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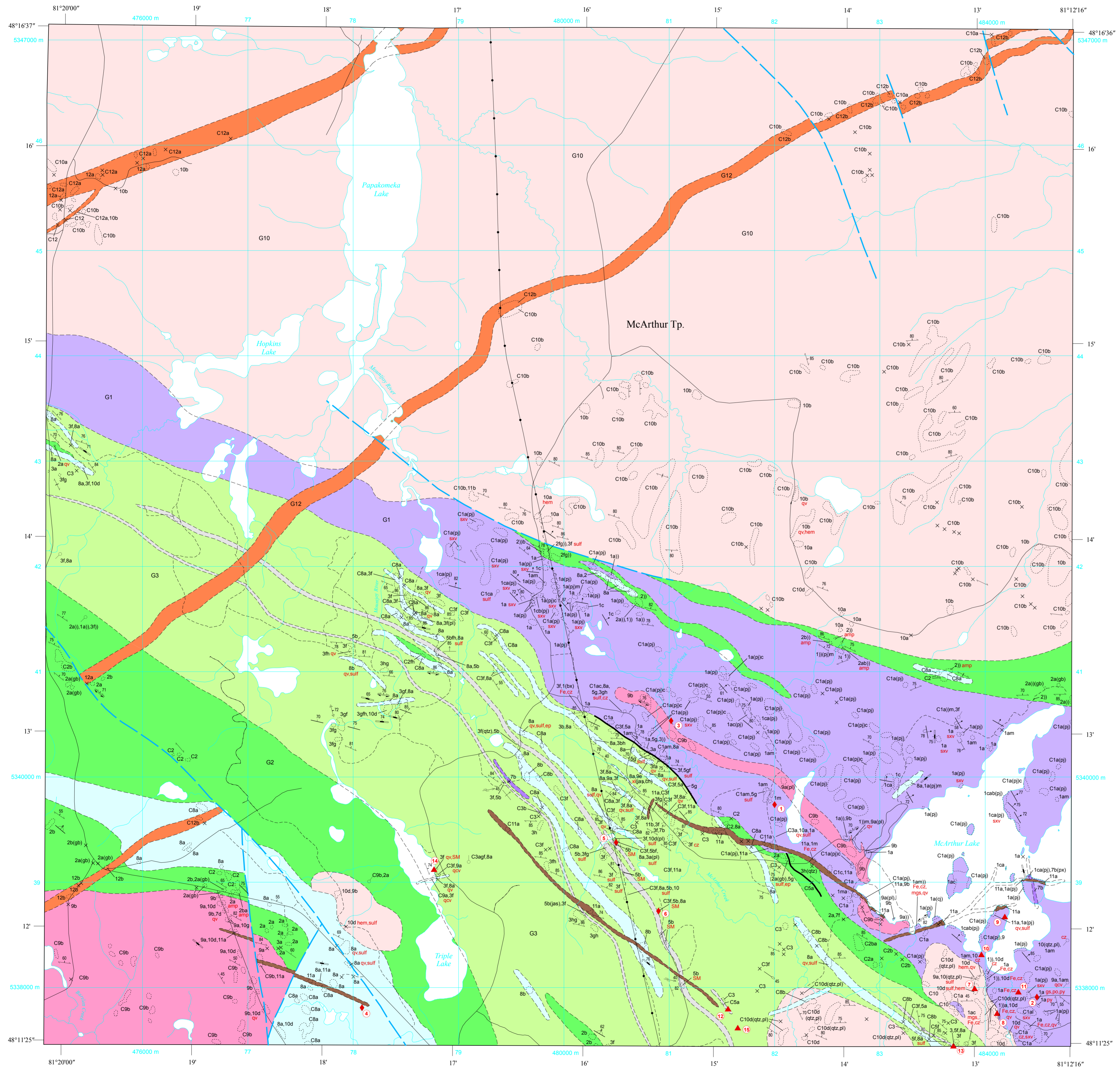
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Houlé, M.G. 2007. Precambrian geology of McArthur Township; Ontario Geological Survey, Preliminary Map P.3583, scale 1:20 000.

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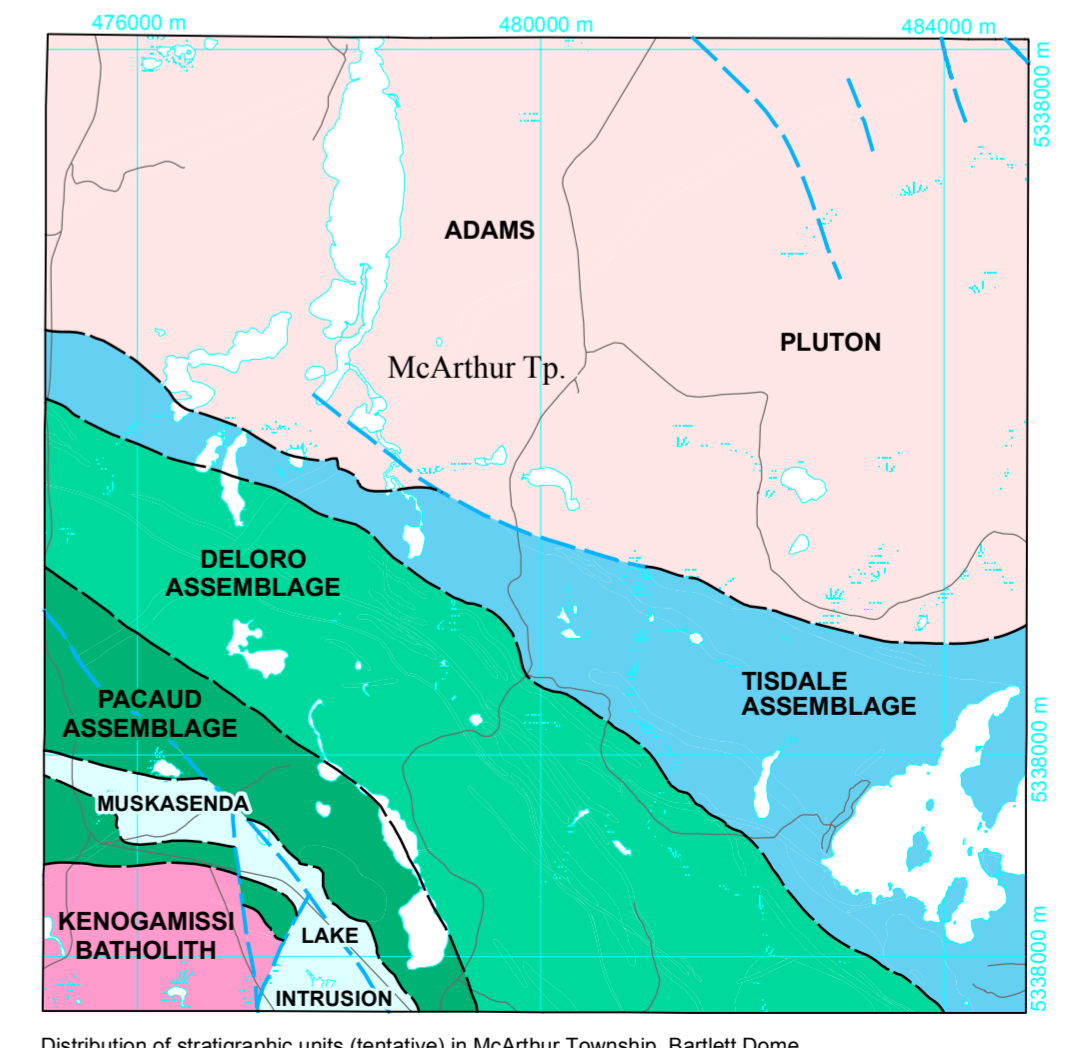
- LEGEND<sup>ab</sup>**
- PHANEROZOIC**
- CENOZOIC**
- QUATERNARY**
- PLEISTOCENE AND RECENT  
Unconsolidated sandy till, glaciofluvial sand and gravel
- PRECAMBRIAN**
- PROTEROZOIC**
- MESOPROTEROZOIC**
- 12 Mafic Intrusive Rocks (Abitibi Dike Swarm)  
12a Olivine diabase  
12b Quartz diabase
- INTRUSIVE CONTACT**
- PALEOPROTEROZOIC**
- 11 Mafic Intrusive Rocks  
11a Diabase dikes (Sudbury dike swarm)  
11b Diabase dikes (Matachewan dike swarm)
- INTRUSIVE CONTACT**
- ARCHEAN**
- NEOARCHEAN**
- 10 Felsic Intrusive Rocks  
10a Granodiorite  
10b Porphyritic granodiorite  
10d Tonalite  
10g Apatite
- 9 Intermediate Intrusive Rocks  
9a Diorite  
9b Quartz-bearing diorite  
9c Syenite
- INTRUSIVE CONTACT**
- 8 Mafic Intrusive Rocks  
8a Gabbro  
8b Quartz-bearing gabbro
- 7 Ultramafic Intrusive Rocks  
7a Peridotite  
7d Amphibolite  
7f Pyroxenite
- INTRUSIVE CONTACT**
- 5 Chemical Metasedimentary Rocks  
5a Iron formation  
5b Oxides facies  
5f Chert  
5g Graphitic argillite  
5h Chert breccia
- 3 Intermediate to Felsic Metavolcanic Rocks  
3a Massive flows  
3b Pillow flows  
3f Tuff, lapilli tuff  
3g Lapillistone  
3h Tuff breccia
- 2 Mafic Metavolcanic Rocks  
2a Massive flows  
2b Pillow flows  
2f Tuff, lapilli tuff  
2g Lapillistone  
2h Tuff breccia
- 1 Ultramafic Metavolcanic Rocks (Komatiites)  
1a Massive flows  
1b Pillow flows  
1c Organized flows  
1i Synvolcanic dikes and sills  
1m Spinifex textured
- <sup>a</sup> The prefix "G" denotes rock types interpreted from geophysical data.  
<sup>b</sup> The prefix "C" denotes rock types from compilation: these may have been reinterpreted.

- SYMBOLS**
- Area of bedrock exposure  
Small bedrock exposure  
Geological boundary, interpreted from geology or geophysics  
Fault, interpreted, unknown generation  
Brittle-ductile fault/shear zone, sense of movement unknown, inclined  
Volcanic bedding, no facing, inclined  
Volcanic bedding, other, with facing (inclined, overturned)  
Volcanic bedding, other, no facing (inclined, vertical)  
Cleavage, spaced, unknown generation, inclined  
Foliation, unknown generation (trend only, inclined, vertical)  
Dikes (inclined, vertical)  
Stretching lineation  
Fold axis, unknown generation, unknown symmetry  
Fold axis, unknown generation, z-asymmetry  
Veins, inclined  
Diamond-drill hole  
Road, trail  
Powerline

- ABBREVIATIONS**
- amp.....amphibolite  
Au.....gold  
Cu.....copper  
cz.....carbonatized  
ep.....epidote  
Fe.....iron  
gs.....gossan  
hem.....hematite  
mgs.....magnetite  
Ni.....nickel  
pb.....lead  
po.....pyrrhotite  
py.....pyrite  
qv.....quartz vein  
qv.....quartz carbonate vein  
SM.....sulphide mineralization  
sulf.....trace of sulphide minerals  
sv.....spineliferous vein (sills) or patches  
xi.....xenoliths  
Zn.....zinc

- MODIFIERS**
- (bx).....brecciated  
(ch).....chert  
(cj).....columnar jointing  
(gb).....gabbroic texture  
(jas).....jasper  
(pl).....polydeformed  
(p).....plagioclase phyllic/phenocryst  
(px).....pyroxene phenocryst  
(qtz).....quartz phenocryst  
(s).....highly foliated and/or sheared

- MAIN COMMODITY**
- ▲ Precious metals  
◆ Base metals
- PROPERTIES**
- Occurrences
- Noranda 77-1: Ni, Cu\* (MD42A03N00055)
  - Gossan: Ni?, Cu? (MD42A03N00027)
  - Paymaster 1957-2: Ni\* (MD42A03N00027)
  - Conigo: Cu, Au\* (MD42A03N00022)
  - Marceau 92-MDD-03: Fe, Zn, Cu, Ni, Pb (MD42A03N00019)
  - Therault/Dugive vein: Au, Cu (MD42A03N00023)
  - Chouinard vein: Au
  - Steel vein: Au\*
  - Portage vein: Au\*
  - Andover porphyry showing: Au\*
  - Westport Porcupine occurrences #1: Au\*
  - Westport Porcupine occurrences #2: Au\*
  - Triple Lake showing: Au
  - Hewitt shaft: Au\*
- \*Not located during this survey.



**Ontario**  
Ontario Geological Survey  
MAP P.3583  
**PRECAMBRIAN GEOLOGY**  
**McARTHUR TOWNSHIP**

Scale 1:20 000  
500 m 0 0.5 1 km  
NTS Reference: 42 A/3, 6  
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TGI-3  
This map was produced as part of the TGI-3 Abitibi Project of Natural Resources Canada and is a contribution to the Targeted Geoscience Initiative (TGI-3) Program of the Earth Sciences Sector.

IGC-3  
Cette carte a été produite dans le cadre du projet IGC-3 Abitibi de Ressources naturelles Canada et contribue au programme de l'Initiative géoscientifique ciblée (IGC-3) du Secteur des sciences de la Terre.

Location Map  
1 cm equals 10 km

**SOURCES OF INFORMATION**

Base map information is 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 and Mines.

Map Datum: NAD 83  
Mapping conducted using UTM coordinates in Zone 17.  
Magnetic declination approximately 10°43'W in 2007.

Compiled geology derived from:  
Assessment files, Resident Geologist's office, Timmins.  
Property information modified after the Mineral Deposit Inventory (MDI2) and Clark (1989).  
Aerogeost 2004. Report on a helicopter-borne magnetic and electromagnetic surveys on McArthur property, McArthur Township, Timmins area, Ontario, Mustang Minerals Corporation, assessment file no. 42A03NE2010, 41p.  
Barber, R.A., Lauder, P. and Diorio, P.A. 1992. Report on the geology and geochemistry of the McArthur Project, McArthur and Douglas townships, Ontario, NTS 42A3.6, BHP Minerals Canada, assessment file no. 42A03NE2001, 761p.  
Clark, R. 1989. Geological and geophysical surveys, Norwin project, Ontario, McArthur and Bartlett Twps. Inco Gold Management Inc., assessment file no. 42A03NE0027, 71p.  
Ontario Geological Survey 2003. Magnetic supergrids, Ontario airborne geophysical surveys: magnetic data, grid data, Ontario Geological Survey, Geophysical Data Set 1037.  
Ontario Geological Survey 2003. Timmins area, Ontario airborne magnetic and electromagnetic surveys, processed data and derived products, Archean and Proterozoic "greenstone" belts, Geophysical Data Set 1004.  
Pyke, D.R. 1978. Geology of the Redstone River area, Districts of Timiskaming, Ontario Division of Mines, Geological Report 161, 75p. Accompanied by Map 2363 and Map 2364.  
Pyke, D.R. 1978. Geology of the Peterling Lake area, Districts of Timiskaming and Sudbury, Ontario Division of Mines, Geological Report 171, 52p. Accompanied by Map 2345.

**CREDITS**

Geology by M.G. Houli and Martine Picotte, 2006.  
Preparation of geophysical imagery by D. Rainsford.  
Drafting by M.G. Houli and S. Josey.  
Preparation of GIS product by S. Josey and M. Houli.  
Cartographic production by A. Evers.  
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 and Mines does not assume liability. Users should verify critical information.  
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