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N.T.S.:- 31C/14 SE
RPT. NO. 3

SUMMARY REPORT
ON THE
HARDIE PROPERTY
BARRIE AND CLARENDON TOWNSHIPS
FRONTENAC COUNTY
EASTERN ONTARIO MINING DIVISION
ONTARIO
FOR
GRANDAD RESOURCES LIMITED

F.J. SHARPLEY

FEBRUARY 1984

OM83-9-C-378

GRANDAD RESOURCES LIMITED

HARDIE PROPERTY

PROPERTY

Eastern Ontario Mining Division, Ontario

Frontenac County

Barrie Township

Claims:

E0 543863	Lot 3	S 1/2	Concession IX
E0 543864	Lot 4	S 1/2	Concession IX
E0 552713	Lot 2	S 1/2	Concession X
E0 552714	Lot 1	S 1/2	Concession X
E0 575039	Lot 5	N 1/2	Concession IX
E0 575540	Lot 6	S 1/2	Concession IX
E0 575569	Lot 3	S 1/2	Concession X
E0 600411	Lot 4	S 1/2	Concession X
E0 673138	Lot 2	N 1/2	Concession IX

Clarendon Township

Claims:

E0 673144	Lot 25	W 1/2	Concession XIV
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OWNERSHIP

Claim optioned from D.A. Hardie and A.A. Hardie, 17 Poplar Road, West Hill, Ontario.

LOCATION AND ACCESS

Accessibility is by Highway 506, 10 miles east of Highway 41, a distance eleven miles north of Kaladar, about 170 miles east of Toronto in Eastern Ontario.

EXPLORATION HISTORY

The area was prospected for gold in the late 19th and early 20th

century.

Part of the property known originally as the Gough claims.

Trenching was carried out in 1938 on the South Zone over a strike length of 800 feet.

Packsack drilling carried out in 1980 in 5 holes for 132 feet on the North Zone.

Diamond drilling in 1983 in 3 holes for 304 feet on the North and South Zones.

GEOLOGY AND MINERALIZATION

A number of gold-silver and base metal properties within the Grenville Province occur near the unconformity between the Flinton Group of sediments and the underlying volcanic rocks and marbles.

On the Hardie Property there are two mineralized zones within Grenville rocks of Eastern Ontario as follows:

The North Zone is high grade gold associated with narrow quartz veins in meta-arkose over a strike length of 300m. The quartz-tourmaline-hematite veins within the meta-arkose, mineralized with disseminated pyrite and chalcopryrite, are reported to have assayed up to 5.70 oz. Au per ton and 4.00 oz. Ag per ton over narrow widths (4" to 4') and intermittently over a strike length of 800 feet in the North Zone.

The South Zone consists of high grade zinc, lead and silver mineralization in dolomitic marble over a width of 50m and a length of 300m. The zone occurs within the dolomitic marbles of the Myer Cave Formation. Mineralized trenches over a strike length of 1,000 feet have exposed a series of concordant quartz-calcite-tremolite veins carrying dominantly tetrahedrite with lesser chalcopryrite, bornite, sphalerite, pyrite and arsenopyrite. The vein systems are strongly folded, steeply dipping, pinch and swell, and the mineralization is erratic. Assays are reported up to 46.75 oz. Ag per ton and 0.12 oz. Au per ton over a width of eight inches from one of the trenches. In 1983 a drill hole adjacent to the South Zone assayed 4.88% Zn, 1.26% Pb and 1.07 oz. Ag per ton over a core length of 16 feet.

The purpose of the current exploration programme is to evaluate these occurrences using magnetometer, V.L.F., induced polarization, geological surveys and diamond drilling.

OPTION TERMS

Payments:		
Downpayment	\$	25,250
July 31, 1984		25,000
January 31, 1985		100,000
January 31, 1986		250,000
January 31, 1987		300,000
January 31, 1988		600,000
January 31, 1989		700,000

Total:	\$2,000,250	
January 31, 1990	\$1,000,000	40 % interest
	\$2,000,250	100 % interest

ASSESSMENT WORK REQUIREMENTS

Claims:

	work recorded	recording date	work requirements
EO 543863	200	09/20/79	lease before 1990
EO 543864	144	09/20/79	60 days-09/20/84
EO 552713	140	02/08/80	60 days-02/08/85
EO 552714	140	02/08/80	60 days-02/08/85
EO 575039	140	05/05/80	60 days-05/05/85
EO 575040	140	05/05/80	60 days-05/05/85
EO 575569	130	05/29/80	10 days-05/29/84
EO 600411	100	11/05/80	40 days-11/05/84
EO 673138	nil	01/11/84	20 days-01/11/85
EO 673144	nil	03/08/84	20 days-03/08/85

CONCLUSION AND RECOMMENDATIONS

A 1984 exploration programme is to consist of linecutting, magnetometer, I.P., geological surveys and diamond drilling.

BUDGET

PHASE I	-	\$	99,673
PHASE II	-	\$	199,650

		\$	299,323

F.J. SHARPLEY
Burlington Ontario
revised March 9, 1984

HARDIE PROPERTY

BUDGET

PHASE I

1. Linecutting:		
26 km (16 mi) at \$ 200/km (\$ 325/mi)		\$ 5,200
2. Magnetometer Survey:		
26 km (16 mi) at \$ 181/km (\$ 294/mi)		\$ 4,706
3. V.L.F.-E.M. Survey:		
26 km (16 mi) at \$ 181/km (\$ 294/mi)		\$ 4,706
4. Geological Mapping:		
20 km (12 mi)		\$ 4,000
5. I.P. Survey		
6 km (3.7 mi)		\$ 13,000
6. Diamond Drilling:		
894m (2,950 feet) at \$ 66/m (\$ 20/ft)		\$ 59,000
7. Administration & Supervision: 10 %		\$ 9,061

Sub-Total:		\$ 99,673

Phase II

8. Diamond Drilling:		
2,750m (9,022 ft) at \$ 66/m (\$20/ft.)		\$181,500
9. Administration & Supervision 10 %		\$ 18,150

Sub-Total:		\$199,650

PHASE I + PHASE II

TOTAL: \$ 299,323

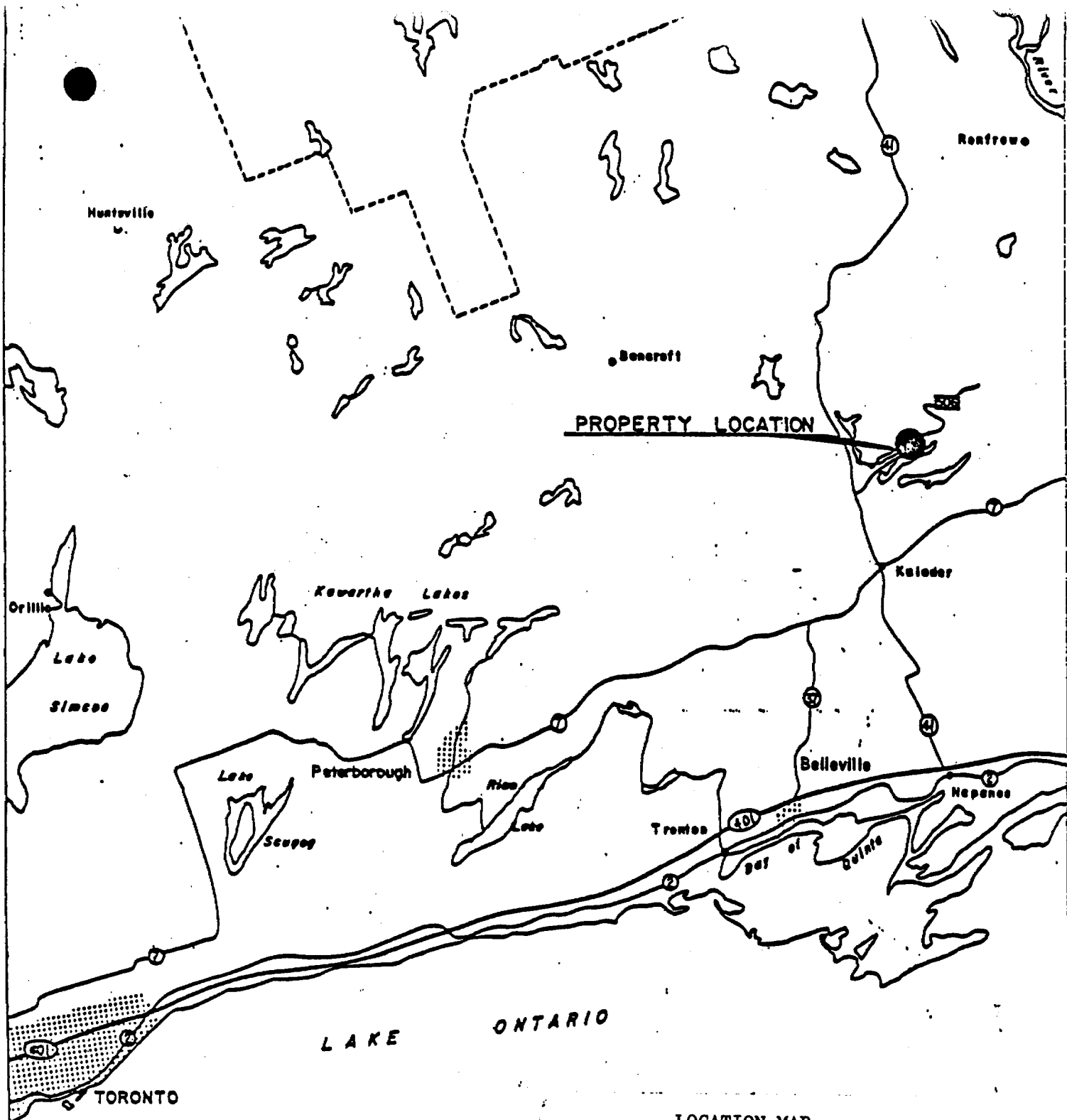
REFERENCES

- Barron, P.S., 1983 Summary of Field Work, 1983 by the Ontario Geological Survey; OGS MP-16; No. S61; "Geology of Selected Gold Occurrences in Eastern Ontario" pp 276-280.
- Hewitt, 1964 O.D.M., G.C. No. 12, Geological Notes for Maps Nos. 2053 and 2054, Madoc-Gananoque Area
- Lea & Dill 1968 Zinc Deposits, Balmat Edwards District, New York; Ore Deposits of U.S. Vol.I pp 20-48.
- Lill, J., 1980 Report on the Hardie Property, Barrie Township, Ontario.
- Moore, J.M., Jr. and Morton, R.L., 1980
O.G.S., O.F.R., 5316
Geology of the Clarendon Lake Area, Counties of Frontenac and Lennox and Addington; O.G.S. Preliminary Map P.2278
- O.D.M., 1942 Vol. LI, Part IV; Map 51d, Geology of the Grimsthorpe - Kennebec Area; Meen, V.B. and Harding, W.D.
- Wolffe, J.M., 1982
O.G.S. Report 216; Geology of the Long Lake Area; Lennox, Addington and Frontenac Counties, Ontario.

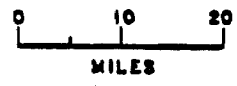
APPENDIX

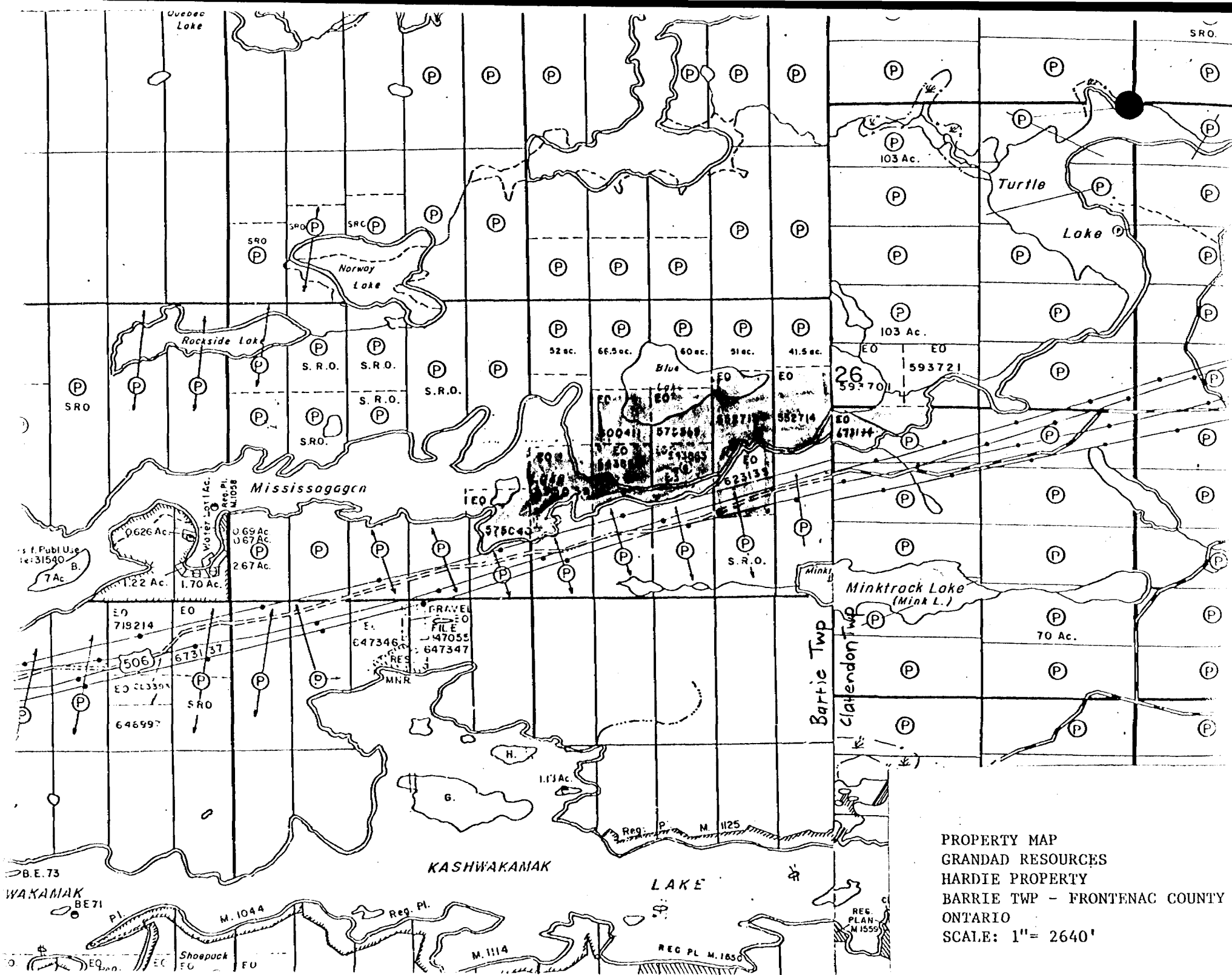
MAPS

Location Map	1" = 20 miles
Property Map	1" = 2,640'
Grid Map	1" = 800'
Grid Map	1" = 2,640'
Section D.D.H. 83-3	1" = 40'
Trench Map	
Detailed Geology (O.G.S. 1983)	1" = 1000'
General Geology (O.G.S. 1983)	1:10,000
Airborne Magnetics	1" = 1 mile

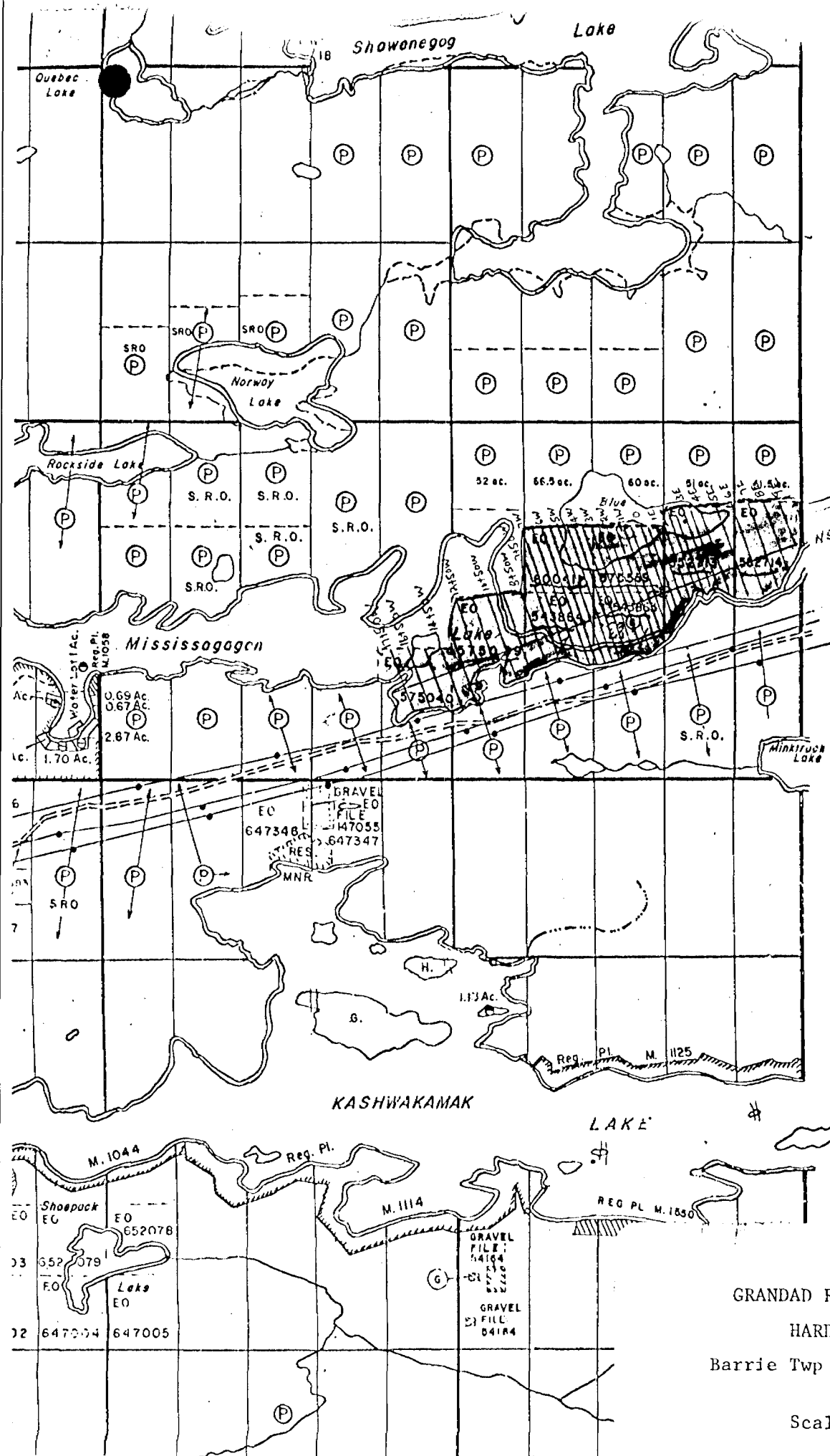


LOCATION MAP
 GRANDDAX RESOURCES LIMITED
 HARDIE PROPERTY
 Barrie Twp - Frontenac County
 ONTARIO
 Scale: 1"=20 miles





PROPERTY MAP
 GRANDDAD RESOURCES
 HARDIE PROPERTY
 BARRIE TWP - FRONTENAC COUNTY
 ONTARIO
 SCALE: 1" = 2640'



XII

XI

X

IX

VIII

VII

Clarendon Twp. (M.77)

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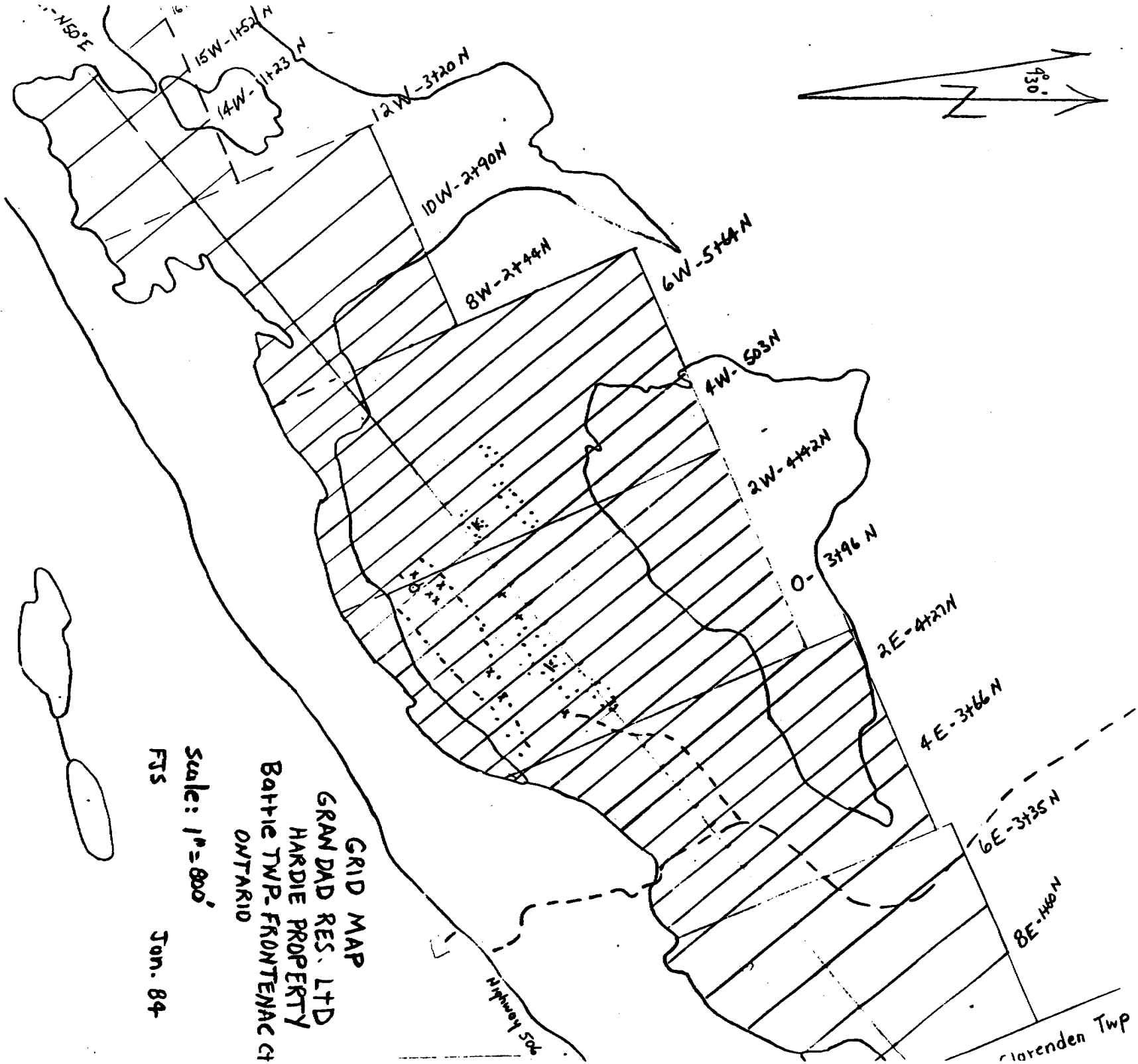
GRID MAP

GRANDAD RESOURCES LIMITED

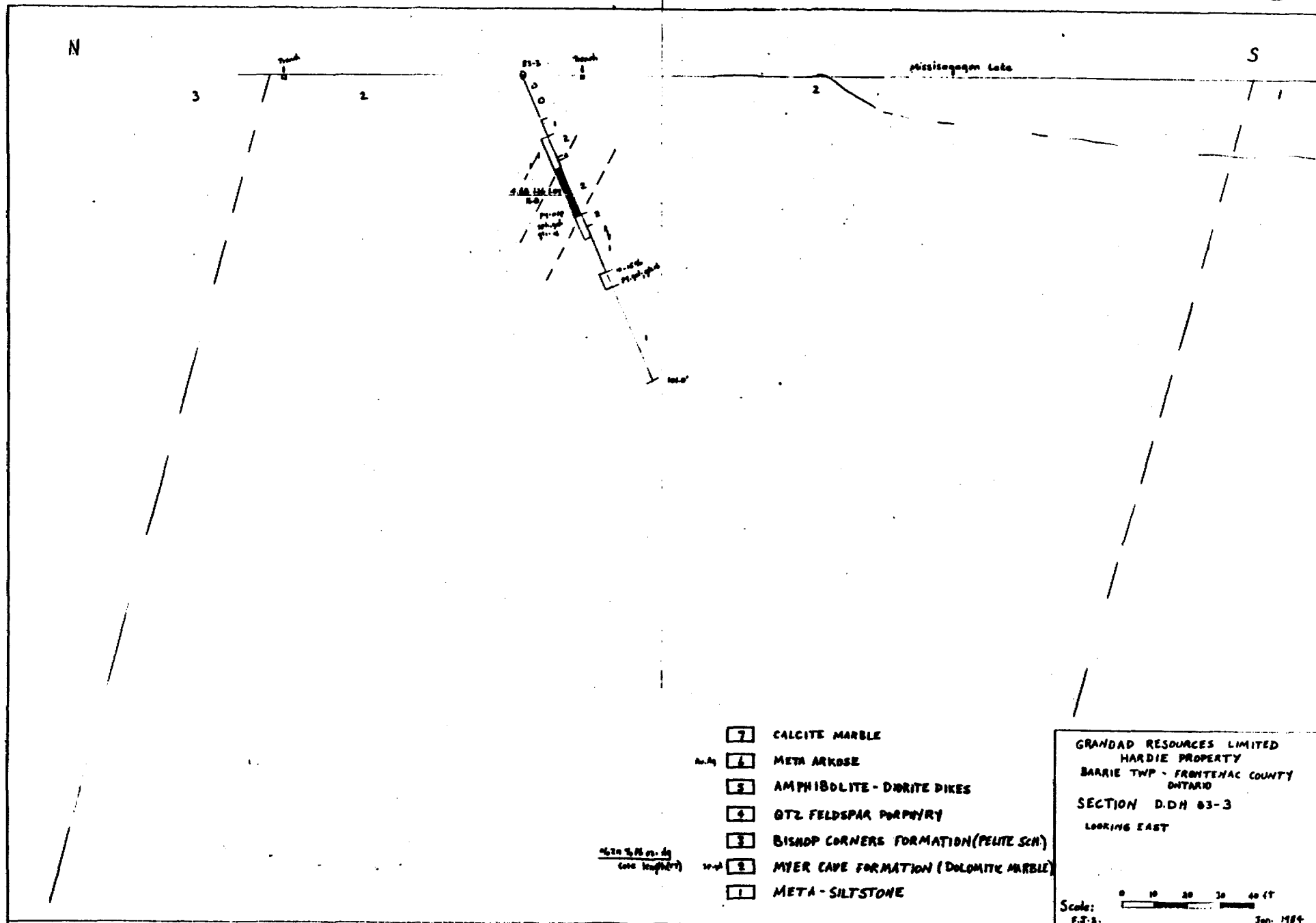
HARDIE PROPERTY

Barrie Twp - Frontenac County
ONTARIO

Scale: 1"=2640'



GRID MAP
 GRAY DAD RES. LTD
 HARDIE PROPERTY
 BATHIE TWP. FRONTENAC C
 ONTARIO
 Scale: 1" = 800'
 FTS
 Jan. 84



- 7 CALCITE MARBLE
- 6 META ARKOSE
- 5 AMPHIBOLITE - DIORITE DIKES
- 4 QTZ FELDSPAR PORPHYRY
- 3 BISHOP CORNERS FORMATION (PELITE SCH)
- 2 MYER CAVE FORMATION (DOLOMITE MARBLE)
- 1 META-SILTSTONE

GRANDAD RESOURCES LIMITED
 HARDIE PROPERTY
 BARRIE TWP - FRONTENAC COUNTY
 ONTARIO
 SECTION D.D.H. 03-3
 LOOKING EAST

Scale: 0 10 20 30 40 FT
 F.S.S. Jan. 1984

E060041 E057569

E0543864 E0543863

E05527

BEAVER POND

FAULT

D Gold

A Gold

STAUROLITE SCHIST

CAMP

SILVER GOLD

SILVER GOLD

SILVER GOLD

SILVER GOLD

ANOMALY

PYRITE

LIMESTONE

GRAVEL PIT

DAM

22	Au	Ag
lik	5.70	.94
"	2.52	.35
"	2.99	—
"	2.40	—

02 Au	Ag	Au	Ag	Au	Ag
1.09	1.52	.18	.11	.07	.00
.06	.52	.42	.74	.08	.74
.01					

Au	Ag
1.87	

Au	Ag
Nil	Tr.
12	46.75

Au	Ag
.06	6.37

02 Au	Ag	Au	Ag
1.09	1.52	.18	.11
.06	.52	.42	.74
.01			

02 Au	Ag	Au	Ag
1.09	1.52	.18	.11
.06	.52	.42	.74
.01			

Au	Ag
.02	.80

Au	Ag
4.88	124.01
16.00	

TRENCH MAP

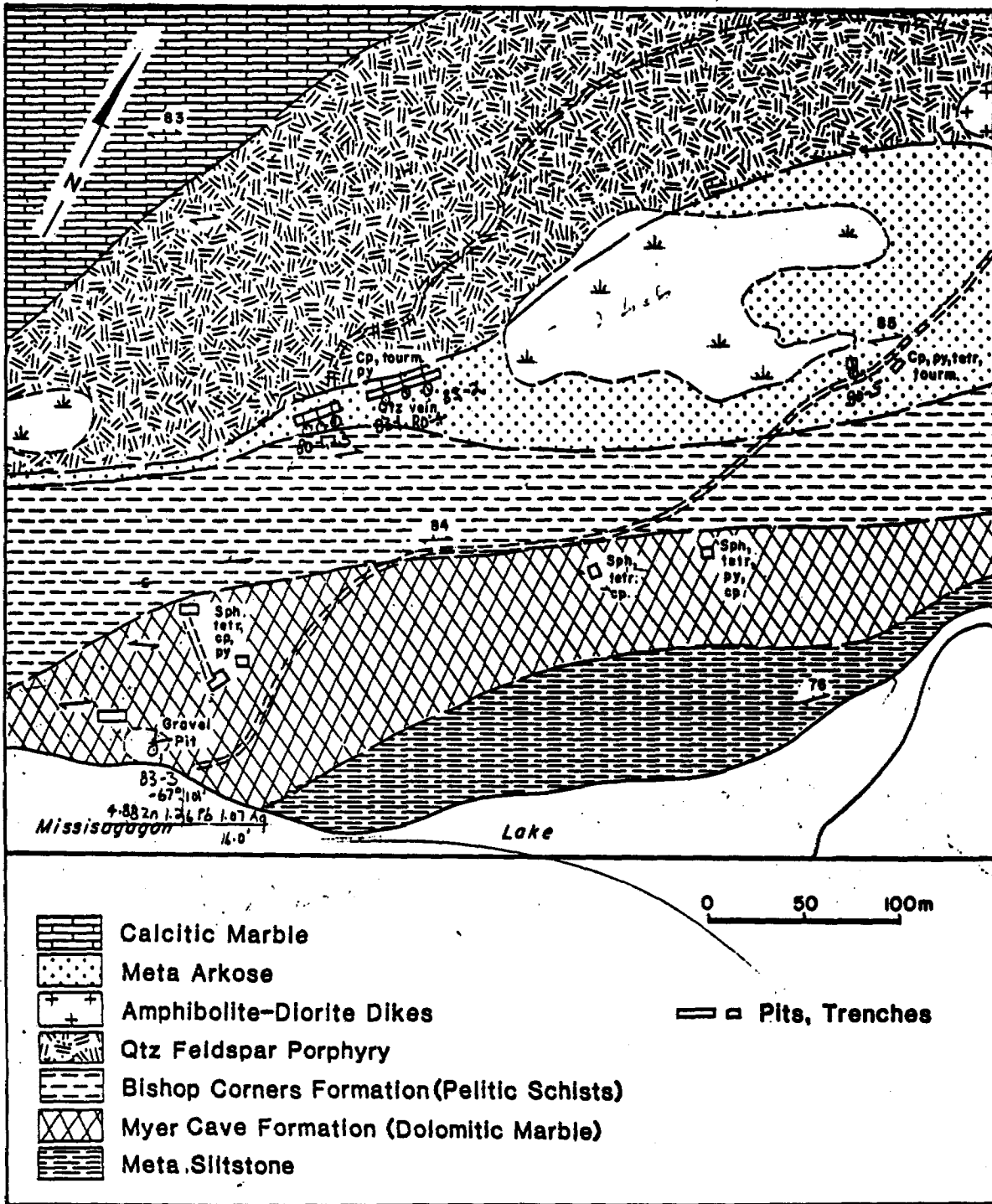


Figure 2. Hardie Property.

tain mineralized quartz veins within shear zones and were mapped at a scale of 1:2500 to investigate the possibility of a linear structure linking the 2 properties.

The geology of Anglesea Township is dominated by a north-trending belt of massive very fine grained to fine-grained, medium- to dark-green mafic metavolcanics. Numerous textural variations include fine- to coarse-grained amphibolites, amphibolite gneisses, and chlorite schists. Pillow sequences, pillow-top breccias, and agglomerate beds represent primary volcanic structures. Minor intermediate (andesite-dacite) flows <5 m thick occur within the thick homogeneous mafic flow sequence.

The shear zones contain mineralized quartz veins within sequences which may represent interflow metasediments or altered silicified and carbonatized mafic metavolcanics. At the Ultimate Energy showing, the host rocks are very fine grained to fine grained buff-weathering, and light to medium grey in colour. Mineralized quartz veins at the O'Donnell Property occur within a dark grey, thinly bedded (<1 cm) very fine grained unit.

The Elzevir batholith, which underlies 300 km² in Elzevir, Anglesea, Grimsthorpe, and Kaladar Townships, intrudes the mafic metavolcanics to the west. It varies from diorite

and quartz diorite to granodiorite in Anglesea Township (Moore and Morton 1980a, 1980b). To the northeast, the mafic metavolcanics are overlain by a series of calc-alkaline flows with intercalated volcanoclastic and carbonate metasediments (Moore and Morton 1980a, 1980b).

The mafic metavolcanics trend north to northwest and dip steeply west. A series of swamps parallel a similarly trending shear zone whose northern extension is marked by the Ultimate Energy showings (Figure 1). Associated alteration consists of extensive carbonatization, sericitization, and silicification. The shear zone is 50 m wide and 400 m long and contains south- to southeast-trending quartz veins which extend for 150 m and range in thickness from a few centimetres to 2.5 m. Coarsely crystalline calcite, ankerite, biotite, and chlorite are associated with the sheared rocks adjacent to the veins. Metavolcanics within the shear zone are altered to hornblende-chlorite schists. Mineralization consists of pyrite, chalcopyrite, and arsenopyrite and assessment reports state that gold is associated only with the first two sulphides. Assay values from 10 short diamond-drill holes (totalling 435 m) along a strike length of 400 m reveal only traces of gold and silver (Assessment Files Research Office, Ontario Geological Survey, Toronto (AFRO)).

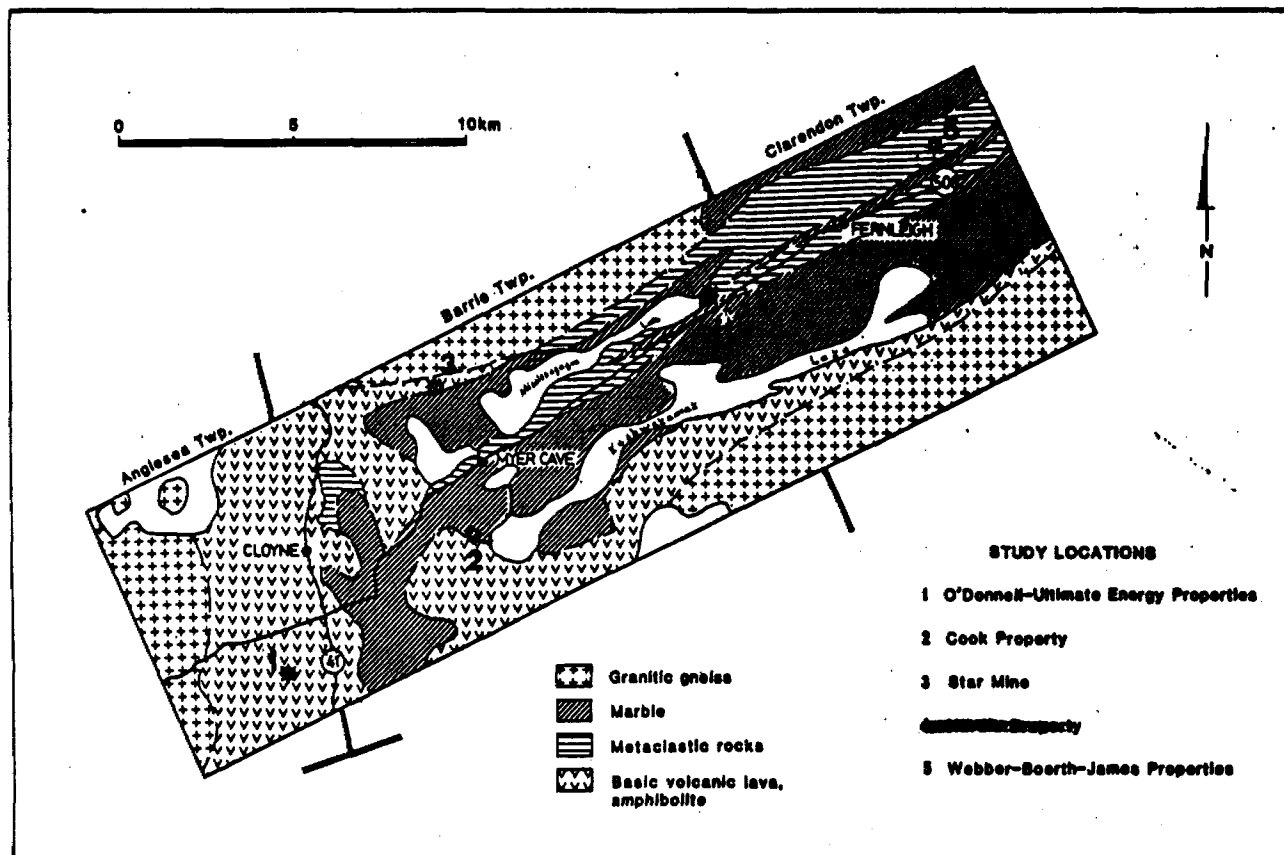
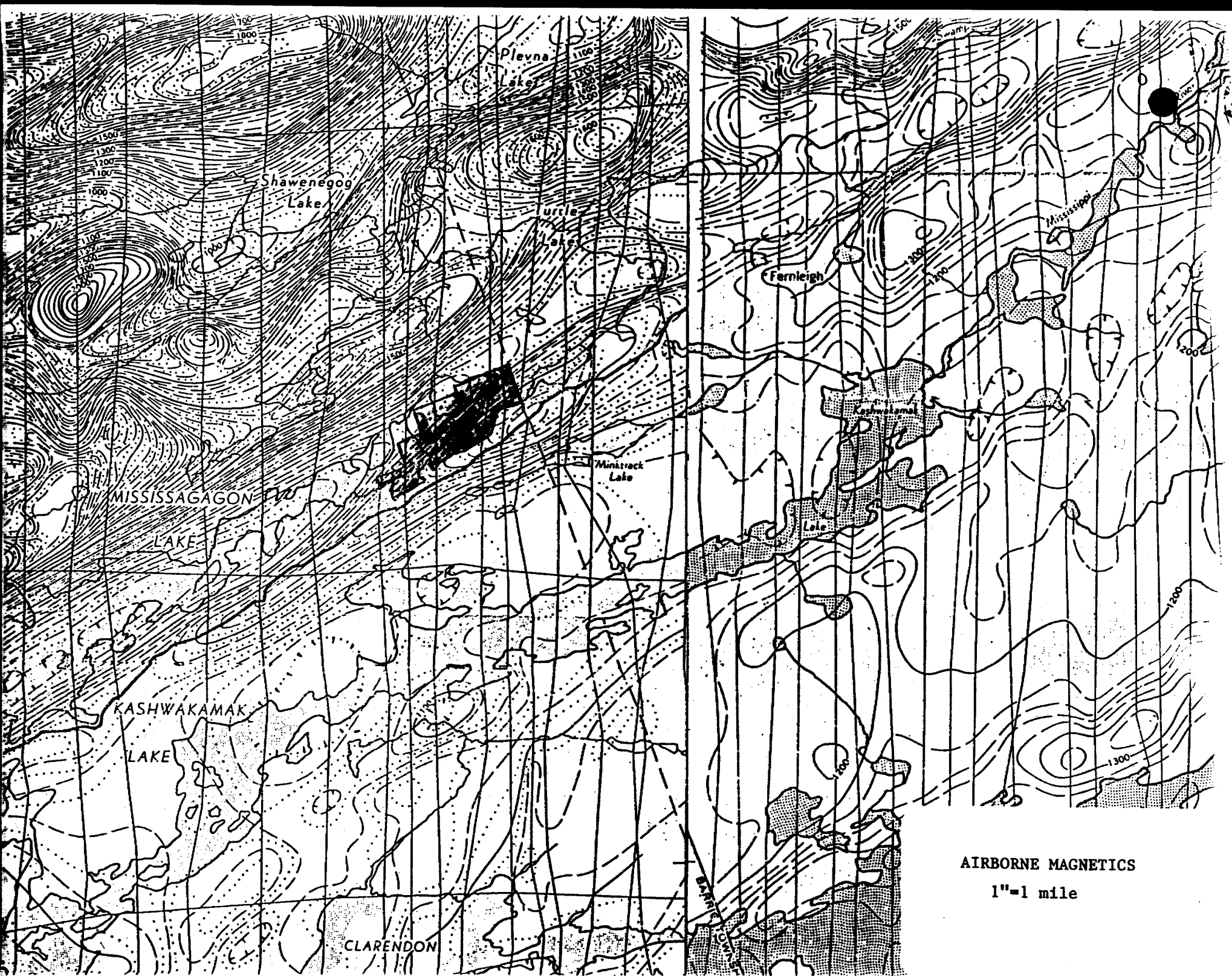


Figure 1. Location of study areas.



AIRBORNE MAGNETICS
1"=1 mile