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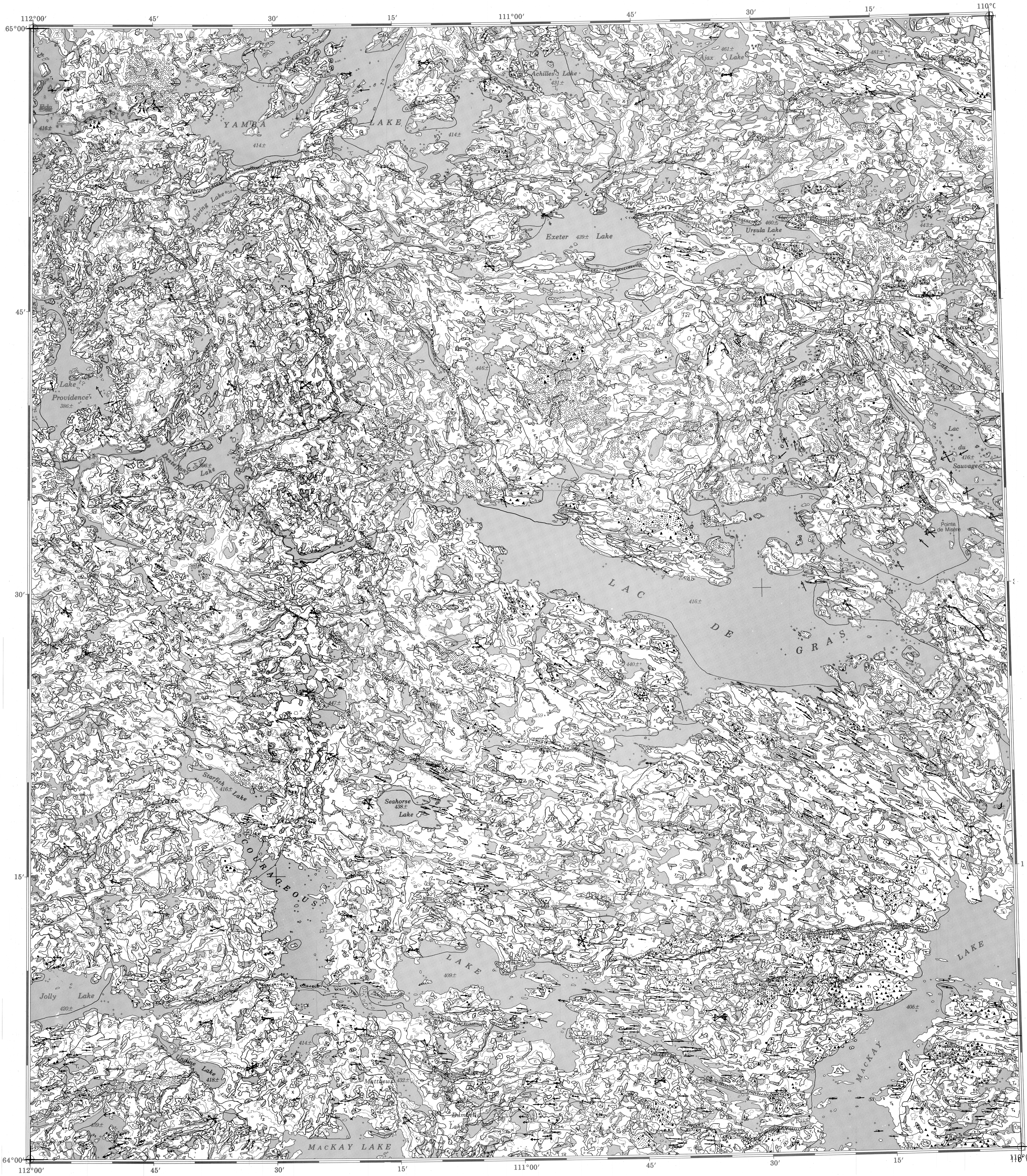
GEOLOGICAL SURVEY OF CANADA | COMMISSION GÉOLOGIQUE DU CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES
MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES



LEGEND

QUATERNARY

HOLOCENE

NONGLACIAL ENVIRONMENTS

O-ORGANIC DEPOSITS: peat and muck up to 2 m thick; formed predominantly by the accumulation of vegetative material in bogs; occur in depressions and along valley bottoms; permafrost is commonly present; the unit contains small palsas, ice wedge polygons, and thermokarst collapse structures. Small unmapped organic deposits occur in most terrain units.

Ap-ALLUVIAL FLOODPLAIN DEPOSITS: gravel to silt size sediment deposited by the modern streams and rivers; deposits generally are stratified and moderately sorted and range from 1 to 5 m thick; can include lacustrine deposits from small ponds; commonly covered with an organic veneer.

PLEISTOCENE (WISCONSIN GLACIATION)

GLACIAL ENVIRONMENTS

GLACIOFLUVIAL DEPOSITS: sand, gravel and minor silt more than1 m thick; sorting ranges from good to poor and stratification from massive or cross-stratified to planar bedded; deposited by water flowing from, or in contact with, glacier ice.

G2-Outwash: rounded gravel and sand; massive to cross-stratified; probably less than 5 m thick; occurs as braided fans.

G1-Esker sediments: sand, silt, and gravel; in planar, cross-stratified and massive beds; 1 to 40 m thick; form ridges with both sharp-crested and flat-topped segments, mounds, and flanking aprons; deposited at or behind the ice margin; formed subglacially or in subaerially exposed ice-walled channels; zones of washed rock, isolated kame deposits, small transverse gravel ridges, and circular rim ridges associated with this unit are shown by symbols.

TILL DEPOSITS: unsorted glacial debris (diamicton), consisting of a silty sand matrix containing pebbles, cobbles, and boulders, with minor lenses of sorted sediments; deposited beneath, or along the margin of, glaciers as lodgement till, meltout till, and gravity flow deposits

T3-Hummocky Till: from 5 to 30 m thick; forms irregular to rolling terrain with relief up to 15 m; some areas have abundant small meltwater channels and lag concentrations of boulders in depressions.

T2-Till Blanket: from 2 to 10 m thick; occurs as till plains mimicing bedrock topography or as drumlinoids. Small rock outcrops in this unit are shown by symbols.

T1-Till Veneer: less than 2 m thick; rock structure is generally visible on airphotos; unit includes patches of bedrock and till blanket.

PRE-QUATERNARY

R-Bedrock: Precambrian granitic, gneissic, metasedimentary and metavolcanic rocks, mafic dikes and minor, younger (Tertiary?) kimberlite; may include patches of till veneer or glaciofluvial deposits; areas of shattered and frost-heaved rock, particularly on metasediments, are designated by symbols. R1-volcanic rocks; R2-metasedimentary rocks; R3-granitoid rocks.

SYMBOLS

- Sample site
- Fossil locality
- Ice wedge polygons
- Thermokarst
- Frost heaved and shattered rock
- Raised beach
- Lag concentration of glacially abraded boulders
- Area of meltwater scour
- Subglacial or proglacial meltwater channel
- >>> <> Esker (direction of flow known, unknown)
- Kames and gravelly transverse ridges
- Rim ridges and till plateaus
- Moraine
- Drumlinoid till form
- Rock crag and till tail form
- Roche moutonée
- Striation (ice flow direction known, unknown),
- Gossan
- Small rock outcrop
- Geological boundary

Geology by B. Ward, L. Dredge, and D. Kerr, with assistance from M. Gingras, R. Paulen and B. Pierna, and logistic support from the Polar Continental Shelf Project. With additional striae observations by R.N.W. DiLabio, A. LeCheminant, B. Kjarsgaard, A. Peterson, P. Thompson and assistants 1992, 1993.

Terrain Sciences Division contribution to Slave Province NATMAP Project.

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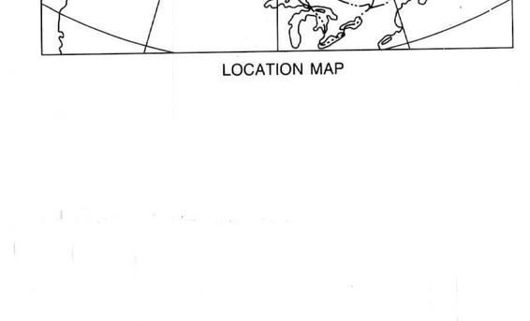
SURFICIAL GEOLOGY
LAC DE GRAS
NORTHWEST TERRITORIES

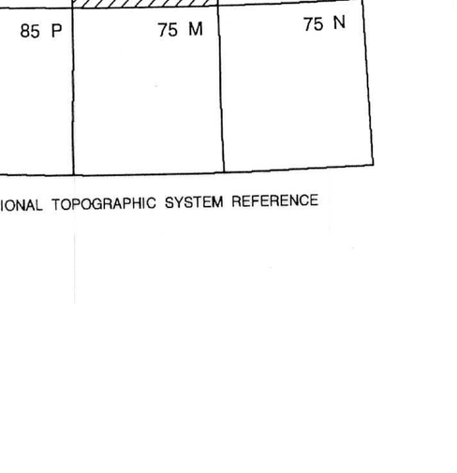


LOCATION MAP

Scale 1:125 000 - Échelle 1/125 000

Kilometres 2 0 2 4 6 8 10 Kilomètres

Universal Transverse Mercator Projection | Projection transverse universelle de Mercator



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE

OPEN FILE
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OTTAWA
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