

REPORT ON THE TURNER TOWNSHIP PROPERTY OF NORMINGO MINES LIMITED
SUDBURY MINING DIVISION - ONTARIO

1. PROPERTY, LOCATION, ACCESS

Normingo Mines Limited owns outright one group of nineteen contiguous unpatented claims in Turner Township, District of Sudbury, Sudbury Mining Division.

The claims are numbered S-77108 to S-77126, inclusive.

The property lies in the south-east corner of Turner Township, fifty air miles north-east of the City of Sudbury, and forty air miles west of the Town of Cobalt.

Bull Lake, which lies only half a mile north of the property, can be easily serviced by aircraft either from Sudbury or from New Liskeard.

A good travel road connecting Stouffer Lake, five miles west of the property, with Wanapitei Lake and Sudbury, could be easily extended to the property.

2. GENERAL CONDITIONS

The geology of the area is shown on Geological Map #179A, Onaping Sheet, published in 1915.

The map area is underlain by formations Precambrian in age, which consist of sedimentary, intrusive, and metamorphic rocks. They have been subdivided in three groups: basement, basic intrusive, and the sedimentary group, the latter underlying most of the east half of the map area.

The rocks within the basement group are pre-Huronian in age, and are made up of granite, granite-gneiss, and of a complex of



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strongly folded volcanic and sediments.

The volcanic rocks, known as Keewatin greenstones, range in composition from acidic (rhyolite) to basic (andesite and basalt), and are overlain by pyroclastic sediments and iron formation, known as Temiskaming or Sudbury series.

The rocks within the sedimentary group are Huronian in age; they are only gently folded and rest unconformably on the pre-Huronian basement formations.

The sedimentary group consists chiefly of conglomerate, quartzite, and greywacke, generally known as Cobalt series; it is divided into an older Gowganda formation composed of interbedded quartzite, conglomerate and greywacke, and a younger Lorrain group chiefly made up of white quartzite.

However, it is believed that it also includes a formation older than the Gowganda, known as Bruce formation, which extends almost continuously from Sault Ste. Marie to Wanapitei Lake.

The intrusive group is largely composed of basic rocks ranging in composition from the diorite type to the gabbro or diabase type. The rock occur as sills and irregular masses within the basement or the sedimentary group. It is considered as Keweenawan in age.

Intensive prospecting has been carried on during the past hundred years over the area underlain by the Huronian sediments and numerous deposits carrying lead, copper, silver and cobalt have been found, but, outside the well known silver and cobalt-rich veins of the Cobalt area, very little commercial production has been achieved so far.

The Bull Lake property lies only eight miles east of the

New Delhi Gold Mines property, where considerable surface work has outlined an interesting lead deposit. Another lead deposit is known to occur four miles west of the Normingo holdings, in Marconi Township.

Since the discovery of the Peach and Quirke Lake deposits in the Blind River area, in the spring of 1953, followed by other uranium discoveries in the Espanola District and in the Capreol area, in the fall of 1953, all in Huronian sediments, the uranium possibilities of the area situated between Sudbury and Lake Temiskaming have attracted a considerable interest and caused extensive staking and prospecting.

3. LOCAL GEOLOGY

The rocks of the three groups mentioned above, namely the basement, the sedimentary and the basic intrusive groups, occur within the Bull Lake property.

The upper part of the basement group, consisting of "iron formation", occurs in a large belt running roughly north-east, south-west through the property, and are well exposed in the vicinity of Medicine Lake. The rock, dark in colour, with a blue or red tinge, is often massive, but sometimes shows narrow cherty bands.

The mineralization, quite widespread, consists of seams of magnetite and/or seams of pyrite in association with pyrrhotite. Irregular masses of massive sulphides were observed in the vicinity of Medicine Lake.

The attitude of the beds can be seldom observed; however, the whole formation appears to be strongly folded and steeply dipping.

The basement group is overlain by the sedimentary group, the contact has not been observed, but appears to be unconformable

as the sediments are only gently folded with dips averaging ten to fifteen degrees to the east or the northeast.

The sediments are exposed within the north-west corner, the south and the east parts of the property, surrounding the belt of iron formation. The formation consists of quartzite, greywacke, with minor argillite, and intraformational conglomerate.

The quartzite are of two different types, either fine-grained and grey, or coarse-grained with a green tinge. Certain horizons were noted for the abundance of small angular quartz pebbles (micro-conglomerate).

The quartz-pebble conglomerate is by far the most interesting type of rock in the area. It consists of well rounded, well sorted pebbles of white quartz, quartzite, greywacke, and occasionally green or red jasper.

The pebbles are remarkably uniform in size, and range from one inch to three inches in diameter.

The conglomerate formation is exposed within the east of the property over a length of almost two miles, and width of two hundred feet; assuming an average dip of fifteen degrees, its thickness would be approximately thirty feet.

It consists of lenticular horizons of conglomerate interbedded with beds of argillite, fine-grained quartzite or quartzite with micro-conglomerate.

The pyritization is widespread through the whole formation, with the maximum concentration within the conglomerate lenses.

Intrusive masses of basic rocks were observed within the northwest corner of the property, and also within claims 77119 and 77122.

4. DEVELOPMENT

The west half of the property presently owned by Normingo Mines Limited has^d been staked originally in order to protect several showings of massive sulphides in the vicinity of Medicine Lake.

The previous owners have done some stripping and trenching and abandoned the property, after the sulphides were found to carry only small amounts of copper and gold.

The recent discovery (June 1954), of significant radio-activity within the pyritized Huronian sediments east of Medicine Lake attracted considerable interest and the ensuing staking rush quickly covered the whole township and the adjoining ones.

The development work done by Normingo Mines Limited on its Bull Lake property consisted of stripping, shallow diamond drilling, and line cutting, followed by a geiger and geological survey which covered most of the east half of the property.

(a) Geiger Survey

A grid of lines including north-south line and east-west control lines two hundred feet apart was used as a guide for a geiger survey that covered seven claims: S-77109 to S-77112 inclusive and S-77115 and S-77123.

The readings were taken along the lines every fifty feet, and also outside the lines and at closer intervals within any anomalous area.

The geiger survey has outlined several anomalies, the eight most significant of which, numbered A to H inclusive, lie^s to the east of the base line, within claims S-77109 to 77112 inclusive, as shown on the accompanying map.

The anomaly A occurs in greywacke slightly pyritized on the east shore of the pond, and shows a radio-activity ranging from three to seven times the background.

Radio-activity varying from three to eight times background was recorded on well pyritized quartz pebble conglomerate within the anomalous areas B, C, and H.

Radio-activity as high as ten times background was recorded within the anomalous area F on a bed of coarse-grained quartzite with micro-conglomerate slightly mineralized with pyrite.

Other anomalies such as E, D, and G were found to occur in similar formation within the upper part of the main conglomerate formation.

(b) Following the discovery of the radio-active zones, a Packsack Drill machine was used to bore three short holes chiefly for sampling purposes.

D.D.H.#1 was drilled in order to test the anomaly A. The hole was drilled vertically to a depth of twelve feet, through a bed of greywacke mineralized with disseminated pyrite, pyrrhotite and minor amounts of chalcopyrite. Two three-foot samples (0-3 and 6-9) of the core were taken for assay.

D.D.H.#2 drilled vertically on the anomaly B, within claim S-77110, to a depth of twenty-two feet, went through twelve feet of quartz pebble conglomerate interbedded with coarse-grained green quartzite well mineralized with pyrite and some pyrrhotite, followed by ten feet of grey argillite scantily mineralized with finely crystallized pyrite and showing only low radio-activity.

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Two three-foot samples (0)-3 and (5-8) were selected for assay.

D.D.H.#3, drilled to a depth of seventeen feet (anomaly C, claim S-77110), intersected fourteen feet of quartz pebble conglomerate well mineralized with pyrite, from which one three-foot sample (10-13) was taken.

The remaining three feet are described as a very fine-grained quartzite mineralized with sparse pyrite, and only mildly radio-active.

5. CONCLUSIONS AND RECOMMENDATIONS

The recent discovery of radio-active minerals within the Normingo Mines Limited property in a geological setting quite similar to that prevailing in the Blind River, Espanola and Capreol districts is considered as very promising.

A programme including detailed geological mapping in conjunction with geiger survey, stripping and shallow diamond drilling has already indicated eight radio-active zones within the east half of the property; the radio-activity recorded ranges from three to ten times background.

The radio-activity appears to occur chiefly in pyritized quartz pebble conglomerate and also in pyritized coarse-grained quartzite with horizons of micro-conglomerate; the intensity of the radio-activity is not directly related to the amount of sulphides.

No radio-activity has been recorded on the "iron formation" underlying the central part of the property, despite a widespread and locally massive sulphide mineralization.

Radiometric assays in conjunction with chemical tests run on several grab samples confirmed the presence of uranium, with

minor amounts of thorium and a rather high (2%) percentage of zirconium.

The chemical assays from several core samples are still awaited.

The results already obtained justify a well-planned programme of development for the Bull Lake property.

The programme should include the clearing of the site of the five other anomalies followed by shallow and deep drilling and sampling.

Furthermore, geological and geiger traversing should be done through the north-west and the south-west corners of the property, where the favourable formations are known to occur.

Respectfully submitted,

"J. de Geoffroy"

J. de Geoffroy, B.Sc.

North Bay, Ontario,

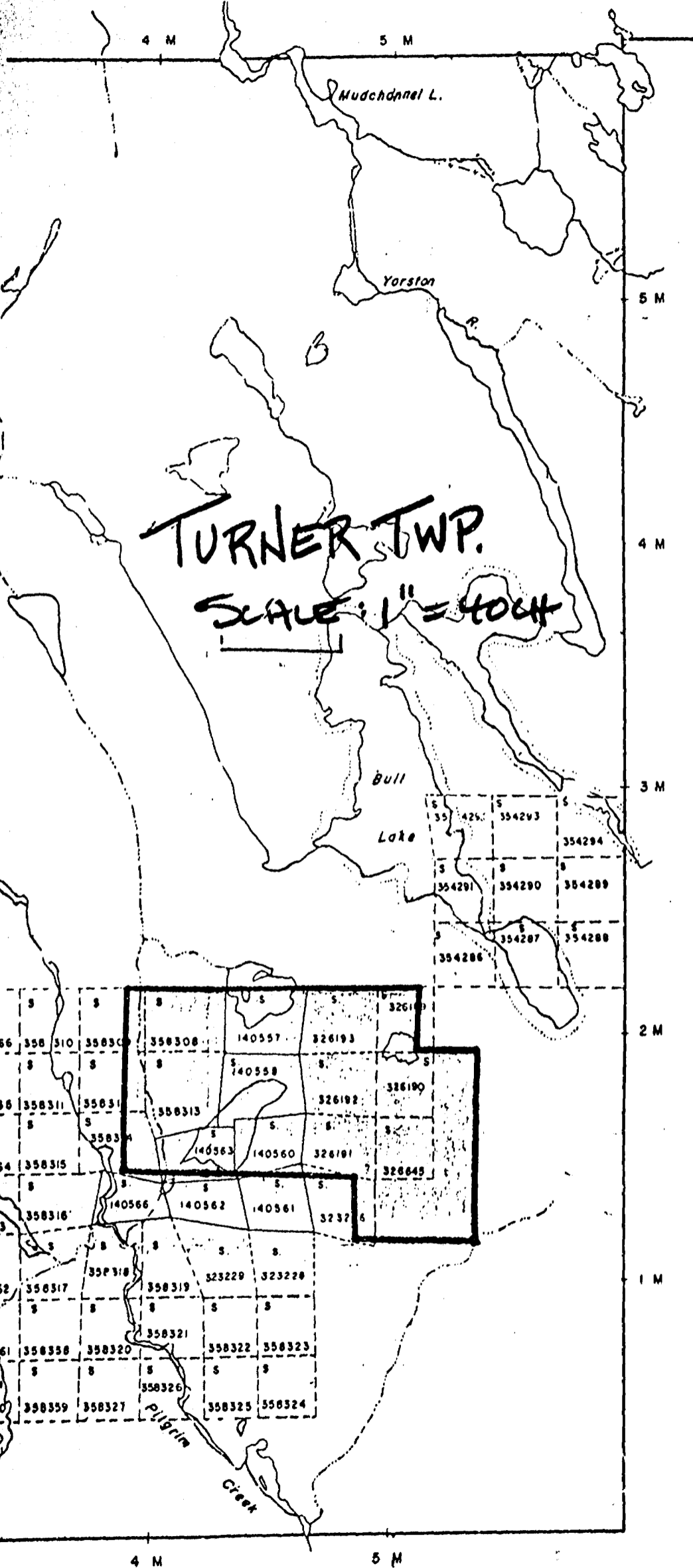
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