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RESULTS OF EXPLORATION BLACK BAY URANIUM LIMITED REID TOWNSHIP PROPERTY TIMMINS AREA, ONTARIO

INTRODUCTION

The following report describes the results of diamond drilling and geological mapping carried out on your property in Reid Township between August 1st and September 30th, 1964.

PROPERTY

The property consists of 12 contiguous unpatented mining claims in Reid Township, identified as follows:

CLAIM NOS.	LOT	<u>CONCESSION</u>
P-59137	SEL Sh Lot 3	III
P-59138	NEL NZ Lot 3	II
P-59139	NET St Lot 3	III
P-59140	NWŁ Sł Lot 3	III
P-59141	swł sł Lot 3	III
P-59142	NWI NI Lot 4	II
P-59143	NEL SZ Lot 4	III
P-59144	SEL SI Lot 4	III
P=59145	NEL NE Lot 4	II
P-59146	NWL NI Lot 4	II
P-59147	SWL SL Lot 4	III
P-59148	NWL SE Lot 4	III

LOCATION

The property is situated 20 miles northwest of Timmins. The west boundary lies adjacent to the Mattagami River. The hydro-electric line between the Sturgeon Falls power station and Timmins coincides with the east boundary.

ACCESS

Access to the western part of the property is by float or ski equipped aircraft landing on the Mattagami River. The nearest air base is at South Porcupine, 22 miles to the southeast. The property may also be reached by boat from Sandy Falls on the Mattagami River. This involves a trip of about 18 miles. The power line on the east boundary of the property provides a convenient landing place for helicopter service.

The boundary between Concessions II and III is surveyed and can be followed on foot for the entire length of the property.

TOPOGRAPHY

The area covered by the property is mainly drift covered and flat. Little swamp is present. The north and southeastern portions are slightly higher than the remainder of the claim group. Vegetation consists of spruce with some poplar stands on the higher ground.

- 2 -

GEOLOGY

Geological information on the property is based on scattered outcrops in the eastern portion of the property and on 7 drill holes located in the southeastern, east-central, northeastern and northwestern portions of the claim group.

The bedrock formations encountered are all of pre-Cambrian age. They consist of rhyolite and tuffaceous rhyolite containing minor interbeds of andesite. The andesitic formations were observed only in drill holes. The volcanic outcrops all consist of massive rhyolite. The only structural information was obtained on one outcrop located on Line 1600W, 400S. Here a foliation was developed striking 105° and dipping vertically.

The south contact of a gabbro mass with rhyolite was located on Line 800W on the baseline. The extent of this gabbro intrusive could not be determined. Drill Hole B-3, some 700' to the north, was drilled through gabbro and interbedded gabbro and andesite were encountered in Hole B-4 some 3200' to the northwest on Line 3600W on the north boundary of the property.

The accompanying plan shows the outcrop areas and the drill hole geology.

EXPLORATION PROGRAM

The exploration program followed up a Touram electromagnetic survey carried out by Huntec Limited between

- 3 -

May 2nd and June 17th, 1964. The results of this survey are described in a report by Hunter Limited dated June 1964.

Eight conductive zones were indicated by this survey and drilling on four of these was recommended.

All four of the recommended conductors and one additional conductor were tested by diamond drilling.

Seven holes were drilled totalling 2568*. A total of 500* was drilled in overburden. The first hole started August 14, 1964 and the last hole was completed September 27, 1964.

During and succeeding the drill program the property was mapped geologically by Mr. Paul LaFleur, B.Sc., under the supervision of the writer. The mapping was carried out by traversing cut and chained picket lines at 400° intervals. The results of the survey are described under the heading of *Geology*.

RESULTS OF EXPLORATION

The Huntec report on the Touram electromagnetic survey describes the anomalies previously referred to as "Anomalous Trends". These trends were believed to form part of a fault or shear zone pattern which might carry mineralization or graphite.

No shearing, graphite or sulphide mineralization was encountered in any of the anomalous zones drilled. This was puzzling, particularly in view of the strength and good ratios obtained on the conductor located on Lines 2000W and

- 4 -

2400W, 1600S. This conductor was drilled from the north, from the south and vertically but no evidence of mineralization or shearing was obtained. Similarly, the conductor between Lines 400W and 800W, 200S was also drilled vertically. These two holes were drilled vertically on the chance that the conductor might reflect a flat lying lens which could be overshot or undershot by the inclined holes.

Holes B-1, B-5, and B-6 were drilled through the strong conductor previously referred to on Lines 2000W and 2400W. The depth of overburden in B-1 was 16' and in B-5 was 36' suggesting that the conductor would not be due to overburden. It was also noted that considerable limonitic stain was encountered in Holes B-1 and B-5 and the rhyolite in these holes was somewhat porous suggesting leaching. Hole B-6 drilled vertically above the conductor encountered 84' of overburden and little limonite or porous texture below 100'.

Hole B-2 drilled at the east end of an anomaly approximately 500° to the north of the above also encountered considerable limonite stain and pitting, suggesting leaching.

Hole B-7 drilled to test the anomaly on Line 400W, 200S, a vertical hole, encountered no explanation for the conductor. Similarly, Hole B-3, drilled through massive gabbro did not encounter anything of significance. This hole was drilled to test a conductor located on Line 800W, 1000N.

A possible conductor located at the north boundary of the property was drilled on Line 3600W. Between 450' and 464' in this hole a shear zone along the contact between

- 5 -

andesite and gabbro was encountered. This shear zone, contained 2%-3% euhedral crystals of pyrite. Ionic effects along this shear zone could possibly account for the indicated conductor here.

The other conductors present as indicated by drill Holes B-1, B-2, B-5 and B-6 could be due to topographic effects due to sharp depressions in the bedrock surface.

Scattered isolated crystals of pyrite, chalcopyrite and galena were noted to occur sporadically in Holes B-1, B-2, B-5, B-6 and minor pyrite in B-7.

CONCLUSIONS

The conductors indicated by the electromagnetic survey are believed, with one exception, to be due to sharp bedrock valleys filled with overburden. The exception is the conductor indicated to be present on 3600W on the north boundary of the property. This conductor could be due to ionic effects along the shear zone.

No mineralization of economic significance was encountered.

RECOMMENDATIONS

No further work is recommended on the property at this time.

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Toronto, Ontario October 15th, 1964 - 6 -

