



DESCRIPTIVE NOTES

The Lake Nipigon map area of 196 000 km² north of Lake Superior... includes parts of the Precambrian Superior and Southern provinces of the Canadian Shield...

The Archean Superior Province includes parts of Uchi, Wabigoon and Wawa volcano-plutonic sub-provinces and English River and Quetico metasedimentary sub-provinces...

Volcanic rocks in the Fort Hope greenstone belt of Uchi Subprovince are likely coeval with sequences west of the map area ranging in age from 3000-2800 Ma...

In Uchi and Wabigoon subprovinces plutonic rocks may be coeval with plutons west of the map area ranging in age from over 3000 to less than 2700 Ma...

English River and Quetico subprovinces consist of metamorphosed turbiditic wacke and minor conglomeratic units, with abundant granitic and pegmatitic intrusions...

In the Southern Province, the Aphetian Animikie Group in the Port Arthur Homocline unconformably overlies the Superior Province...

The Lake Superior Basin and subsidiary Nipigon Embayment contain the Helikian Sibley Group and the Keweenaw Supergroup...

The Keweenaw Supergroup unconformably overlies the Sibley. A thin lower sequence of continental red shale, sandstone and vesicular mafic flows...

The Lake Superior Basin formed by early rifting, accompanied by alkaline intrusions such as the Helikian Colwell and Kilala complexes...

The southern part of the Hudson Platform is formed of Ordovician to Devonian rocks of the Moose River Basin, which is bounded by two basement tectonic elements...

Oldest Late Ordovician, Richmondian strata consist of fossiliferous limestone with basal sand and shale of the Churchill River Group...

Lower Silurian, mid to late-Landoverly limestone of the Severn River Formation unconformably overlies the Ordovician, and is followed by late Landoverly-Werlock dolomite...

Along the northern margin of the basin, upper Ekwon River basinal carbonate gives place laterally to complexly folded and faulted red deposits of the Attawapiskat Formation...

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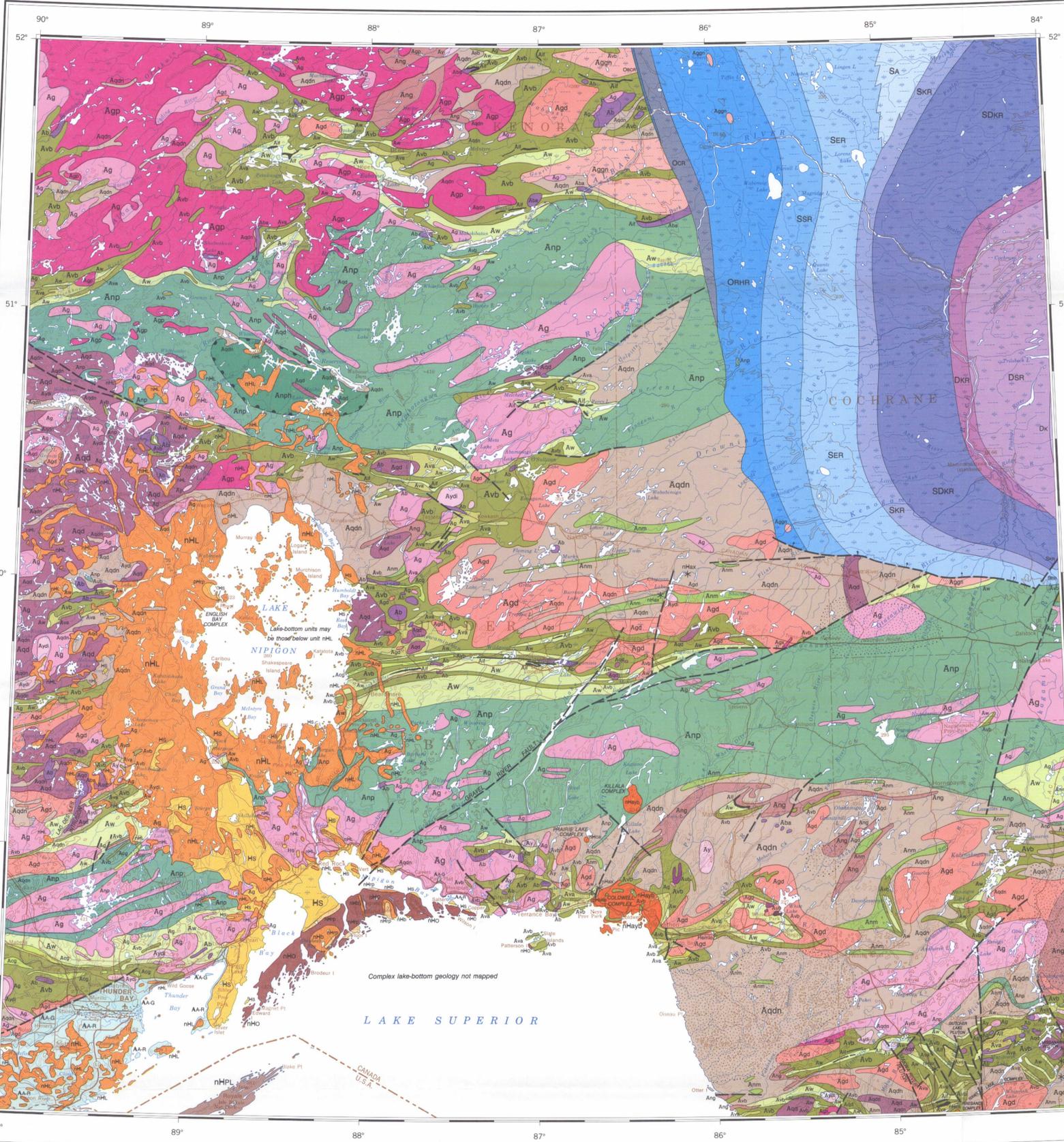
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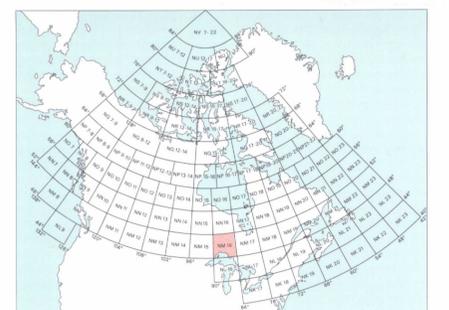
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GEOLOGY LAKE NIPIGON ONTARIO-U.S.A. GEOLOGICAL ATLAS, MAP NM-16-G SHEET 1 OF 5

Geological compilation by K.D. Card, J.A. Percival and B.V. Sanford, 1982. Contributions by R.P. Sage, Ontario Geological Survey. Reviewed by R. Sutcliffe and P.C. Thurston, Ontario Geological Survey. Geological cartography by P.M. O'Regan, Geological Survey of Canada. Base map at the same scale, published by the Surveys and Mapping Branch in 1972. Elevation in metres above sea level. MAP LIBRARY / CARTOTHEQUE

GENERAL CO-ORDINATOR: A.V. OKULITCH. Scale 1:1 000 000 - Échelle 1/1 000 000. This 1:1 000 000 scale map is part of the Geological Atlas of Canada and is plotted on the International Map of the World (IMW) base. Geology is one parameter being published in the National Earth Science Series.



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LEGEND. PALEOZOIC: DEVONIAN (Dk, K'WATABOHEGAN FORMATION; DSR, STOOPING RIVER FORMATION; DSR, KENOGAMI RIVER FORMATION (upper member); DSR, KENOGAMI RIVER FORMATION (middle member); DSR, KENOGAMI RIVER FORMATION (lower member); SA, ATTAWAPISKAT FORMATION; SER, EKWAN RIVER FORMATION; SSR, SEVERN RIVER FORMATION). SILURIAN AND DEVONIAN: UPPER SILURIAN AND LOWER DEVONIAN (ORHR, RED HEAD RAPIDS FORMATION; OOR, CHURCHILL RIVER GROUP; OOR, BAD CACHE RAPIDS GROUP). HELIKIAN: NEOHELIKIAN (HHL, alkali rock-carbonate complexes; HHL, amphibolite-gabbro complexes; HHL, lamprophyre, carbonate dykes, ferric, calcareous breccia; HHL, KEWEENAW SUPERGROUP PORTAGE LAKE FORMATION; HHL, OSLER GROUP; HHL, rhyolite porphyry; HHL, mafic intrusions; HHL, LOGAN SILLS). PALEOHELIKIAN (HHL, MARATHON lamprophyre dykes, breccia; HHL, quartz mafic rhyolite porphyry, minor rhyolite sills). HELIKIAN (HHL, SIBLEY GROUP, PASS LAKE, ROSSPORT AND KILALA HILL FORMATIONS). APHEBIAN: ANMIKIE GROUP (AAH, AAH); ROVE FORMATION (AAH); GUNFLINT FORMATION (includes KAKABEKA CONGLOMERATE) (AAH).

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