



ONTARIO
DEPARTMENT OF MINES

63A.112

PARLIAMENT BUILDINGS
TORONTO 2, ONTARIO



42C12NW0174 42C12NW0011 MOLSON LAKE

900

April 19th, 1951.

Dear Sir:

I am enclosing herewith for your records
a geological report submitted by Trevor W. Page
covering 12 mining claims in Township 72.

Yours very truly,

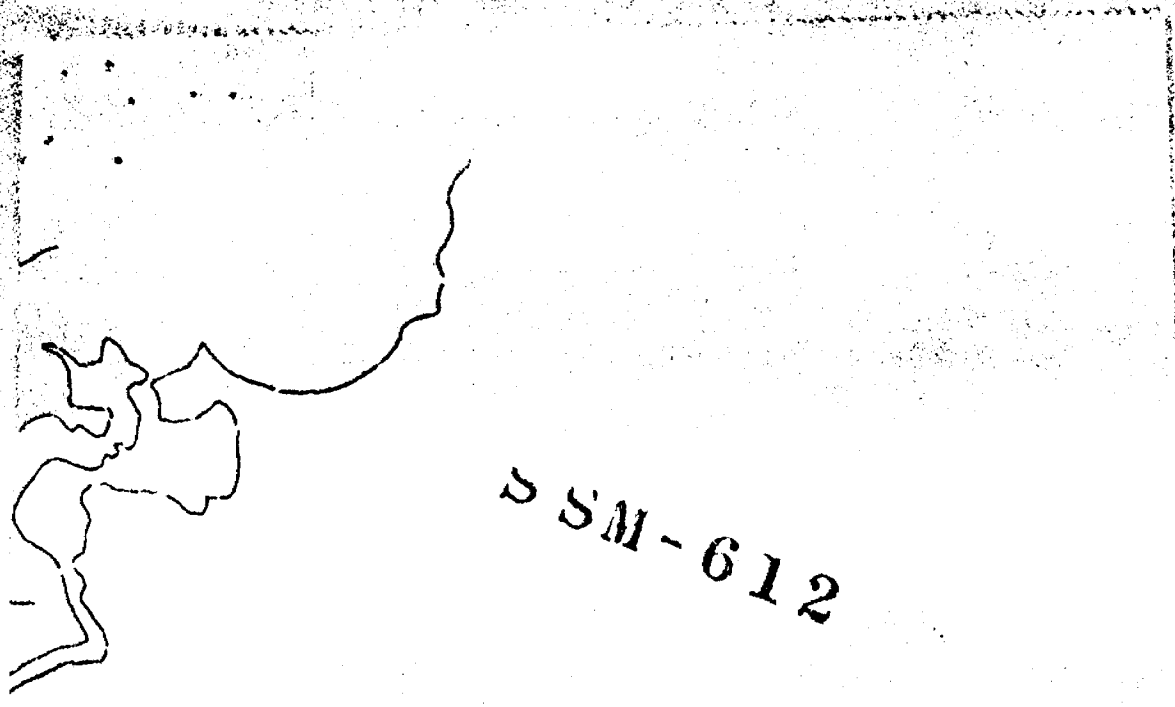


J. F. McFarland,
Chief, Mining Lands Branch.

/MG
enc.

SSM-612

Mr. W.L.C. Greer,
Court House,
PORT ARTHUR, Ont.



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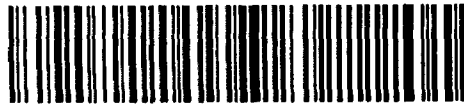
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20859

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A GEOLOGICAL REPORT ON THE

TRUDEAU GROUP

OF MINING CLAIMS

TOWNSHIP 72 HEMLO AREA, ONTARIO

RECEIVED

APR 23 1964

RESIDENT GEOLOGIST
SAULT STE. MARIE

PROPERTY, LOCATION AND ACCESS

The Trudeau Group of twelve claims held by J. Skopyk of Fort William, Ontario, on license E 14793 consist of mining claims, SSM-20859 to SSM-20870 inclusive. These claims are all located in the central portion of Township 72, Sault Ste. Marie Mining Division.

The claims form a contiguous block and lie one half mile south of mileage 31 west of White River Divisional Point on the Canadian Pacific Railway mainline. As Trudeau siding on the C.P.R. lies approximately one mile north of the claims, the term "trudeau" has been used to designate the group. This siding is also a flag stop for local passenger trains which at present are the only means of access to the property.

Heron Bay, twenty-five miles to the west, and White River, thirty-one miles to the east are the nearest supply points. Mail and telegraphic communications are available at Hemlo Station ten miles west.

HISTORY

A large part of what is now the Trudeau group of claims consists of ground that was originally staked by Northern Canada Mines Ltd., in the summer of 1947. This staking was carried out to cover the projected strike of structure in which encouraging gold value had been obtained by the Lake Superior Mining Corp. Ltd., some distance to the east. The ground was subsequently allowed to lapse during the depressed condition of the gold market in 1948 and 1949.

With renewal of exploration activities by the Lake Superior

ASSESSMENT WORK

Company in 1950, and on the strength of further substantial results obtained therefrom the present Trudeau group was obtained by the present owner.

TIMBER, WATER AND POWER

Although the greater part of Township 72 lies within the timber concessions of the Ontario Paper Company and The Abitibi Power and Paper Company, there is a plentiful supply of timber that may be obtained for mining purposes when so required.

Water is readily available from two lakes lying in low ground within and adjacent to the claim group.

No hydro electric power is available as yet within the area. With further development of the district and eventual completion of the North Shore Power projects, hydro sites on the White River, eight miles to the south will most likely be made use of.

GENERAL GEOLOGY

The rock exposures on the Trudeau group of claims indicate that they are for the most part, of a general similarity to the types found elsewhere in the area. It has been found that at least locally in the Hemlo area the rocks are for the most part of a sedimentary nature, bearing a strong resemblance in many cases to the types common in the Little Long Lac Area. Greywacke, quartz mica schists and biotite schists are the more common types. It may be said in general that many of the typical members as found in the Trudeau group appear to have a higher silicious content those found elsewhere.

The area in general is characterized by an east-west trending belt of predominately sedimentary rocks forming a band from one to two miles in width enclosed on either side by granite of probable Algonian age. Although continuous from just west of Hemlo, east to the White

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River, a distance of 20 miles intermittent exposures west to Heron Bay would indicate the probable overall extension to this point in the west.

Probably the most marked feature of the district is the overall conformity in strike with gentle changes of direction that are closely paralleled by a series of persistent major faults. Three of these faults may be traced with great continuity on aerial photographs. One of them is believed to pass close to the southern boundary of the Trudeau group.

The rocks on the northern claims of this group strike in a north-east direction while towards the south the strike is more nearly east-west. This is the converse of the rocks on the adjoining property to the west where the prevailing strike is west-northwest. This may be in part the reflection of an invading granite body that may be seen exposed in a few places in the low ground approximately one mile west of the Trudeau group.

ROCK TYPES - Detailed differentiation of the rock types on the Trudeau claims presents a difficult problem for two reasons. In the first place over sixty percent of the claims lie in low swampy ground and a large part of the balance of the area is covered by considerable overburden. Secondly, the majority of the rocks appear to be highly altered sedimentaries that grade from one type into another without clear cut dividing lines. As a consequence only a generalized view of the situation may be obtained. However, for purposes of prospecting, which is the prime importance, a close segregation is not necessary as from work done in the area it is apparent that structural conditions and the association of highly altered quartz porphyries are the predominant features associated with gold mineralization.

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QUARTZ-MICA SCHIST - This rock type, which is presently believed to be the oldest, consists in general of an aggregation of fine to medium grains of quartz together with light colored mica. In places the quartz accounts for up to 65% of the total volume. In places the micaceous constituents occur in small aggregates. Color of this rock type ranges from grey to light buff.

This type of rock is found elsewhere in the district to the west. On the Trudeau group it occupies the east central section of the ground and forms the higher ridges of this section.

GREY SEDIMENTS - This rock type which is widely distributed in the Hemlo area was found only in the northern section of the claims and is limited mainly to the isolated outcrop on claim SSM-20864.

These rocks, of sedimentary nature, are probably a greywacke. They are dark grey, medium to fine grained, fairly hard and tend to massive structure. This latter feature may be altered at times with increase of micaceous minerals which tend to produce a fissility.

SILICEOUS BROWN SEDIMENTS - This rock type which is found along the ridge between claims SSM-20859 and SSM-20865 appears to be a more siliceous and altered variation of what has been termed brown sediments further west. In places it approaches in composition close to that of an impure quartzite. Fine pyrite which is at times sparsely disseminated throughout the rock gives it a red-rusty appearance on surface exposure. A similar section of this type was found along the extreme south boundary of the group.

In the hand specimen this rock exhibits a very fine granular texture and is composed of over 90% quartz. Fine micaceous minerals of varying amount account for variations in color across the section.

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On the south side of the ridge between claim SSM-20859 and SSM-20865 and contacting the above siliceous type there is to be found at the edge of the low ground, a band of soft micaceous schist. Its full extent is indeterminate as it disappears under the swamp and as such probably accounts for this low section.

FELDSPAR PORPHYRY - A few exposures of typical feldspar porphyry were observed. In the main they consist of phenocrysts of feldspar up to one quarter inch across enclosed within a medium of fine grained ground-mass of quartz, feldspar and dark minerals.

GRANITE DIKES - One persistent granite dike was found as indicated on the accompanying map. It is not porphyritic and exhibits a somewhat gneissoid texture possibly due to movement prior to consolidation. Its contact with surrounding rocks is sharp and well defined. Mineralogically it is composed of fine grained feldspar 45%, quartz 30% and dark minerals 25%.

DIABASE DIKES - Typical diabase dikes are quite common within this claim group. One large dike trends in a northwest direction through the eastern section of the claims. It shows an apparent offset near where it enters the claim group. It is probable that numerous other dikes occur beneath the drift covered sections of the claims.

STRUCTURAL GEOLOGY

East west trending strike faults of the type prevalent in the area can only be inferred from topographic expression. Even where this expression is evident it is not so clear cut as elsewhere. It would appear that the main system of faults pass somewhat to the south of this property.

One fault is assumed as passing through claim SSM-20859 in a northwest direction. Apparent offsetting of a diabase dike and a well

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developed gully gives strong evidence for this assumption.

As mentioned previously the strike of the rocks on the Trudeau group shows a marked change from those further to the west. The prevailing strike is about ten degrees north of east. Dips are fairly constant at forty five degrees to the north across the entire group. The presence of a salient of granite a short distance west of the claims is probably responsible in part for this change in direction of strike.

MINERALIZATION

To date no mineralization of great economic importance has been found on the Trudeau group. Considerable time was spent in trenching and stripping the rusty weatherings siliceous sediments on the ridge between claims SSM 20859 and SSM-20865 in hopes that a concentration of mineralization might be located. What pyrite is present is too scattered and barren to be of economic worth. Controlling structural features such as shears zones or porphyry bodies are not present so that it would appear expedient to search elsewhere for strong zones of mineralization.

CONCLUSIONS AND RECOMMENDATIONS

Work done to date has been discouraging in that it has revealed no value sections. However, it has eliminated this section of the claims in the search for gold bearing zones. Under these circumstances it is felt that the search would be better directed towards the south and east section of the claims during the early part of the season before the leaves make prospecting too difficult. Because of the oberburden and dense undergrowth prospecting at any time is a difficult undertaking. It is also felt that it may be expedient to carry the search further to the south on the open ground adjoining this group as several major faults appear to pass through this section.

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PORT ARTHUR, ONTARIO.
FEBRUARY 15, 1951

Trevor W. Page
TREVOR W. PAGE, P. Eng.



- A [Symbol] Diabase
- B [Symbol] Granite Dike
- C [Symbol] Fels. Por. Dike
- D [Symbol] Brown Sediment
- E [Symbol] Greywacke
- F [Symbol] Qtz-Mica Schist

- [Symbol] Swamp
- [Symbol] Rock Outcrop
- [Symbol] Ridge
- [Symbol] Geol. Boundary

Scale 1" = 200'

REPRODUCED FROM
 ORIGINAL FILE
 1980-01-15

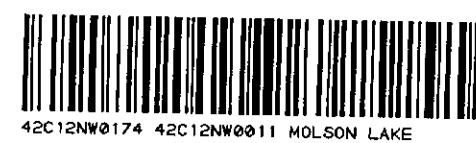
GEOLOGICAL MAP
 TRUDEAU GROUP OF CLAIMS
 (SSM-20862-60-1-2-3-4-5-6-7-8-9-10)
 T.M.P. 75 - SAULT STE MARIE MIN. DIV.

SCALE: 1" = 200'

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THIS MAP IS REMOVED FROM
 THE OFFICE OF THE RESIDENT
 GEOLOGIST, MIN. DEPT. OF MINES
 SAULT STE MARIE, ONT.

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