



42A13SE0300 2.969 REID

010

PROJECTS
SECTION

GEOPHYSICAL SURVEYS

on the

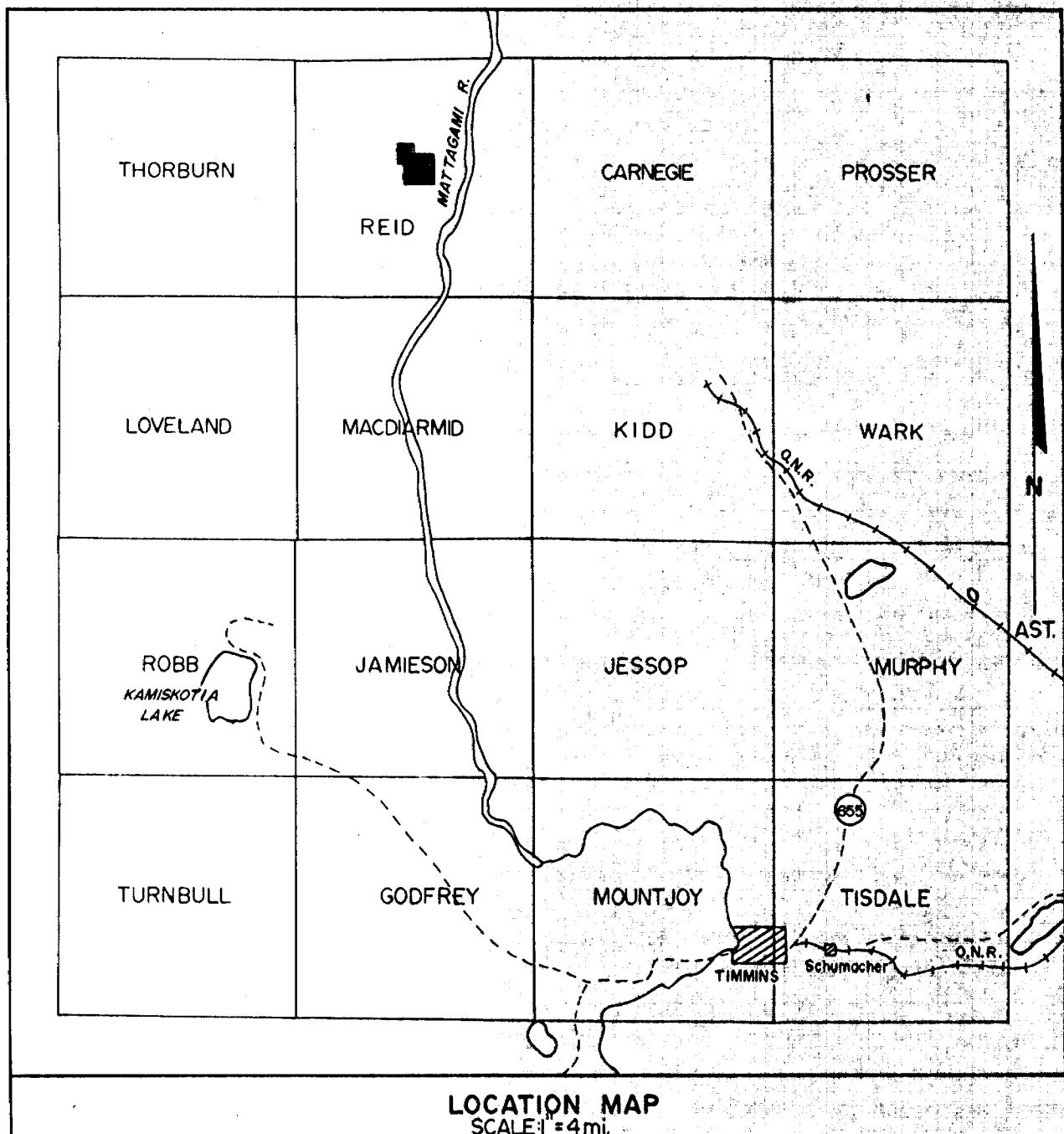
REID No. 3 GROUP

HOLLINGER MINES LIMITED

Reid Township, Ontario

July 28, 1972

H. Z. Tittley, P.Eng.



MAHAFFY TWP. - M.540

4 M

3 M

1

30.11

REID TWP.

REID TWP.											
326525	326526	326527	326528								
P	P	P	P	R	P	P	P	P	P	P	P
327055	285062	285063	285062	285063	285062	285063	285062	285062	285063	285062	308192
P	P	P	P	R	R	P	P	R	R	P	308191
327056	285061	285054	285051	285044	285041	285034	285031	285024	285021	285014	308190
P	P	P	P	R	R	P	P	R	R	P	308189
327057	285060	285055	285050	285045	285040	285035	285030	285025	285020	285015	285004
P	P	P	P	P	P	P	P	R	R	P	307773
327044	285059	285058	285049	285048	285046	285039	285036	285029	285026	285019	285008
P	P	P	P	P	P	P	P	R	R	P	308247
326975	285058	285057	285048	285047	285038	285037	285028	285027	285018	285017	285007
P	P	P	P	P	P	P	P	R	R	P	308248
326976	300924	300923	300922	300921							
P	P	P	P	P	P	P	P	R	R	P	308249
326981	300927	300928	300929	300930							
P	P	P	P	P	P	P	P	R	R	P	308241
326982	300935	300934	300933	300931							
P	P	P	P	P	P	P	P	R	R	P	308242
326987	300936	300937	300938	300939	300940						
P	P	P	P	P	P	P	P	R	R	P	308243
326990	326991	300941	289980								
P	P	P	P	P	P	P	P	P	P	P	308244
326993	326994	289981	289976	289975							
P	P	P	P	P	P	P	P	P	P	P	308245
327004	327001	256529	256528	256529							
T	P	P	P	P	P	P	P	P	P	P	308246
327009	327008	327007	289790	289783	289780	289773					
P	P	P	P	P	P	P	P	P	P	P	308247
327018	327020	289789	289784	289779	289774						
P	P	P	P	P	P	P	P	P	P	P	308248
327049	327050	327051	289788	289785	289778	289775					
P	P	P	P	P	P	P	P	P	P	P	308249
			289787	289786	289777	289776	289770	289969			

SCALE 1" = 2640'

SUMMARY

Ground geophysical surveys have been completed on three contiguous claims in Reid Township, Ontario.

The only definite conductive anomaly detected was previously tested by drilling and found to be due to sulphide mineralization.

INTRODUCTION

This report, on the results of two geophysical surveys on a portion of the Reid No. 3 Group, is submitted in accordance with the assessment requirements set by the Ontario Ministry of Natural Resources. The author supervised the field crew and interpreted the results.

During the winter of 1972, a grid of lines was established and surveyed using ground magnetic and horizontal-loop electro-magnetic methods.

Information about the area of the property is available through the Ministry of Natural Resources from the following documents:

- 1) Assessment file T-787 Mespi Mines Limited
- 2) " " T-1189 Mercury Chipman
- 3) " " T-1008 Duvan Copper
- 4) Preliminary Map P-700 Reid Township

PROPERTY, DESCRIPTION and LOCATION

Hollinger Mines Limited Reid No. 3 Group was expanded by the addition of three claims in June 1971. These claims are: 320253, 320254, and 320854.

The property is situated in the center of Reid Township, Porcupine Mining Division. It lies west of the Mattagami River and 20 miles northwest of the Town of Timmins.

ACCESSIBILITY

The claims are accessible via the Mattagami River from Sandy Falls in Mountjoy Township, 5 miles northwest of Timmins.

The river is navigable even for smaller barges for the 17 miles. Land transportation is possible only by tractor roads through Loveland and Thorburn Townships from the end of highway 576 in Robb Township. On the property there is a clearing suitable for helicopter flights.

HISTORY

A comprehensive summary of the previous exploration work in the central part of the Township is available from the above list of information.

GEOLOGY

Two outcrops occur on the claims and are shown on the accompanying plans. From the government map, the outcrop situated in the south part of claim 320253 is shown to contain intermediate lavas along the north side in contact with acid lavas to the south. The three drill holes, immediately south of the outcrop, intersected acid to intermediate lavas. Elsewhere, conductive clays blanket the bedrock.

SURVEY METHODS

Linecutting:

The required grid of picket lines was surveyed from a base line bearing 267 degrees and originating from a point 2000 feet north of the main base line along section 28W. Picket lines were cut 400 apart normal to the base line and extended to cover the entire property. Stations were established at every 100 feet over a total of 3.52 miles of lines.

Magnetics:

All the lines were read at a station interval of 100 feet or less with a tripod-mounted torsion-wire magnetometer capable of measuring the vertical component of earth's magnetic field. Diurnal and instrument drift variations were recorded by frequently repeating previously established magnetic bases

at the intersections of the base line and cross-lines. These variations were subtracted from the readings and an arbitrary value of 945 gammas for the Ogden-Bristol government base, transported to the grid, was added to complete the corrections in gammas.

Electromagnetics:

The electromagnetic survey was conducted over the same grid at a station interval of 100 feet or less with the transmitter and receiver coils 400 feet apart. The readings were recorded at the station midway between the coils.

RESULTS

Magnetics:

The results of the magnetic survey show a total relief of 750 gammas from a low of 825 to a high of 1574 gammas. All the magnetic features are believed to represent north trending diabase dykes of varying thicknesses.

Electromagnetics:

The results of the electromagnetic survey are complicated by changes in the thickness and possibly the conductivity of the clays within the overburden. Only one conductive anomaly is interpreted on the accompanying plan. The conductor extends into the nine claim portion of the group. Across claim 320254 the anomaly was tested with three drill holes six years earlier and found to contain pyrite, pyrrhotite and chalcopyrite mineralization of sub-economic grade.

CONCLUSIONS and RECOMMENDATIONS

No new conductive zones have been detected by these investigations.

Further work is ~~not~~ recommended at this time.



H. Z. Tittley, P.Eng.

**GEOPHYSICAL - GEOLOGIC
TECHNICAL DATA**

42A13SE0300 2.969 REID

900

S A M P L E

**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 Electromagnetic

Township or Area Reid #3 Group, Reid Township

Claim holder(s) Hollinger Mines Limited
Box 320, Timmins, Ontario

Author of Report H. Z. Tittley

Address c/o Hollinger Mines Limited

Covering Dates of Survey March 16-18, 1972
(line cutting to office)

Total Miles of Line cut _____

**MINING CLAIMS TRAVESED
List numerically**

P - 320253
(prefix) (number)

D - 320254

P - 320851

**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	20
-Magnetometer	_____
-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 LD

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 9

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

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations _____ Number of Readings _____
Station interval _____
Line spacing _____
Profile scale or Contour intervals _____
(specify for each type of survey)

MAGNETIC

Instrument _____
Accuracy - Scale constant _____
Diurnal correction method _____
Base station location _____

ELECTROMAGNETIC

Instrument Geonics EM-17
Coil configuration Horizontal Co-Planar
Coil separation 400 feet
Accuracy Real $\pm 1\%$; Imaginary $\pm 3\%$
Method: Fixed transmitter Shoot back In line Parallel line
Frequency In-phase (Real) and Out-of-phase (Imaginary)
(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 _____

**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 Reid #3 Group, Reid Township, Ont.
 Claim holder(s) Hollinger Mines Limited
Box 320, Timmins, Ontario
 Author of Report H. Z. Tittley
 Address c/o Hollinger Mines Limited
 Covering Dates of Survey March 1-11, 1972
(linecutting to office)
 Total Miles of Line cut 3.52

MINING CLAIMS TRAVESED
List numerically

P.....	320252.....
(prefix)	(number)
P.....	320254.....
P.....	320854.....

SPECIAL PROVISIONS
CREDITS REQUESTED

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

ENTER 20 days for each additional survey using same grid.

	DAYS per claim
Geophysical	9
-Electromagnetic	40
-Magnetometer	9
-Radiometric	9
-Other	9
Geological	9
Geochemical	9

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 _____

Previous Surveys _____

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 3

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

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 161 Number of Readings 287
Station interval 100 feet
Line spacing 400 feet
Profile scale or Contour intervals 25, 50, 100, 200, 300 and 500 gammas
(specify for each type of survey)

MAGNETIC

Instrument A.B.E.M. MZ-4 Serial No. 3599
Accuracy - Scale constant 10.1 gammas per scale division
Diurnal correction method Return loops to magnetic base lines
Base station location Bristol-Ogden Township, O.D.M. base = 945 gammas
945
30m

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 _____

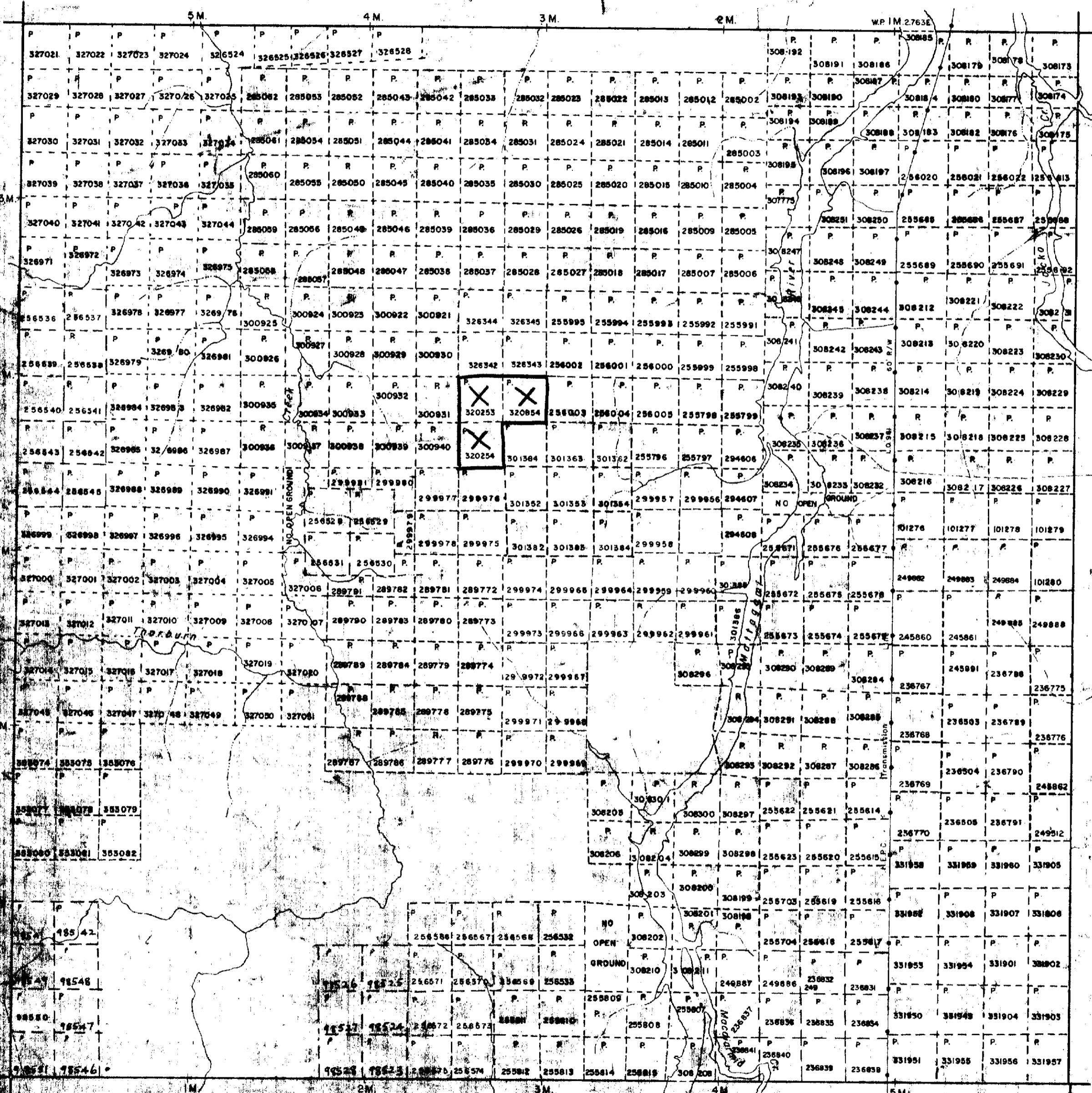
Elevation accuracy _____

INDUCED POLARIZATION - RESISTIVITY

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

MAHAFFY TWP. - M.540

THORNBURN TWP - M-601



MAGGIAR MID TWR - M. 294

HF TOWNSHIP

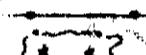
REID

**DISTRICT OF
OCHRANE**

ORCUPINE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
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.

Subdivision of this twp. into lots and concessions
annulled Aug. 19, 1953.

Flooding Rights to areas along Mattagami River reserved to HEPC. * L.O. 7085

DATE OF

G 4 1972

PLAN NO. M.575

ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS

