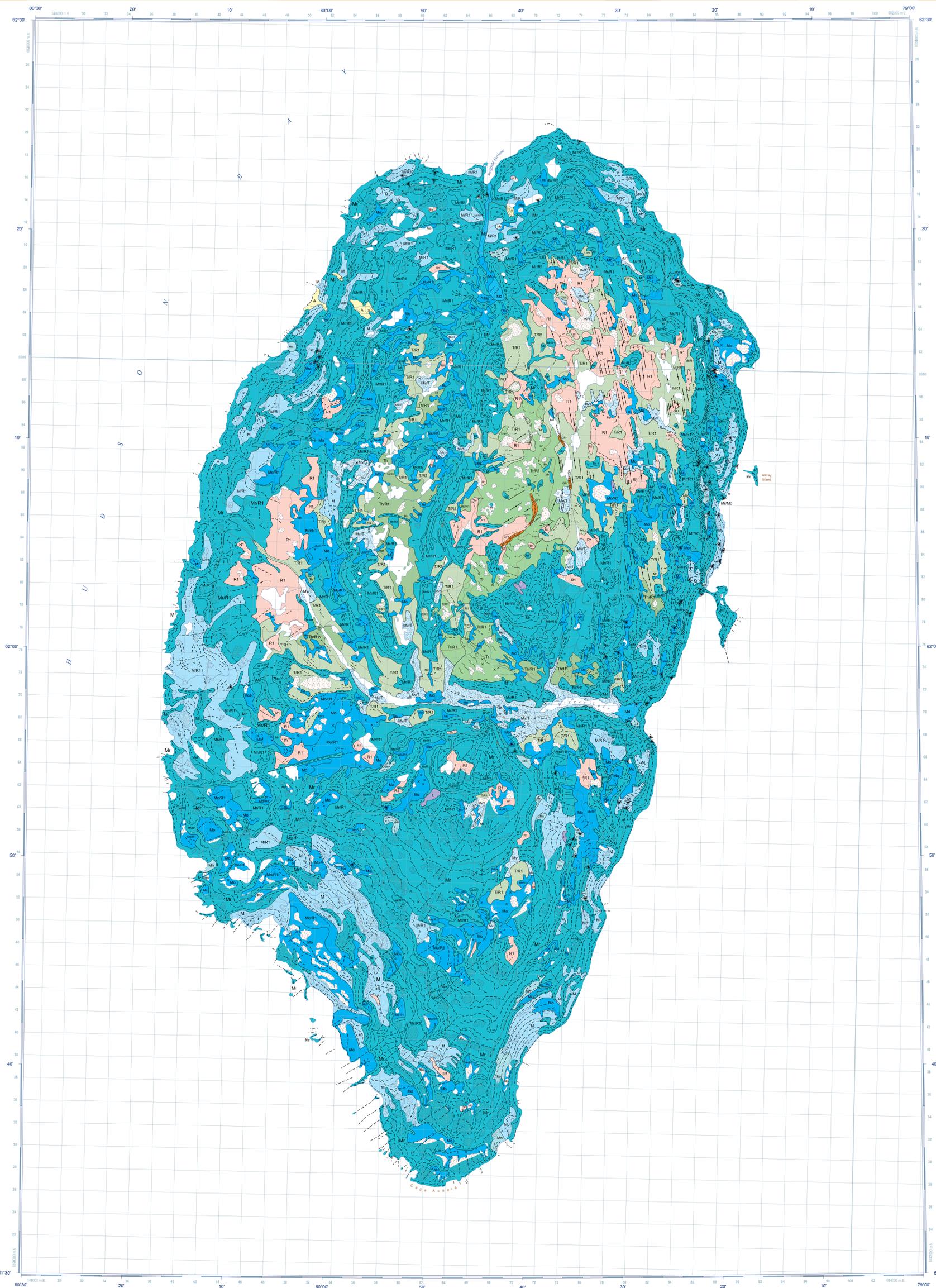


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- QUATERNARY**
- A** Alluvial sediments, unfossiliferous: sil. sand, gravel, cobbles, and boulders; variable thickness; deposited in channels or on floodplains of modern active drainage systems; "modern" is defined as the period since retreat of the sea, which can be to 8 000 years, depending on elevation above sea level.
 - L** Lacustrine sediments, unfossiliferous: variable composition; variable thickness; recently drained lake basin.
 - MA** MARINE SEDIMENTS: sediments deposited in or at the margin of the marine environment; glacial deposits modified by marine processes; all sediments represent offlap conditions as a result of continuous isostatic uplift.
 - M** Beach sediments: sand, gravel, and cobbles; variable thickness; nearshore sediments deposited as beaches, bars, and spits; formed by wave action on fill, bedrock, eskers, and by reworking of alluvial and estuarine sediments; may include of Paleozoic lithologies are frost shattered on all beaches more than 3 to 4 m above present high tide; difficult to distinguish from frost shattered bedrock; ridges may dam shallow lakes; hummocky gravel deposits on beach-covered slopes probably caused by freezing of periodic outflow of groundwater through subterranean conduits in transverse direction; movement of the frozen overlying sediments and subsequent downslope movement of sediments during the thaw period; when unit overlies bedrock in complex polygons, unit has undetermined thickness and 20 to 80% bedrock outcrop; when unit overlies M4 in complex polygons, it forms distinct beach ridges which form a chevron pattern curving back from the river on both banks.
 - Ms** Deltic sediments: sand and gravel; variable thickness; isotactically uplifted; when unit is overlain by M1 in complex polygons, it is covered with distinct beach ridges which form a chevron pattern curving back from the river on both banks.
 - Mn** Nearshore sediments: sand; variable thickness; with cover of vegetation.
 - Mo** Offshore sediments: clay, silt, and sand; variable thickness; from depths greater than wave base; washed from slopes into deep water by wave action during emergence or deposited offshore from river mouths; marine sediments commonly overlain by peaty organic material; may include pockets of alluvium; well drained surfaces characterized by mudcracks; poorly drained surfaces characterized by frost polygons and a cover of peat and sedge meadows; parallel ridges and other slight irregularities in the surface have clear normal drainage, resulting in shallow dammed lakes, extensive areas of landslides, and a network of tiny rivulets cutting through the organic mat; also includes recently drained lake basins; when unit overlies bedrock in complex polygons, unit has undetermined thickness and 20 to 80% bedrock outcrop, or less than 1 m of sediment matrix bedrock.
 - Mv** Marine veneer: sand; a thin sheet; nearshore sediments deposited on the coastal plain by migrating shoreline; likely derived from wave reworking of marine clay and silt; sand; when unit overlies M1 in complex polygons, surface characterized by mudcracks or sorted circles; sediment commonly contains marine shells.
 - M** Marine sediments, unfossiliferous: sand, gravel, and cobbles; variable thickness; nearshore sediments forming ridges parallel to former shorelines, with intervening flat areas of peaty organic deposits resulting from poor drainage; ridges comprise more than 25% of area; pebbles and cobbles of Paleozoic lithologies are frost shattered on all beaches more than 3 to 4 m above present high tide; difficult to distinguish from frost-shattered bedrock; ridges may dam shallow lakes; hummocky gravel deposits on beach-covered slopes probably caused by freezing of periodic outflow of groundwater through subterranean conduits in transverse, resulting in doming of the frozen overlying sediments and subsequent downslope movement of sediments during the thaw period; when unit overlies bedrock in complex polygons, unit has undetermined thickness and 20 to 80% bedrock outcrop.
 - GF** Esker sediments: sand and gravel; stratified; variable thickness; ice-contact; deposited as eskers in ice tunnels by meltwater streams; pebbly surface, boulders scarce; commonly enriched in Precambrian erratics in contrast to surrounding, nearly eratic-free terrain; commonly reworked by wave action; unvegetated.
 - GLACIAL SEDIMENTS (TILL):** clay and silt rich fill with sparse clasts; calcareous; unsorted sediments deposited by, or near, glacial ice; contains erratics specific to Quebec mainland; includes unfossiliferous pockets of fine grained marine sediment; heavily reworked by waves; surface characterized by mudcracks or sorted circles, and small frost polygons (cell size less than 1 m).
 - Th** Hummocky till: diamiction; variable thickness; regular hummocks; 100-300 m diameter and 5-10 m high; probably marks zones of ice stagnation; when unit overlies bedrock in complex polygons, unit has undetermined thickness and 20 to 80% bedrock outcrop.
 - Tr** Ribbed moraine: diamiction; variable thickness; ribbed (Rogen) moraine; hummocks and straight in sinuous ridges generally less than 1.5 km long; ridges may be asymmetric in cross-section with steep side facing down-ice; ridges commonly oriented transverse to direction of ice flow when unit overlies bedrock in complex polygons, unit has undetermined thickness and 20 to 80% bedrock outcrop.
 - T** Till, unfossiliferous: diamiction; variable thickness; ill veneered by fine-grained marine sediments or depressions in till surface filled by marine sediments or clastics consisting of mixtures of till and marine sediments resulting from cryoturbation processes; surface characterized by mudcracks or sorted circles; sediment commonly contains marine shells; when unit overlies bedrock in complex polygons, unit has undetermined thickness and 20 to 80% bedrock outcrop.
- PRE-QUATERNARY**
- R1** Sedimentary bedrock: Ordovician and Silurian carbonate rocks; surface comprises more than 80% outcrop or felsite; bedrock generally frost shattered and jointed; abundant evidence of solution along joints.
- Stratigraphic relationship:** a stratigraphic relationship is shown with two main-unit designators separated by a slash (/) (e.g. M1/M2) designates marine beach sediments overlying marine deltic sediments).
- Reworked sediments, by waves
 - Geological contact, defined
 - Beach crest, bar, spit and/or ice-pushed ridge. Includes transverse ridges or below sea level
 - Minor moraine ridge, ribbed, Rogen, De Geer
 - Esker, direction of flow assumed
 - Drumlinoid ridge or fluting
 - Hummock, gravel deposit on beach-covered slopes
 - Alluvial fan
 - Small bedrock outcrop

Abstract

This new surficial geology map product represents the conversion of A-Series Map 1632A and its legend only, using the Geological Survey of Canada's Surficial Data Model (SDM version 2.2) which can be found in Open File 8041. All geoscience knowledge and information from Map 1632A that conform to the current SDM were maintained during the conversion process. Additional material such as marginal notes or figures which may exist on the original map, are not included here. The purpose of converting legacy map data to a common science language and common legend is to enable and facilitate the efficient digital combination, interpretation, management, and dissemination of geologic map information in a structured and consistent manner. This provides an effective knowledge management tool designed around a geodatabase which can expand following the type of information to appear on new surficial geology maps.

Résumé

Ce nouveau produit cartographique de la géologie des formations superficielles correspond à la conversion de la Carte 1632A et de sa légende uniquement, en se servant du Modèle de données pour les formations superficielles (MDF) version 2.2 de la Commission géologique du Canada, lequel peut être consulté dans le Dossier public 8041. Toutes les connaissances et l'information de nature géoscientifique de la Carte 1632A qui sont en conformité avec le modèle de données ont été conservées pendant le processus de conversion. Des éléments supplémentaires tels que des notes marginales ou des figures qui pourraient être présents sur la carte originale ne sont pas inclus ici. Le but de la conversion de cartes publiées antérieurement est de faciliter la combinaison, l'interprétation, la gestion et la diffusion efficaces de l'information géologique cartographique en mode numérique de façon structurée et cohérente. Cette façon de faire offre un outil efficace de gestion des connaissances élaboré à l'aide d'une géodatabase qui pourra évoluer suivant le type d'information à paraître sur les nouvelles cartes des formations superficielles.



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CANADIAN GEOSCIENCE MAP 250
RECONNAISSANCE SURFICIAL GEOLOGY
MANSEL ISLAND
Nunavut
parts of NTS 35-L, E, and 45-H, I
1:125 000



Geological Survey of Canada
Canadian Geoscience Maps



Author: Geological Survey of Canada
Geology by J.M. Aylsworth and W.W. Shill, 1979, based mainly on airphoto interpretation with limited ground observations.
Geology conforms to Surficial Data Model v. 2.2
Data conversion by D.E. Kerr and S. Eagles, 2014, 2015

Geomatics by CSP Geomatics Inc. and J. Kingsley
Cartography by E. Everett
Initiative of the Geological Survey of Canada, conducted under the auspices of Natural Resources Canada's Geomapping for Energy and Minerals (GEM) Program.
Map projection Universal Transverse Mercator, zone 17, North American Datum 1983

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Base map at the scale of 1:250 000 from Natural Resources Canada, with modifications.
Elevations in metres above mean sea level.
Mean magnetic declination 2017, 20° 0' W, decreasing 17' annually. Readings vary from 18° 54' W in the SW corner to 21° 07' 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 map info document accompanying the downloaded data for more information about the publication.
This publication is available for free download through GEOSCAN (<http://geoscan.mcg.ca/>)

Preliminary publications in this series have not been scientifically edited.

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