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 G. A. JONES, Executive Director, Division of Mines
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PRELIMINARY MAP P-853
 KIRKLAND LAKE DATA SERIES
EDWARDS TOWNSHIP

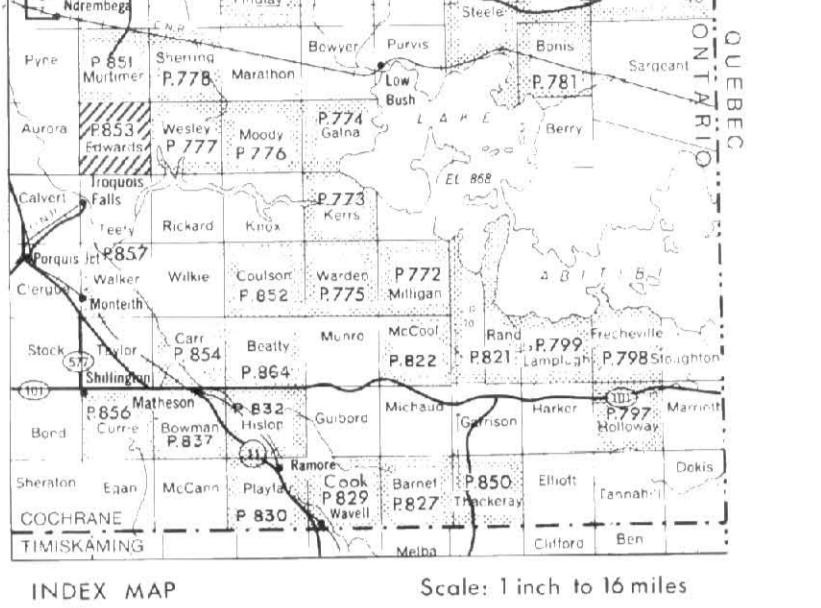
DISTRICT OF COCKBURN
 Scale 1 inch to 1 mile
 NTS Reference: 52 AJ15
 CGS Aeromagnetic Map: 2337C
 CGS Aeromagnetic Map: 1985C
 CGS Geological Compilation Series Maps: 2046, 2205

The legend, the geological and mining symbols, and the metal and mineral references, accompanying this map apply to the maps published in the current Kirkland Lake Data Series commencing Map P-772.

Rock units 7, 10, 11, 12, 13, 14, 15, 16 and 17 do not appear on this map.

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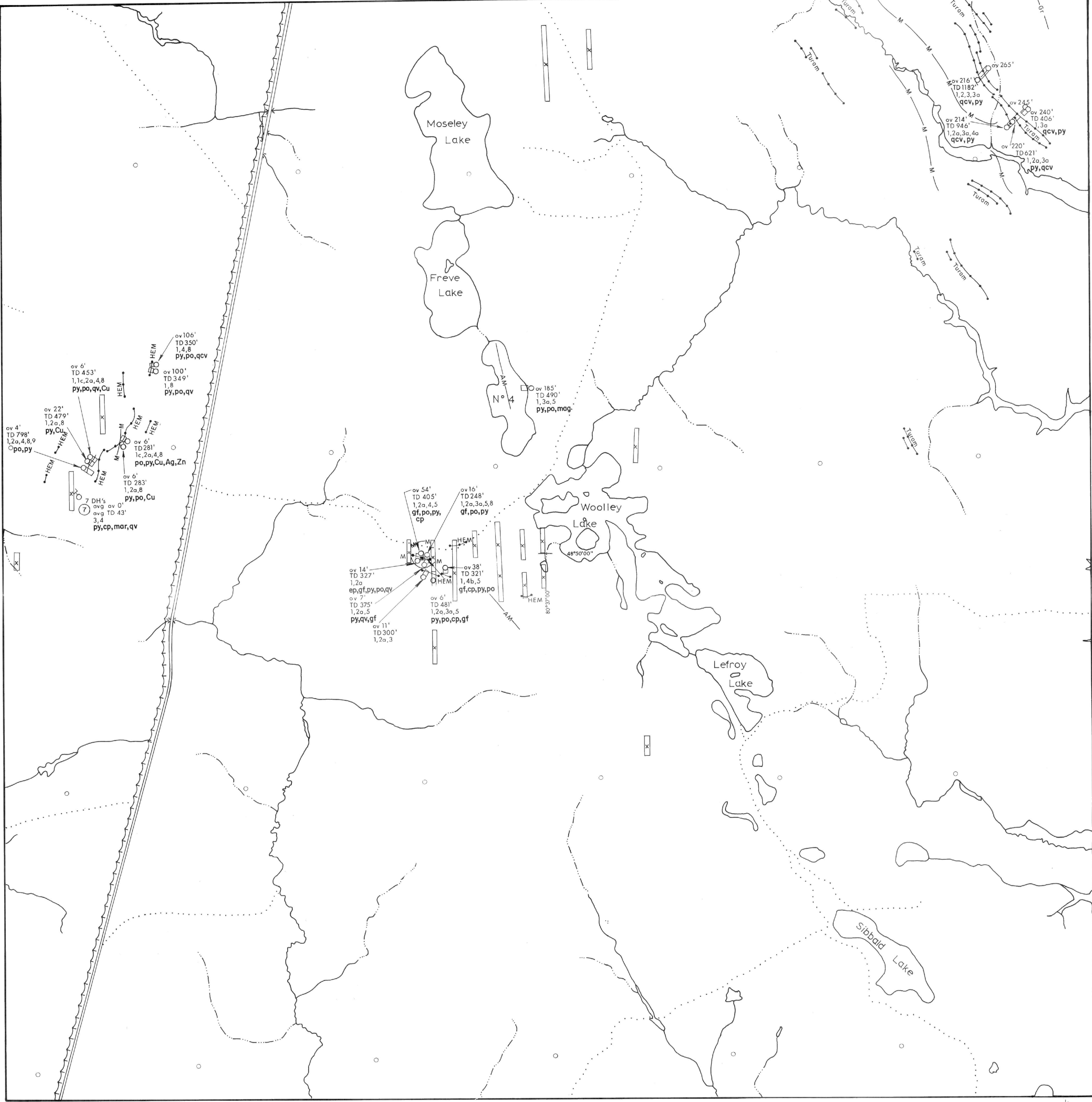
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Scale: 1 inch to 10 miles
 Kirkland Lake Data Series maps published

LEGEND

- SEDIMENTARY**
- 18a IRONIC DEPOSITS: Iron and iron-ore bogs
 - 18b COAL-TO-ASH DEPOSITS: Clay, silt
 - 18c CLAY-TO-ASH DEPOSITS: Sand and gravel deposits
 - 18d CLAY-TO-ASH DEPOSITS: Silt and gravel deposits
 - 18e IRONIC DEPOSITS: Sand and gravel deposits
 - 18f IRONIC DEPOSITS: Sand and gravel deposits
 - 18g IRONIC DEPOSITS: Sand and gravel deposits
 - 18h IRONIC DEPOSITS: Sand and gravel deposits
 - 18i IRONIC DEPOSITS: Sand and gravel deposits
 - 18j IRONIC DEPOSITS: Sand and gravel deposits
 - 18k IRONIC DEPOSITS: Sand and gravel deposits
 - 18l IRONIC DEPOSITS: Sand and gravel deposits
 - 18m IRONIC DEPOSITS: Sand and gravel deposits
 - 18n IRONIC DEPOSITS: Sand and gravel deposits
 - 18o IRONIC DEPOSITS: Sand and gravel deposits
 - 18p IRONIC DEPOSITS: Sand and gravel deposits
 - 18q IRONIC DEPOSITS: Sand and gravel deposits
 - 18r IRONIC DEPOSITS: Sand and gravel deposits
 - 18s IRONIC DEPOSITS: Sand and gravel deposits
 - 18t IRONIC DEPOSITS: Sand and gravel deposits
 - 18u IRONIC DEPOSITS: Sand and gravel deposits
 - 18v IRONIC DEPOSITS: Sand and gravel deposits
 - 18w IRONIC DEPOSITS: Sand and gravel deposits
 - 18x IRONIC DEPOSITS: Sand and gravel deposits
 - 18y IRONIC DEPOSITS: Sand and gravel deposits
 - 18z IRONIC DEPOSITS: Sand and gravel deposits
- NEOZOIC**
- 17 Kimberlite
- PALEOZOIC**
- 16a UPPER ONTARIO: 16a1 Huronian Formation: limestone, dolomite, sandstone
 - 16a2 Huronian Formation: limestone, shale
 - 16b MIDDLE AND UPPER ONTARIO: 16b1 Huronian Formation: shale
 - 16b2 Huronian Formation: limestone
 - 16b3 Huronian Formation: limestone, shale
 - 16b4 Huronian Formation: sandstone
- PRECAMBRIAN**
- 15a LATE PRECAMBRIAN (PROTEROZOIC): 15a1 MAFIC INTRUSIVE ROCKS: 15a1a Diabase dikes
 - 15b MIDDLE PRECAMBRIAN (PROTEROZOIC): 15b1 ALKALIC INTRUSIVE ROCKS: 15b1a Spinelite, monzonite, lamprophyre
 - 15b2 ALKALIC INTRUSIVE ROCKS: 15b2a Spinelite, monzonite, lamprophyre
 - 15b3 ALKALIC INTRUSIVE ROCKS: 15b3a Spinelite, monzonite, lamprophyre
 - 15c EARLY PRECAMBRIAN (ARCHEAN): 15c1 MAFIC INTRUSIVE ROCKS: 15c1a Diabase dikes
 - 15d METASEDIMENTS: 15d1 Conglomerate, gneiss, schist, slate
 - 15d2 Conglomerate, gneiss, schist, slate
 - 15d3 Conglomerate, gneiss, schist, slate
 - 15d4 Conglomerate, gneiss, schist, slate
 - 15d5 Conglomerate, gneiss, schist, slate
 - 15d6 Conglomerate, gneiss, schist, slate
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 - 15d100 Conglomerate, gneiss, schist, slate



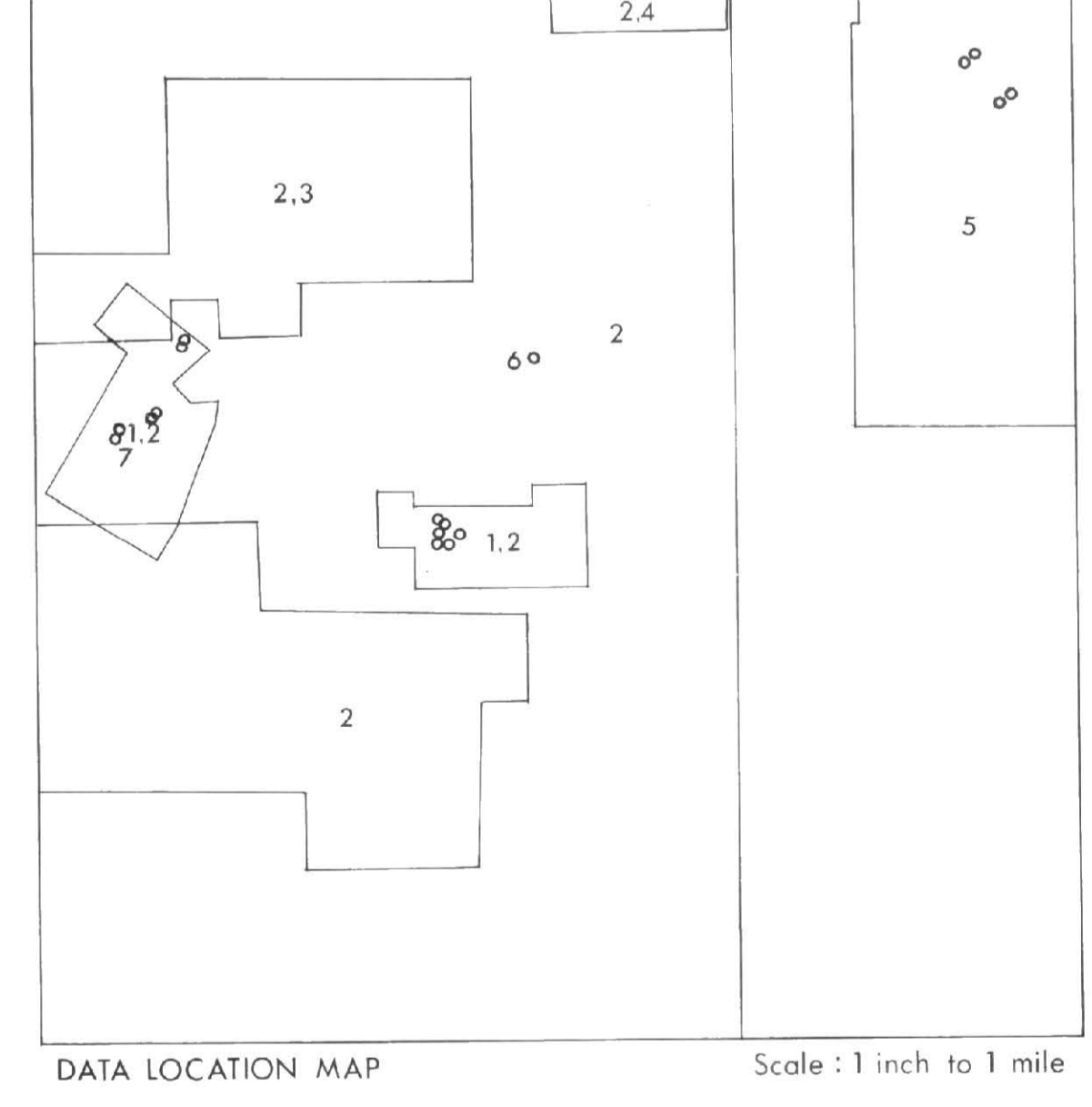
Scale: 1 inch to 1/4 mile

DATA FILED WITH THE RESIDENT GEOLOGIST ONTARIO MINISTRY OF NATURAL RESOURCES KIRKLAND LAKE

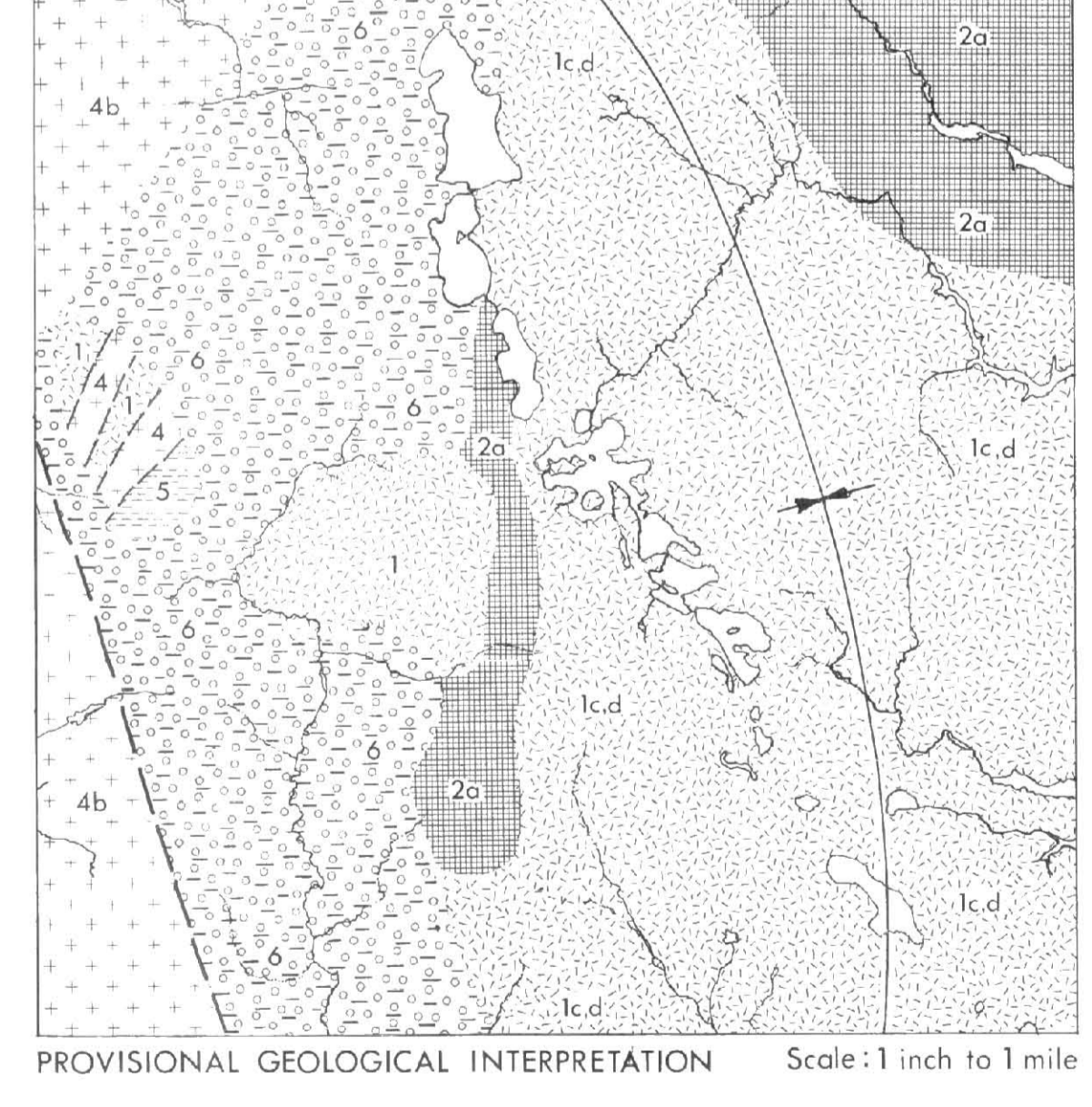
		GEOLOGICAL	DIAMOND DRILLING	AIRBORNE MAGNETOMETER	AIRBORNE ELECTROMAGNETOMETER	GROUND MAGNETOMETER	VERTICAL LOOP ELECTROMAGNETOMETER	HORIZONTAL LOOP ELECTROMAGNETOMETER	TURAM ELECTROMAGNETOMETER	JEM	INDUCED POLARIZATION	VIP	RESISTIVITY	GRAVITY	GEOCHEMICAL	OTHERS
1.	Canadian Javelin Ltd. "J10"	64	64*			64	64									
2.	Canadian Javelin Ltd. "J11"	64		64	64											
3.	Canadian Javelin Ltd. "J12"	64		64	64											
4.	Canadian Javelin Ltd. "J13"	64		64	64											
5.	Glen Lake Silver Mines Ltd.			64		62	64								64	
6.	International Nickel Co. of Canada Ltd., The			64												
7.	Tesluk		58*													

* Composite geology mapped where multiple drill holes indicated

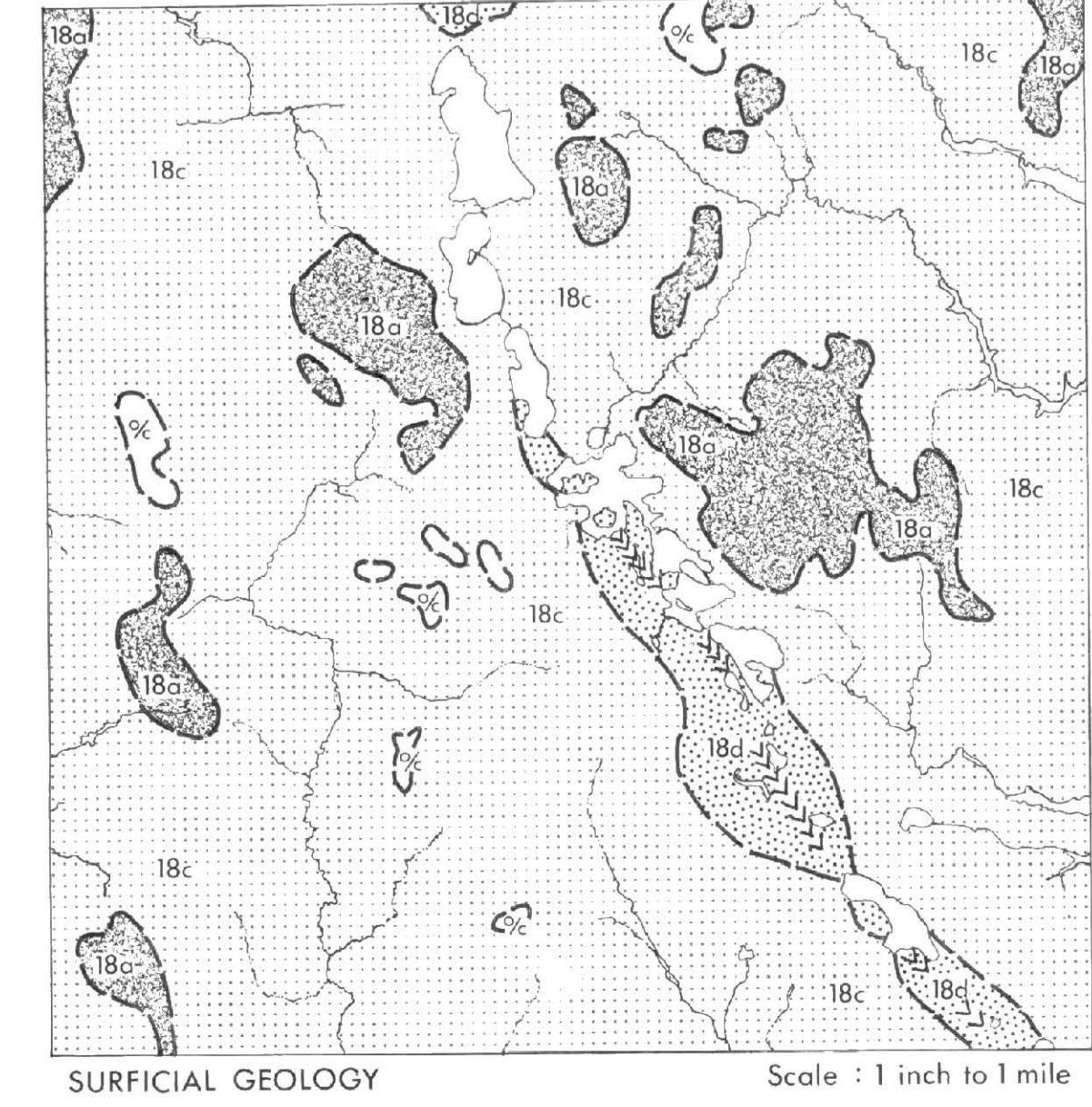
Note: The numbers on the above list stand for the year when the work was done e.g. 66 for 1966. On the accompanying DATA LOCATION MAP only areas for which work was submitted to the Ministry are outlined and thus a company may hold more ground than indicated here. The numbers on the DATA LOCATION MAP and any circled numbers refer to the company list above.



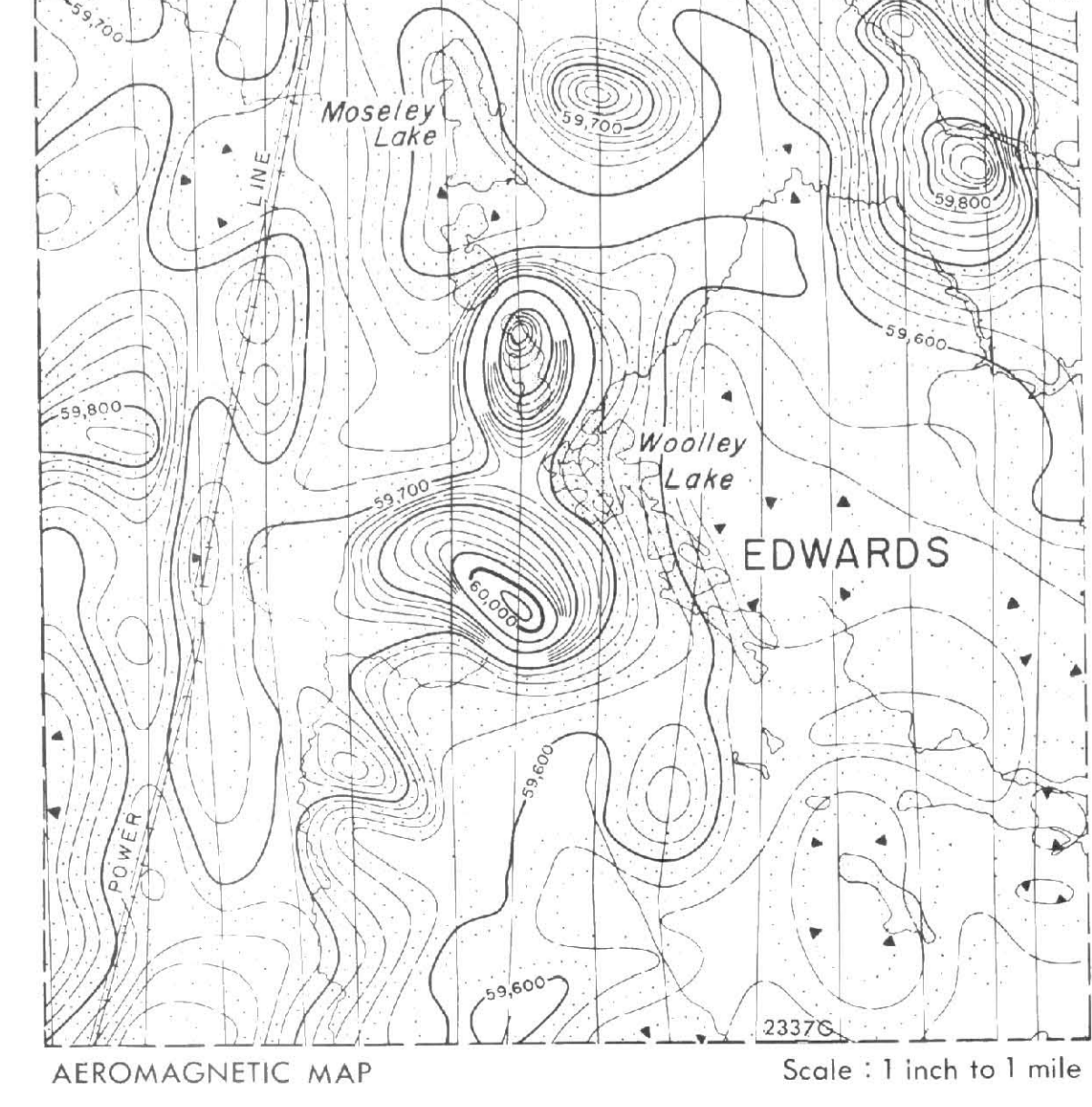
Scale: 1 inch to 1 mile



Scale: 1 inch to 1 mile



Scale: 1 inch to 1 mile



Scale: 1 inch to 1 mile

4. Formerly classified as Kewadin
 b. Formerly classified as Timiskaming
 c. Formerly classified as Malabar
 d. Formerly classified as Algoma
 e. Includes north-south trending line of Macabean swarm
 f. Includes striking and sub-parallel
 g. Includes Keswadin
 h. Several ages; some units appear to be intrusive equivalents
 i. Volcanic formations whereas others postdate volcanic
 j. Rocks in these groups are subdivided lithologically; the
 order does not necessarily imply age relationships within
 or among groups.
- GEOLOGICAL AND MINING SYMBOLS**
- Glacial stream
 - Drill hole; vertical or projected vertically; data complete, data incomplete, overburden in feet (or 0/0/0), overburden in meters (inclined)
 - Bedrock outcrop
 - Bedding, top unknown; (inclined, vertical)
 - Bedding, top (arrow) from grain gradation; (inclined, vertical, overturned)
 - Bedding, top (arrow) from cross bedding; (inclined, vertical)
 - Lineation with plunge
 - Geological boundary, observed, unobscured
 - Geological boundary, deduced iron gneiss
 - Fault; (observed, assumed). Spikes indicate down throw side, arrows indicate horizontal movement
 - Lineament
 - Jointing; (horizontal, inclined, vertical)
 - Drag folds with plunge
 - Anticline, syncline, with plunge
 - Shaft; depth in feet
 - Drill hole; vertical or projected vertically; data complete, data incomplete, overburden in feet (or 0/0/0), overburden in meters (inclined)
 - Mineral occurrence at surface
 - Airborne electromagnetic anomaly (Canadian Aero System)
 - Airborne electromagnetic anomaly, Quarter & Channel Input System
 - 2 channel response
 - 3 channel response
 - 4 channel response
 - 5 channel response
 - 6 channel response
 - Large enclosing circle means composite magnetic anomaly
 - Airborne magnetometer anomaly
 - Ground magnetometer anomaly
 - Ground electromagnetic conductor (Vibro-Loop; 900-watt loop; 900-watt loop; Very low freq.; Turam; JEM-Cine DP-16)
 - Induced Polarization anomaly
 - Spontaneous Polarization anomaly
 - Gravity anomaly
 - Radioisotopic anomaly
 - Resistivity anomaly
 - Iron Formation
- METAL AND MINERAL REFERENCES**
- Ag Silver
 - Asb Asbestos
 - Dol Dolomite
 - Co Cobalt
 - Cu Chalcoprite
 - Chn Chalcoprite
 - Cu Copper
 - Ep Epidote
 - Flu Fluorite
 - Gal Galena
 - Gr Graphite
 - Hg Mercury
 - Msp Magnetite
 - Mst Marcasite
 - Ni Nickel
 - Ms Melnikovite
 - Py Pyrite
 - Qz Quartz
 - Sp Spinelite
 - St Sulfur
 - Tk Tellurite
 - U Uranium
 - V Vanadinite
 - Zn Zinc
- SOURCE OF INFORMATION**
- Compiled by the Geological Survey of Canada in cooperation with Leo J. Jones, E. G. Pyle, and J. G. Jones, Ontario Ministry of Natural Resources from data on file with the Ontario Ministry of Natural Resources Resident Geologist, Kirkland Lake.
- Base maps derived mainly from Forest Resources Inventory, Division of Forests, Ontario Ministry of Natural Resources, 1973.
- Parts of this publication may be quoted if credit is given to the Ontario Division of Mines. It is recommended that reference to this map be made in the following form:
- Edwards Township, District of Cockburn, Ontario Div. of Mines, Prelim. Map P-853, Kirkland Lake Data Series, scale 1 inch to 1 mile. Data compiled 1972, 1973.