



- 1 -

FOREWORD AND SUMMARY

The writer holds a group of six unpatented mining claims in the central part of Strathy Township, two miles west of Goward, Ontario. The ground adjoins east of a group of eight claims held by the writer, the whole being a copper-nickel and gold prospect on the east boundary of Ajax Minerals Limited. (formerly Cuniptau Mines and Trebor Mines)

During 1966 and 1967 a geomagnetic and electromagnetic survey was carried out on the six claim holding.

The geomagnetic results show areas of higher magnetic permeability at the north and south ends of the claim group. The higher magnetic area in the south part of the group may indicate underlying basic intrusives of interest for copper-nickel exploration at depth.

Accompanying this report is a map on a scale of 200' to 1 inch showing the results of the geomagnetic survey.

PROPERTY AND ACCESS

The property consists of six unpatented mining claims, approximately 250 acres, recorded in the Temiskaming Mining Division as follows:

T. 58251
58252
58253
58254
58259
58260

Access to the property is gained by driving west from Goward, Ontario, a station on the Ontario Northland Railway three miles north of Temagami village. The route to the property from Goward leads two miles west of Highway No. 11 on the Ajax Mine road (formerly Cuniptau and Trebor) and crosses the claim group.

The claims show about 25% outcrop including ground between the south bays of Kanichee Lake and Net Lake.

HISTORY:

The writer acquired the claims by staking in 1966. The ground was formerly part of the Strathly Basin Mines Limited. In the Ontario Department of Mines Report Volume XLIV, Part 7, 1935, this company was reported as being active with the disclosure of sulphide mineralization including chalcopyrite. Test pits in the area are reported to be gold bearing.

The locality has received intermittent exploration in recent years, chiefly for nickel and copper, by Inco and Ajax Minerals Limited. Fairly extensive underground work was carried out nearby on the properties of Cominco and Clenor for gold in the late 1930's. In 1965 and 1966 exploratory work was carried out on surface by Ajax and Inco, including geophysics and diamond drilling.

GEOLOGY

The rocks underlying the six claim group are composed largely of Keewatin greenstones striking in a direction N.70°E., facing south and dipping steeply to the southeast. These rocks are basic volcanic flows with fairly well developed flow structure. Minor amounts of rhyolite breccia likely occur interbedded with basic flows.

Through the area the Keewatin is intruded by basic rocks including diorite, gabbro and peridotite. These basic intrusives are possible differentiates of the same mass and are pre-Algoman in age. Acid dike rocks of Algoman age include quartz and feldspar porphyrys, comparatively narrow dikes up to 15 feet wide, and striking in various directions. The latest rocks are intrusions of Keweenawan olivine diabase dikes, striking northwest-southeast.

GEOMAGNETIC SURVEY PROCEDURE AND RESULTS.

The geomagnetic survey was carried out to investigate the property for the possibility of basic intrusive occurrence with which might be associated nickel and copper bearing sulphides. The survey was carried out with a Sharpe A2 magnetometer with a sensitivity of 20 gammas per scale division. Readings were taken from a picket line grid out in

an east-west direction at 200' spacing along a north-south base line. In all 7.7 miles of line were read and recorded totalling 405 stations. The readings of the magnetometer survey are plotted on an accompanying map sheet on a scale of 200' to 1 inch. The main control station is on the east boundary of the property at Line 22N. This is 200' north of the access road where the road crosses the east boundary.

The results of the survey show a background of 500 to 700 gammas in the central part of the claim group.

At the north end of the claims, on Claim T.58260 a high anomaly of 2500 gammas marks the intrusion of a northwest-southeast striking olivine diabase dike.

In Claim T.58259, north of the road, a low anomalous area up to 1,000 gammas includes a sulphide pit location which shows pyrrhotite, pyrite and sparse chalcopyrite. This anomalous area may indicate pyrrhotite mineralization in the Keewatin rocks.

At the south end of the property in Claims T.58252 and T.58253 magnetic anomalous areas reach 2,000 gammas. This is the most interesting part of the property considering the possibility of the ground being underlain at shallow depth by a sill-like basic intrusive related to the copper and nickel bearing peridotite which plunges east from the Ajax Mine. The higher magnetic readings on this part of the property may be indicative of underlying rocks of this type.

RECOMMENDATIONS

It is recommended that the property be geologically surveyed and that an I.P. type of electromagnetic survey be carried out. I.P. is more deeply penetrating than most electromagnetic procedures. Also ore grade copper and nickel occurrence of the disseminated type at the Ajax property is low sulphide content which might escape electromagnetic methods other than I.P.

The property is easily accessible and the existing lines could be used for these recommended surveys. A cost estimate for these two surveys is \$3,500.00.

Respectfully submitted,



E.L. MacVeigh B.A., M.S.

May 6, 1968,
Haileybury, Ontario.



FOREWORD AND SUMMARY

The writer holds a group of six unpatented mining claims in the central part of Strathy Township, two miles west of Goward, Ontario. The ground adjoins east of a group of eight claims held by the writer, the whole being a copper-nickel and gold prospect on the east boundary of Ajax Minerals Limited. (formerly Cuniptau Mines and Trebor Mines)

During 1966 and 1967 a geomagnetic and electromagnetic survey was carried out on the six claim holding.

The results of the survey do not show any strong electromagnetic conductors. In Claim T.58259, negative in-phase readings coupled with near zero or plus out-of-phase readings are co-incident with a low magnetic anomaly. This area includes a surface pit at which sulphides may be observed. The area extends from the access road north for 700' in Claim T.58259 and might indicate sulphides of interest under the overburden.

Accompanying this report is a map on a scale of 200' to one inch showing the results of the electromagnetic survey.

PROPERTY AND ACCESS

The property consists of six unpatented mining claims, approximately 250 acres, recorded in the Temiskaming Mining

Division as follows:

T. 58251
58252
58253
58254
58259
58260

Access to the property is gained by driving west from Goward, Ontario, a station on the Ontario Northland Railway three miles north of Temagami village. The route to the property from Goward leads two miles west of Highway No. 11 on the Ajax Mine road (formerly Cuniptau and Trebor) and crosses the claim group.

The claims show about 25% outcrop including ground between the south bays of Kanichee Lake and Net Lake.

HISTORY

The writer acquired the claims by staking in 1966. The ground was formerly part of the Strathy Basin Mines Limited. In the Ontario Department of Mines Report Volume XLIV, Part 7, 1935, this company was reported as being active with the disclosure of sulphide mineralization including chalcopyrite. Test pits in the area are reported to be gold bearing.

The locality has received intermittent exploration in recent years, chiefly for nickel and copper, by Inco and Ajax Minerals Limited. Fairly extensive underground work was carried out nearby on the properties of Cominco and Clenor for gold in the late 1930's. In 1965 and 1966 exploratory

work was carried out on surface by Ajax and Inco, including geophysics and diamond drilling.

GEOLOGY

The rocks underlying the six claim group are composed largely of Keewatin greenstones striking in a direction N.70°E., facing south and dipping steeply to the southeast. These rocks are basic volcanic flows with fairly well developed flow structure. Minor amounts of rhyolite breccia likely occur interbedded with basic flows.

Through the area the Keewatin is intruded by basic rocks including diorite, gabbro and peridotite. These basic intrusives are possible differentiates of the same mass and are pre-Algoman in age. Acid dike rocks of Algoman age include quartz and feldspar porphyrys, comparatively narrow dikes up to 15 feet wide, and striking in various directions. The latest rocks are intrusions of Keweenawan olivine diabase dikes, striking northwest-southeast.

ELECTROMAGNETIC SURVEY PROCEDURE AND RESULTS

The electromagnetic survey was carried out for the purpose of locating any sulphide conductors which might be near surface in the overburdened areas of the property. The Ronka method would have limitations in that the sulphides would have to be sufficiently concentrated to form a conductor, and the penetration depth would probably not exceed 100'.

The survey was carried out using Ronka Horizontal Loop equipment with a cable separation of 200' and a transmission frequency of 876 c.p.s. Readings were taken at 100' stations on a picket line grid cut in an east-west direction with 200' spacing along a north-south base line. In all 7.7 miles of line were read and recorded with a total of 360 stations. The results of the E.M. survey are shown on an accompanying map sheet on a scale of 200' to 1 inch.

The survey shows very few anomalous readings indicative of a conductor. Slightly low in-phase readings in the north part of the property on Claim T. 58259, Picket Lines 24N, 26N. and 28N. are co-incident with a magnetic anomaly of a few hundred gammas in an area where sulphide rocks have been surface blasted. The sulphides include pyrrhotite, pyrite and sparse chalcopyrite. While the location is generally overburdened intensive prospecting of this area 400' wide by 700' long might reveal a surface discovery.

The south part of the claim group has some chance of being underlain at depth by ultra basic intrusive rocks. Low magnetic anomalies were obtained here but no electromagnetic conductors were found. This chance of sulphides at depth underlying the south part of the property may

be too deep for Ronka penetration or too sparse to form a conductor.

RECOMMENDATIONS

The results of the Ronka Horizontal Loop electromagnetic survey on the six claim group reported do not show the presence of any strong conductors. Very low conductor readings in mining claim T.58259 just north of the access road are co-incident with a magnetic anomaly approximately 700' long in an area where sulphides are known to occur. It is recommended that further surface prospecting be carried out at this location.

The south part of the property composed of Claims T.58252 and T.58253 is believed to be underlain by sill-like ultra basic intrusives at depths not exceeding 1,000'. Magnetic highs on these two claims may be indicative of the presence of these rocks at depth. Quite possibly the Ronka survey would not penetrate deep enough to reveal any conductors below 150' vertical. Also important amounts of disseminated nickel and copper sulphides might be too sparse to form a conductor.

It is recommended that the I.P. type of electromagnetic survey be carried out on the six claim group and also that a geological survey of the property be completed.

These two surveys would cost an estimated \$3,500.00.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "MacVeigh".

May 7, 1968
Haileybury, Ontario.

E.L. MacVeigh B.A., M.S.

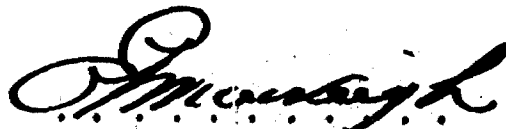
APPENDIX TO ELECTROMAGNETIC SURVEY TO
ACCOMPANY REPORT BY E.L. MACVEIGH ON
SIX CLAIMS, STRATHY TOWNSHIP DATED
MAY 7, 1968

- (a) Ronka Horizontal Loop E.M. Unit F.6, Serial No. 31,
Mark I, Battery power.
- (b) 10 Watts, Transmission Frequency 876 c.p.s.
Battery transistor, dial range 45%.
- (c) Two men operation with cable separation of 200'
reading at 100' stations by nulling out in-phase
and out-of-phase readings.
- (d) Readings plotted as percent of compensating
voltage required to achieve a null. In-phase
plotted left and out-of-phase plotted right.
Not profiled unless significant readings
obtained.


E.L. MacVeigh B.A., M.S.

APPENDIX TO GEOMAGNETIC SURVEY TO ACCOMPANY REPORT BY E.L. MACVEIGH ON SIX CLAIMS STRATHY TOWNSHIP, DATED MAY 6, 1968.

- (a) Sharpe - Model A.2. Vertical force Magnetometer - Serial No. 128.
- (b) Sensitivity - 20 gammas per scale division.
- (c) Stations read at 100' distances on 200' line spacing and check backs hourly related to main control station. Double reading averaged.
- (d) Diurnal corrections made from plotted curve. Daily correction applied. Normal correction shown on map sheet. Map contoured showing areas of equal vertical magnetic intensity.


E.L. MacVeigh B.A., M.S.

Best Twp. (M-417)

THE TOWNSHIP OF

STRATHY

DISTRICT OF
NIPISSING

LARDER LAKE
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	—

NOTES

400' Surface Rights Reservation
around all Lakes & Rivers.

Area reserved to Dept. of Highways shown thus:
First Mile Line surveyed by E.L. Moore 1928

Area within mining claims T 53460, T 53461, T 53463
& T 53464 reserved for Sand & Gravel File No
98831 (PT. OF T 53458 & T 53459 & T 53457 FILE NO.
83858)

Area shown thus ~~reserved~~ reserved for
Timagami Townsite by O.C. 2022/66 L & F
File No. 3996
Land now comes under section 36(a) of the
Mining Act.

THE ESTABLISHMENT OF PITS AND QUARRIES
IN AREA SHOWN THUS ~~IS~~ IS PROHIBITED.
BY ORDER OF THE FEDERAL DEPARTMENT OF MINING AND TECHNICAL SURVEYING
MINING LANDS BR.
THIS MAP FOR CHECKING
PURPOSES ONLY - MUST
NOT BE SOLD.

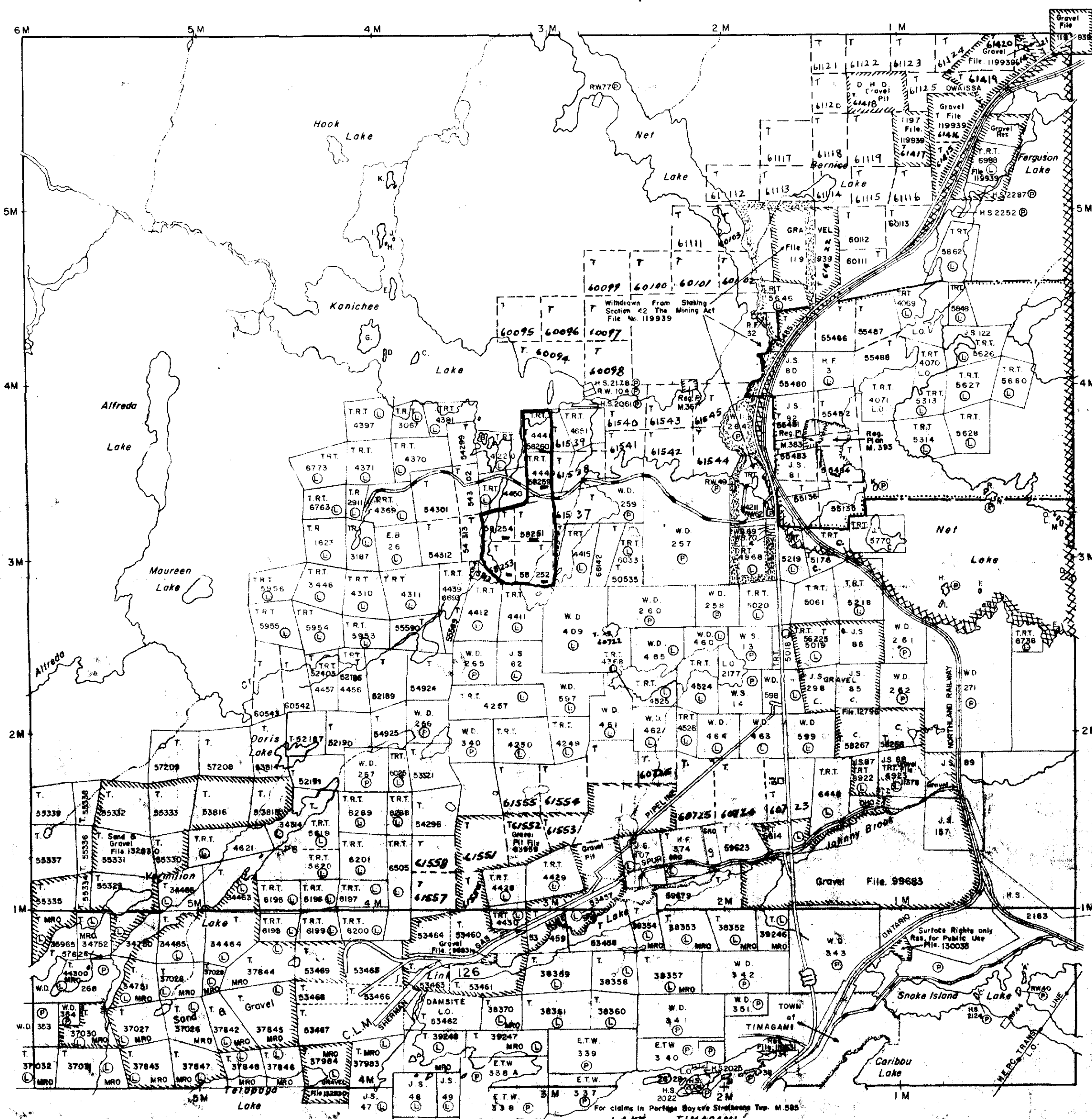
PLAN NO.-M. 596

DEPARTMENT OF MINES

— ONTARIO —

Chambers Twp. (M-447)

Cassels Twp. (M-444)



Strathcona Twp. (M-595)

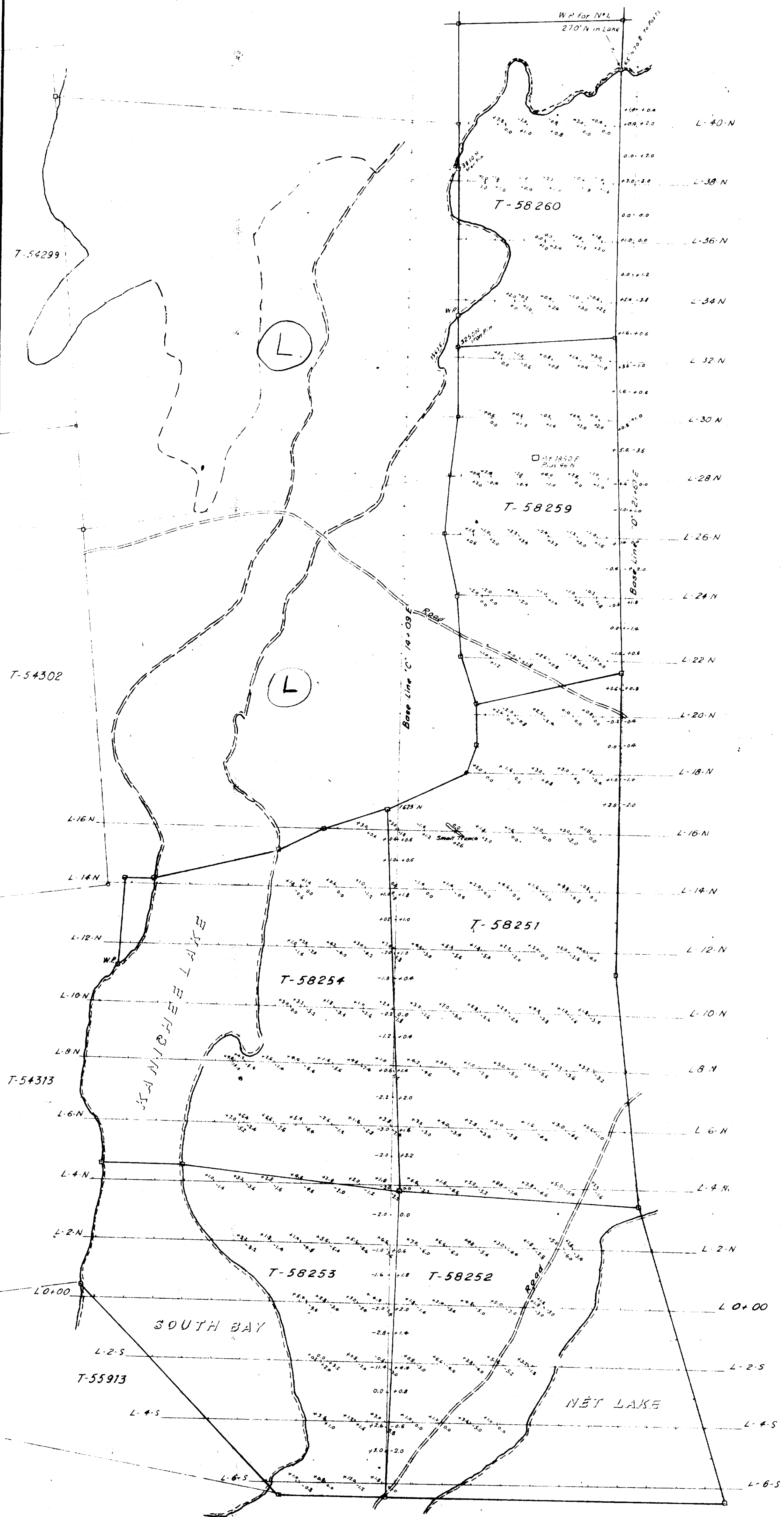
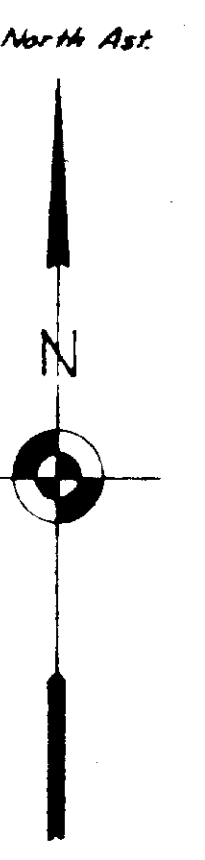
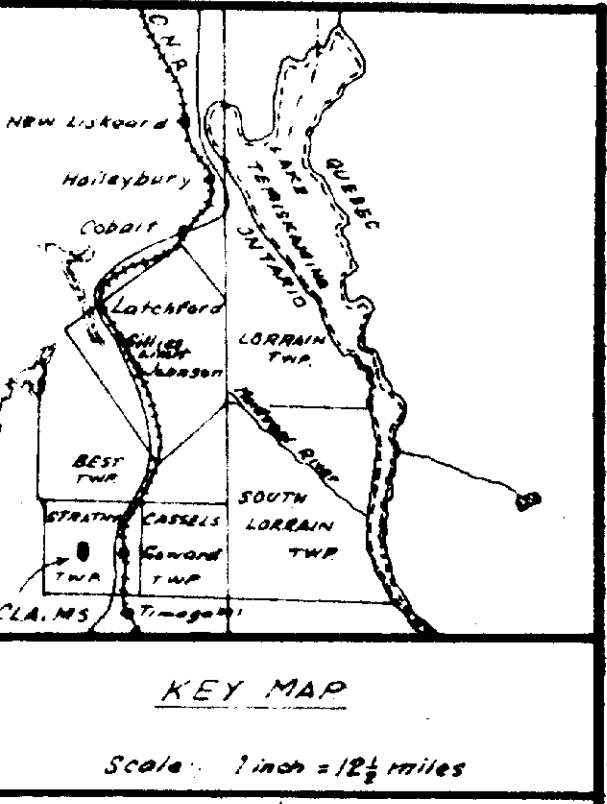
DATE OF

OCT 3 1968

ONTARIO DEPT. OF MINES



31424N0015 63-2341 STRATHY



LEGEND.

- 8 Olivine diabase
- 7 Nipissing diabase. 7d. diabase dikes.
- 6 Cobalt sediments: 6c. Conglomerate; 6s. Slate; 6q. Quartzite.
- 5 Lamprophyres, etc.: 5a. Amphibolite; 5g. soft Greenstone dikes.
- 4 Acid intrusives: Quartz porphyry; Felsite.
- 3 Basic intrusives: 3p. Peridotite; 3d. Metadiabase; 3g. Quartz diorite.
- 2 Acid Volcanics: 2k. Rhyolite; 2e. Acid Tuffs.
- 1 Basic and intermediate lavas: 1p. Pillow lava; 1b. Basalt.
- Fe. Iron formation.

SYMBOLS.

- Outcrop Boundary
- Swamp and low ground boundary
- Swamp
- Trench or pit and dump
- Indicated Fault
- Lower edge of rise in topography
- Claim Post
- Base and Picket lines
- Claim boundary
- Diamond Drill Hole
- Strike and dip of formation etc.
- Geological Boundary, defined
- Geological Boundary, approximate or assumed.
- Gravel Road
- Trail, etc.
- 100' Level (Cunipaw Shaft)
- Outline of altered and mineralized peridotite (Sulphide body)
- Massive Sulphides.

Electromagnetic Symbols.

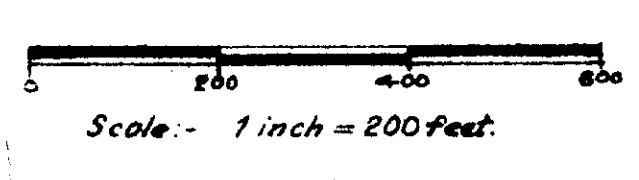
- 2.0 - 0.0 Percent of compensating voltage change due to conductor
- +3.0 - -1.5 In-phase readings plotted to Left
- Out-of-phase readings plotted to Right
- Broken-line - profile of out-of-phase readings
- Solid-line - profile of in-phase readings
Profile scale: 1/2 of 1%
Negative values to left of line
Positive values to right of line
- Conductor Axis
- Notes: 200' cable separation.
876 c.p.s. Transmission.

**ELECTROMAGNETIC MAP
(RONKA)**

OF
MINING CLAIMS
T-58251; T-58252; T-58253; T-58254; T-58259; T-58260.

STRATHY TOWNSHIP, TIMAGAMI AREA.
TIMISKAMING MINING DIVISION, ONTARIO.

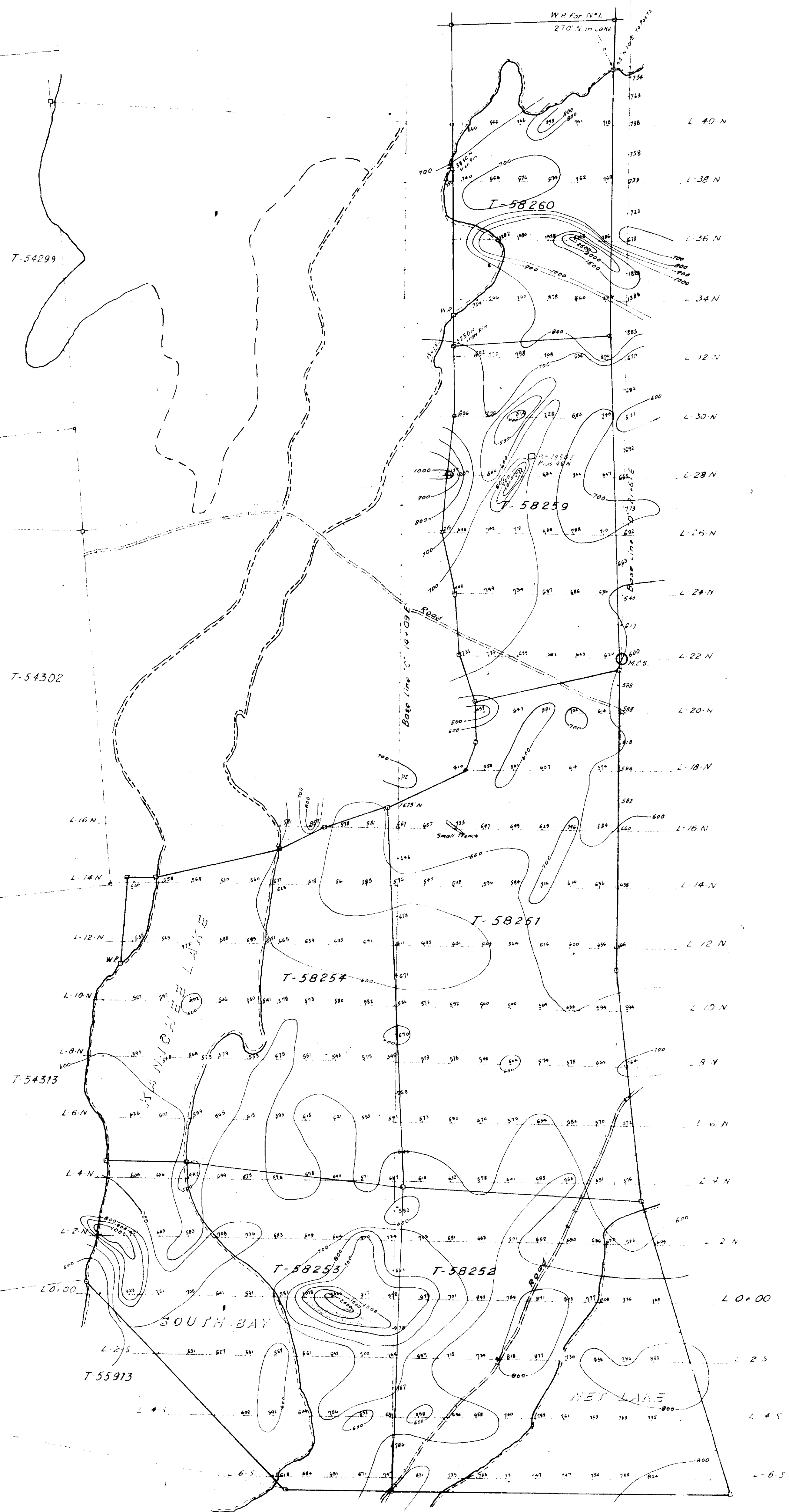
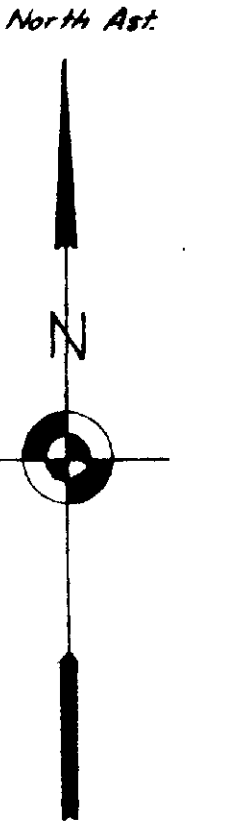
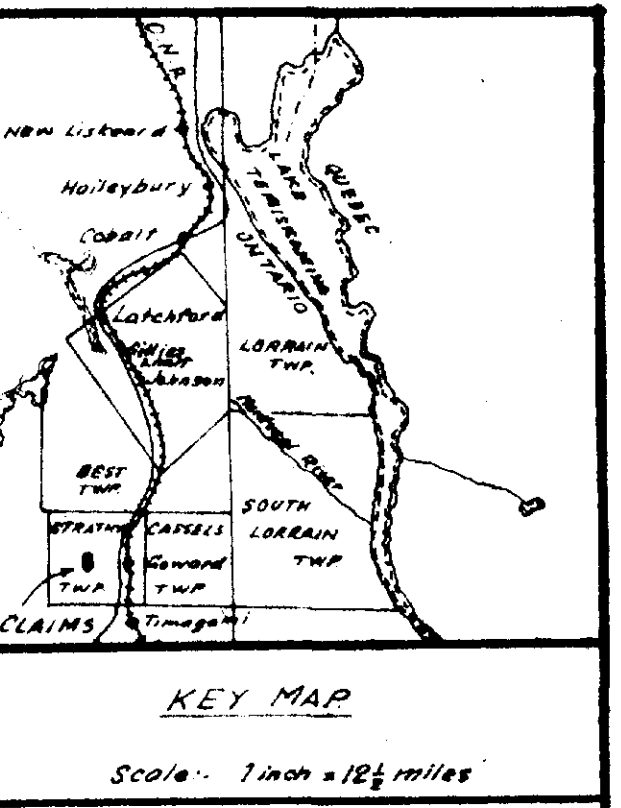
To accompany Report by E. L. MacVeigh, B.A., M.S.



MacVeigh

Date





LEGEND

- 8 Olivine diabase
- 7 Nipissing diabase; 7d. Diabase dikes
- 6 Cobalt Sediments; 6c. Conglomerate, 6s. Slate; 6q. Quartzite
- 5 Lamprophyres etc.; 5a. Amphibolite; 5g. Soft Greenstone dikes
- 4 Acid Intrusives: Quartz porphyry, Felsite.
- 3 Basic Intrusives: 3p. Peridotite; 3d. Metadiabase; 3q. Quartz diorite
- 2 Acid Volcanics: 2k. Rhyolite; 2e. Acid tuffs.
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- Fe Iron Formation.

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- Outerop Boundary
- Swamp and Low Ground boundary
- Swamp
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- Indicated Fault
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- Claim Post
- Base and Picket Lines
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- Diamond Drill Hole
- Strike and Dip of formation, etc.
- Geological boundary, defined.
- Geological boundary, approximate or assumed.
- Gravel Road
- Trail etc.
- 100' Level (Cunipiau shaft)
- Outline of altered and mineralized peridotite (Sulphide body)
- Massive Sulphides.

MAGNETOMETER DATA

Scale Constant: 20.0 gammas per scale division
 Normal Correction: minus 1000 gammas
 Contour Interval: 100 gammas (to 1000)
 500 gammas (over 1000)
 Main Control Station: O M.C.S.
 Magnetometer Reading: -693
 Contour Line of Equal Vertical Magnetic Intensity: 1000

LEGEND

- 1000 to 0 gammas
- 0 to 300 gammas
- 300 to 500 gammas
- 500 to 600 gammas
- 600 to 700 gammas
- 700 to 1000 gammas
- 1000 to 2000 gammas
- Over 2000 gammas

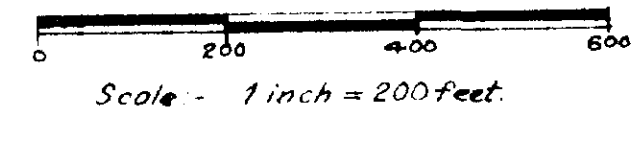
GEOMAGNETIC MAP

OF
MINING CLAIMS

T-58251; T-58252; T-58253; T-58254; T-58259; T-58260.

STRATHY TOWNSHIP, TIMAGAMI AREA,
TIMISKAMING MINING DIVISION, ONTARIO. 63-2341

To accompany Report by E. L. MacVeigh, B.A., M.S.



MacVeigh
Date

