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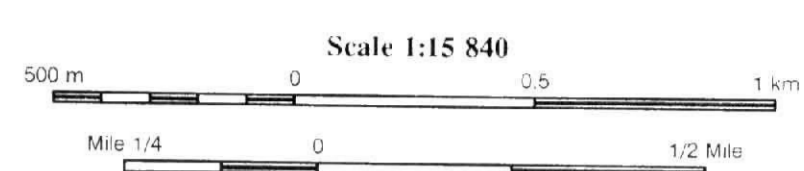
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UNEDITED MANUSCRIPT
This unedited Open File Map is presented for viewing in order to provide early access to recent geoscience mapping. It will be available for on-request viewing at the Wawa Resident Geologist's office, the Ontario Geological Survey Mines Library in Sudbury and the Mines and Minerals Information Centre Library in Toronto.
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Sage, R.P. 1993. Precambrian geology, Dunphy Township, Ontario. Geological Survey, Open File Map 224, scale 1:15 840.

SOURCES OF INFORMATION
Base map derived from Forest Resources Inventory maps, Lands and Waters Group, Ontario Ministry of Natural Resources.
Assessment Files Research Office, Ontario Geological Survey, Toronto (AFRO).
Resident Geologist's Files, Ontario Ministry of Northern Development and Mines, Sault Ste. Marie.
Records, The Algoma Steel Corporation Limited (formerly Algoma One Properties Limited), Sault Ste. Marie.
Assessment Files, Ontario Geological Survey, Sault Ste. Marie (ASR).
Geology not tied to surveyed lines.
Magnetic declination approximately 6° 16' W in 1983.

LEGEND\*
PHANEROZOIC
CENOZOIC
QUATERNARY
PLEISTOCENE AND RECENT
Organic soils, sandy fill, glacioluvial sand and gravel
UNCONFORMITY
PRECAMBRIAN
PROTEROZOIC

- 12 Mafic Intrusive Rocks
12a Diabase
12b Porphyritic (feldspar) diabase
12c Glomeroporphyritic (feldspar) diabase
12d Diabase with minor biotite
12n Carbonate
12p Olivine lamprophyre
12e Carbonate-silicocarbonate
12f Ferruginous carbonate
12s Syenite
12t Biotite lamprophyre
12u Porphyritic (feldspar) lamprophyre
12v Lamprophyre with xenoliths
Carbonate Intrusive Rocks
11 Firesand Carbonite
11a Sövite\*
11b Silicocarbonate
11c Rauhaugite (feruginous dolomite)
INTRUSIVE CONTACT
ARCHEAN
8 Herman Lake Alkalic Rock Complex
8a Medium-grained equigranular amphibole syenite
8b Coarse-grained nepheline-carbonite syenite
8c Nepheline syenite pegmatite
8d Melanocratic nepheline syenite to malgaitite
8e Pyroxenite
8f Syenite pegmatite
8g Fine-grained syenite to nepheline syenite
8h Syenite apfite to quartz syenite apfite
8i Coarse-grained syenite
8k Metagabbro, may not be related to complex
INTRUSIVE CONTACT
7 Felsic Intrusive Rocks
7a Quartz-feldspar porphyry
7b Feldspar porphyry
7c Quartz porphyry
7d Diorite, quartz diorite
7e Granodiorite, granite
7f Aplite
7g Diorite, granodiorite
7i Porphyritic granodiorite to quartz monzonite
7k Felsic dikes
7m Trondhjemite, granodiorite, quartz-feldspar porphyry
7n Felsic intrusive rocks, (fine grained, rare quartz or feldspar phenocrysts)
7p Intrusive breccia
7q Equigranular quartz monzonite to granite
7r Porphyritic (plagioclase) diorite, granodiorite
7s Porphyritic quartz monzonite to granite
7t Syenite to quartz syenite
7u Monzonite to quartz monzonite
7v Massive trondhjemite to quartz schistose
7w Granodiorite, fine grained, commonly schistose
INTRUSIVE CONTACT
6 Metamorphosed Mafic to Ultramafic Intrusive Rocks
6a Gabbro, diorite
6b Anorthositic gabbro
6c Anorthosite
6d Diabase
6f Hornblende diorite
6g Pseudotachylite
6h Pyroxenite
6i Talc schist
6j Mafic dikes
6k Quartz diorite, trondhjemite\*
6l Quartz gabbro
6m Xenolithic gabbro
6n Porphyritic gabbro, diorite
6o Carbonatized or carbonate-bearing mafic intrusion
6p Hornblende
6q Hornblende-biotite rock with xenoliths (intrusive breccia)
6r Biotite-rich intrusive rock
6s Intrusive Breccia
INTRUSIVE CONTACT
5 Chemical Metasedimentary Rocks\*
5a Magnetite-hematite chert iron formation
5b Carbonate, commonly with minor chert, pyrite, and rarely arsenopyrite
5c Sulphide, commonly associated with subordinate siderite and chert
5d Chert, may contain subordinate siderite and pyrite locally may be gneptic
5e Graphite-argillite, commonly pyritic, argillaceous and associated with iron formation
5f Chert and iron oxide in approximately equal portions
5g Chert and carbonate in approximately equal portions
5h Chert and sulphide in approximately equal portions
5i Chert, graphite, argillite (black chert containing graphite)
5k Chert, siderite and magnetite
5m Chert, wacke or siltstone
5n Chert cemented with iron oxides, i.e. weathered iron formation (chert breccia)
5p Chert, hematite
5q Iron oxide, chert, wacke
5r Iron oxide, wacke
5s Chert breccia
4 Clastic Metasedimentary Rocks
4a Volcanic clast wacke
4b Chert
4c Plagioclase-quartz biotite schist
4d Wacke, lithic wacke
4e Argillite
4f Interstratified siltstone, mudstone
4g Conglomerate with granite clasts\*
4h Volcanic clast conglomerate
4i Siltstone, sandstone, lithic sandstone
4j Quartz arenite, arkose, lithic arkose
4k Carbonate-rich metasediment
4l Lithic arkose
4m Thinly bedded wacke, siltstone
4n Carbonate, ferruginous limestone
4o Wacke, thinly bedded amphibole, quartz-plagioclase schist
4p Wacke with garnet porphyroblasts
4q Siltstone, massive

- Metavolcanic Rocks
3 Intermediate to Felsic Metavolcanic Rocks
3a Sericite schist
3b Heterolithic breccia
3c Monolithic lapilli tuff
3d Tufaceous quartz-eye, feldspar-clast sericite schist
3e Banded tuff with flame
3f Massive flow
3g Monolithic breccia (felsic matrix, mafic clasts)
3h Porphyritic (feldspar) flow
3i Feldspar crystal tuff, intermediate
3j Porphyritic (quartz) flow
3k Spherulitic flow
3l Breccia, felsic clasts in chlorite matrix
3m Flow banded lava
3n Autoclastic monolithic breccia
3o Intermediate tuff
3p Heterolithic lapilli tuff
3q Quartz-eye crystal tuff
3r Heterolithic quartz-eye crystal tuff, lapilli tuff
3s Heterolithic crystal tuff, breccia
3t Tuff
3u Laminated tuff
3v Chlorite-sericite schist
3w Feldspar crystal tuff, felsic
3x Crystal (quartz-feldspar) tuff
3z Heterolithic (cataclastic) breccia
2 Mafic to Intermediate Metavolcanic Rocks
2a Massive flows
2b Pillowed flows
2c Chlorite schist
2d Heterolithic breccia
2e Monolithic breccia (mafic matrix, felsic clasts)
2f Porphyritic (feldspar) flows
2g Massive medium-grained flows
2h Magnetite-bearing flows
2i Tufaceous chloritic schist
2j Pillowed porphyritic (feldspar) flows
2k Variscitic flows
2l Amygdaloidal flows
2m Feldspar (quartz) crystal tuff
2n Heterolithic breccia, lapilli size clasts
2p Breccia (mafic matrix, intermediate to felsic clasts)
2q Amphibolite
2r Laminated tuff, lapilli tuff
2s Crystal (feldspar) tuff, crystal tuff
2t Talc-actinolite, actinolite rock
2u Monolithic breccia (mafic matrix, mafic clasts)
2v Laminated tuff
2w Lapilli tuff
2x Porphyritic (amphibole) flows
2y Porphyritic quartz schist with quartz\*
2z Tuff, chloritic schist with quartz\*
INTRUSIVE CONTACT
1 Early Felsic Plutonic Rocks
Gneissic Granitic Rocks
1a Aplite
1b Pegmatite
1c Diorite, quartz diorite
1d Trondhjemite
1e Trondhjemite, gneissic to massive
1f Leucocratic trondhjemite
1g Porphyritic biotite trondhjemite dikes
Massive Granitic Rocks\*
1h Aplite, pegmatite dikes
1i Diorite, quartz diorite
1j Trondhjemite
1k Granodiorite, quartz monzonite
1l Monzonite, quartz monzonite
1m Porphyritic monzonite, quartz monzonite
1n Granodiorite, trondhjemite (weakly foliated)
1o Porphyritic granodiorite
1p Massive quartz monzonite
1q Porphyritic quartz monzonite to granite
Symbols
Schistosity (inclined, vertical)
Lineation, bearing and plunge indicated:
(m - mullion structure, c - cleft, p - pillow, s - slickensides, b - biotite, f - intersection of 2 foliations, F - fold axis of minor fold, Se - stretched spheralites, h - hornblende, Ch - chlorite streaks)
Glacial striae
Pillowed volcanics, dip and facing direction indicated
Pillow elongation (inclined, vertical, facing direction unknown)
Radioactivity, superscript refers to number in table
Minor shear (inclined, vertical)
Major shear (attitude uncertain, attitude indicated)
Trench
Pit
Banding (inclined, vertical)
Kinkband (inclined, vertical with plunge of fold and direction of movement indicated)
Minor fold (strike and dip of axial plane, bearing and plunge of fold axis)
Geological boundary (observed, interpreted)
Small bedrock outcrop
Area of bedrock outcrop
Mine
Mineral Occurrence
Bedding, top (arrow) from grain gradation (inclined, vertical, overturned)
Bedding, top (arrow) from cross bedding (inclined, vertical, overturned)
Bedding top, (arrow) indicated by flame structures in metabasalt-siltstone (inclined, vertical, overturned)
Paleocurrent direction as suggested by ripple marks (R), Cross bedding (X)
Data from diamond drillhole
Shaft, depth in feet
Jointing (inclined, vertical)
Lineament
Lineament, possibly a fault zone
Note: Not all symbols may appear on this map sheet.

\* This is a preliminary field report modified by subsequent laboratory investigations. The legend applies to all maps resulting from current mapping programs in the Wawa area. Units listed may not all be present in each township. Where a rock unit code is followed by a second code it brackets the second unit because within the first unit. Many drillholes, pits, trenches, and all surveyed claims were deleted due to lack of space.
# Greater than 50% silicate-oxide minerals
\* Colour index 20 to 40
# Colour index 10 to 25
f Transitional porphyry to magporphyry
\* Associated with mafic intrusive rocks
# A chemical sedimentary bed which contains 33% or more of the common iron minerals by volume. This does not include commonly associated interbeds of other or exotic sedimentary material. A sufficiently extensive magnetite unit containing a significant proportion of ironstone interbeds of chert or clastic sedimentary material, a sufficiently extensive magnetite unit containing a significant proportion of ironstone interbeds may be designated as an iron formation.
# Dark type conglomerate
f Green mica may be present
\* May be intrusive in part
f Greater than 5% quartz
# Possibly contemporaneous with unit 7
# May be Proterozoic
# Legend established in 1979 and in order to maintain continuity between map sheets it will be retained. Obsolete and not used since Turek et al. (1982) - 1984 units so far indicated that the external granites are younger than the supracrustal rocks.
# May be compiled from external sources.

- ABBREVIATIONS
m ..... mullion structure
c ..... cleft
p ..... pillow
s ..... slickensides
b ..... biotite
mf ..... intersection of two foliations
F ..... fold axis of minor fold
Se ..... stretched spheralites
h ..... hornblende
Ch ..... chlorite
st ..... iron staining
sil ..... siltstone
silt ..... siltstone
chld ..... chloritoid
pf ..... porphyritic
se ..... iron formation
MA ..... magnetic anomaly
th ..... hornblende
my ..... mylonite
gos ..... gossan
c ..... carbonatized
te ..... iron staining
sil ..... siltstone
silt ..... siltstone
chld ..... chloritoid
pf ..... porphyritic
se ..... iron formation
MA ..... magnetic anomaly

