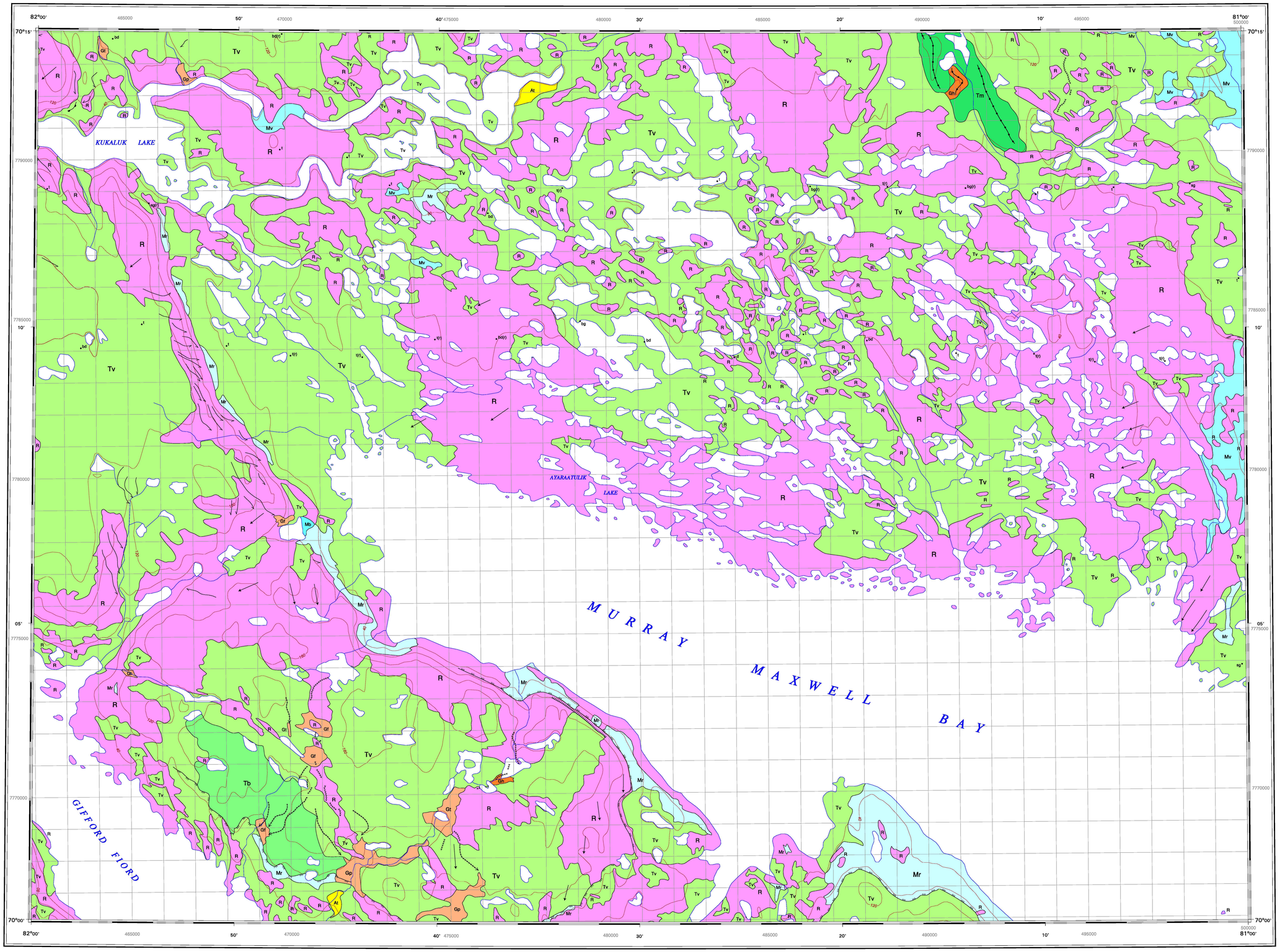
Natural Resources Canada / Ressources naturelles Canada

GEOLOGICAL SURVEY OF CANADA / COMMISSION GÉOLOGIQUE DU CANADA



LEGEND

This legend is common to Open Files 1598 to 1613, and 1628 to 1631.
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

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, beach and deltaic environments.*

- **Lr** — ***Beach sediments:*** *sand and gravel, 1 – 5 m thick, forming beach ridges.*
- **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.*
- **Tvw** — ***Till veneer:*** *0.5 – 2 m thick, surface armoured by stones due to washing by subglacial meltwater.*
- **Tb** — ***Till blanket:*** *2 – 10 m thick forming an undulating blanket with drumlins and ribbed moraines in places.*
- **Tbr** — ***Till blanket:*** *2 – 10 m thick forming ribbed (Rogen) moraines.*

BEDROCK
PRE-QUATERNARY

- **R** — ***ROCK:*** *rock of various compositions and ages (Jackson and Sangster, 1987) variously modified by glacial erosion during the Quaternary and with patchy till cover; 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; in places veneered by thin till, commonly bouldery.*

Geological boundary (defined, assumed)
Areas covered by perennial icefields during the Little Ice Age (indicated by a white pattern)
Kettle (large)
Glacial lake spillway
Glacial lake limit
Marine limit
Escarpment
Lateral meltwater channel; barb on upslope side
Subglacial and proglacial meltwater channel (small)
Esker
Kame
Ice contact face
Ribbed moraines
Lateral moraine
End 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)
Crossed striae (numbers indicate relative age, 1 being the oldest)
Field observation site: bouldery diamicton (bd), bouldery gravel (bg), clay (c), diamicton (d), gravel (g), gravelly sand (gs), mud (m), muddy sand (ms), rock (r), sand (s), sandy gravel (sg), stony mud (sm), till (t) • t
Field observation site: material as above near rock outcrop • t(r)
Marine limit elevation (metres) • 88

LOCATION MAP

Geology by A.S. Dyke, 2002

Field data provided by De Beers Canada Inc., 2002

Digital cartography by M.M. Proulx, Earth Sciences Sector Information Division (ESS Info)

This map was produced from processes that conform to the ESS Info Publishing Services Subdivision Quality Management System, registered to the ISO 9001: 2000 standard

OPEN FILE 1612

SURFICIAL GEOLOGY

MURRAY MAXWELL BAY (WEST)

BAFFIN ISLAND

NUNAVUT

Scale 1:50 000/Échelle 1/50 000

kilomètres 1 0 1 2 3 4 kilomètres

Universal Transverse Mercator Projection
North American Datum 1983

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

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 ESS Info

Locational accuracy of the base appears to be ±100m based on plotting of GPS measured field site locations

Proximity to the North Magnetic Pole causes the magnetic compass to be erratic in this area
Mean magnetic declination 2003, 40°27'W, decreasing 42.9' annually

Elevations in metres above mean sea level

47 E/13 OF 1601	47 E/14 OF 1600	47 E/15 OF 1599	47 E/16 OF 1598
47 E/12 OF 1602	47 E/11 OF 1603	47 E/10 OF 1604	47 E/9 OF 1605
47 E/5 OF 1609	47 E/6 OF 1608	47 E/7 OF 1607	47 E/8 OF 1606
47 E/4 OF 1610	47 E/3 OF 1611	47 E/2 OF 1612	47 E/1 OF 1613
47 D/13 OF 1628	47 D/14 OF 1629	47 D/15 OF 1630	47 D/16 OF 1631

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

OPEN FILE
DOSSIER PUBLIC
1612
GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA
2003

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