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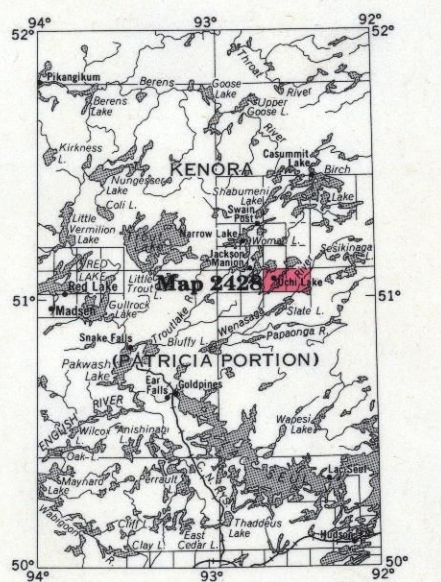
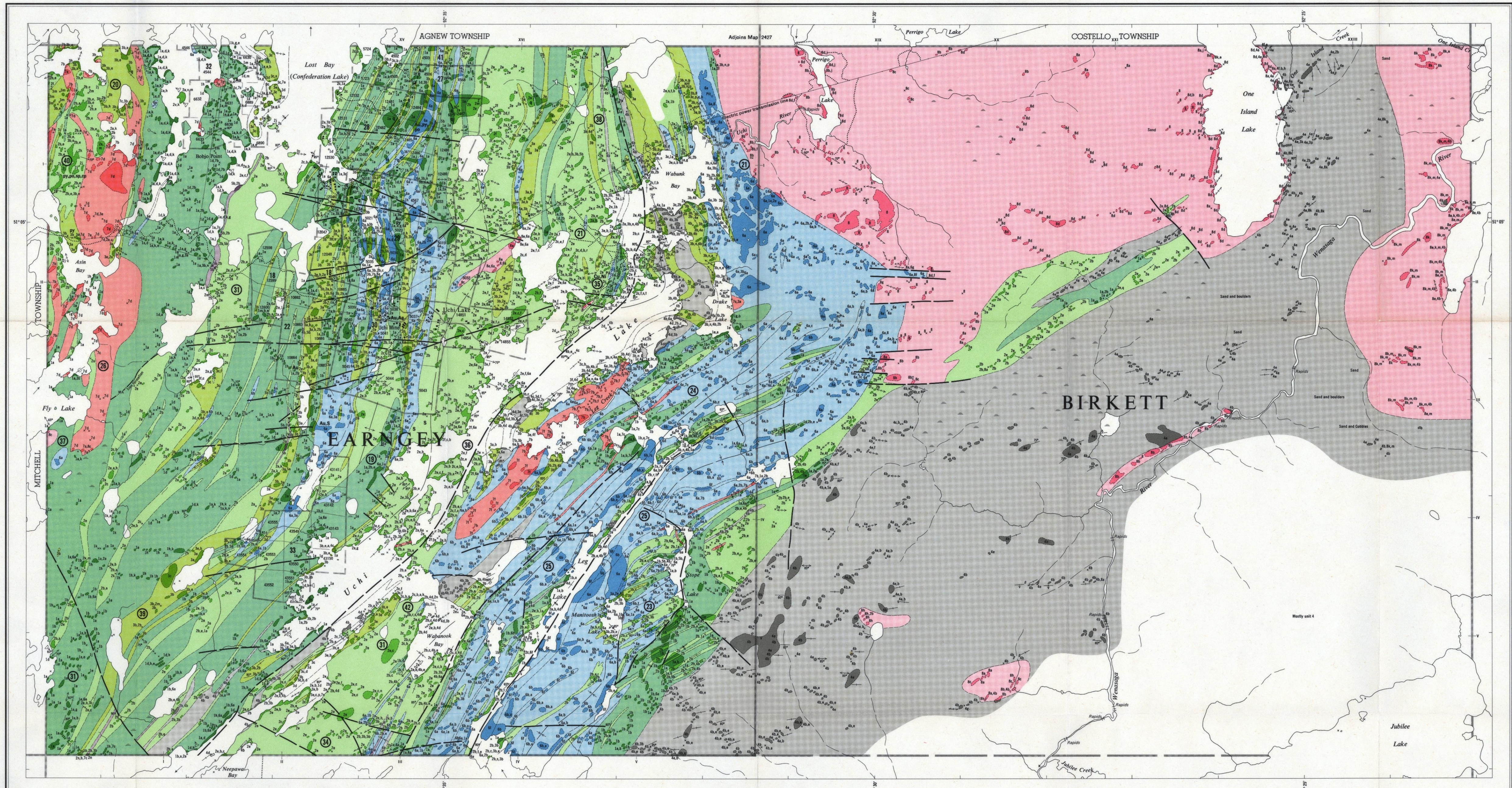
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**LEGEND**

- PHANEROZOIC**  
**CENOZOIC**  
**QUATERNARY**  
**RECENT**  
 Swamp, stream, and lacustrine deposits.  
**PLEISTOCENE**  
 Till, clay, sand, and gravel.  
**UNCONFORMITY**  
**PRECAMBRIAN**  
**EARLY PRECAMBRIAN (ARCHEAN)**  
**FELSIC TO INTERMEDIATE INTRUSIVE ROCKS**  
 1 Unsubdivided.  
 8a Hornblende diorite-syenodiorite.  
 8b Hornblende trondhjemite-quartz diorite.  
 8c Biotite trondhjemite-quartz diorite.  
 8d Hornblende-biotite quartz monzonite-granodiorite.  
 8e Biotite quartz monzonite-granodiorite.  
 8f Hornblende phenocrysts and/or mafic inclusions.  
 8g Intrusion breccia.  
 8h Biotite diorite-syenodiorite (plagioclase).  
 8i Equigranular.  
 8j Pink pegmatite.  
 8m Muscovite (major mineral in any of the above).  
**INTRUSIVE CONTACT**  
**METAMORPHOSED FELSIC TO INTERMEDIATE INTRUSIVE ROCKS**  
 7 Unsubdivided.  
 7a Quartz porphyry.  
 7b Quartz-feldspar porphyry.  
 7c Felsic feldspar porphyry.  
 7d Granophyric granodiorite.  
 7e Felsite.  
 7f Micro quartz diorite.  
 7g Intermediate feldspar porphyry.  
**INTRUSIVE CONTACT**  
**METAMORPHOSED MAFIC TO ULTRAMAFIC INTRUSIVE ROCKS**  
 6 Unsubdivided.  
 6a Gabbro.  
 6b Diorite.  
 6c Quartz diorite.  
 6d Serpentinized pyroxenite.  
 6e Serpentinized peridotite.  
 6f Serpentinized dunite.  
 6g Porphyritic mafic intrusive rocks.  
**INTRUSIVE CONTACT**  
**METASEDIMENTS**  
**CHEMICAL METASEDIMENTS<sup>d</sup>**  
 5a Chert.  
 5b Magnetite-ironstone interbedded with chert.  
**CLASTIC METASEDIMENTS<sup>def</sup>**  
 4a Arenite (excluding arkose).  
 4b Wacke.  
 4c Mudstone.  
 4d Reworked felsic tuff.  
 4e Arkose, lithic arkose.  
 4f Paraconglomerate.  
 4g Orthoconglomerate.  
**METAVOLCANICS<sup>g</sup>**  
**FELSIC METAVOLCANICS<sup>g</sup>**  
 3a Flow.  
 3b Tuff.  
 3c Lapillistone.  
 3d Pyroclastic breccia.  
 3e Lapilli-tuff.  
 3f Tuff-breccia.  
 3g Autoclastic breccia.  
 3h Spherulitic flow.  
 3j Porphyritic flow (quartz phenocrysts).  
 3k Porphyritic flow (amphibole phenocrysts).  
 3m Porphyritic pyroclastic rock (phenoclastic)-feldspar phenocrysts.  
 3n Thin-bedded.  
 3p Medium-bedded.  
 3r Thick-bedded.  
**INTERMEDIATE METAVOLCANICS<sup>g</sup>**  
 2 Unsubdivided.  
 2a Flow.  
 2b Tuff.  
 2c Lapillistone.  
 2d Pyroclastic breccia.  
 2e Lapilli-tuff.  
 2f Tuff-breccia.  
 2g Volcanic breccia.  
 2h Autoclastic breccia.  
 2i Spherulitic flow.  
 2j Amygdaloidal flow.  
 2m Porphyritic flow-feldspar phenocrysts.  
 2n Porphyritic flow-amphibole ± chlorite ± biotite phenocrysts.  
 2p Porphyritic pyroclastic rock (phenoclastic)-quartz phenocrysts.  
 2q Flow, bedded.  
 2r Thin-bedded.  
 2s Medium-bedded.  
 2t Thick-bedded.  
 2u Epitaxial mafic to intermediate flow.  
 2v Pillowed flow.  
**MAFIC METAVOLCANICS<sup>g</sup>**  
 1 Unsubdivided.  
 1a Flow.  
 1b Porphyritic flow-amphibole phenocrysts.  
 1c Porphyritic flow-feldspar phenocrysts.  
 1d Pillowed flow.  
 1e Pyroclastic rock, lapilli-tuff, tuff.  
 1f Autoclastic breccia.  
 1g Amygdaloidal flow.  
 1h Pillow breccia.  
 1k Epidote-rich, mafic to intermediate.  
 1m Variolitic flow.  
 1n Carbonatized.



Scale: 1 inch to 50 miles.  
 N.T.S. Reference: 52N/1, 52N/2.

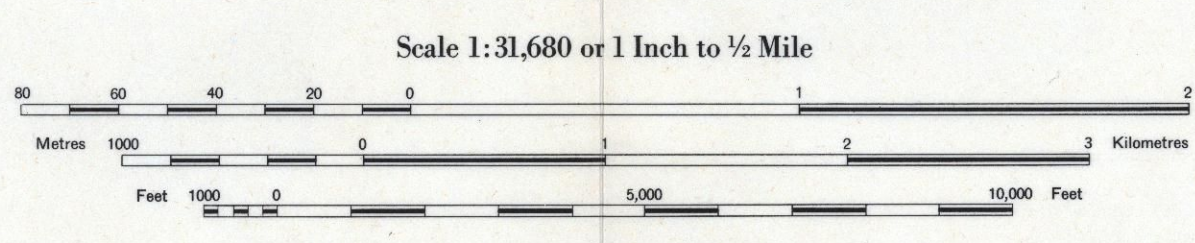
**SYMBOLS**

- Glacial striae.
- Small bedrock outcrop.
- Area of bedrock outcrop.
- Bedding, top unknown; (inclined, vertical).
- Bedding, top (arrow) from grain gradation; (inclined, vertical, overturned).
- Bedding, top indicated by arrow; (inclined, vertical, overturned).
- Bedding, top (arrow) from cross bedding; (inclined, vertical, overturned).
- Lava flow; top (arrow) from pillows shape and packing.
- Lava flow; top in direction of arrow.
- Schistosity; (horizontal, inclined, vertical).
- Foliation; (horizontal, inclined, vertical).
- Lineation with plunge.
- Geological boundary, observed.
- Geological boundary, position inferred.
- Geological boundary, deduced from geophysics.
- Fault; (observed, assumed). Spot indicates down throw side, arrows indicate horizontal movement.
- Drag folds with plunge.
- Anticline, syncline, with plunge.
- Drill hole; (vertical, inclined).
- Vein, width in inches.
- Magnetic attraction.
- Swamp.
- Road.
- Trail, portage, winter road.
- Township boundary, with milepost, approximate position only.
- Township boundary, unsurveyed.
- Mining property, surveyed; approximate position only.
- Mineral deposit; mining property, unsurveyed.
- Surveyed line, approximate position only.

Ag Silver.  
 ap Apatite.  
 Au Gold.  
 cp Chalcopyrite.  
 Cu Copper.  
 fu Fuchsite.  
 Mo Molybdenum.  
 Ni Nickel.  
 pe Pyrrhotite.  
 py Pyrite.  
 q Quartz.  
 S Sulphide mineralization.  
 sp Sphalerite.  
 tm Tourmaline.

<sup>d</sup>Unconsolidated deposits. Cenozoic deposits are represented by the lighter and uncoloured parts of the map.  
<sup>e</sup>Bedrock geology. Outcrops and inferred extensions of each rock map unit are shown respectively in deep and light tones of the same colour. Where in places a formation is too narrow to show in colour and must appear in black, a short black bar appears in the appropriate block.  
<sup>f</sup>Subdivisions of major rock units do not indicate age relationships.  
<sup>g</sup>Age relationships between units 1, 2, 3, 4, and 5 are unknown.  
<sup>h</sup>Formerly classified in part as the Slate Lake Series and in part as Uchi Series.  
<sup>i</sup>Preceded by 4f, ep, 4te these codes denote composition of matrix conglomerate.  
<sup>j</sup>Formerly classified as part of the Uchi Series.  
<sup>k</sup>Occurs only on companion sheet.

Ontario Geological Survey  
 Map 2428  
**EARNGEY and BIRKETT TOWNSHIPS**  
 KENORA DISTRICT



**NOTES**  
 The designating letters "KRL" have been omitted on this map from the numbers marking the mining claims recorded at the office of the Red Lake Mining Division.

**SOURCES OF INFORMATION**  
 Geology by P. C. Thurston and assistants, Ontario Geological Survey, 1974.  
 Geology is not tied to surveyed lines.  
 Assessment files, Ministry of Natural Resources, Toronto, Resident Geologist's files (ODM), Red Lake Map 47c, Uchi Lake Area, Ministry of Natural Resources (ODM).  
 Aeromagnetic maps 872G and 885G; ODM-GSC.  
 Preliminary maps (OGS) P. 532 Earngey Township and part of Birkett Township, 1958; Birkett Township, scale 1 inch to 1/4 mile, issued 1975.  
 Cartography by C. Karpas, P. A. Wisbey and assistants, Surveys and Mapping Branch, 1979.  
 Base maps derived from maps of the Forest Resources Inventory, Surveys and Mapping Branch. Additional information by P. C. Thurston.  
 Magnetic declination in the area approximately 3° 30' East in 1975.

Parts of this publication may be quoted if credit is given. It is recommended that reference to this map be made in the following form:  
 Thurston, P. C.  
 1980: Earngey and Birkett Townships; Ontario Geological Survey Map 2428, Precambrian Geology Series, scale 1 inch to 1/4 mile, geology 1974.

**PROPERTIES, MINERAL DEPOSITS**  
**EARNGEY TOWNSHIP**  
 18. Bergeron, Mrs. Kenneth (Berrigan Prospect).  
 19. Bohme, J. D. S. (1971).  
 20. Darnel Gold Mines Ltd. (1959).  
 21. Falconbridge Nickel Mines Ltd. (1969).  
 22. Geisler, Robert A. (former Raingold Mines Occurrences).  
 23. Grip Lake Mines Ltd. (1956).  
 24. Hanna Gold Mines Ltd. (1970).  
 25. Jellicoe Mines (1939) Ltd. (1956).  
 26. Lee, Norman (1970).  
 27. Little Long Lac Mines Ltd.  
 28. Grassel-Cameron Prospect.  
 29. Jada Prospect.  
 30. Kenelsa Prospect.  
 31. Uchi Mines.  
 32. New Husco Mines Ltd. (1970).  
 33. New York Oils Ltd. (former Bobjo Prospect).  
 34. Northgate Exploration Ltd. (former Hanson Prospect).  
 35. Picairum Gold Mines Ltd. (1938).  
 36. Polholm, H. (Campbell Island Mines and Exploration Ltd. Prospect).  
 37. Salem Exploration Ltd. (1966).  
 38. Selco Mining Corporation Ltd.  
 39. Colambere option Fly Prospect.  
 40. Lost Bay Prospect.  
 41. Uchi River Prospect.  
 42. Wasp Grid Prospect.  
 43. Tremblay, J. A.  
 44. Woco Gold Developments Ltd. (1938).

Information current to December 31st, 1974.  
 Only former properties on ground now open for staking are shown where exploration information is available - a date in square brackets indicates last year of exploration activity. For further information see report.