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JAN 15 1975

PROJECTS UNIT

GEOPHYSICAL SURVEY

on the

MANN #1 GROUP

Hollinger Mines Limited  
Mann Township, Ontario

H.Z. Tittley, P.Eng.

Timmins, Ontario  
January 8, 1975

Hanno Twp.

6

5

4

3

2

1

P.L.  
371863

P.I.P.  
382236  
363179

P.P.  
353716  
353717

P.P.  
363180  
GRAVEL  
371468  
FILE  
44165

P.  
382789

P.  
371857

P.  
371854

P.  
371851

P.  
371852  
371853

P.  
371854

P.  
326390  
326391  
326392  
326393  
326394

P.  
326390  
326398  
326397  
326395  
326396

P.  
326400  
326401

P.  
371848  
371845  
371847  
371846  
326403  
326402

(P)

(P)

(P)

VII

V

IV

MANN TWP.

1" = 40 |Chains|

P  
413083  
P  
413082  
P  
413087  
P  
413089

**MANN TWP.**

1" = 40 Chains

368256	358252	358251	368250	358249	358248
358254	368253	358247	358246	368245	358244
358243	368242	358241	358240		

x

Newmarket Twp.

## INTRODUCTION

Between October 1974 and January 1975, 4 mining claims, in Mann Township north of Timmins, Ontario, were gridded and surveyed with a portable magnetometer in order to obtain additional information about the underlying geology.

An intrusive, possibly of ultramafic composition, extending across the north part of the claims was outlined.

## PROPERTY, LOCATION and ACCESS

Mann #1 Group consists of 18 unpatented mining claims, situated in the township of Mann, Porcupine Mining Division, held by Hollinger Mines Limited under option from Mr. Ty Randa of Cochrane, Ontario.

The scope of this report is a square block of four claims that occupies the W $\frac{1}{2}$  of the S $\frac{1}{2}$  of lot 4 and the E $\frac{1}{2}$  of the S $\frac{1}{2}$  of lot 5 in concession 5. The claims are numbered P-371845 to P-371848 inclusively.

## TOPOGRAPHY

The area of the property is a relatively flat wooded plain typical of the undeveloped parts of the 'clay-belt' (Barlow-Ojibway formation). In the northern part of the claims, Devonshire creek has eroded a channel 400 feet wide to a depth of 20 feet. While alders abound near the creeks, the higher ground is forested with spruce, poplar and fir.

## SURVEY METHOD

### Linecutting

A base line originating from a diamond drill collar situated east of the northeast corner of the group was extended westerly for 3,300 feet near the north boundary of the claims. From this base line cross lines, 200 feet apart, were extended

normally, south to the creek. A second base line parallel to the first was extended across the group 1,600 feet to the south. Similarly, lines were extended north to the creek and south to the claim boundary. Stations were established at 100 foot intervals along the cross lines.

#### Magnetics

Variations of the earth's total magnetic field between stations were recorded with a model G-816 proton magnetometer. Control stations were established along the base lines at the even 200 foot intersections by averaging repeat loops that encompassed all these points. A curve of the diurnal was recorded by repeating the control points at convenient time intervals. From the curve, the correction for every reading could be interpolated and applied to the reading. Finally, 59,000 gammas were subtracted from the readings to make for clearer presentation of the data.

#### RESULTS

The results of the magnetic survey were plotted and contoured as shown on the accompanying plan entitled "Magnetic Survey" at a scale of 1 inch to 200 feet.

Considerable magnetic relief was encountered ranging in intensity from less than 500 to nearly 7,000 gammas. These higher magnetic values are thought to be due to ultramafic intrusives similar to peridotites in composition.

The outlines of the magnetic units superimposed on the magnetic contours are derived from gradient magnetic data that were obtained in conjunction with the survey.

#### CONCLUSIONS

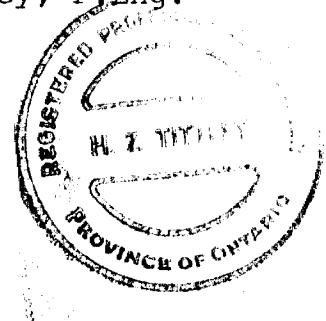
Although all the lines were not read with the magnetometer, the distribution of the magnetic units underlying the property has been successfully demonstrated.

Further magnetic work does not appear warranted  
at this time.

Respectfully submitted,

H. Z. Tittley P. Eng.

H. Z. Tittley, P. Eng.



November 15, 1974.

Statement showing distribution of Assessment Days  
as a result of a Geophysical Mag. Survey (including  
line-cutting) performed on Claims P.371845-48 inclusive,  
Mann Township, October 11 - November 13, 1974

<u>Claim Number</u>	<u>Assessment Days</u>
P-371845	40
371846	40
371847	40
371848	40

O H Hansen

(Signature)

Geophysical Survey

**GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL  
TECHNICAL DATA STATEMENT**

TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT  
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT  
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

Type of Survey Geophysical Mag Survey  
Township or Area Mann Township  
Claim holder(s) Hollinger Mines Limited,  
Box 320, Timmins, Ontario.  
Author of Report H. Z. Tittley  
Hollinger Mines Limited  
Address Box 320, Timmins, Ontario  
Covering Dates of Survey Oct. 11, 1974 to Jan. 8, 1975  
(incutting to office)  
Total Miles of Line cut 7.98 miles

**SPECIAL PROVISIONS**  
**CREDITS REQUESTED**

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

**Geophysical** **DAYS**  
per claim

- Electromagnetic \_\_\_\_\_
- Magnetometer 20 40
- Radiometric \_\_\_\_\_
- Other \_\_\_\_\_
- Geological \_\_\_\_\_
- Geochemical \_\_\_\_\_

**AIRBORNE CREDITS** (Special provision credits do not apply to airborne surveys)

Magnetometer \_\_\_\_\_ Electromagnetic \_\_\_\_\_ Radiometric \_\_\_\_\_  
(enter days per claim)

DATE: \_\_\_\_\_ SIGNATURE: \_\_\_\_\_ Author of Report or Agent

## PROJECTS SECTION

Res. Geol. \_\_\_\_\_ Qualifications 63-2513

Previous Surveys 21104 geological records

Checked by \_\_\_\_\_ date \_\_\_\_\_

GEOLOGICAL BRANCH

Approved by \_\_\_\_\_ date \_\_\_\_\_

## GEOLOGICAL BRANCH

## GEOLOGICAL BRANCH

Approved by \_\_\_\_\_ date \_\_\_\_\_

**MINING CLAIMS TRAVERSED**  
**List numerically**

..... {prefix} (number)

.....

P = 371846

P - 371847

P - 371848

If space insufficient, attach list

Show instrument technical data in each space for  
type of survey submitted or indicate "not applicable"

## GEOPHYSICAL TECHNICAL DATA

### GROUND SURVEYS

Number of Stations 249 Number of Readings 247  
Station interval 100 feet  
Line spacing 200 feet  
Profile scale or Contour intervals 50, 100, 200, 300, 500 and 1000  
(specify for each type of survey)

### MAGNETIC

Instrument Geometric Model G-816 Proton Magnetometer  
Accuracy - Scale constant 1 gamma  
Diurnal correction method closed loops  
Base station location 16S B.L. at 16+00'W

### ELECTROMAGNETIC

Instrument \_\_\_\_\_  
Coil configuration \_\_\_\_\_  
Coil separation \_\_\_\_\_  
Accuracy \_\_\_\_\_  
Method:  Fixed transmitter  Shoot back  In line  Parallel line  
Frequency \_\_\_\_\_  
(specify V.L.F. station)

Parameters measured \_\_\_\_\_

### GRAVITY

Instrument \_\_\_\_\_  
Scale constant \_\_\_\_\_  
Corrections made \_\_\_\_\_  
  
Base station value and location \_\_\_\_\_

Elevation accuracy \_\_\_\_\_

### INDUCED POLARIZATION - RESISTIVITY

Instrument \_\_\_\_\_  
Time domain \_\_\_\_\_ Frequency domain \_\_\_\_\_  
Frequency \_\_\_\_\_ Range \_\_\_\_\_  
Power \_\_\_\_\_  
Electrode array \_\_\_\_\_  
Electrode spacing \_\_\_\_\_  
Type of electrode \_\_\_\_\_

M.C.41

TOWNSHIP

OF

2.169

MANN

DISTRICT OF  
CHIRANEPORCUPINE  
WILDERNESS DIVISION

SECTION - BLOCK - 40 CHAIN

GROUND

P.L. 1975  
ON FILE

PLATTED

LOCATED LAND

LICENSE OF OCCUPATION

POLICE

IMPROVED PLATE

R.R. 100

FENCE LINE

MANUFACTURED BUILDINGS

WATER POWER

WELL

STOCK

CROPS

FOREST

WILDLIFE

WATER

SOIL

ROCK

WATER