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PRECAMBRIAN GEOLOGY
PARTS OF LAMPLUGH,
FRECHVILLE, STOUGHTON,
HARKER, HOLLOWAY AND
MARRIOTT TOWNSHIPS,
GHOST RANGE AREA

Scale 1:20 000

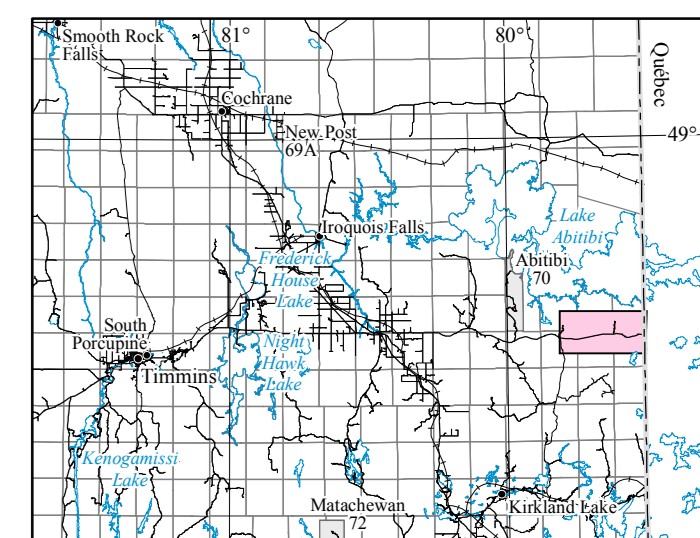
NTS References: 32 D105, 12

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SOURCES OF INFORMATION

Digital base map information derived from the Ontario Land Information Warehouse. Land Information Ontario, Ontario Ministry of Natural Resources, scale 1:20 000, with modifications by staff of the Ministry of Northern Development, Mines and Forestry.

Map coordinates are in UTM zone 17, NAD 83.

Berger, B.R. and Anselmi, Y. 1988. Project 107 87-024. Geological investigations along Highway 101: Goulbourn, Michipicou and Garrison townships. In Summary of Field Work and Other Activities 1988, Ontario Geological Survey, Miscellaneous Paper 168, p.25-32.

Berger, B.R., Lustrina, B. and Ropchan, J.C. 2000. Precambrian geology of the Ghost Range area, Ontario Geological Survey, Map 2563, scale 1:50 000.

Jensen, L.S. 1978. Stoughton and Marriott townships, Cochrane District, Ontario. Ontario Geological Survey, Map 2096, scale 1:51 680 or 1 inch to 1/4 mile.

1982. Precambrian geology of the Ghost Range area, Lightning River area, Cochrane District, Ontario. Ontario Geological Survey, Preliminary Map P.2431, scale 1:15 840 or 1 inch to 1/4 mile.

Ropchan, J.C., Lustrina, B., Fowler, A.D., Benn, K., Ayer, J., Berger, B., Gault, R., Labrie, R. and Anselmi, Y. 2002. Host rock and structural controls on the nature and timing of gold mineralization at the Holloway Mine, Abitibi Supracrustal, Ontario. Economic Geology, v.97, p.291-305.

Floor of the Resident Geologist's Office, Kirkland Lake, and GeologyOntario.

Metric conversion factor: 1 foot = 0.3048 m.
Geology not tied to surveyed lines.
Magnetic declination approximately 12°02'W at the centre of the map area in 2010.

CREDITS

Geologic mapping carried out in 2007-2008, and parts of 2009.
Preparation of base map and GIS compilation of data by J. Chartrand.
Cartographic production by A. Evans.To enable the rapid dissemination of information, this map has not received a technical edit. Discrepancies may occur for which the Ontario Ministry of Northern Development, Mines and Forestry does not assume liability. Users should verify critical information. Sources include both the references listed here and information on file at the Resident Geologist's and Mining Recorder's offices nearest the map area.
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Drexel, E. 2010. Precambrian geology of parts of Lamplugh, Frechville, Stoughton, Harker, Holloway and Marriott townships, Ghost Range area, Ontario Geological Survey, Preliminary Map P.3615, scale 1:20 000.

Users of OGS products are encouraged to contact those Aboriginal communities whose traditional territories may be located in the mineral exploration area to discuss their project.

LEGEND^a

- PHANEROZOIC**
CENOZOIC
QUATERNARY
RECENT
Lake, stream and wetland deposits
PLEISTOCENE
Glacial, glacioluvial and glaciolacustrine deposits: sand, gravel, clay, till
UNCONFORMITY
ARCHEAN
NEOARCHEAN
11 Metamorphosed Ultramafic and Mafic Intrusive Rocks of the Ghost Range Intrusion
11a Peridotite, dunite
11b Pyroxenite
10 Metamorphosed Mafic Intrusive Rocks
10a Gabbrro, diorite
10b Mafeyenite
9 Clastic Metasedimentary Rocks, Timiskaming Assemblage
9a Sandstone
9b Conglomerate
UNCONFORMITY
8 Clastic and Chemical Metasedimentary Rocks, Unknown Assemblage
8a Sandstone
8b Siltstone
8c Mudsstone / argillite
8d Graphitic and/or pyritic argillite
UNCONFORMITY
7 Mafic to Intermediate Metavolcanic Rocks of the Blake River Assemblage
7a Massive flows
7b Pillowed flows
7c Pillow breccia, flow breccia
7d Sphenulitic / variolite
6 Mafic Metavolcanic Rocks, Unknown Assemblage
6a Massive flows
6b Pillowed flows
6c Pillow breccia, flow breccia
6d Sphenulitic / variolite
5 Felsic Metavolcanic Rocks of the Upper Kidd-Munro Assemblage, Holloway Unit
5a Massive and laminated flows
5b Pillowed / lobate
5c Sphenulitic / variolite
4 Ultramafic Metavolcanic Rocks of the Upper Kidd-Munro Assemblage
4a Massive, cumulate flows
4b Spherulitic / variolite
4c Schist
3 Mafic to Intermediate Metavolcanic Rocks of the Lower Kidd-Munro Assemblage
3a Massive flows
3b Pillowed flows
3c Pillow breccia, flow breccia
3d Lapilli / tuff and breccia
2 Mafic to Intermediate Metavolcanic Rocks of the Stoughton-Roquebelle Assemblage
2a Massive flows

SYMBOLS

- Geologic contact (interpreted)
Small bedrock outcrop
Areas of bedrock outcrop
Fault
Syncline, interpreted (trend only)
Volcanic bedding, being known (profile, trend only)
Pillowed flow, facing known (vertical, trend only)
Mineral foliation (first generation, second generation, third generation)
Stretching lineation
Vein (dip/slip)
Mineral deposit (keyed to table 1)
Geochronology sample location, with age in Ma
Administrative boundary
Road (primary, tertiary)
Powerline

ABBREVIATIONS

- Au - silver
Asb - asbestos
Al - albite
C - calcite
Cu - copper
Fe - iron
H - host
Zn - zinc

Table 1. Mineral deposits within the map area.

Map No.	Deposit Name	Deposit Status
1	Hudman-West	Developed Prospect without Reserves
2	Johns Manville	Occurrence
3	Hudman-East	Group Occurrence
4	Hudman-East	Occurrence
5	Lightbulb	Occurrence
6	Neumine	Occurrence
7	Neumine	Occurrence
8	Clashett	Occurrence
9	Chemist, G.	Occurrence
10	Toussaint	Developed Prospect with Reserves
11	Constar Harker	Occurrence
12	CMS Syndicate	Occurrence
13	Lenora	Occurrence
14	Ray Arch	Occurrence
15	Hard, Don	Occurrence
16	Mary Ellen	Occurrence
17	Worwell	Past-producing Mine
18	Three Star Deposit	Developed Prospect with Reserves
19	Teddy Bear Mine	Occurrence
20	Mining Corporation-West	Occurrence
21	Strong, N.	Occurrence
22	Manville - West	Occurrence
23	Manville - East	Occurrence
24	Dunsmuir Gulf	Occurrence
25	Dunsmuir Gulf	Occurrence
26	Alaron	Occurrence
27	Remo Occurrence	Occurrence
28	Remo West	Occurrence
29	Remo East	Occurrence
30	Hull McDermott Mine	Past-producing Mine
31	Call	Occurrence
32	Mattawassa Extension	Occurrence
33	Mattawassa	Developed Prospect with Reserves
34	Choumont	Occurrence
35	Canamax 42 Zone	Developed Prospect without Reserves
36	Canamax East Zone	Developed Prospect without Reserves
37	Revere-2	Occurrence
38	Johns-Manville	Occurrence
39	Montroy-Porcupine	Occurrence
40	Mines Ltd.	Occurrence
41	Labarre (203)	Occurrence
42	Argente	Occurrence
43	Revere-1	Occurrence
44	Mining Corp. East	Group Occurrence
45	Mantob-1	Occurrence
46	Play-South	Occurrence
47	Dalhousie	Occurrence
48	Mack, H.E.	Occurrence
49	Marrion-2	Occurrence
50	Copper	Occurrence
51	Accord	Occurrence
52	Holloway Mine	Past-producing Mine

^a This is a field legend; rock units and contacts may change with subsequent studies.

^b The letter "C" preceding a rock code refers to data compiled from existing maps and from maps filed for assessment work on file and available for viewing at the Kirkland Lake Resident Geologist's Office and downloading from GeologyOntario. The letter "G" preceding a rock code refers to data interpreted from geophysical survey results. The letter "D" preceding a rock code refers to data derived from elements and logs that were not observed by the author.

Mineral Deposit Type

- ▲ Mafic to Ultramafic Volcanic and Intrusion Associated
▲ Sediment Associated
◆ Vein Replacement Deposit
◆ Volcanic Associated
● Unknown Hard Rock Deposit

Mineral Deposit Commodity

- Asbestos
● Gold
● Copper
● Zinc

Mineral Deposit Status

- Past-producing Mine
● Developed Prospect
● Occurrence

Classification Example

- ◆ diamond symbol = vein replacement deposit
yellow colour = gold
size = occurrence

