



42A12SE0420 2.1352 GODFREY

010

352

RECEIVED

NOV 14 1973

PROJECTS
SECTION

GEOPHYSICAL SURVEY

on the

GODFREY No. 7 GROUP

Hollinger Mines Limited
Godfrey Township, Ontario

November 7, 1973

H.Z. Tittley, P.Eng.

SUMMARY

During the summer of 1969 a ground electromagnetic survey was performed over two adjoining claims situated in Godfrey Township, Ontario.

A conductive zone, detected by a previous operator using an induced polarization method was outlined and tested by diamond drilling. A leached zone near a rhyolite andesite contact encountered by the drilling is considered the cause of the anomaly at that point.

INTRODUCTION

This report on a ground V.L.F. (20 KHz) electro-magnetic survey is prepared to conform with the assessment requirements of the Ontario Ministry of Natural Resources.

The field work was done during June, July and August 1969 by W. H. King, an employee of Hollinger Mines in Timmins, over a previously surveyed system of grid lines.

The author supervised the field work, interpreted and prepared the data for presentation.

Additional information about the central Godfrey area is available from files and reports that can be obtained from the Ministry of Natural Resources.

PROPERTY, DESCRIPTION and LOCATION

Hollinger Mines' two unpatented mining claims P-100431 and P-100433 occupy the southwest quarter of the south half of lot 8 in concession 5 and the north west quarter of the north half of lot 8 in concession 4 respectively, near the center of Godfrey Township, Ontario. The two claims are part of Hollinger's 43 claim Godfrey No. 7 Group located within the City of Timmins, 8 miles west of center town.

ACCESSIBILITY

A gravel road along the west boundary of the two claims joins with highway 576, one mile to the north.

HISTORY

The property was acquired by staking in November 1968. Previously the area had been examined by Mespi Mines (Ku-Kam Porcupine Mines Limited) using magnetic, electro-magnetic and induced-polarization geophysical methods, followed up by diamond drill testing. (1)

During the summer of 1969, at the time of the geophysical survey, Hollinger Mines mapped the geology along recently surveyed lines. This work was submitted for assessment in January 1971. (2)

In September 1970, Hollinger Mines drilled one hole and the results were submitted for assessment credits in October of 1970.

A summary of additional technical information on the area accompanies the publication P-639 by the Ministry of Natural Resources entitled "Godfrey Township", issued in 1971.

GEOLOGY

Considerable exposure of rhyolite can be found in the northeast half of the property. Between 400 and 800 feet west of the west boundary of the claims lies the eastern edge of a ridge containing large areas of exposed rhyolite. Two Mespi drill holes (NG-1 and NG-4) and the Hollinger drill hole (G7-1) shown on the accompanying plan encountered intermediate to basic as well as felsic volcanic rocks. These results suggest the presence of a more basic unit trending southeast across the south claim between two rhyolite areas.

SURVEY METHOD

The instrument used in this survey is a production model EM-16 electromagnetic receiver (Ser. #48) manufactured by Geonics Limited of Toronto, Canada. The inclinometer is calibrated in % and the "Out-of-phase" is wired so that both components have the same sign over a non-shallow non-magnetic conductive source.

The survey was conducted along a grid of picket lines 200 feet apart, surveyed from a base line (40W) bearing 140 degrees across the property. Observations were taken at every measured 100 feet along the grid lines. A total of 184 readings were taken for 3.25 miles of electromagnetic survey.

RESULTS

The results of the electromagnetic survey completed over the two claims are presented on the accompanying plan at a scale of 1" to 400'. A conductive anomaly extends from line 208N near the northwest corner of claim P-100431 southeast to line 192N near the southeast corner of the same claim. Another very weak anomaly, reflected only by the Out-of-phase component, occurs near and parallel to the 40W base line between lines 198N and 210N.

CONCLUSIONS and RECOMMENDATIONS

Hollinger Mines diamond drill hole G7-1 intersected the conductive zone on line 206N and, as previously mentioned, encountered only a leached zone to account for the anomaly at this point. However, hole NG-1, located between lines 192N and 194N, was drilled by Mespi Mines in 1965. It intersected a zone containing approximately 15% sulphides after passing through 40 feet of poorly recoverable material. Another Mespi drill hole (NG-4) collared east of the conductive zone between

lines 204N and 206N was possibly of sufficient length to test the second weakly conductive anomaly near the 40W base line but the results obtained in this hole are not available to the author.

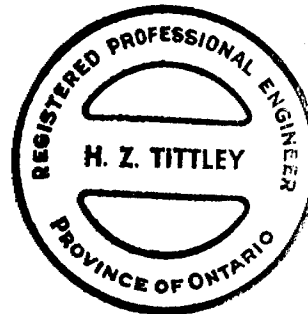
Because of the seemingly favourable geological setting of the main conductive zone, the remaining 1200 ft. untested portion centered near the middle of claim P-100431 should be investigated further as a possible source of economic sulphide mineralization.

REFERENCES

- (1) Ontario Ministry of Natural Resources File T-965.
- (2) Ontario Ministry of Natural Resources File T-1460.

H. Z. Tittley P. Eng.

H. Z. Tittley, P.Eng.



November 8, 1973.

Statement Showing Distribution of Assessment
Days as a Result of a Geophysical Electromagnetic
Survey Performed in the Summer of 1969

<u>Claim Number</u>	<u>Assessment Days</u>
P-100431	20
P-100433	20

Note: The line-cutting was filed previously
with a geological survey.

W H Hansen

HOLLINGER MINES LIMITED

TIMMINS, ONTARIO



42A12SE0420 2.1352 GODFREY

File 2.1352

900

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 Electromagnetic Geophysical

Township or Area Godfrey #7 Group, Godfrey Township

Claim holder(s) Hollinger Mines Limited

Author of Report H. Z. Tittley

Address Box 320, Timmins, Ontario

Covering Dates of Survey _____
(linecutting to office)

Total Miles of Line cut _____

MINING CLAIMS TRAVERSED
List numerically

(prefix)

(number)

P -100431

P -100433

**SPECIAL PROVISIONS
CREDITS REQUESTED**

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

ENTER 20 days for each
additional survey using
same grid.

Geophysical

--Electromagnetic _____

--Magnetometer _____

--Radiometric _____

--Other _____

Geological _____

Geochemical _____

DAYS
per claim
20

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

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)

DATE: Nov. 7/73 SIGNATURE: H. Z. Tittley P. Eng.
Author of Report or Agent

PROJECTS SECTION

Res. Geol. 2.585 Qualifications 63.2513

Previous Surveys Geological & Geochemical see

attached sheet

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

TOTAL CLAIMS 2

OFFICE USE ONLY L.D.

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 _____ 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 _____ Ronka EM-16 #48

Coil configuration _____

Coil separation _____ Infinity

Accuracy _____ $\pm \frac{1}{2}^\circ$

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____ 20 KHz

(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 _____

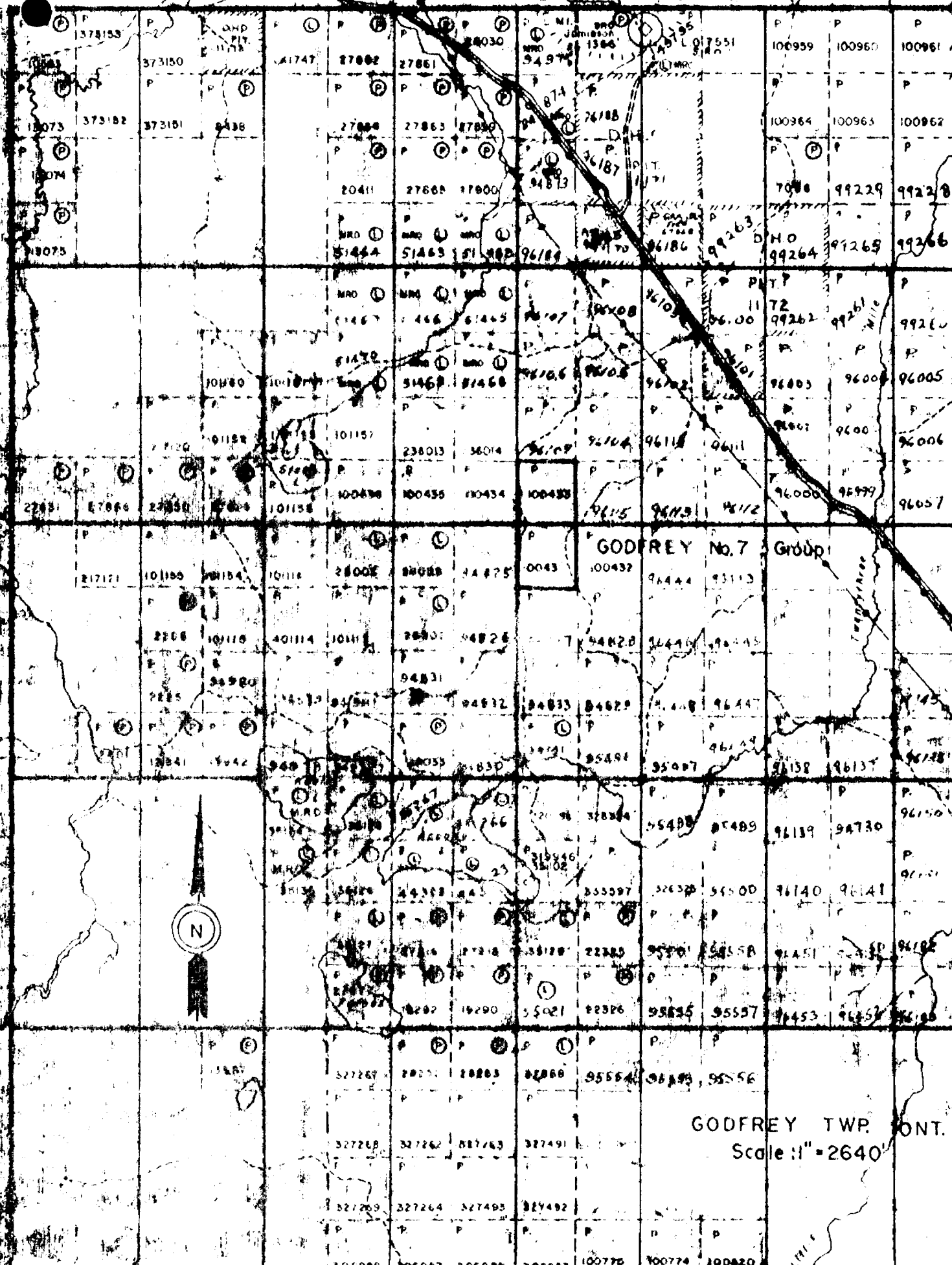
Electrode array _____

Electrode spacing _____

Type of electrode _____

Jamieson Twp. (M. 2)

Cap. Rodar Sig
Dept of National Defence
Withdrawn from Stock
Sec. 34(D) of Mining Act File 169051



GODFREY TWP. ONT.
Scale 1" = 2640'

Jamieson Twp. (M. 288)

THE TOWNSHIP OF
GODFREY

DISTRICT OF COCHRANE

PORCUPINE MINING DIVISION

SCALE: 1 INCH = 40 CHAINS

LEGEND

- PATENTED LAND
- CROWN LAND SALE
- LEASES
- LOCATED LAND
- LICENSE OF OCCUPATION
- MINING RIGHTS ONLY
- SURFACE RIGHTS ONLY
- ROADS
- IMPROVED ROADS
- KIND'S HIGHWAYS
- RAILWAYS
- POWER LINES
- MARSH OR BIRCHES
- MINES
- CANCELLED

NOTES

400' surface rights reservation created on lakes and rivers.

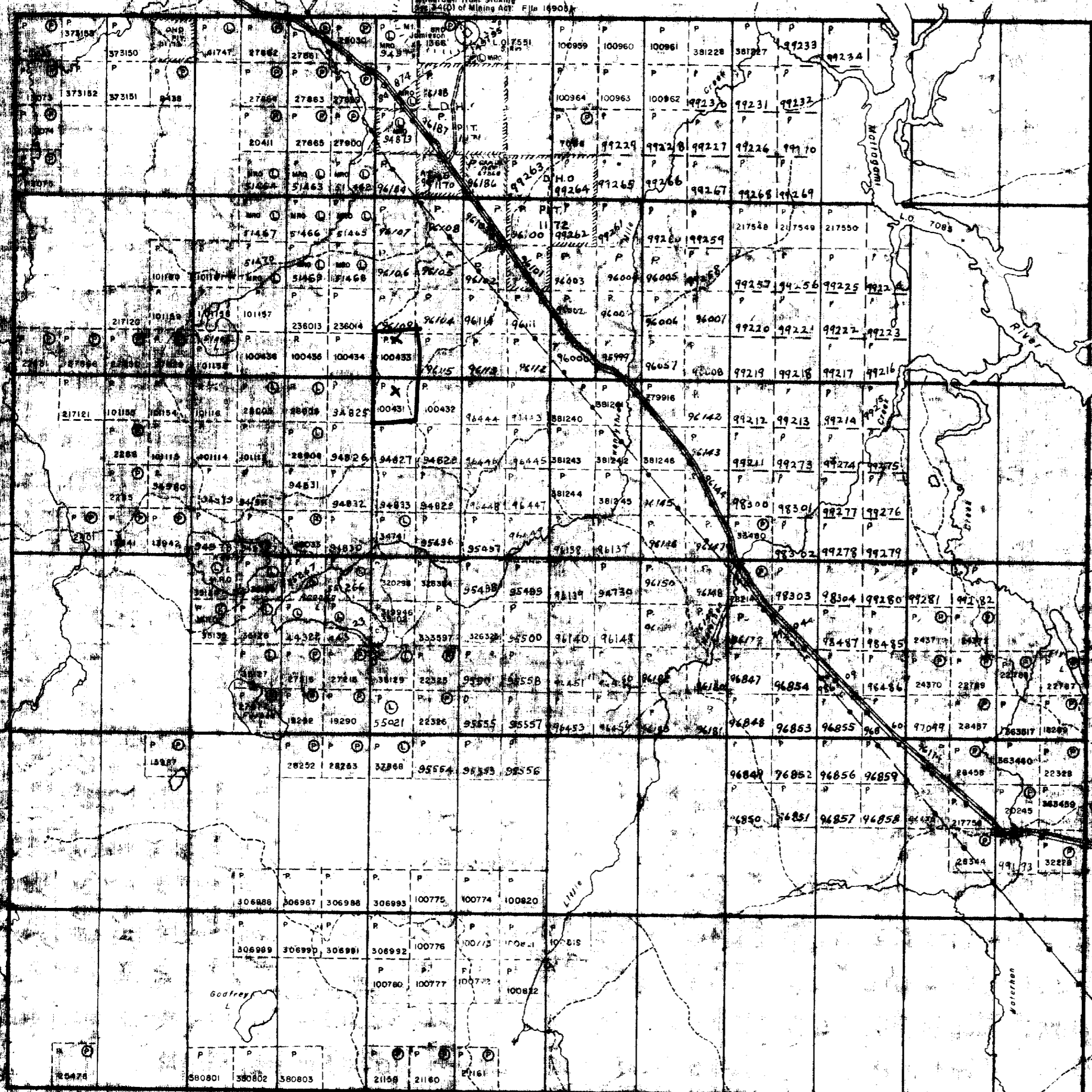
Fishing rights on other lakes of the Dominion N.H.E.C.

MINING LANDS
DATE OF ISSUE
NOV 15 1973
MINISTRY OF NATURAL RESOURCES

FILE-2.1352

PLAN NO. M.284

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH



Bristol Twp. (M. 264)



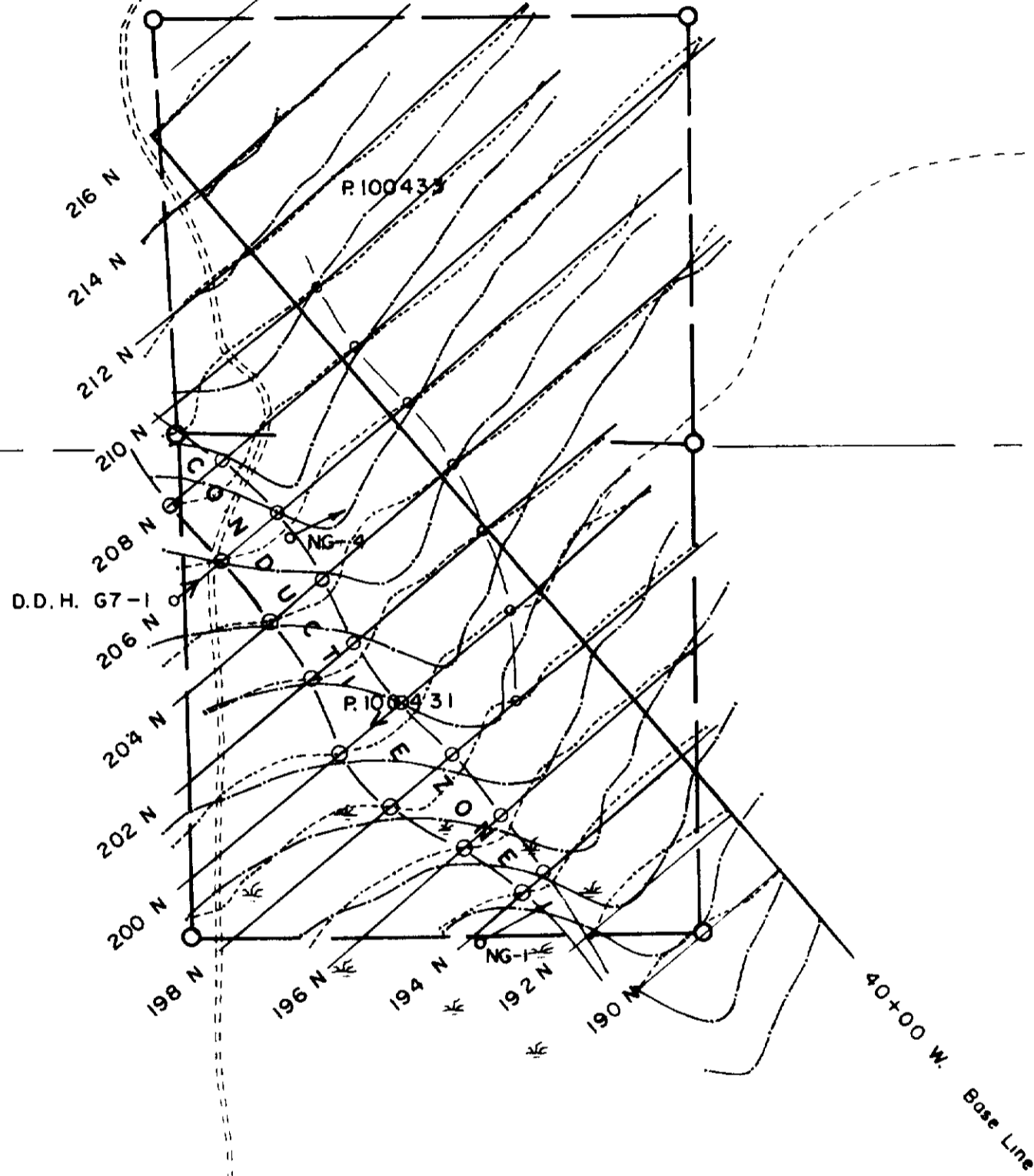
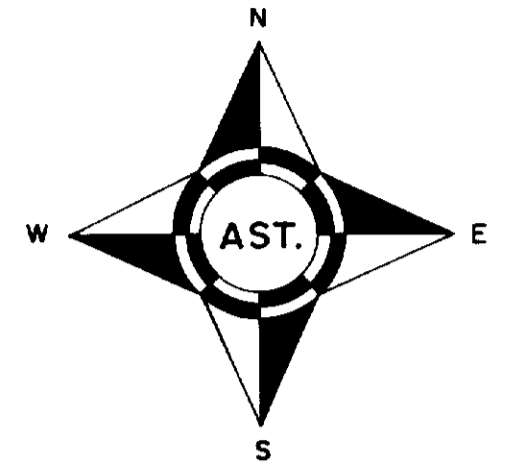
42A126E0420 2.1352 GODFREY

200

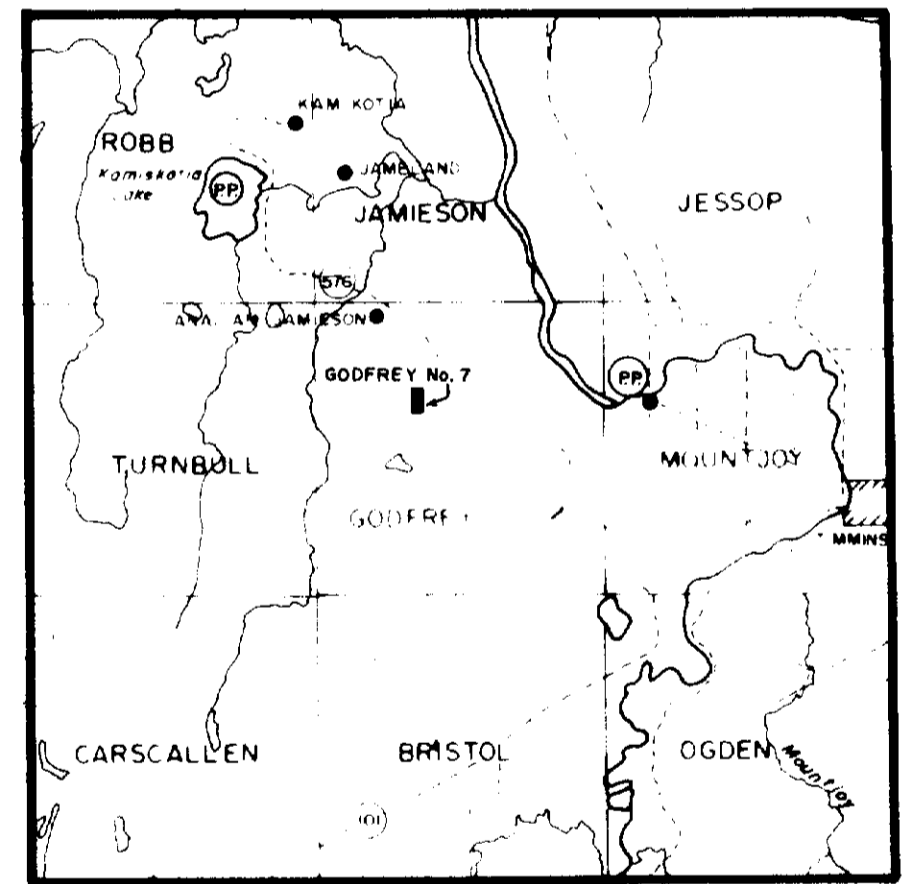
Lot 9 Lot 8

Lot 8 Lot 7

Gravel Road



CON. 5
CON. 4



LOCATION MAP

1" = 4 mi.

HOLLINGER MINES LTD.
 Godfrey Group No. 7
 V.L.F (20 KHz. E.M.) SURVEY
 GODFREY TWP. ONT.

Scale: 1" = 400'

2.1352



Lot 8 Lot 7

LEGEND

