



Scan Explorations Limited,
Suite 513,
44 Victoria Street,
Toronto 210, Ontario

2.598

Gentlemen:

This report describes the results of a program of electro-magnetic surveys carried out to cover your Dyment Lake property in Dynes Township, Sudbury Mining Division, Ontario. The results are depicted on the plan accompanying this report, plotted to a scale 1" = 200'.

PROPERTY, LOCATION AND ACCESS -

The property is comprised of the following 17 claims:

S-234553 to S-234566, inclusive (14 claims), and

S-269563 to S-269565, inclusive (3 claims).

The location is on and to the immediate south of Dyment Lake at the east central part of Denyes Township, about 30 miles east of Chapleau. The shape of the property is outlined on the location map, with geology, inserted on the plan accompanying this report.

Access was readily made by bush planes from Chapleau to Dyment Lake. Chapleau is on the C. P. R. and the junction of Ontario Highways Nos. 101 and 129, about 80 miles to the south-southwest of Timmins and 125 miles by road to the north-northeast of Sault Ste. Marie.

GEOLOGY -

General geology of the area is on Map 2116 and Map No. P. 285, O. D. M. In short, the property is located at the west central part of a large greenstone belt. The most outstanding feature in the vicinity of the property is the occurrence of an up to three-mile wide zone of acid volcanics which extends east-westerly for a distance of over 18 miles. The north part of the property covers 1 3/4 miles of the south boundary of this zone of acid volcanics, in contact with basic and intermediate volcanics. The west half of the property covers the eastern end of a similar but narrower band of acid volcanics, also in contact with basic and intermediate volcanics.

Outcrop geology of the property area is on Map No. P. 259, O. D. M. It is interesting to note that the acid volcanics indicated along the north part of this property are mostly rhyolite (1a). There is an outcrop of volcanic breccia (1c) located near the northwest corner of this property, and an outcrop of feldspar porphyry (1h) located near the northeast corner of the property. The narrower band of volcanics located at the west half of the property widened considerably at its eastern end and consists of feldspar porphyry and rhyolite porphyry (1g).

MINERAL OCCURRENCES -

The area was known as the Swayze Gold Area with numerous

gold occurrences, mainly along the zones of acid volcanics. Some of these gold occurrences are associated with noticeable sulphide mineralization. According to Maps Nos. 2116 and 2120, one of these is located at the southwest shore of Dymont Lake, about 1/2 mile to the west of your property. Recent prospecting by others on a property tying onto the northeast of your claim group uncovered an interesting chalcopryrite showing and a free gold showing in acid volcanics located about 1/2 mile and 3/4 of a mile from the northeast corner of your property.

In 1933-34, the property area was partly prospected by Dymont Mining and Investments Limited (charter surrendered 1939). The occurrence at the southwest shore of Dymont Lake was described as a 150 foot long vein system, striking S 60° E over a width of 9 feet, with fine native gold along fractures. Galena, specularite, and a little chalcopryrite were also noted in the vein system. (Geological Report 63, 1968, O. D. M., Page 40).

AEROMAGNETIC DATA AND RECONNAISSANCE EM DATA -

Aeromagnetic Map No. 2246G; G. S. C. and O. D. M., showed an isolated weak anomaly located at the northeast part of the property, along the contact zone between rhyolite and basic to intermediate volcanics. Also, there is a strong aeromagnetic zone with

readings of over 300 gammas above background along and to the immediate south of the south boundary of the property. This magnetic zone was outlined over basic to intermediate volcanics and follows an east-westerly synclinal axis which undulates at the south part of your property. The eastern end of this magnetic zone is marked by the occurrence of a network of quartz veins. The undulation is partly accounted for by the widening of a band of feldspar porphyry and rhyolite porphyry located on your property, although the occurrence of acidic injections, such as quartz-calcite veins, is possible. This, and the fact that reconnaissance EM-16 traverses made during the staking of the north 14 claims encountered a rather sharp VLF conductor near the south boundary of Claims Nos. S-234555 and S-234558, lead to the staking of the additional three claims to cover the area north of the undulation. Readers are referred to our memorandum dated October 27, 1970, for the description of the three reconnaissance traverses made on the north 14 claims.

SURVEY DATA -

The geophysical survey was carried out along picket lines spaced at 300 foot intervals, north-south. A total of 20.19 miles of base line and picket lines was cut and chained with 100 foot stations to cover all the 17 claims for the survey.

A total of 18.56 miles of VLF electromagnetic survey was carried out on all the picket lines, using a Ronka EM-16 instrument and transmitter station NAA.

A total of 23 short traverses, requiring four days of field work, was carried out to check various indications obtained by the Ronka EM-16 survey throughout the property.

SURVEY RESULTS AND INTERPRETATION -

The survey encountered 10 VLF conductor zones on the property. Many of these have strong in-phase changes (up to 66%) but weak corresponding out-of-phase changes. The axes of these conductors are numbered from west to east on the plan accompanying this report and are described as follows:

Conductor Zone "1" - is a weak zone with no out-of-phase expression and has an indicated length of about 1000 feet. It is apparently due to a geological break which strikes S 60° E, the same as the vein structure located at the southwest shore of Dymont Lake. A Ronka Mark IV horizontal loop check traverse across this zone obtained negative results.

Conductor Zone "2" - is a short and marginal zone, possibly indicating minor shearing along part of the contact zone between acid and basic to intermediate volcanics.

Conductor Zone "3" - is likely the southeast extension of "1", but offset about 500 feet to the south. It has an indicated length of about 3000 feet and turns east-northeast at its eastern end. The strongest indication along this zone is located near Post No. 2, Claim No. 234555, where the zone turns east-northeasterly. This location is near the point where previous reconnaissance encountered a sharp VLF conductor. The corresponding minor out-of-phase changes indicate a poor conductor of large dimensions in non-conductive ground. Horizontal loop check survey encountered negative results along this conductor zone.

Conductor Zone "4" - strikes northeast and joins the eastern end of "3" at approximately 1100 feet south of L 6 W.

The VLF EM data, as well as horizontal loop check survey data, indicated the occurrence of disseminated mineralization along this zone at 1550 feet south of L 12 W and 1350 feet south of L 9 W. In fact, the choice indications obtained by the horizontal loop check survey on this property were encountered along this zone.

Conductor Zone "5" - located to the southwest of "4", is striking east-west for a distance of 600 feet. The out-of-phase responses are comparatively stronger than most of the other zones but the characteristics are inferred as that of a poor conductor affected to a degree by surface features. However, the occurrence of

disseminated mineralization is possible. Horizontal loop check survey obtained negative results along this zone.

Conductor Zone "6" - is encountered on Dymont Lake and extends onto land at 150' N of L 3 W. This is a weak indication with little out-of-phase expression. It is inferred as indicating a north-northwesterly cross fault. Horizontal loop check survey encountered negative results.

Conductor Zone "7" - is an east-westerly zone of about 1500 feet long, with its eastern end turning toward southeast. The west part of the zone is a structural type indication with broad responses and little out-of-phase expression. The eastern part is complicated by a parallel zone "8". Horizontal loop check survey obtained negative results.

Conductor Zone "8" - is a weak zone, with topographic effects, located about 150 feet to the southwest of the eastern part of "7" and extends eastward to the east boundary of the property for an indicated length of over 3700 feet. In Claim No. S-234566, it is inferred as being offset for a short distance to the south by north-south structures such as that carrying quartz veins and exposed in the outcrop area at the south part of said claim. Along this zone, there are few sharp responses with the characteristics of poor conductors plus surface effects. Horizontal loop check survey encountered negative results.

Conductor Zone "9" - is a short and weak zone with an indicated length of about 400 feet. It is a poor and marginal conductor in non-conductive ground, or at surface.

Conductor Zone "10" - is located at the northeast part of the property, striking easterly across an area of rhyolite. It has an indicated length of over 2200 feet, open to the east. It has rather sharp in- and out-of-phase responds, but the characteristics indicated a poor conductor. Horizontal loop check traverses indicated the possibility of having narrow concentrations of conductive minerals along part of this zone. There is an old trench located near the conductor zone at L 30 E, 1100 feet north.

CONCLUSIONS AND RECOMMENDATIONS -

The VLF electromagnetic survey encountered 10 conductor zones on the property. These zones are mostly elongated with poor conductors which could be accounted for by geological structures, such as faults and shears associated with or without veins or sulphide mineralization. Horizontal loop check survey data indicated that Conductor Zone "4" carries some disseminated conductive minerals and "10" may, in part, carry narrow concentrations of conductive minerals.

Because of the fact that there are occurrences of free gold associated with some sulphides in the area, the writer recommends to carry out a program of geological prospecting to check Conductor Zones "1" to "5", inclusive, and "8" to "10", inclusive. The writer also recommends to test drill Conductor Zones "4" and "10", if the geological prospecting obtained no information to account for these two zones.

Respectfully submitted,

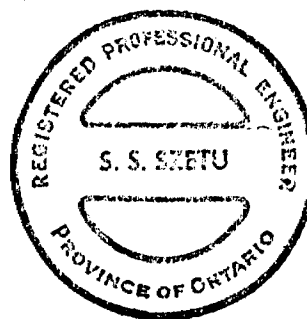
CANA EXPLORATION CONSULTANTS LIMITED



S. S. Szetu, Ph. D., P. Eng.
Consulting Geologist

SSS:rk

Toronto, Ontario
March 27, 1971



Appendix - Details of Instruments for Geophysical Surveys

(a), Type of instrument: - (1) Ronka EM-16, Serial #5, manufactured by Geonics Ltd., of Toronto.

(2) Ronka Mark IV unit, Serial No. 55, manufactured by Hunttec Limited, Toronto.

(b) Specifications: - (1) Ronka EM-16: horizontal primary field from VLF transmitting station NAA, Cutler, Maine, freq. 17.8 kHz, and NSS, Annapolis, Maryland, freq. 21.4 kHz, selected by plug-in units; vertical measured field with in-phase and quadrature components with $\pm 1\%$ accuracy of readings, $\pm 150\%$ range of measurements for in-phase and $\pm 40\%$ for quadrature; null-detection by an earphone, real and quadrature components out-put read-out from mechanical dials; size 16 x 5.5 x 3.5 in. ; receiver powered by six size AA penlight cells.

(2) Ronka Mark IV unit: power out-put at 876 cy/sec, 4 watts; power required: Eveready 8 type 950 1.5 V cells for transmitter, 1 type 781 4.5 cells for receiver; Coil separation = 300 ft.

(c) Survey procedures: - For the Ronka EM-16 survey, along north-south lines, the proper transmitting station (NAA) was selected with coil parallel to the primary field. Readings were taken with operator facing northerly along lines of the primary field. Both in-phase and out-of-phase readings were taken in percentage.

For the Ronka Mark IV check survey, transmitter was behind and readings were recorded at the station of the receiver. Overall accuracy of the equipment is $\pm 3\%$ of the scale reading $\pm 1\%$.

SPECIAL PROV
ASSESSMENT WORK



410155W0069 2.598 DENYES

900

SEP 19 1971

PROJECTS
SECTION

NAMES AND ADDRESSES

Chief Line Cutter or Contractor W. Wilson, 143 Cedar St. N. Timmins, Ontario.
Party Chief John Ferguson) Ste. 426,
Consultant S. S. Szetu) 12 Richmond St. E., Toronto.

COVERING DATES

Line Cutting Jan. 30/71 - Feb. 14, /71
Field and Office Jan. 30/71 - March 27/71

INSTRUMENT DATA

Make, Model and Type Ronka EM-16 and Ronka Mark IV unit
Scale Constant or Sensitivity _____
or provide copy of instrument data from Manufacturer's brochure
Total Number of Stations Within Claim Group 18.56 miles, more than 979 stations
Number of Miles of Line cut Within Claim Group 20.19 miles

ASSESSMENT WORK CREDITS REQUESTED

Geological Survey _____ Days per Claim
Geophysical Survey 40 Days per Claim

MINING CLAIMS TRAVERSED

S-234553 to S-234566, inclusive,

S-269563 to S-269565, inclusive.

TOTAL 17 claims

DATE Aug. 20th, 1971 SIGNED S. S. Szetu

Raney Twp. - M.1069

Halcrow Twp. - M.906

Swayze Twp. - M.1150

Greenlaw Twp. - M.895

THE TOWNSHIP
OF
Claim Map
DENYES

DISTRICT OF
SUDBURY

SUDBURY
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	Ⓟ
CROWN LAND SALE	C.S.
LEASES	Ⓛ
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	—
IMPROVED ROADS	—
KING'S HIGHWAYS	—
RAILWAYS	—
POWER LINES	—
MARSH OR MUSKEG	—
MINES	Ⓧ
CANCELLED	C.

NOTES

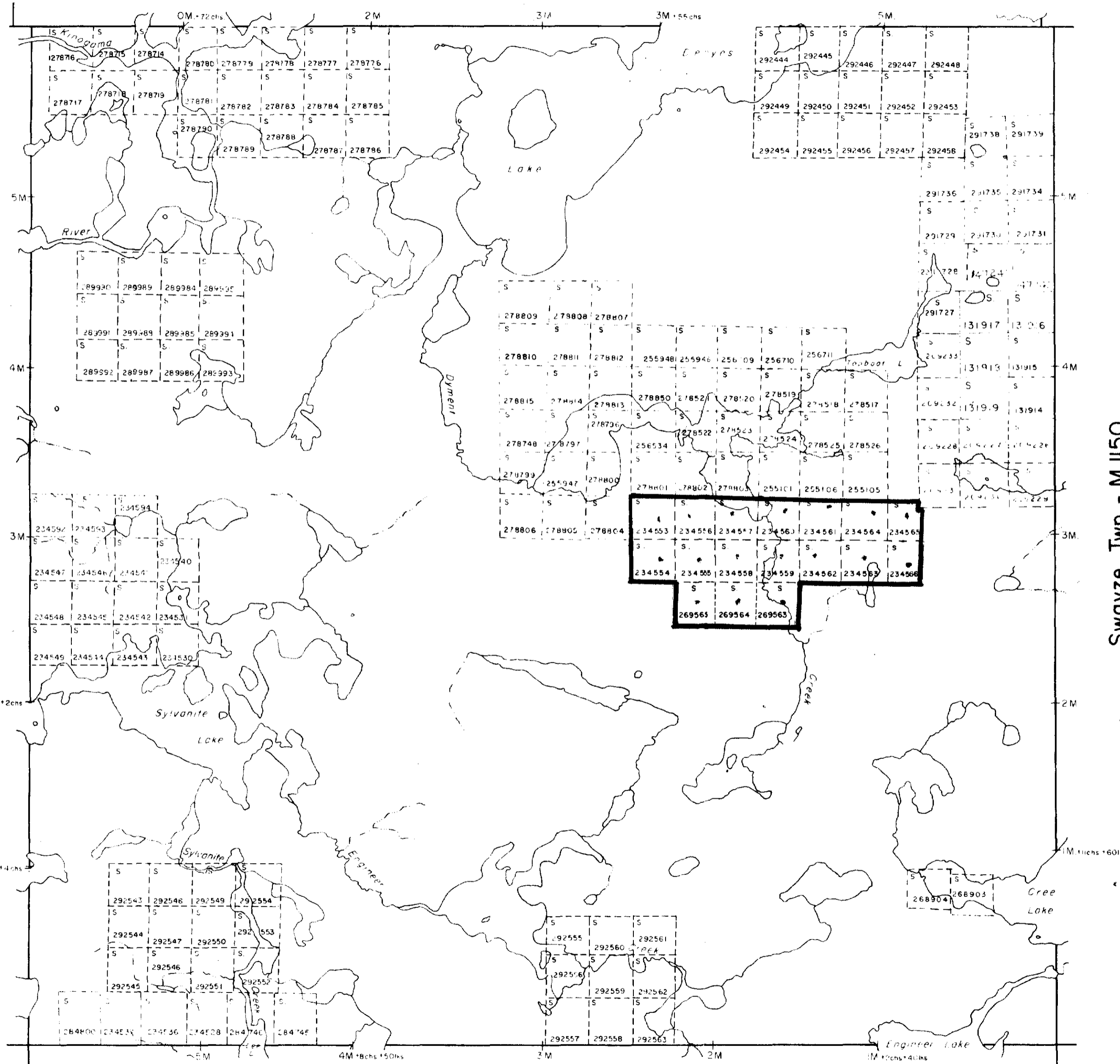
400' Surface Rights Reservation around
all lakes and rivers

DATE OF ISSUE
SEP 15 1971
ONT. DEPT. OF MINES
AND NORTHERN AFFAIRS

2598

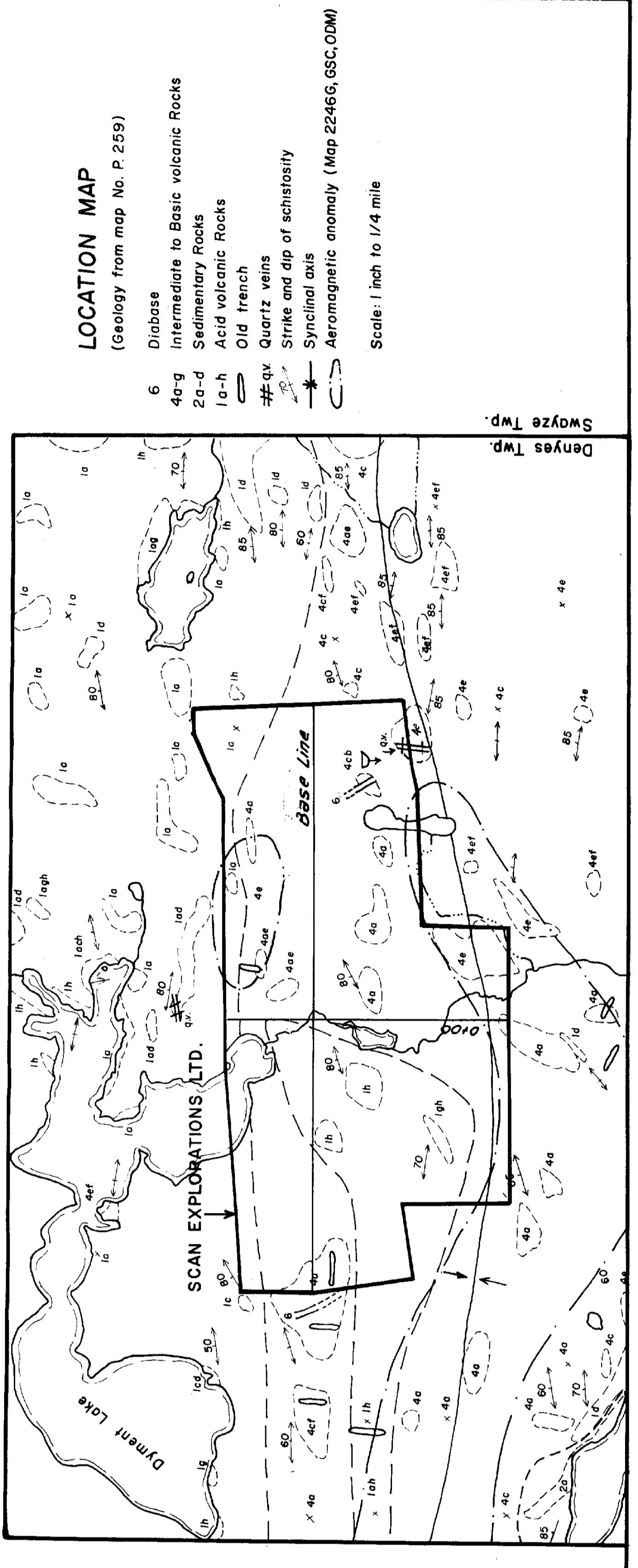
PLAN NO. **M.758**

ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS



SCAN EXPLORATIONS LIMITED
 DYMMENT LAKE AREA
 DENYES TOWNSHIP
 SUDBURY MINING DIVISION, ONTARIO
 Scale 1" = 200'
 March 1971
 CANA EXPLORATION CONSULTANTS LTD.

GEOPHYSICAL SURVEY DATA
 ON 17-CLAIM PROPERTY OF



LEGEND

- Location of claim post and claim line
- Higher ground
- Old trench
- Outcrop
- Electromagnetic readings obtained by using a Ronko E-M-16 instrument with transmitter station NAA.
- In-phase readings plotted West, Out-of-phase readings plotted East of each station.
- In-phase profile
- Out-of-phase profile
- Scale of profiles: 1/10" = 10% phase change
- VLF electromagnetic conductor
- Direction of Ronko Mark IV traverse with 300 ft. cable, receiver leading.
- Readings recorded at the station
- Left, Out-of-phase readings plotted to the right of each station.
- In-phase profile
- Out-of-phase profile
- Scale of profiles: 1/10" = 2% phase change

