

LEGEND

This legend is common to maps 1412A, 1413A, 1414A, and 1415A (uncoloured blocks do not appear on this map)

PALEOZOIC

ORDOVICIAN

21 Trenton and Black River Groups

20 Undifferentiated

HADRYNAN (?)

19 Jacobsville Formation: sandstone, shale, conglomerate (formerly classified as Cambrian)

NEOHELICIAN

18 Keweenaw Group

17 Maminse Point Formation: basalt, rhyolite

APHEBIAN

17 18a M'Pising Diabase: quartz diabase, gabbro, subordinate granophyre; 17a, mainly basaltic gabbro; 18, mainly granophyre diabase and gabbro (probably includes some pre-Huronian intrusions)

HURONIAN SUPERGROUP

16 Bar River Formation: white quartzite, minor argillite

15 Gordon Lake Formation: varicoloured siltstone, chert

14 Lorrain Formation: quartzite, pebbly quartzite, arkose, Jasper conglomerate, argillaceous quartzite, argillite

13a 14a white orthoquartzite member: white quartzite, pebble beds; 14a, upper red quartzite member: red and buff pebbly quartzite, grit; 14a, lower red quartzite member: varicoloured pebbly quartzite, grit; 14a, upper siltstone member: purple arkose, siltstone, argillite; 14a, lower arkose member: arkose, minor siltstone, argillite, quartzite

13 Gowanda Formation: paragonomelane, orthoconglomerate, argillite, graywacke, arkose, siltstone, quartzite; 13a, mainly paragonomelane; 13b, mainly quartzite; 13c, mainly pink arkose, quartzite, and siltstone; 13d, mainly argillite, graywacke and quartzite; 13d, upper argillite member

PROTEROZOIC

12 Quirk Lake Group (12-13)

12a Scepter Formation: pelagitic quartzite, polymictic conglomerate; 12a, polymictic conglomerate (collected in Sault Ste. Marie and Wakarusa Lake-Dean Lake map areas)

11 Espanola Formation: 11a, Bruce limestone member; 11b, Espanola siltstone member; 11c, dolomite member

10 Bruce Formation: paragonomelane, minor quartzite, grit, and orthoconglomerate

HOUH-LAKE GROUP (7-9)

9 Mississagi Formation: fine to coarse-grained feldspathic quartzite, pebble conglomerate, and paragonomelane; minor orthoconglomerate; 9a, paragonomelane; 9a, ABERNES F. FORMATION: feldspathic quartzite, graywacke, quartz pebble conglomerate; paragonomelane, minor argillite, arkose (formerly correlated with the Scepter Formation)

8 Pecora Formation: argillite, siltstone (subsurface only, not identified in outcrop)

7 Ramsay Lake Formation: paragonomelane, minor quartzite, argillite

6 Elliot Lake Group (4-6)

6a Tresselt Formation: basalt, andesite, rhyolite, minor pyroclastic rocks and intercalated sediments; 6a, basalt, minor quartzite and quartz pebble conglomerate; 6b, rhyolite; 6c, quartzite; 6d, amphibolite/basalt

4 5 Martineida Formation: feldspathic quartzite, arkose, grit, quartz pebble conglomerate, polymictic conglomerate, minor basalt; 4a, polymictic conglomerate; 4b, basalt

5 Livingstone Creek Formation: feldspathic quartzite, siltstone, polymictic conglomerate, quartz-pebble conglomerate

ARCHEAN

3 Jarvis Batholith: quartz monzonite, granite, syenite, quartz diorite

2a, mainly pink to grey granite to diorite gneiss, including numerous remnants of 1b and 1c, and areas of 2b; 2b, mainly massive pink granite, quartz monzonite, granite, gneiss, and quartz diorite, possibly in part younger than 2a; 2c, mainly porphyritic pink granite; 2c, mixed migmatite, amphibolite, and granitic rocks; 2c, mainly migmatite

1a, schistose basic to acidic flows and pyroclastic rocks; subordinate sediments including non-formation, minor diorite and gabbro; 1a, diorite and hornblende-gabbro-quartz gneisses, commonly with granitic intercalations; 1c, amphibolite; 1d, mixed zones of amphibolite, biotite gneiss and granite, "granitized" amphibolite, migmatite

Drift-covered area: [Symbol]

Rock outcrop: [Symbol]

Geological boundary (approximate, assumed): [Symbol]

Bedding (inclined): [Symbol]

Schistosity, pressure-schistosity (inclined, vertical dip unknown): [Symbol]

Anticline (direction of plunge): [Symbol]

Syncline (direction of plunge): [Symbol]

Fault, shear zone (approximate, assumed, downthrow side): [Symbol]

Thrust or reverse fault (direction of dip): [Symbol]

Glacial stress (direction of ice movement, unknown): [Symbol]

Raised beach: [Symbol]

Breccia zone: [Symbol]

Driftline (vertical, inclined): [Symbol]

Mineral occurrence: [Symbol]

Inactive mine workings: [Symbol]

ELEMENT AND MINERAL SYMBOLS

Cobalt: Co

Copper: Cu

Iron: Fe

Lead: Pb

Pyrite: py

Silica: Si

Silver: Ag

Uranium: U

Zinc: Zn

Geology by M.J. Frery, 1958-61, 1963, 1967, 1970
To accompany Memoir 363 by M.J. Frery

Geological cartography by M. St-Pierre, Geological Survey of Canada

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

Base map at the same scale published by the Army Survey Establishment, R.C.E., in 1955

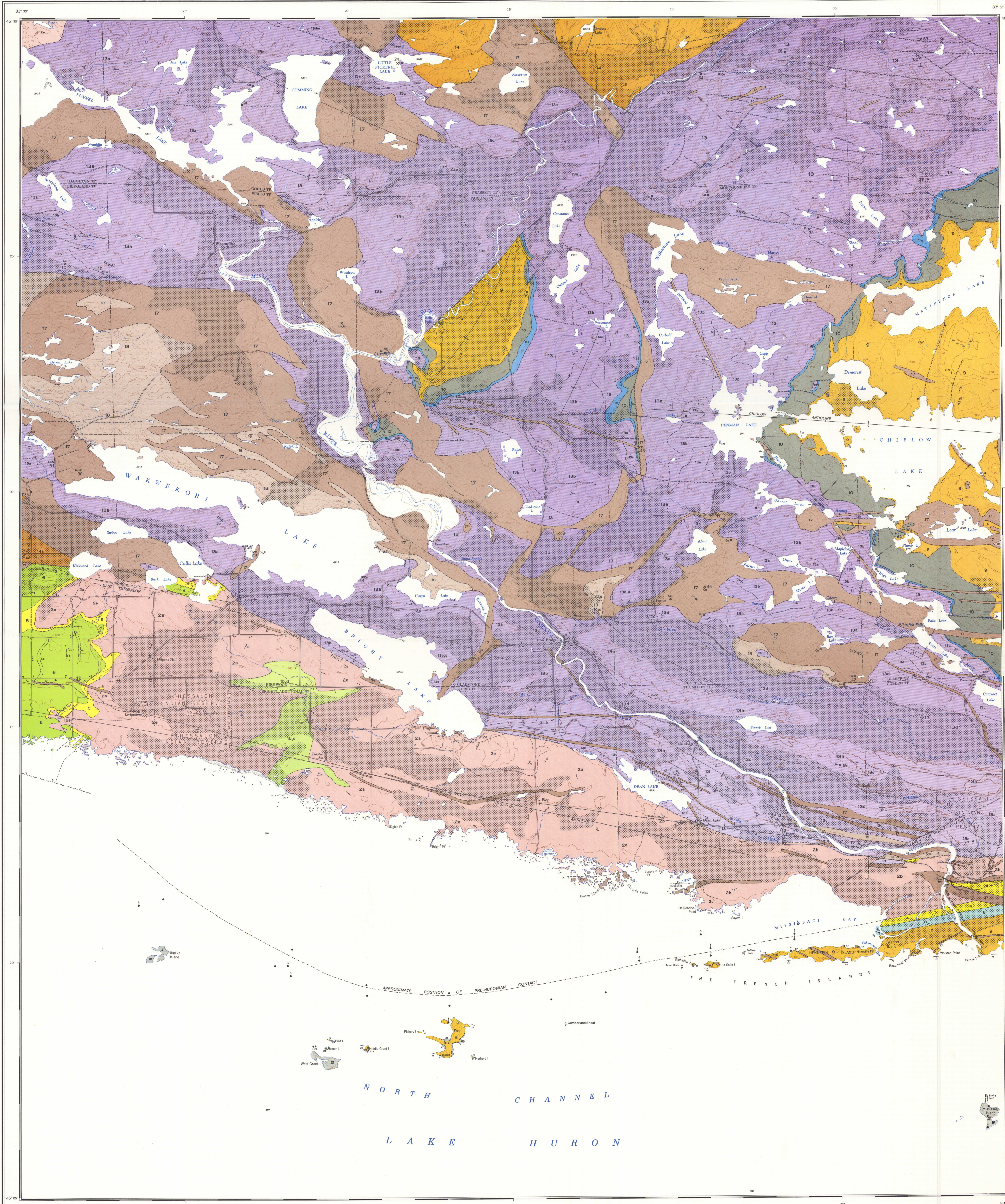
Copies of the topographical edition of this map may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa

Approximate magnetic declination 1974, 9°52' West decreasing 1' annually

Elevations in feet above mean sea level

Key to numbered copper prospects and past producers* by Township (For descriptions see the Ontario Department of Mines, Mineral Resources Circular No. 12, 1969)

Aberdeen	1. Fraser	34. Cobden River
	2. Indian Lake	35. North Montgomery
	3. Black Lake*	
Aberdeen Additional	4. Two Horse Lake	36. Copper Queen
	5. Taylor	37. Rising Sun
Abernes	38. Fero	
	39. Parkinson	
	40. Helen	39. Central Lake
	41. Nysted	40. Little White River
Bridgland		
	41. Bitter*	
	42. Fryer	
	43. Hooper River	42. Brady
		43. Copper Flat
	44. Chesley	44. July*
		45. Kennedy
	45. Ranson	46. Martin
Chesley Additional		
	47. Salsore	47. Bad Ore
	48. Cobden	48. Bruce
	49. Gouding*	49. Copper Bay Section
		50. Taylor Section
	50. Day	51. Bruce Section
	51. Demsey	52. Campbell Dikes
	52. Sowerly	53. Centre Line
	53. Ted Lake	54. North Prospect
	54. Derecha	55. Stansberg
	55. Day	
	56. Galbraith	56. Algonquin
	57. Diner	57. Canada Verde
	58. Wilmet	
	59. Gladstone	59. Childs Lake
	60. Diagona*	60. Potts Lake
	61. Principle Strategic Minerals	
	62. Goud	62. Tarbutt Additional
	63. Grand Portage*	63. Adis Prospect
	64. Rockview	64. Tarbutt and Johnson
	65. Gravel	65. Desbarats
	66. Kynoch	66. Thompson
	67. Little Pickers Lake	67. Bar Lake*
	68. Jans	68. Knoblauch
	69. Syle	
	70. Johnson	69. Wharfedale
	71. Rainbow*	70. Township 168
	72. Rubin	71. Cannon
	73. Austin	72. Conventias
	74. Dean	73. Township 175
	75. Ginty	74. Alkban
	76. Kirkwood	75. Ripsheld
	77. Anthony	76. Shets
	78. McMahon	
	79. Patten Lake East	
	80. Romer	



Copies of this map may be obtained from the Geological Survey of Canada, 615 Booth Street West, Ottawa K1S 1B5, 3003 - 28th Street W., Calgary, Alberta T2B 2A7

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 Abernes: 38. Fero, 39. Parkinson, 40. Helen, 41. Nysted
 Bridgland: 41. Bitter*, 42. Fryer, 43. Hooper River
 Chesley: 44. Chesley, 45. Ranson
 Chesley Additional: 47. Salsore, 48. Cobden, 49. Gouding*, 50. Day, 51. Demsey, 52. Sowerly, 53. Ted Lake, 54. Derecha, 55. Day, 56. Galbraith, 57. Diner, 58. Wilmet, 59. Gladstone, 60. Diagona*, 61. Principle Strategic Minerals, 62. Goud, 63. Grand Portage*, 64. Rockview, 65. Gravel, 66. Kynoch, 67. Little Pickers Lake, 68. Jans, 69. Syle, 70. Johnson, 71. Rainbow*, 72. Rubin, 73. Austin, 74. Dean, 75. Ginty, 76. Kirkwood, 77. Anthony, 78. McMahon, 79. Patten Lake East, 80. Romer

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MAP 1415A
 GEOLOGY
WAKWEKOBI LAKE - DEAN LAKE AREA
 DISTRICT OF ALGOMA
 ONTARIO
 Scale 1:50,000

Kilometers 0 1 2 3 4
 Miles 0 1 2

Universal Transverse Mercator Projection
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1415A

NATIONAL TOPONYMIC SYSTEM REFERENCE
 MAP 1415A
WAKWEKOBI LAKE - DEAN LAKE AREA
 ONTARIO

1415A