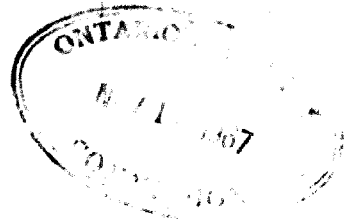


DRURY-0029-A1

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REPORT ON A MINING PROSPECT  
LOCATED IN  
DRURY TOWNSHIP - SUDBURY MINING DIVISION  
PROVINCE OF ONTARIO  
FOR  
PARAMAQUE MINES LIMITED  
BY  
MICHAEL ZUROWSKI, B.Sc., P. Eng.

October 27th, 1967

*Geological Report*

**Report on a Mining Property**  
**Drury Township - Province of Ontario**  
**for**  
**Paramaque Mines Limited**

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**INTRODUCTION**

The following report elucidates the observations made in the examination of the recently optioned mining prospect of Paramaque Mines Limited, located in Drury Township, Sudbury Mining Division in the Province of Ontario.

The mineral occurrences, of interest, present thereon were discovered by Mr. Stanley Grimsell of Worthington, Ontario in the early part of October of this year. Mr. Grimsell, Mr. Donald Rastall and Mr. Martin Burton, the latter two both of Sudbury, Ontario, are the vendors of the subject acreage.

**SUMMARY**

Paramaque Mines Limited holds, under an option agreement, eight (8) contiguous unsurveyed and unpatented mining claims located in the southeast quarter of Drury Township, Sudbury Mining Division in the Province of Ontario.

The International Nickel Company of Canada Limited is conducting mining operations in the most southeast portion of Drury Township, about one and one-half miles southeast of the subject acreage, extracting copper-nickel bearing ores from a geological environment known as the "Worthington Offset".

The claim group is underlain by rocks of Precambrian age, consisting of metasediments and gabbro. These rocks are older than those that constitute the "Worthington Offset". The gabbroic rocks form part of two larger masses in the township. The northerly of the two bodies is the host of several copper-nickel bearing sulphide occurrences. One of these occurrences was investigated by a small one-compartment shaft in the late 1930's. Two of the occurrences are recent discoveries of Mr. Grimsell and they are located in the same gabbro near a gabbro-sediment contact on claim S-134886, about 100 feet west of the forementioned one-compartment shaft. The occurrences are about 200 feet apart, and confined to a zone of alteration striking N30°W, astronomic and dipping southwesterly.

Samples from these occurrences assayed 0.60 and 1.43 percent combined copper-nickel, with the ratio of copper to nickel almost on a 1:1 basis.

The mineralization noted appears to be of the hydrothermal replacement type with shearing, brecciation and a slight embayment in the south margins of the host gabbro as the main structural control.

### CONCLUSIONS

The copper-nickel occurrences recently uncovered on the subject acreage are of fair tenor and if substantial quantity of similar or better grade material can be outlined, the deposit (s) could be exploited economically.

The limited exploration work performed to date on these occurrences can hardly be considered as having ascertained their economic worth.

Certain expenditures are warranted to evaluate the quantity and quality of the mineralization present on the property.

### RECOMMENDATIONS

It is recommended that \$12,000.00 be allocated to evaluate the copper-nickel bearing mineral occurrences by detailed magnetic surveying and diamond drilling, and to explore the host geological environment within the confines of the subject property for similar type of mineralization.

### PROPERTY AND LOCATION

The property held under option by Paramaque Mines Limited consists of eight contiguous unsurveyed and unpatented mining claims occupying the north half of lot 5, concession 2 and the south half of lot 5, concession 3. The claims form a rectangular block one mile long in a north-south direction and one-half mile wide in an east-west direction.

The claims are numbered S-134885 to S-134887 inclusive, S-134892 and S-135412 to S-135415 inclusive and are located in the southeast quarter of Drury Township, Sudbury Mining Division in the Province of Ontario. The area of the claim group totals about 320 acres.

### ACCESSIBILITY, LOCAL RESOURCES, ETC.

Worthington, Ontario is located 20 miles west of Sudbury, Ontario. From Worthington, the property lies two miles in a northeasterly direction and it can be easily reached by a network of roads passable by truck and jeep type vehicle.

The surface of the property is lightly forested.

The topographic relief on the property is quite moderate with small hills seldom exceeding 75 feet in elevation.

Several small creeks flow through the property.

The main line of the Canadian Pacific Railway, connecting Sudbury and Sault Ste. Marie passes within one-half mile of the south boundary of the subject acreage. A high voltage line passes through claims S-135415 and S-135413 of the property.

The road bed of a abandoned branch line of the Algoma Central Railways passes through the property.

The International Nickel Company of Canada Ltd. and Kidd Copper Mines Limited are conducting mining operations in the Worthington area, mining copper-nickel bearing ores from deposits centered on a geological feature known as the "Worthington Offset".

#### HISTORY

Previous exploration work on the property consisted of prospecting and the sinking of a small pit to a depth of about 40 feet in the northeast part of claim S-134886. The pit was sunk in the early 1930's and has been dewatered several times since.

In early October of this year, Mr. Stanley Grimsell of Worthington, Ontario concentrated his prospecting efforts near the margins of a gabbroic body about 100 feet west of the forementioned pit. This work revealed two copper-nickel mineral occurrences in the gabbro. The occurrences are about 200 feet apart, with the intervening area covered by glacial debris. Mr. Grimsell completed a minor amount of surface work on the occurrences prior to its acquisition by Paramaque Mines Limited.

#### PROPERTY GEOLOGY

The subject acreage is situated in a sequence of rocks, considered much older than those constituting the nickel irruptives. The latter rocks hosts the majority of the nickel copper mineral deposits being exploited economically in the Sudbury area.

On the subject property, the main rock types are gabbroic and metasedimentary in composition.

The gabbroic rocks form part of two larger tabular masses in Drury Township.

The long axis of these masses more or less conform to the trend of the metasedimentary rocks.

The general strike of the rocks on the property are northwest - southeast with steep dips.

ECONOMIC MINERALIZATION

Two copper-nickel mineral bearing occurrences have been uncovered on claim S-134886 of subject acreage by Mr. Stanley Grimsell. They lie about 100 feet west of the small shaft sunk in the late 1930's.

The southeasterly occurrences (No. 1) consists of chalcopyrite and nickeliferous pyrrhotite appearing as disseminations and solid stringers in a siliceous, chloritized, and in part brecciated gabbro. The mineralization is exposed over a width of about six feet. A chip sample across the zone assayed 0.28 percent copper and 0.31 percent nickel - 0.60 combined nickel-copper.

Two hundred feet, in a direction bearing N30°W, astronomic, another nickel-copper occurrence has been exposed by trenching.

The mineralization is similiar in character as in the No. 1 showing, but more concentrated and over a width of at least ten feet. A chip sample across the zone assayed 0.62 percent copper and 0.81 percent nickel - 1.43 percent combined nickel-copper.

The mineralization noted appears to be of the hydrothermal replacement type, with shearing, brecciation and a slight embayment in the south margins of the gabbro as the main structural control to it.

MINERALIZATION AND STATE OF DEVELOPMENT

Mr. Grimsell has performed limited trenching and diamond drilling on the mineral occurrences. This work was carried out mainly to reveal the character of the mineralization and to obtain assessment work credits. Of two drill holes completed, one hole was drilled outside of the mineral occurrences and the second hole was drilled beneath the No. 1 occurrence. The hole was completed to a depth of 42 feet and it obtained a 8.5 foot intersection of well mineralized gabbro, very similiar to the surface outcrop. The intersection was not submitted for assay.

All in all, the work completed by Mr. Grimsell is considered of a preliminary nature only and hardly an assessment of the mineralization present on the property.

Respectfully submitted,

*Michael B. Zurowski*

Michael Zurowski, B.Sc., P.Eng.

MZ/ew

Toronto 1, Ontario  
October 27th, 1967

REFERENCES


- 1) Preliminary Geological Map No. P-405 - Sudbury Mining Area.
- 2) Geology of Drury and Hyman Townships - District of Sudbury by K.C. Card, O.D.M. Publication.
- 3) Metal Resources Circular No. 2 - Ontario Department of Mines.
- 4) Aeromagnetic Map No. 1517, entitled, "Copper Cliff Sheet".

CERTIFICATE

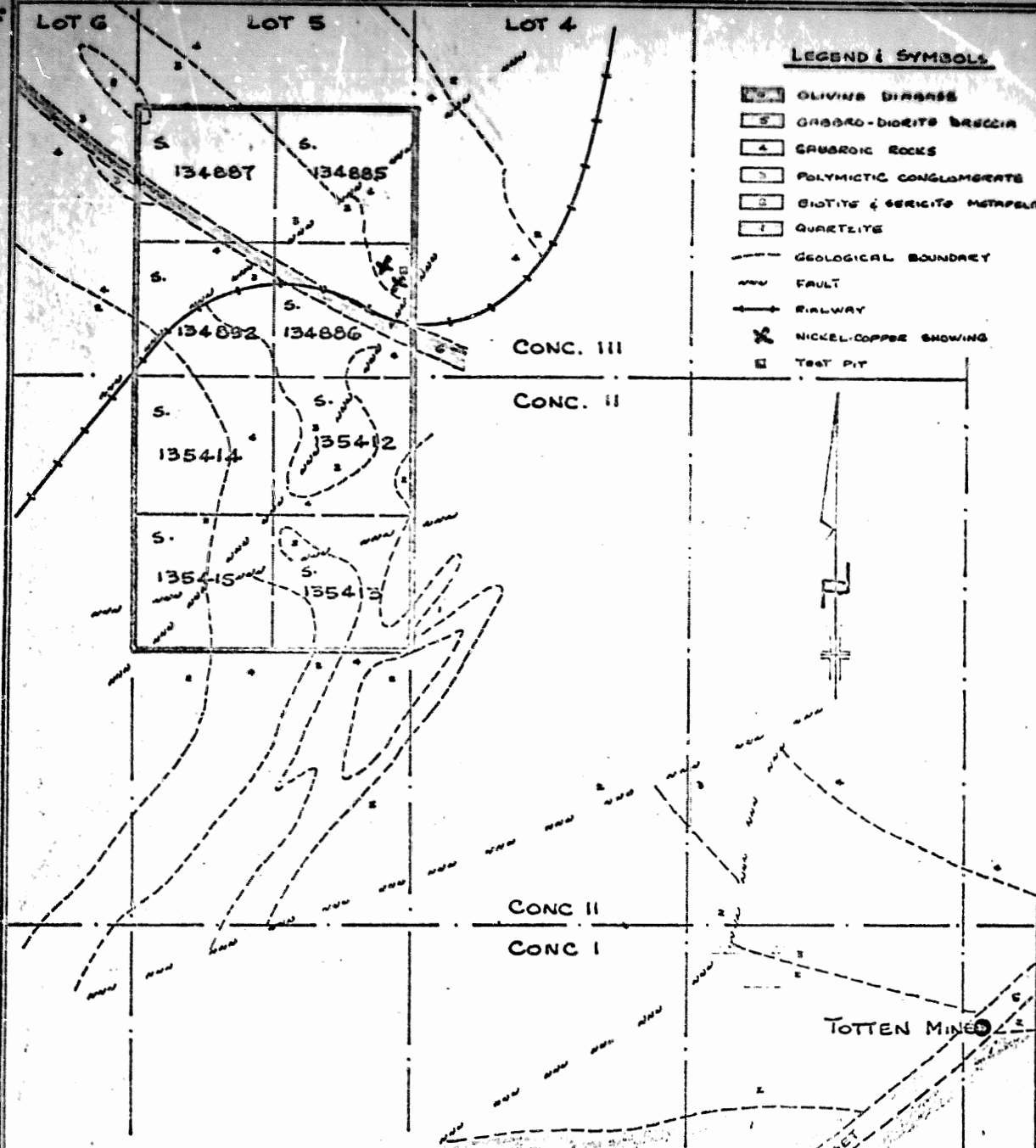
I, Michael Zurowski, of the City of Toronto, in the Province of Ontario, hereby certify:

1. That I am a practising Geological Engineer residing at 299 Holmes Avenue, Willowdale, Ontario.
2. That I am a graduate of the University of Saskatchewan, holding the degree of B.Sc., in Geological Engineering, and I am a member of the Association of Professional Engineers of the Province of Ontario. I have been practising my profession for the past seventeen years.
3. That I have no interest either directly or indirectly and I do not expect to receive any interest directly or indirectly in this property or the securities of Paramaque Mines Limited.
4. That the accompanying report is based on a personal examination of the property on October 26th, 1967 and upon geological literature and data which is listed and incorporated into this report under references.
5. This this certificate applies to claims S-13485 to S-13487 inclusive, S-134892 and S-135412 to S-135415 inclusive all located in Drury Township, Sudbury Mining Division in the Province of Ontario.

DATED at Toronto, Ontario, this 27th day of October, 1967.

  
Michael Zurowski, B.Sc., P.Eng.





**LEGEND & SYMBOLS**

- OLIVINE DIABASE
- GABBRO-DIORITE BRECCIA
- GABBROIC ROCKS
- POLYMICTIC CONGLOMERATE
- BIOTITE & SERICITE METAPELITE
- QUARTZITE
- GEOLOGICAL BOUNDARY
- FAULT
- RAILWAY
- NICKEL-COPPER SHOWING
- TEST PIT

**PARAMARQUE MINES LIMITED**

DRURY TOWNSHIP - PROVINCE OF ONTARIO

PLAN SHOWING MINING PROSPECT  
RECENTLY ACQUIRED

SCALE 1" = 1320'

GEOLOGY FROM: MAP No. 2095 O.D.M. & FIELD OBSERVATIONS.

*Michael J. ...  
Oct 30 1957*

Trill TWP (M-1163)

Fairbank

THE TOWNSHIP  
OF

DRURY

*Saramague, M.L.*

DISTRICT OF  
SUDBURY

SUDBURY  
MINING DIVISION

SCALE: 1-INCH 40 CHAINS

VI

V

IV

III

II

I

Hymn Twp. (M-945)

Denison Twp (M-756)

