GEOLOGICAL I
GOLDEN BOUNTY MINING COMPANY LIMITED
MONTROSE TOWNSHIP
ONTARIO

SUMMARY

A program of geological mapping was carried out on the entire group of fifteen mining claims, held by Golden Bounty Mining Company Limited and located in Montrose Township, Matachewan Area, Ontario. This work was carried out during the period June 12th to June 29th, 1974 and the results plotted on plan on the scale of one inch to two hundred feet.

2.1494

The north-south picket lines spaced at 400-foot intervals and cut to provide control for the geophysical survey work earlier this year, were used for contol on the geological mapping program. The bedrock exposures were found to be small and quite sparce but fortunately were sufficiently widespread to provide a reasonable indication of the rock types underlying the entire property.

All the formations encountered on the claims group are of volcanic origin and include both flows and pyroclastics. They comprise both acid and basic types and are made up of a lower, middle and upper unit. The middle unit forms a band of highly altered and carbonated rocks, about 1,500 feet in width and extending in a north of west direction through the central part of the property. These rocks are often highly schisted and drag folded with at least four zones of fairly strong pyrite and pyrrhotite mineralization and zones of silicification and quartz stringers. Trenching and a limited amount of diamond drilling using Ex-Ray equipment was carried out at the location of the pyrite bearing silicified zone in the northeast corner of claim 374738. Old reports mention that 0.31 ounces of gold per ton was encountered over a core length

J. D. McCANNELL

of ten feet in one of the Ex-Ray drill holes. The electromagnetic anomaly in the north part of the claims group coincides quite well with pyrite and pyrrhotite mineralization in that area of the claims group. Highly decomposed massive sulphides are exposed in a small outcrop near the number three post of claim 374743.

The highly altered and carbonated rocks along with the zones of silicification and sulphide mineralization, provide a very favourable environment to search for gold or even base metal mineralization. In addition to this, gold is known to occur in at least one location on the property. It is recommended that Golden Bounty Mining Company Limited proceed with the diamond drilling program as recommended in the geophysical survey report of April 16th, 1974 which called for a minimum of 1,000 feet of diamond drilling.

PROPERTY, LOCATION AND ACCESS

The property described in this report, comprises a group of fifteen unsurveyed mining claims of approximately 40 acres each and forming a contiguous block. The claims group is located in the extreme northeast corner of Montrose Township, District of Timiskaming, Larder Lake Mining Division, Ontario. The claims included in the group are further described as follows: 373967 and 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. The area can be readily reached via highway 65 to Matachewan and then highway 566 to the old Ashley Mine site in the northwest corner of Bannockburn Township. The immediate area is serviced by numerous good gravel

roads and one such road leads to the property described in this report. The distance from the Ashley Mine which is at the end of highway 566, to the property is about two miles.

TOPOGRAPHY

The topography of the claims group is quite flat with the elevation varying within a limit of less than fifty feet. The whitefish river forms a low valley running southeasterly across the property. The meandering of this stream and the accompanying low marshy areas, results in a broad area of low swamp in the south and southwest parts of the claims group. Considerable marsh and a small lake occur in the northeast part of the property. The areas of higher ground probably have a bedrock core but are covered with a light mantle of glacial till and sand plane. The entire area was timbered about thirty years ago and is now covered with a dense growth of small evergreen and deciduous trees and dense small underbrush, all of which makes traversing the claims group extremely difficult.

Outcrop is sparse and the surface, especially in the higher ground, is trewn with large pieces of angular float probably broken from bedrock and very close to being in place. In some cases, these pieces are so large, it is difficult to distinguish between bedrock and float.

GEOLOGY

The geology of Montrose Township, is shown on the Bannockburn Gold Area Sheet, Map number 41a, which was published by the Province of Ontario Department of Mines in 1932 on the scale of 1 inch to 3/4 of a mile and accompanies Volume XLI, Part 2. This sheet shows the area of the claims group discussed herein, to be

underlain by basic volcanic flows, tuffs and agglomerate with acid volcanics to the south and a large area of cobalt sediments about half a mile to the west. The volcanic formations are classified as Keewatin and are intruded by numerous narrow dikes of Algoman porphyry and Matachewan diabase.

The detailed geological mapping of the property recently completed, shows the property to be underlain by rocks of volcanic origin and to include both flows and pyroclastics. Rock exposures on the ground are for the most part, quite small and sparse but scattered over most of the property. This was found to provide an indication of the predominant rock types throughout the entire claims group but did not permit close detail mapping of any of the more interesting areas.

In general, the formational strike was found to be about south 40° east with steep dips to the northeast. The pillow tops were also noted to be to the northeast, suggesting the claims group to located in the southwest limb of a synclinal structure. The volcanic formations could be devided into three units with the oldest rocks being to the southwest. From the oldest to the youngest, these rocks are composed of a lower zone of massive, dark green pillowed andesite flows, a middle zone of highly altered and carbonated rhyolite flows and tuffs, intermediate lavas and various degrees of altered, silicified and carbonated mixtures of both types, and an upper zone of massive pillowed andesite.

The middle zone is by far the most interesting geologically, and is about 1,500 feet in width with no clearly observed contacts. Much of it consists of a mixture of rhyolite flows, tuffs and fragmentals along with some dacite, all of which have been subjected to various degrees of alteration resulting in considerable

carbonitization and silicification . There is evidence of much drag folding and localized schistosity. The rhyolite is often softened by the carbonate and may include some kaolinite resulting from arkosic material. Pyrite mineralization with lesser amounts of pyrrhotite is widespread in this altered rhyolite and sometimes occurs in massive form. The carbonate itself, is white coloured, iron rich and dolomitic. It weathers to a rich reddish brown colour for a depth of about one half inch. The locations of the best pyrite zones observed on the ground, are shown on the accompanying plan. The EM 16 survey carried out over the property earlier this year, appears to have detected the stronger mineralized zones but the continuous pattern was probably interupted by the drag folding, a condition that was brought out by the geological mapping. A more detailed description of the pyrite zones is as follows:

Zone A

Located 100 feet east of 2+50 south on line 36 East, silicified and cherty carbonitized rhyolite flows and tuff with narrow quartz stringers and up to 5% pyrite. Considerable trenching was carried out here in th 1930's and five Ex-Ray diamond drill holes were put down. One of these holes is reported to have returned an assay of 0.31 ounces of gold per ton for a core length of 10.0 feet.

Zone B

Located immediately east of 8+50 south on line 36 East. This is a rusty outcrop about 15 feet wide with the strike about due east-west, dip vertical. It is a soft, schistose, carbonated rock with considerable gossan and up to 15% pyrite in the fresh rock.

Zone C

This is a small pit on a bush road and located 70 feet west of 15+00 north on line 12 east. It consists of masses and seams of massive pyrite in soft, carbonated and highly decomposed fragmental rhyolite. It is only exposed for a width of 5 feet but is probably much wider. The EM-16 showed a strong conductor in this location.

Zone D

Located at 13+00 north on line 16 east, it consists of up to 10% pyrite in a fragmental lava and across a width of 10 feet. The EM-16 showed a conductor at this location.

Other Occurrences

1) 14+50 north on line 8 east, quartz stringers and up to 5% pyrite across a width of 10.0 feet.

2) 50 feet west of 12+00 north on line 12 east, about 2% disseminated pyrite in a chert schist.

3) From 7+00 north on line 12 east to 5+00 north on line 16 east, zone of reddish brown carbonate with some disseminated pyrite.

4) At 3+50 north on line 20 east, a north-south carbonate band with an old trench on a rusty shear zone containing some pyrite.

5) At 2+00 south on line 32 east, a carbonate zone with considerable gossan and some fine pyrite.

6) At 12+00 south on line 48 east, some pyrite in schistose greenstone. Considerable quartz float but none in place.

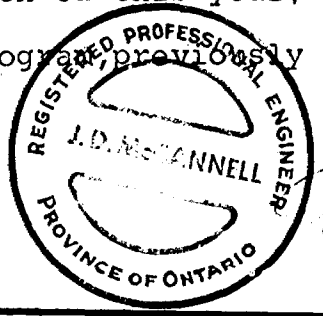
A total of eight grab samples were taken from surface at several of the above mentioned locations but the assay returns showed only low values in gold.

CONCLUSIONS AND RECOMMENDATIONS

The geological mapping, even with the sparce and widely exposed occurrences of bedrock, indicates the claims group to be a very favourable environment to concentrate a search for gold and base metal deposits. The favourable rock formations are highly altered and decomposed at surface but there is ample indications of folding, shearing, silicification and sulphide mineralization. In addition to this, old reports indicate that gold does occur in these alterd formations.

These favourable geological conditions, along with the strong conductors indicated by the electromagnetic survey conducted over the property in March of this year, definitely suggests that the diamond drilling program previously recommended, be proceeded with.

Toronto, Ontario
August 15, 1974.



Respectfully submitted,

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

J. D. McCANNELL

File 2.1571

RECEIVED

GEOPHYSICAL – GEOLOGICAL – GEOCHEMICAL TECHNICAL DATA STATEMENT

TO BE ATTACHED AS AN APPEND
FACTS SHOWN HERE NEED NOT
TECHNICAL REPORT MUST CONTAIN INT

900

Type of Survey Geological

Township or Area Montrose Township

Claim holder(s) T.Sokoloff (Golden Bounty Mining Co.
520 - 25 Adelaide St. E. Toronto, Ont

Author of Report J.D. McCannell

Address 326 Adelaide St. W. Toronto, Ont.

Covering Dates of Survey June 18-Aug. 15, 1974
(linecutting to office)

Total Miles of Line cut 16.5

SPECIAL PROVISIONS CREDITS REQUESTED		DAYS per claim
ENTER 40 days (includes line cutting) for first survey.	Geophysical	
	--Electromagnetic	
	--Magnetometer	
	--Radiometric	
ENTER 20 days for each additional survey using same grid.	--Other	
	Geological	20
	Geochemical	

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

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

DATE: Sept.16, 1974 SIGNATURE: _____
Author of Report

MINING CLAIMS TRAVERSED
List numerically

(prefix)	(number)
L M	373967
	374735
	374736
	374737
	374738
	374739
	374740
	374741
	374742
	374743
	374744
	374745
	374746
	374747
	374748

If space insufficient, attach list

TOTAL CLAIMS 15

OFFICE USE ONLY

PROJECTS SECTION

Res. Geol. _____ Qualifications 63.2502

Previous Surveys 63.3108 Not for assessment credit (MEAP)

Checked by 2.1494 EM date - 1974 received credits for linecutting

GEOLOGICAL BRANCH

Approved by _____ date _____

LD

GEOLOGICAL BRANCH

Approved by _____ date _____

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 _____

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 _____

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by hand

Mr. F. Matthews

Supervisor Projects Section

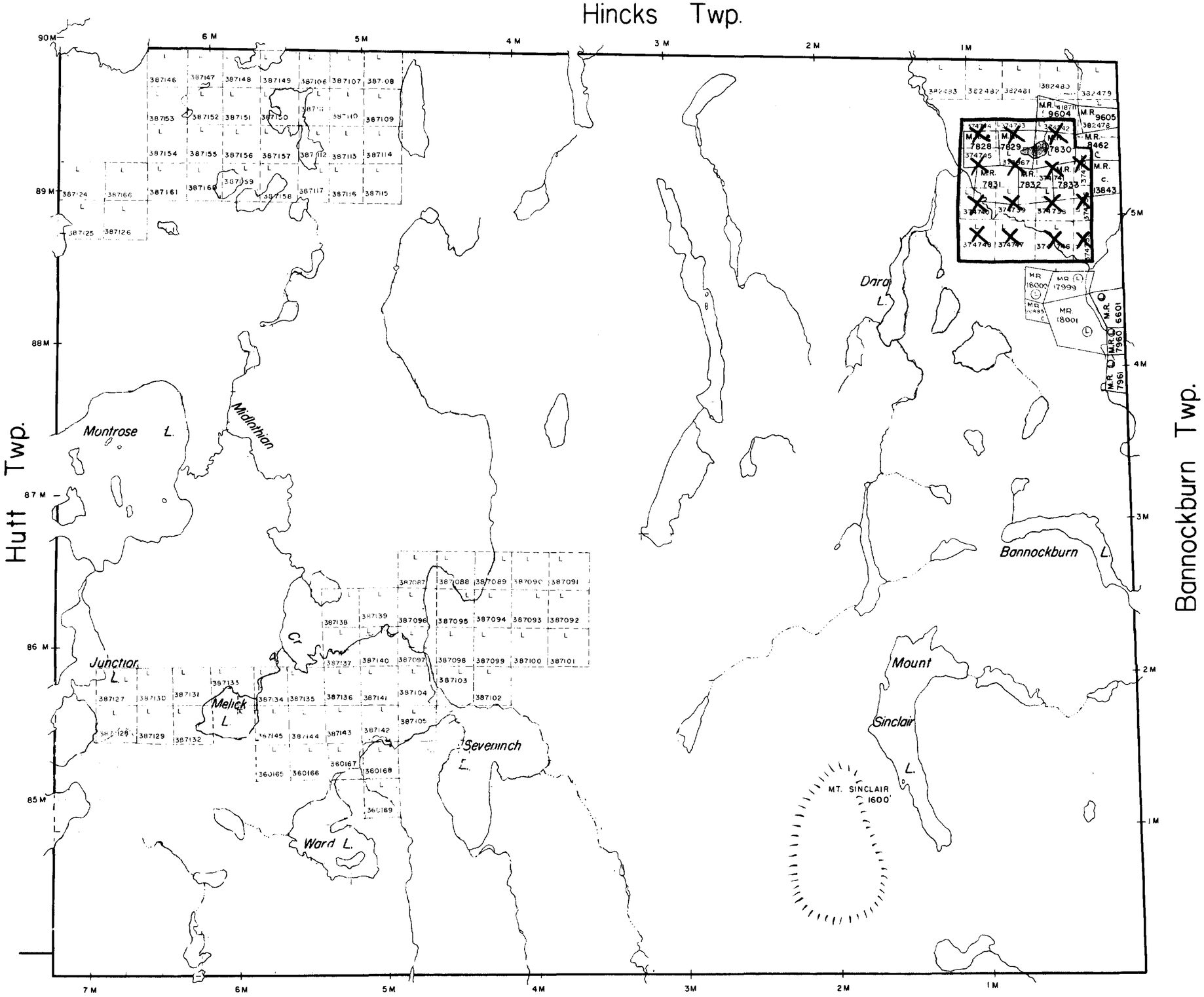
THE TOWNSHIP OF MONTROSE

2.1571

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS



LEGEND

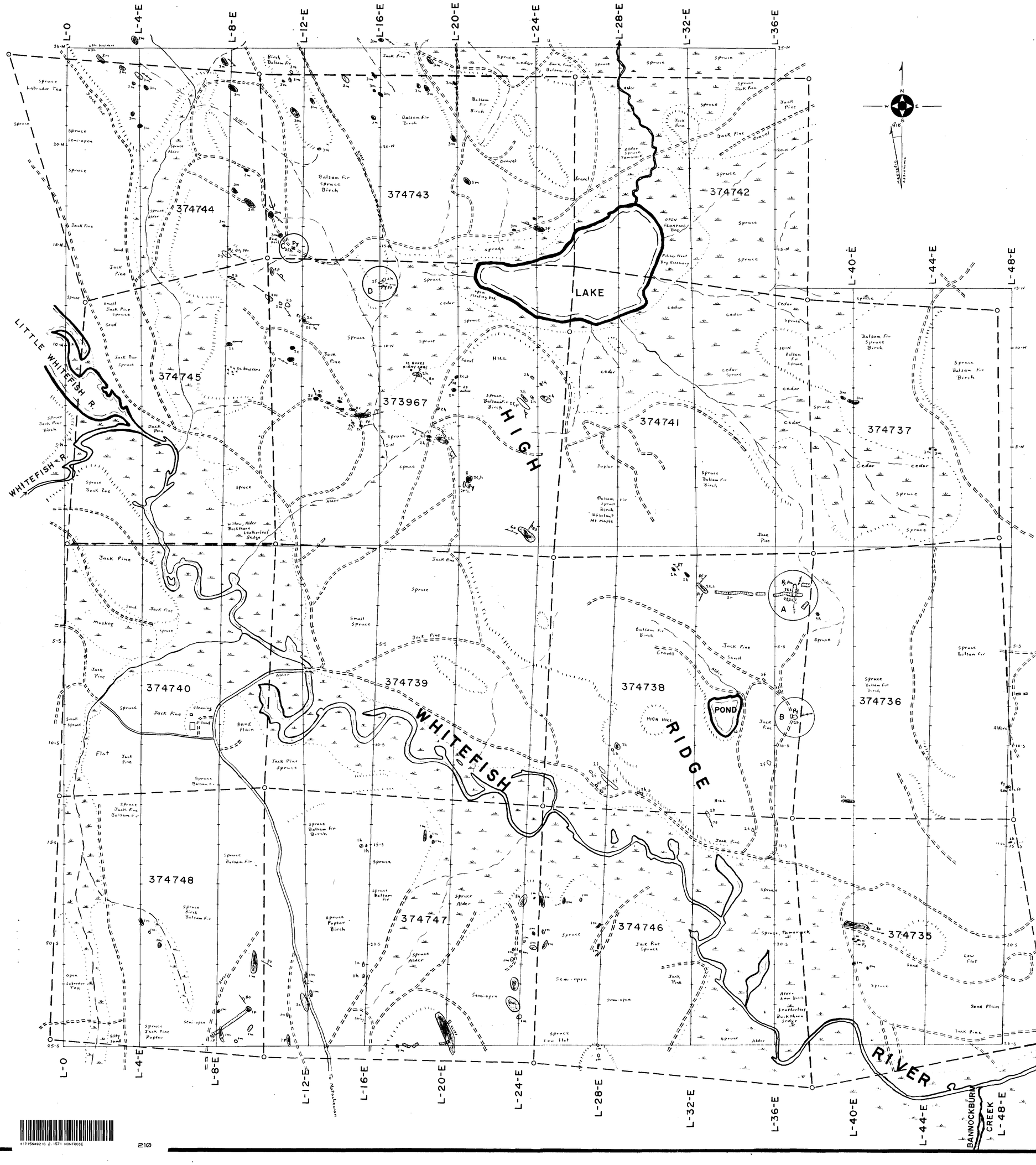
PATENTED LAND	(P)
CROWN LAND SALE	C.S.
LEASES	(L)
LOCATED LAND	Loc.
LICENSE OF OCCUPATION	L.O.
MINING RIGHTS ONLY	M.R.O.
SURFACE RIGHTS ONLY	S.R.O.
ROADS	
IMPROVED ROADS	
KING'S HIGHWAYS	
RAILWAYS	
POWER LINES	
MARSH OR MUSKEG	
MINES	

NOTES

400' Surface rights reservation around all lakes and rivers.

PLAN NO.- M. 237

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH



LEGEND

- STRIKE AND DIP OF SCHISTOCITY, INCLINED, VERTICAL
- STRIKE AND DIP OF BEDDING, INCLINED, VERTICAL
- STRIKE AND DIP OF FRACTURES, INCLINED, VERTICAL
- STRIKE AND DIP OF PILLOWS
- OUTCROP
- TRENCH
- DIAMOND DRILL HOLE
- GLACIAL STRIAE
- AREA OF SPECIAL ECONOMIC INTEREST
- SLOPE
- STREAMS, DRAINAGE, PERMANENT, INTERMITTENT
- ROAD (SUITABLE FOR VEHICLES)
- OLD LOGGING ROADS
- SWAMP, WET AREAS
- TOPOGRAPHIC BOUNDARY
- 20-N PICKET LINE
- CLAIM POST, CLAIM LINES
- Py PYRITE
- Au GOLD
- SHEAR ZONE

GEOLOGY

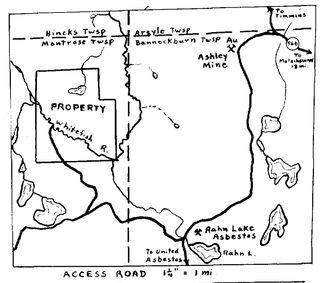
PHANEROZOIC — PLEISTOCENE — HOLOCENE: Glacial Drift, Sand, Gravel, Alluvium, clay, soil, swamp deposits

ARCHEAN — KEEWATIN

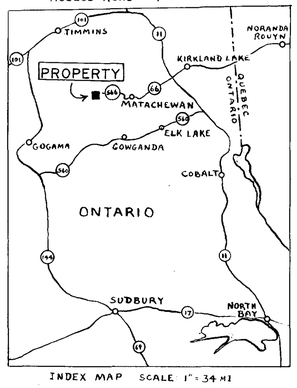
UPPER VOLCANIC UNIT
- Massive andesitic flows
- Pillow Lava, andesitic

MIDDLE HYBRID UNIT
- Carbonate
- Rhyolite, acid lava
- Hybrid lava (rhyolite x carbonate and/or arkose)
- Fragmental lava (acid fragments)
- Tuff
- Pillow lava, andesitic
- Greenstone Schist

LOWER VOLCANIC UNIT
- Massive andesitic flows
- Pillow lava, andesitic



ACCESS ROAD 1½" = 1 mi



INDEX MAP SCALE 1" = 34 MI

REGISTERED PROFESSIONAL ENGINEER — J.D. McCANNELL — PROVINCE OF ONTARIO

2.1571

GEOLOGICAL PLAN

GOLDEN BOUNTY MINING CO. LTD.

MONTROSE TOWNSHIP
DISTRICT OF TIMISKAMING
ONTARIO

SCALE: 1 IN. = 200 FT.	DATE: JULY, 1974
RES. GEOL. H. DOWHALUK, J. NEILSON	CONS. GEOL. J.D McCANNELL

41P15NW8216 2.1571 MONTROSE