



41P15NW0217 2.1494 MONTROSE

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JUN 11 1974

PROJECTS UNIT

ELECTROMAGNETIC SURVEY
GOLDEN BOUNTY MINING COMPANY LIMITED
MONTROSE TOWNSHIP
ONTARIO

April 16, 1974

J. D. McOANNELL

The Directors
Golden Bounty Mining Company Limited
Suite 520
25 Adelaide Street East
Toronto, Ontario

Gentlemen:

This report describes the results of an electromagnetic survey conducted over a group of fifteen mining claims held by Golden Bounty Mining Company Limited and located in Montrose Township, Matachewan Area, Ontario. The field work for this geophysical work was completed during the period March 16th to March 31st, 1974.

The electromagnetic survey was conducted using a Geonics EM-16 instrument and was carried out in an effort to locate zones of shearing or sulphide mineralization that might provide favourable host conditions for gold deposition. Gold is known to occur on the property and is associated with a highly carbonated shear zone fairly well mineralized with disseminated pyrite.

North-south picket lines were established at 400-foot intervals, the electromagnetic observations were made at 100-foot intervals along these lines. A fairly strong conducting zone was indicated by the survey and extends in a general east-west direction through the north part of the property. This conductor coincides quite well with the known location of the gold bearing carbonate shear. It is recommended that your Company proceed with a program of diamond drilling to further investigate this zone. A minimum of 1,000 feet of drilling is suggested as the initial phase of this drilling program, at an overall estimated cost of twelve thousand dollars. As soon as snow conditions permit, a reconnaissance geological examination should be made of the ground.

J. D. McOANNELL.

PROPERTY, LOCATION AND ACCESS

The property described in this report comprises a group of fifteen unsurveyed claims of approximately 40 acres each and forming a contiguous rectangular block. The claims group is located in the extreme northeast corner of Montrose Township, District of Timiskaming, Ontario. The claims included in the group are further described as follows: 373967, 374735 to 374748 inclusive.

Montrose Township is situated in what is generally referred to as the Matachewan Area and is about 45 miles due west of Kirkland Lake and 45 miles southeast of Timmins, Ontario. The area can be readily reached by highway # 65 to Matachewan and then # 566 to the Ashley Mine site. The immediate area is serviced by numerous lumber roads and it is possible to drive directly to the property.

TOPOGRAPHY

The terrain in the immediate vicinity of the claims group is largely flat lying sand-plane, covered with a fairly heavy growth of small timber, mostly jackpine, spruce and balsam. A stream known as the Whitefish River flows in a south and east direction through the south part of the claims group and a small lake or pond is located in the central part of the property.

GENERAL GEOLOGY

Montrose Township is included on the Bannockburn Gold Area map which accomanies Volume XLI, Part II, published by the Ontario Department of Mines in 1932. The Bannockburn Gold Area sheet, Map No. 41a, shows the geology of Montrose, Bannockburn, Argyle and Hincks Townships on the scale of 1 inch to 3/4 of a mile.

The four townships are largely underlain by Keewatin type

volcanic rocks made up of both basic and acid flows and associated tuffs and fragmentals. Parts of this volcanic assemblage is overlain by sediments of the Cobalt Series. The volcanic rocks have been intruded by dikes, sills and small masses of Algoman type granite, syenite and quartz porphyry. Both the early volcanics and later intrusives have been cut by numerous north-south striking dikes of Matachewan diabase.

Map No. 41a, shows the area of the claims group discussed in this report, to be underlain by basic volcanics with several narrow dikes of quartz porphyry and one diabase dike near the west boundary of the property. The limited number of rock exposures on the claims group does not permit a detailed examination of the underlying geological formations.

The old trenches are now largely filled with debris with very little actual rock exposed. An examination of a long trench on claim 374738 showed the rock to be tuffaceous and fragmental with what appeared to be thin beds of arkosic sediments. A small outcrop just north of the trench is a coarse grit with feldspathic pebbles up to 3 inches in diameter. This rock could be a small remnant of Cobalt Series sediment.

Two areas of strong carbonate alteration carrying gold values are known on the property from past exploration programs. One of these zones is located near the number 1 post of claim 374745 and the other near the north boundary of claim 374738. The two zones appear to be separate but are in the same general Geological horizon. The strongest carbonate alteration is at the most westerly zone where the schistosity is much stronger and there is much more oxidation of the pyrite mineralization. In

both cases, the strike appears to be northeast to slightly north of east and the dip vertical to steep south. Specimens of rock exposed in old trenches at both locations show considerable green coloured mica, possibly fuchsite or mariposite.

HISTORY AND PREVIOUS WORK

Gold was first reported on ground forming part of the present claims group, in the early 1930's, during the prospecting rush to the area that followed the discovery of the Ashley gold showing in the northwest corner of Bannockburn Township. The first discovery was reported near what is now the number 1 post of claim 374745 and consisted of large pieces of gold bearing highly sheared and carbonated float. Some trenching and a limited amount of diamond drilling was carried out but the writer was not able to locate any of the records covering this early work.

In the early 1940's, the ground was staked by E. Ames of Matachewan, Ontario who carried out further surface work, largely in the form of trenching, and located a second gold bearing zone near what is the north boundary of present claim 374738. In addition to the trenching, Ames put down five diamond drill holes for a total footage of 591 feet. Almost all the core from this drilling was assayed and reports show a considerable number of the samples to have returned low gold values with one assay of 0.31 ounces per ton for a core length of 10 feet. Values of from five dollars to seven dollars per ton in gold were reported from grab samples taken of rock exposed in the trenches. J.W. McBean, then resident geologist at Swastika, examined the property in the fall of 1945 and logged the drill core. In his report dated December 1st, 1945, Mr. McBean suggested this gold bearing belt to warrant further prospecting.

ELECTROMAGNETIC SURVEY

An electromagnetic survey, using a Geonics EM-16 instrument was carried out over the entire fifteen mining claims held by Golden Bounty Mining Company Limited and located in Montrose Township, Ontario. This work was completed during the period March 16th and April 16th, 1974.

North-south picket lines were cut at 400-foot intervals to provide control for this work, and the electromagnetic observations were made at 100-foot intervals along these lines. Where more detail was required, the lines were spaced at 200-foot intervals. A total of 16.5 miles of lines were cut and chained and 16 miles were covered by the electromagnetic survey.

A fairly strong conducting zone which gave some very sharp nulls, was indicated by the survey in the north part of the claims group. This conductor forms an east-west linear strike trend, about three thousand feet in length and appears to be slightly off-set by faulting about mid-way along its strike. In addition two other weak conductors were also indicated, one in the south part of claim 374736 and the other in the south part of claim 374737. A stream flowing diagonally through the southwest quarter of the claims group and accompanied by a wide area of marsh did not show any topographic influences on the EM-16 instrument.

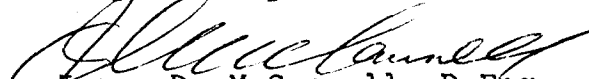
CONCLUSIONS AND RECOMMENDATIONS

The area covered by this report is almost completely covered by glacial till with only a few small areas of exposed rock. Two gold showings, both associated with a mineralized carbonate shear, were previously located on the ground by surface trenching and a

limited amount of diamond drilling.

The electromagnetic survey indicated a fairly strong conductor that appears to conform with the east-west shearing on the property. It is recommended that this zone be checked by diamond drilling with the initial phase of the drilling program to consist of a minimum of 1,000 feet. In a report dated November 22, 1973 and covering this property, the writer estimated the drilling costs at ten dollars per foot. However, increases in labour and materials has necessitated that this figure be revised upwards to twelve dollars per foot.

Respectfully submitted,


James D. McCannell, P.Eng.,
Consulting Geologist



Toronto, Ontario
April 16, 1974.

GEOPHYSICAL - GEOLO
TECHNICAL DA'



41P15NW0217 2.1494 MONTROSE

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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
Township or Area Montrose Twp.
Claim holder(s) Golden Bounty Mining Co. (T.Sokoloff)
520 - 25 Adelaide St. E. Toronto, Ont.
Author of Report J.D. McCannell
Address 350 Bay Street, Toronto, Ont.
Covering Dates of Survey March 16- April 15, 1974
Total Miles of Line cut 16.5 (linecutting to office)

MINING CLAIMS TRAVERSED
List numerically

L (prefix)	378967 (number)
.....	374735 ✓
.....	374736 ✓
.....	374737 ✓
.....	374738 ✓
.....	374739 ✓
.....	374740 ✓
.....	374741 ✓
.....	374742 ✓
.....	374743 ✓
.....	374744 ✓
.....	374745 ✓
.....	374746 ✓
.....	374747 ✓
.....	374748 ✓
TOTAL CLAIMS <u>15</u>	

If space insufficient, attach list

SPECIAL PROVISIONS
CREDITS REQUESTED

ENTER 40 days (includes
line cutting) for first
survey.
ENTER 20 days for each
additional survey using
same grid.

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

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

Magnetometer _____ Electromagnetic _____ Radiometric _____
(enter days per claim)
DATE: June 7, 1974 SIGNATURE: J.D. McCannell
Author of Report or Agent

PROJECTS SECTION

Res. Geol. _____ Qualifications 63.2502
Previous Surveys L.P. 63.3104 not for assessment credits

Checked by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

GEOLOGICAL BRANCH _____

Approved by _____ date _____

OFFICE USE ONLY

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

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS

Number of Stations 819 Number of Readings 819
Station interval 100 feet
Line spacing 400 feet
Profile scale or Contour intervals 1 inch = 40%
(specify for each type of survey)

MAGNETIC

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

ELECTROMAGNETIC

Instrument Geonics EM-16
Coil configuration _____
Coil separation _____
Accuracy + or - 1°
Method: Fixed transmitter Shoot back In line Parallel line
Frequency 17.8 kHz Cutler, Maine
(specify V.I.F. station)
Parameters measured in phase, out of phase

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 _____

THE TOWNSHIP OF
OF
MONTROSE

2.1474

DISTRICT OF
TIMISKAMING

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 | ⓧ |

NOTES

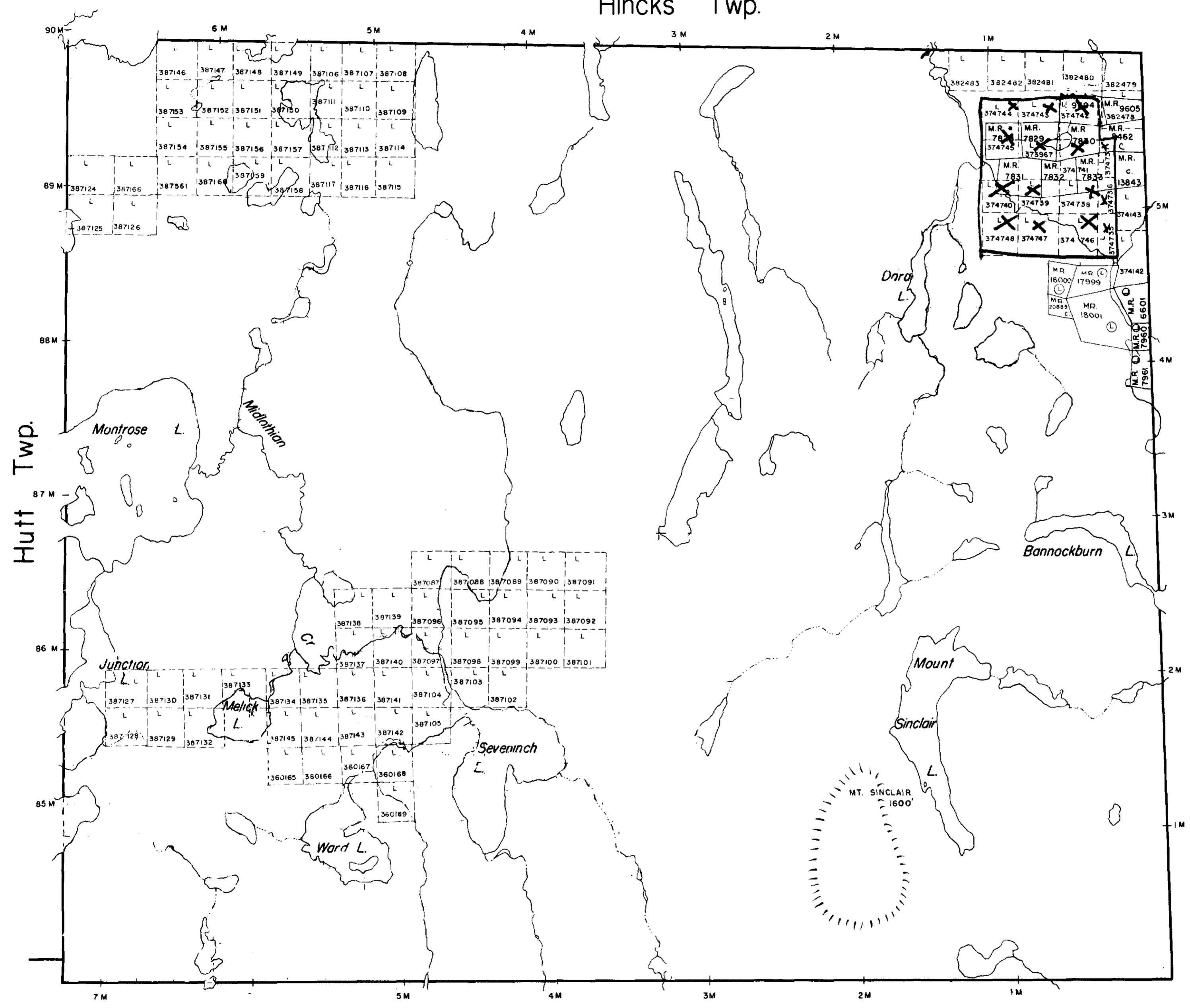
400' Surface rights reservation around all lakes and rivers.

- MINING LANDS -
DATE OF ISSUE
JUN 12 1974
MINISTRY
OF NATURAL RESOURCES

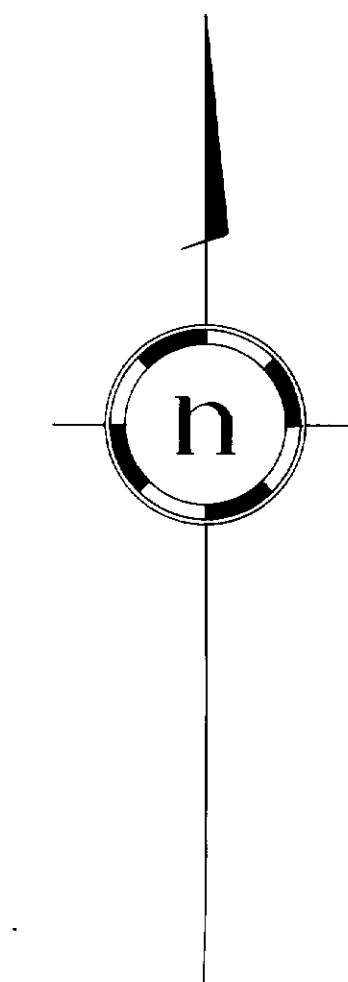
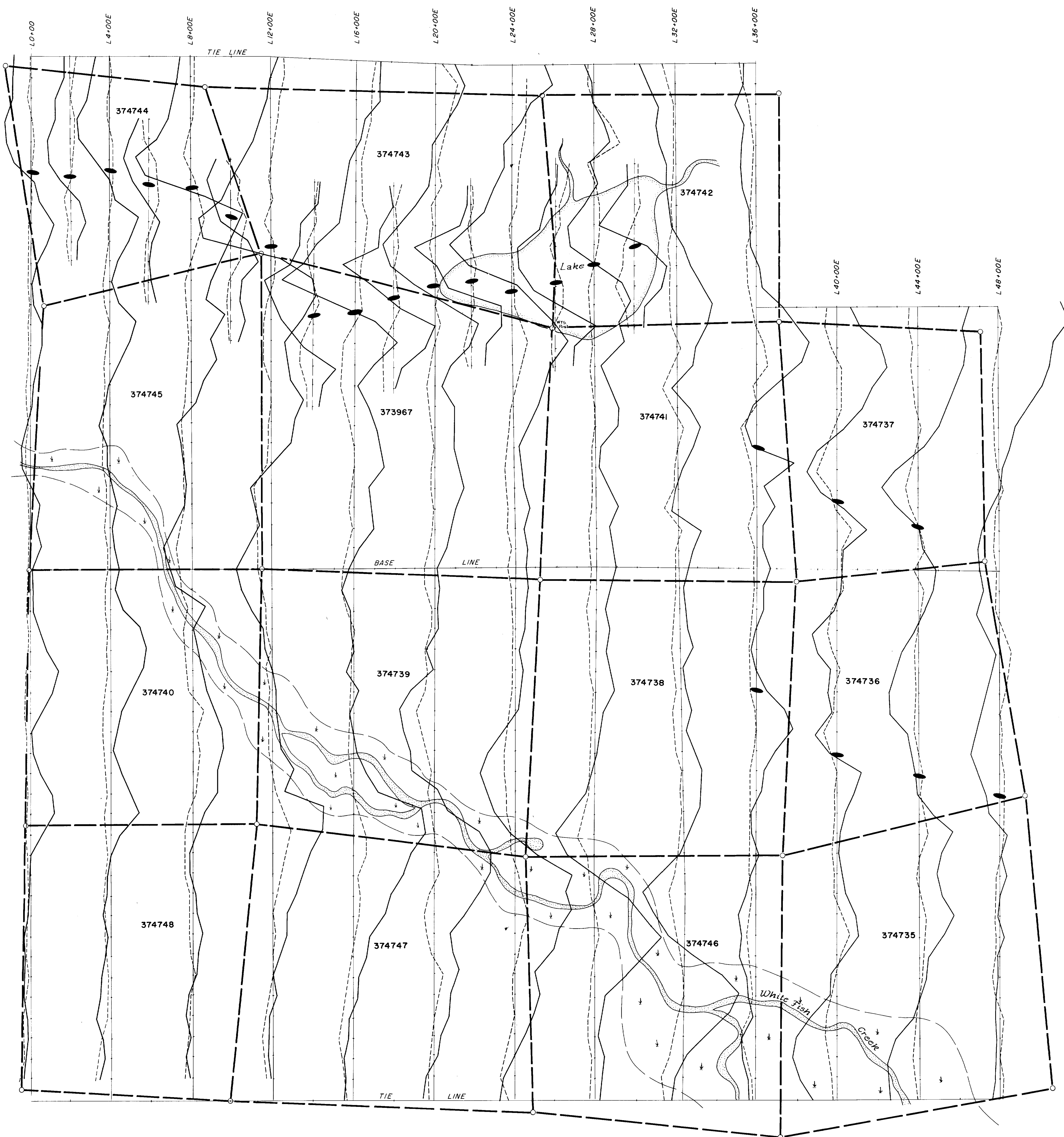
PLAN NO.- M. 237

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH

Hincks Twp.



Midlothian Twp.



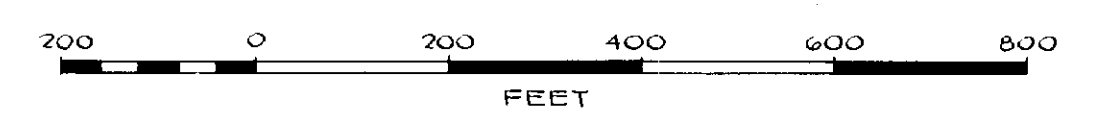
LEGEND

- Out of Phase
- Conductor Axis
- In Phase
- Scale of Profiles 1 inch to 40'
- Station: Cutler, Maine
17.8 KHZ, 1000 kw
- Swamp



GOLDEN BOUNTY MINING CO. LTD.
 MONTROSE TWP, DISTRICT OF TIMISKAMING-ONTARIO.

ELECTROMAGNETIC SURVEY
(E.M. - 16)



2-1494
 April, 1974

