

LEGEND

This legend is common to maps 1937A, 1938A, 1939A, 1940A, and 1941A. 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  
POSTGLACIAL

- NONGLACIAL ENVIRONMENT**
- O** ORGANIC DEPOSITS: organic matter; 1 to 2 m thick; formed by the accumulation of vegetation in poorly drained depressions (swamps and bogs); usually forms flat terrain; may contain shallow permafrost; in places forms mounds and plateaus; Oh, hummocky topography
  - C** COLLUVIAL DEPOSITS: massive diamicton, usually at the foot of a slope or cliff and brought there chiefly by gravity
  - A** FLUVIAL DEPOSITS: alluvium; gravel and sand >1 m thick; A, floodplains and mantling valley floors; Ai, meander scars and point bars; At, terraces along valley sides; Al, alluvial fans; Av, thin discontinuous veneer
  - L1** LACUSTRINE DEPOSITS: sand, silt, and minor clay deposited in a former lake; >1 m thick; generally overlain by organic deposits in lowlands; level topography; L1r, sandy strandlines; L1d, deltaic sediments, sequences of stratified sand, silt, clay, and gravel; L1h, hummocky topography
  - E** EOLIAN DEPOSITS: medium to fine sand; >2 m thick; in sheet or dune form; derived from deltaic or glaciolacustrine deposits; in some areas, eolian sediments are thin or absent between dunes; Er, ridged topography; Eh, hummocky topography
  - Ev** Eolian deposits forming a thin discontinuous veneer; <1 m thick

- POSTGLACIAL OR LATE WISCONSINAN PROGLACIAL AND GLACIAL ENVIRONMENTS**
- L** GLACIOLACUSTRINE DEPOSITS: sand, silt, minor clay or gravel, deposited in lakes formed by ice-dammed valleys or along the margin of the retreating Laurentide Ice Sheet
  - Lv** Sediment forming a thin discontinuous veneer; <1 m thick; LvH, hummocky topography
  - G** GLACIOFLUVIAL DEPOSITS: gravel, sand, minor sand diamicton; 1 to 40 m thick; deposited behind, at, or in front of the ice margin
  - Gv** G, braided outwash deposited in front of the ice margin; Gt, level outwash terraces; Gd, braided outwash deltas; Gdt, delta terraces; Gh, hummocky topography
  - Gv** Outwash forming a thin, discontinuous veneer; <1 m thick
  - Gi** Ice-contact stratified drift; deposited behind or at the ice margin; topography is undulating, irregular, or ridged

- T** TILL BLANKET: >1 m thick; forming undulating topography that may be fluted or drumlinized in places
  - Tv** Till veneer; <1 m thick and discontinuous; underlying bedrock topography is discernible
- BEDROCK PRE-QUATERNARY**
- R1** Devonian limestone, dolomite, gypsum
  - R** Precambrian granite, gneiss, and metasedimentary rocks; forming bars, hilly outcrops

NOTE: In areas where the surficial cover forms a complex mosaic, the area is coloured according to the predominant unit and labelled with hyphenated letters in descending order of cover

- Geological boundary (defined, approximate)
- Organic deposits (swamp or bog)
- Sand dune
- Salt flat; saline groundwater discharge
- Strandline
- Abandoned or underfit channel (large, small and direction of flow inferred, small and direction of flow unknown)
- Escarpment
- Karst area
- Kettle
- Esker (direction of flow inferred, unknown)
- DeGeer moraine
- End moraine
- Drumlin or fluting parallel to ice flow (undifferentiated)
- Crag and tail (fill tail)
- Ice molded bedrock form (roche moutonnée, rock drumlin)
- Striae
- Depressional lineament in bedrock
- Small bedrock outcrop
- Gravel pit
- Quarry

Geology by J.M. Bednarski (1992-1994)

Digital cartography by D. Nunez, General Dynamic Consulting; T. West and J. Pratt, Geoscience Information Division

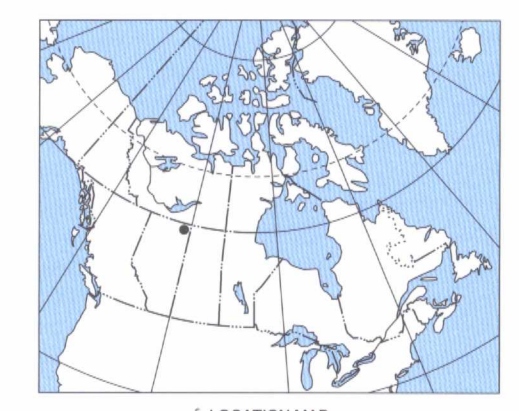
Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

Digital base map from data compiled by Geomatics Canada, modified by the Geoscience Information Division

Magnetic declination 1999, 20°39'E, decreasing 12.8' annually. Readings vary from 20°19'E in the SE corner to 21°19'E in the NW corner of the map

Elevations in feet above mean sea level

Contour interval of 100 feet west of 111°30'; and 50 feet east of 111°30'



85 A1	75 D4	75 D3	75 D2	75 D1	75 C4
84 P16	74 M13	74 M14	74 M15	74 M16	74 N13
	1922A	1928A			
84 P10	74 M12	74 M11	74 M10	74 M9	74 N12
84 P18	74 M5	74 M8	74 M7	74 M6	74 N5
	1939A	1940A			
84 P11	74 M4	74 M3	74 M2	74 M1	74 N4
84 P15	74 L13	74 L14	74 L15	74 L16	74 K13
	1941A				
84 P19	74 L12	74 L11	74 L10	74 L9	74 K12

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

MAP 1939A  
SURFICIAL GEOLOGY  
BARROW LAKE  
ALBERTA

Scale 1:100 000 - Echelle 1/100 000



Universal Transverse Mercator Projection (1982-1985), a subsidiary agreement under the Canada-Alberta Economic Regional Development Agreement. Projection transversale universelle de Mercator © Sa Majesté la Reine du chef du Canada, 1999

NOT TO BE TAKEN FROM LIBRARY / NE PAS SORTIR DE LA BIBLIOTHÈQUE

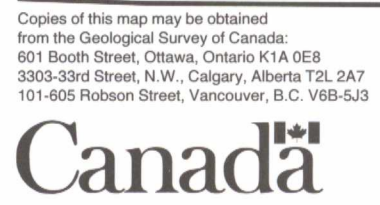
ESIC CIST  
MAR 29 1999  
Earth Sciences / Secteur des sciences de la Terre



MAP LIBRARY / CARTOTHEQUE

Recommended citation: Bednarski, J.M. 1999. Surficial geology, Barrow Lake, Alberta; Geological Survey of Canada, Map 1939A, scale 1:100 000.

1939A



Canada