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SYMBOLS

- Glacial stria.
- Esker.
- Small bedrock outcrop.
- Area of bedrock outcrop.
- Bedding, horizontal.
- Bedding, top unknown; (inclined, vertical).
- Bedding, top (arrow from grain gradation); (inclined, vertical, overturned).
- Bedding, top (arrow from cross bedding); (inclined, vertical, overturned).
- Schistosity; (horizontal, inclined, vertical).
- Gneissosity; (horizontal, inclined, vertical).
- Foliation; (horizontal, inclined, vertical).
- Lamination with plunge.
- Geological boundary, observed.
- Geological boundary, position interpreted.
- Geological boundary, deduced from geophysics.
- Fault; (observed, assumed). Spot indicates down throw side, arrows indicate horizontal movement.
- Lineament.
- Drag folds with plunge.
- Anticline, syncline, with plunge.
- Vein.
- Shaft.
- Magnetic attraction.
- Radioactivity.
- Motor road.
- Other road.
- Trail, portage, winter road.
- Building.
- District boundary, approximate position only.
- Township boundary, base line or meridian, approximate position only.
- Township boundary, unsurveyed.
- Surveyed line, approximate position only.
- Location of mining property. See list of properties.

SOURCES OF INFORMATION

Geology of Speight, Auld, Whitson, and Van Nostrand Townships by W. H. McIlwaine, 1929. Geology of the remaining townships by K. D. Card, 1969. Geology is not tied to surveyed lines.

Maps and plans of mining companies.

Map 179A, Ontario, by H. Collins, Geological Survey of Canada, Mem. 95, 1917.

Map 35C, Anima-Nipissing Lake Area, Ontario Department of Mines, 1926.

Aeromagnetic maps 1504G and 1505G, Geological Survey of Canada.

Preliminary maps:

- P. 301, Maple Mountain Sheet, scale 1 inch to 2 miles, issued 1965.
- P. 302, Van Nostrand Township, P. 373, Speight Township, P. 374, Auld Township, P. 380, Whitson Township, scale 1 inch to 1/2 mile, issued 1969.
- P. 385, Lady Evelyn Lake Sheet, scale 1 inch to 1 mile, issued, 1970.

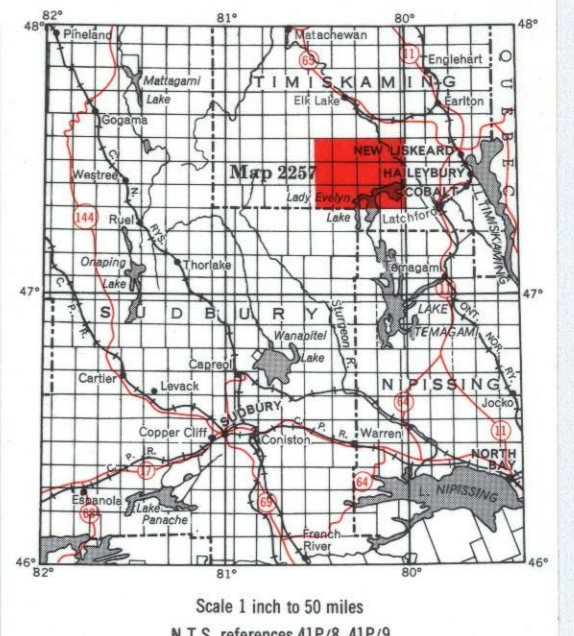
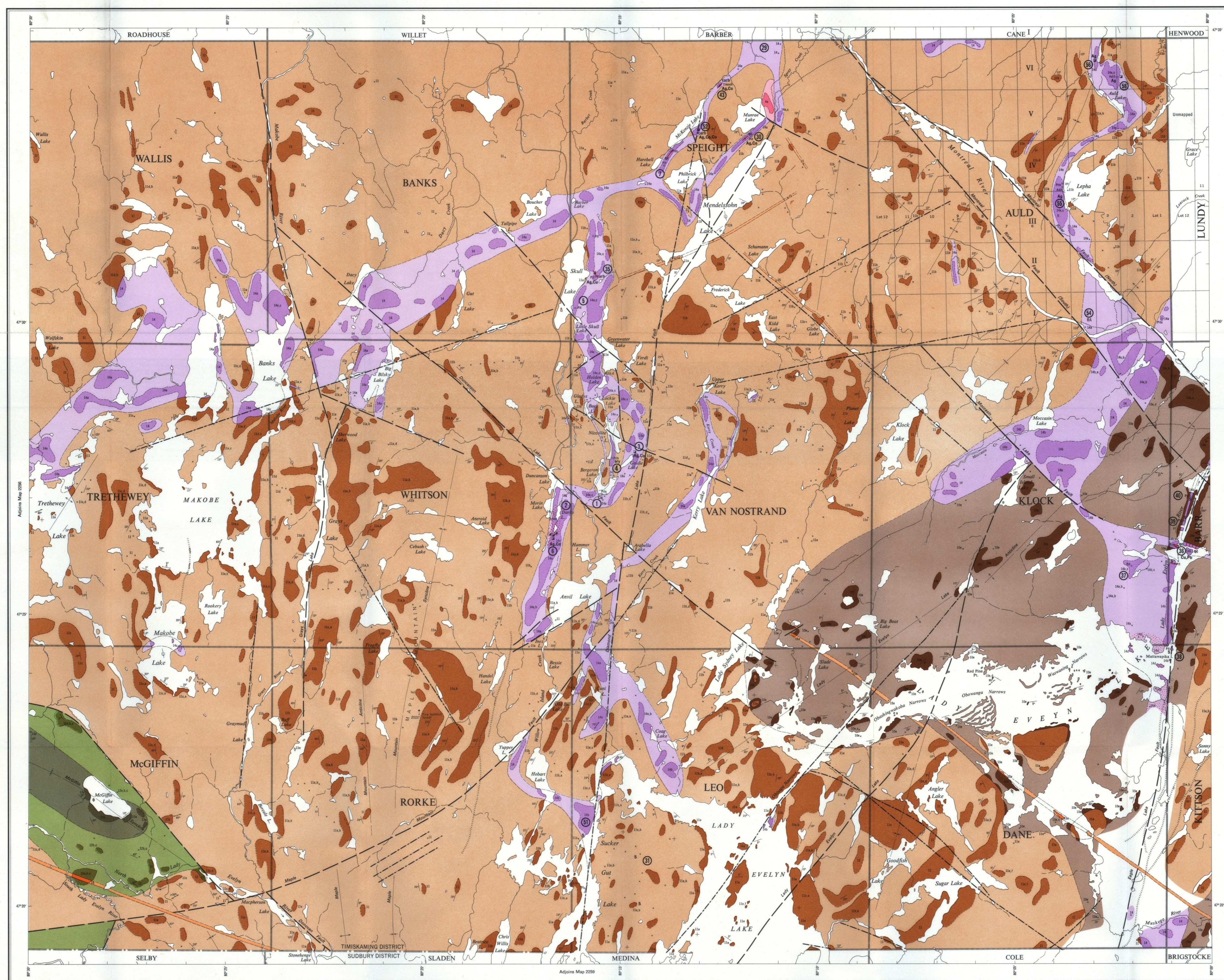
Cartography by C. Kerpas and assistants, Ministry of Natural Resources, 1972.

Base map derived from maps of the Forest Resources Inventory, Ministry of Natural Resources, with additional information by K. D. Card.

Magnetic declination in the area was approximately 9°30' W, 1969.

LIST OF PROPERTIES

1. Argentinum Silver Mines Ltd.
2. Bergeron Lake deposit, van Nostrand Township.
3. Darby Silver Mine, Whitson Township.
4. Goldie Lake deposit, van Nostrand Township.
5. Nicollite Lake deposit, van Nostrand Township.
6. Skull Lake property, Speight Township.
7. White Reserve Mine, Whitson Township.
8. Armstrong, W. S., Estate, Speight Township.
9. Beatty, W. A., Charters Township.
10. Byberg, Andrew.
11. Charters Township.
12. Gowganda-Dugan Mine, Donovan Township.
13. Thompson Mine, Donovan Township.
14. Canadian Johns-Manville Co. Ltd.
15. Dundee, Grigg, Marconi, Seagram, Stobie, and Turner Townships.
16. Harrison Minerals Ltd., T. Saville claims, Turner Township.
17. Marconi Township [1968].
18. Can-Fer Mines Ltd. [1967], Marconi Township.
19. Cole deposit, Cole Township.
20. Denison Mines Ltd., Clay, DeMores, Seagram, and Turner Townships.
21. Eleanor Lake deposit, Ray Township.
22. Fourteen Lake prospect, Leonard Township.
23. Garvey, William, Estate, Charters Township.
24. Gerashy, G. J., Brewer Township.
25. Heines claim, Donovan Township.
26. Hardie, Arnold, Coppersand Lake deposit, Cynthia Township.
27. Hardiman Bay Mines Ltd. [1966], Brewer Township.
28. Hillcoat, James, Donovan Township.
29. Irony Mining and Smelting Co. Ltd., Cotton Township.
30. Jabor Mining Co. Ltd., Kokoko Lake, Cynthia and Aston Townships.
31. Keevil Mining Group Ltd. [1966], Cynthia and Aston Townships.
32. King, Henry.
33. Boundary claims, Speight Township.
34. Munroe Lake deposit, Speight Township.
35. Lady Evelyn Lake deposit, Leo Township.
36. Last, Henry.
37. Clay Township.
38. DeMores Township.
39. Turner Township.
40. Lynch deposit, Speight Township.
41. Mack, Howard.
42. First Bay deposit, Barr Township.
43. Inland deposit, Klock Township.
44. Inland deposit, Dane and Hillton Townships.
45. Klock deposit, Barr Township.
46. Second Bay deposit, Barr Township.
47. Mitchell, R. E., Turner Township.
48. Nelson Explorations Ltd., Skull Township.
49. Moore, William, Speight Township.
50. New Delhi Mines Ltd., Delhi Township.
51. Noranda Exploration Co.
52. Clay Township.
53. Turner and DeMores Townships.
54. Ourgold Mining Company Ltd., Corhill Township.



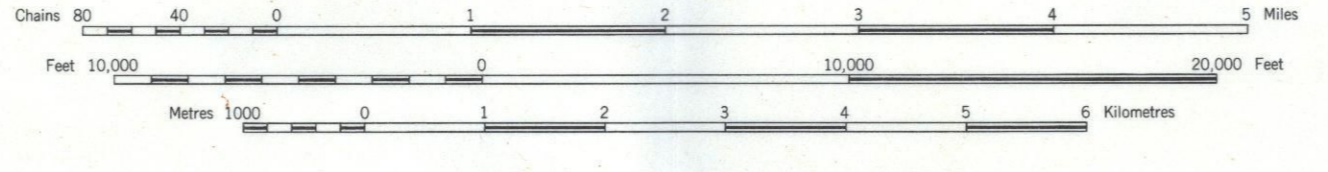
Scale 1 inch to 50 miles
N.T.S. references 417/8, 417/9

LEGEND

- CENOZOIC***
- QUATERNARY**
- RECENT**
- Stream, lake, and swamp deposits.
- PLEISTOCENE**
- Glacial, glacioluvial, and glaciolacustrine deposits.
- UNCONFORMITY
- PRECAMBRIAN***
- PROTEROZOIC**
- MAFIC INTRUSIONS**
- LATE DIABASE INTRUSIONS**
- 15 Diabase.
 - 15a Olivine diabase.
- INTRUSIVE CONTACT**
- NIPISING DIABASE INTRUSIONS***
- 14 Unsubdivided.
 - 14a Pyroxene gabbro.
 - 14b Hornblende gabbro, metagabbro.
 - 14c Epidiote amphibolite.
 - 14d Granophyre.
- INTRUSIVE CONTACT**
- HURONIAN SUPERGROUP**
- COBALT GROUP**
- BAR RIVER FORMATION**
- 13 Unsubdivided.
 - 13a Sandstone.
- GORDON LAKE FORMATION***
- 12 Unsubdivided.
 - 12a Sandstone.
 - 12b Argillite.
 - 12c Chert, chert breccia.
- LORRAIN FORMATION***
- 11 Unsubdivided.
 - 11a Green and grey micaceous pebbly sandstone.
 - 11b Felsitic sandstone.
 - 11c White sandstone.
 - 11d Ferruginous sandstone.
 - 11e Argillaceous sandstone, greywacke, siltstone.
 - 11f Conglomerate.
- GOWGANDA FORMATION***
- 10 Unsubdivided.
 - 10a Probably muscovite-polyimictic conglomerate, greywacke, siltstone, or laminated argillite matrix.
 - 10b Polymictic orthoconglomerate, greywacke or siltstone matrix.
 - 10c Sandstone, felsitic sandstone, greywacke.
 - 10d Argillite, felsitic sandstone, greywacke.
 - 10e Laminated argillite.
- QUIRKE LAKE GROUP**
- SERPENT FORMATION***
- 9a Sandstone.
 - 9b Argillite, siltstone.
- ESPANOLA FORMATION***
- 8 Limestone, siltstone.
- BRUCE FORMATION***
- 7a Polymictic conglomerate.
 - 7b Sandstone.
- HOUGH LAKE GROUP**
- MISSISSAUGA FORMATION***
- 6 Unsubdivided.
 - 6a Sandstone.
 - 6b Argillite, siltstone, argillaceous schist.
 - 6c Polymictic conglomerate.
- UNCONFORMITY
- ARCHAEO**
- MAFIC INTRUSIONS**
- EARLY MAFIC INTRUSIONS:**
- 5 Gabbro, metagabbro, diabase.
- INTRUSIVE CONTACT**
- FELSIC INTRUSIVE AND METAMORPHIC ROCKS**
- GRANITIC ROCKS***
- 4 Unsubdivided.
 - 4a Quartz monzonite, granodiorite.
 - 4b Perphyritic quartz monzonite, granodiorite, quartz diorite.
- GNEISS AND MIGMATITES***
- 3 Unsubdivided.
 - 3a Quartz-feldspar gneiss, migmatite.
 - 3b Mafic migmatite, argillite.
- METAVOLCANICS AND METASEDIMENTS***
- FELSIC METAVOLCANICS AND METASEDIMENTS***
- 2 Unsubdivided.
 - 2a Rhyolite, trachyte, intermediate metavolcanics.
 - 2b Felsic tuff, breccia, agglomerate.
 - 2c Sandstone, argillite, conglomerate.
 - 2d Felsic schist.
- MAFIC METAVOLCANICS***
- 1 Unsubdivided.
 - 1a Basalt, andesite.
 - 1b Amphibolite, amphibolite schist.
 - 1c Diabase.
- IF Iron formation.**
- BRECCIA***
- Ag Silver.
 - Au Gold.
 - carb Carbonate.
 - Co Cobalt.
 - Cu Copper.
 - ey Erythrite.
 - Fe Iron.
 - ne Niccolite.
 - Ni Nickel.
 - Pb Lead.
 - Quartz.
 - Quartz-carbonate.
 - S Sulfide mineralization.
 - U Uranium.
 - Zn Zinc.

Map 2257
MAKOBELAKE
TIMISKAMING DISTRICT

Scale 1: 63,360 or 1 inch to 1 Mile



*Unconsolidated deposits. Cenozoic deposits are represented by the lighter colored and uncoloured parts on the map.

*Bedrock geology. Outcrops and inferred extensions of each rock map unit are shown, respectively, in deep and light tones of the same colour. Where in places a formation is too narrow to show colour and must be represented in black, a short black bar appears in the appropriate block.

*The rocks of these units are subdivided lithologically and the order does not imply age relationship within the groups.

*Nipissing-type.

*Timiskaming-type.

*Appears on accompanying maps of Geological Report 106.