STOCK NO. 10707

SIGNATURE RESOURCES
LINGMAN LAKE PROPERTY

SIGNATURE RESOURCES
PATENTED CLAIMS

OTHER

Ministry of Northern Development and Mines
Ontario
Sean Conway, Minister of Mines

Mines and Minerals Division
Ontario Geological Survey

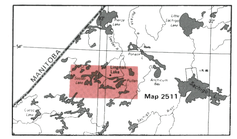
MAP 2511

PRECAMBRIAN GEOLOGY

LINGMAN LAKE AREA

DISTRICT OF KENORA (PATRICIA PORTION)

NTS References: 53 F/14,15
ODM-GSC Aeromagnetic Maps: 3665G, 3673G
ODM Geological Compilation Map: 2178
Scale 1:50 000



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LEGEND

PHANEROZOIC
CENOZOIC
QUATERNARY
PLEISTOCENE AND RECENT
Till, sand, gravel, silt, clay; minor fluvial, lacustrine, and swamp deposits of gravel, sand, silt, and clay
UNCONFORMITY

PRECAMBRIAN
MIDDLE OR LATE PRECAMBRIAN (PROTEROZOIC)
MAFIC INTRUSIVE ROCKS
8 Unsubdivided
8a Diabase, olivine diabase, porphyritic diabase (dikes and sills)
INTRUSIVE CONTACT

EARLY PRECAMBRIAN (ARCHEAN)[a]
ULTRAMAFIC INTRUSIVE ROCKS[b]
7a Serpentinized pyroxenite
INTRUSIVE CONTACT[b]

MAFIC TO INTERMEDIATE INTRUSIVE ROCKS
6 6a Quartz gabbro, porphyritic quartz gabbro (dikes and sills)

INTERMEDIATE TO FELSIC INTRUSIVE ROCKS
5 Unsubdivided
5a Feldspar porphyry, quartz-feldspar porphyry (dikes and sills)
5b Tonalite and/or granodiorite and/or granite (including dikes, sills)
5c Tonalite
5d Quartz porphyry, feldspar-quartz porphyry (dikes and sills)
INTRUSIVE CONTACT

METAVOLCANICS AND METASEDIMENTS
METASEDIMENTS
Chemical Metasediments
4 4a Chert
4b Magnetite ironstone
4c Iron silicate rock
Clastic Metasediments
3 Unsubdivided
3a Arenite, granule conglomerate, wacke, mudstone, minor intermediate to felsic tuff or crystal tuff
3b Wacke, mudstone, arenite, quartz-granule conglomerate
3c Micaceous wacke, mudstone, quartz-granule conglomerate
3d Granule to pebble conglomerate
METAVOLCANICS
Intermediate to Felsic Metavolcanics
2 2a Massive flow
2b Massive flow, tuff, crystal tuff, minor arenite, granule conglomerate, wacke or mudstone
2c Bedded tuff, crystal tuff, lapilli-tuff, minor arenite, granule conglomerate, wacke or mudstone
Mafic to Intermediate Metavolcanics
1 1 Unsubdivided
1a Massive, fine-grained flow, tuff, minor wacke, mudstone or arenite, altered in places
1b Pillowed flow, minor wacke, mudstone, or arenite
1c Massive, medium-grained flow, minor wacke, mudstone, or arenite, altered in places
1d Feldspar porphyritic flow[c], minor wacke, mudstone, or arenite, altered in places
1e Bedded tuff, minor arenite, wacke, or mudstone, altered in places
1f Biotite-rich flow[d]

NOTES
a. These rocks are grouped lithologically and the order does not necessarily imply age relationships between groups.
b. Possibly extrusive, at least in part.
c. May be intrusive. May be quartz gabbro related to unit 6a.
d. Intrusive in part.

SYMBOLS

- Slickenside lineation with plunge
- Geological boundary, observed
- Geological boundary, position interpreted
- Geological boundary, deduced from geophysics
- Thrust fault, teeth indicate direction of dip; (observed)
- Fault, arrows indicate horizontal movement; (observed, assumed)
- Minor folds with plunge
- Anticline, syncline
- Diamond-drill hole; (vertical, inclined)
- Shaft
- Property, surveyed, unsurveyed
- Glacial striae
- Esker
- Small bedrock outcrop
- Area of bedrock outcrop
- Bedding, top unknown; (inclined, vertical)
- Bedding, top (arrow) from grain gradation; (inclined, vertical, overturned)
- Bedding, top (arrow) from crossbedding; (inclined, vertical, overturned)
- Lava flow; top (arrow) from pillow shape and packing
- Fracture cleavage; (horizontal, inclined, vertical)
- Foliation; (horizontal, inclined, vertical)
- Mineral lineation with plunge

PROPERTIES

1. International Minerals and Chemicals Corporation (Canada) Limited [1967]*
2. Kennco Explorations (Canada) Limited [1960]
3. Lingside Copper Mining Company Limited (Lingside Gold Mines)
4. Roman Corporation Limited (Winora Gold Mines)
5. Silverco Mines Limited (Effie Johnson, International Minerals and Chemical option)
6. Twin Gold Mines Limited (Lakelyn Mines, Lingman Lake Gold Mines)

* A date in square brackets indicates last year of recorded exploration activity.

Locations of surveyed claims and diamond drillholes are approximate.

L Leased claim, mining rights only.
P Patented claim.

ABBREVIATIONS

Ag ..... Silver
asp ..... Arsenopyrite
Au ..... Gold
gn ..... Galena
mo ..... Molybdenite
pent ..... Pentlandite
sp ..... Sphalerite

Scale 1:50,000

Metres 1000 0 1 2 3 4 Kilometres

Chains 80 40 0 1 Miles

SOURCES OF INFORMATION

Base map derived from Maps 53 F/14 and 53 F/15 of the National Topographic System.

Stull Lake-Sachigo River Area, District of Kenora (Patricia Portion); Ontario Department of Mines, Map 46c, scale 1:126 720 or 1 inch to 2 miles. Accompanies report by J. Satterly, 1936: Geology of the Stull Lake Area; Ontario Department of Mines, Annual Report, Volume 46, Part 4, p.1-31, 1937.

Seeber Lake, Kenora and Winnipeg Districts; Department of Mines and Natural Resources, Manitoba, Department of Mines and Technical Surveys, Canada, Ontario Department of Mines, Map 3665G, scale 1:63 360 or 1 inch to 1 mile, 1966.

Pullan Lake, Kenora District; Department of Mines and Technical Surveys, Canada, Ontario Department of Mines, Map 3673G, scale 1:63 360 or 1 inch to 1 mile, 1966.

Data has been obtained from unpublished maps in assessment records on file at the Assessment Files Research Office, Ontario Geological Survey, Toronto, and at the Resident Geologist's Office, Ontario Ministry of Northern Development and Mines, Red Lake, particularly, the geological maps, aeromagnetic maps, and diamond drillhole logs of Effie Johnson, International Minerals and Chemical Corporation (Canada) Limited, Kennco Exploration (Canada) Limited, and Silverco Mines Limited.

Mineral Deposits records on file at the Geoscience Data Centre, Ontario Geological Survey, Toronto.

Data has been obtained from unpublished geological maps of Amoco Canada Petroleum Company Limited.

Geology is not tied to surveyed lines.

Magnetic declination at 93°00'00" West Longitude, 53°52'30" North Latitude in January, 1982: 2°10.2' East, annual change - 11.4' (Division of Geomagnetism, Department of Energy, Mines and Resources, Cañada).

ACKNOWLEDGMENTS

Digital scanning and output were provided by Canada Land Data System, Lands Directorate, Environment Canada.

CREDITS

Geology by B.C. Wilson, C.C. Pelletier, and D. Paktunc, 1981.

Cartography by T.W. Watkins, Scientific Review Office, Ontario Geological Survey, 1987.

Every possible effort has been made to ensure the accuracy of the information presented on this map; however, the Ontario Ministry of Northern Development and Mines does not assume any liability for errors that may occur. Users may wish to verify critical information; sources include both the references listed here, and information on file at the Resident Geologist's Office and the Mining Recorder's Office nearest the map area.

Issued 1987

Information from this publication may be quoted if credit is given. Is is recommended that reference to this map be made in the following form:

Wilson, B.C., Pelletier, C.C., and Paktunc, D.

1987: Lingman Lake Area, District of Kenora (Patricia Portion); Ontario Geological Survey, Map 2511, Precambrian Geology Series, scale 1:50 000. Geology 1981.