GM 07568-A

PRELIMINARY GEOLOGICAL REPORT ON FOUR GROUPS

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Preliminary Report

On Groups of Mining Claims

Located in Egan and Lytton Townships, Gatineau County and in the Mitchinamecus(or Forrestier) Lake, and the Thorniche Creek District, Joliette County.

Province of Quebec

Property of Baskatong Uranium Mining Syndicate and Lytton Uranium Mining Syndicate.

Montreal, Que.

Forward:

The objective of the present report is threefold; 1) To give a summary account of the observed geology as determined during the course of three visits to some of the claims under review, made at the request of interested parties, for the specific purpose of writing this report; official publications and maps were consulted such as G.S.C., Southern Quebec, Western Sheet; Que. Dept. of Mines, Nos. 545 and 919, as well of private sources,

2) To give the returns on a few grab samples gathered in the field, as well as those obtained by others,

3) Also to suggest procedures for exploration and possible development of the ground visited.

Inspection of the claims took place on October 12th, and 13th, 1957 for the Egan and Lytton Groups; visits to the Mitchinamecus Group were made on February 8th, 1957 and again on October 20th, 1957; the writer was accompanied in the field by Mr. Bjarne Kvendbo, Morin Heights, on both his October visits and wishes to express his thanks for the many courtesies extended to him.

Previous to the dates of inspection, several "showings" had been located on the claims under review, and the writer limited his examination to these localities.

Title to ground was not verified but is believed to be in order.

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Location, Extent, Accessibility, etc...

For the purpose of this report, the claims will be divided into two Groups; the Egan-Lytton Group, and the Mitchinamecus Group.

1- Egan-Lytton Group:

This group consists of the following lots or part lots as designated below, all in Gatineau County:

Egan Twp.:	Range I	- lots 54 to 61 incl.	- 800 acres
		1/2E lots 62 to 64 incl.	- 150 acres
		Total:	950 acres
Lytton Twp:	Range I - 3/4W.	lots 25 to 30 incl.	- 610 acres
	Range II-	lots 17 to 37 incl.	- 2100 acres
		lots 40 to 47 incl.	- 800 acres
	Range III -	lots 15 to 20 incl.	- 600 acres
		lots 22 to 37 incl.	- 1600 acres
	1/2W.	lots 38 and 39	- 100 acres
		lots 40 to 46 incl.	- 700 acres
	Range IV- 1/2E.	lots 20 and 21	- 100 acres
		lots 35 to 42 incl.	- 800 acres
		Total:	7,410 acres

Total area of the Egan-Lytton Group is about 8360 acres

Both the Egan and the Lytton claims are easily accessible to Grand-Remous, a distance of about five or six miles by paved or good bush roads to within easy walking distance from the showings examined and about to be described: Grand-Remous is located on Highway 58, approximately 20 miles west of Mount-Laurier, or an equal distance south of Maniwaki, both town being railroad terminals of the C.P.R. leading respectively to Montreal or Hull.

Water for mining purposes is readily available from the numerous lakes and streams on the claims.

General Geology

Regional geology is Precambrian, in age, consisting of Grenville Series; that is, paragneiss, quartzite, impure limestone with metamorphic pyroxemite, amphibolite and allied rocks. The series has been invaded by quartz-syenite, porphyritic granite and pegmatites of various types giving rise to more or less complex assemblages, many of which have not been thoroughly differentiated as yet.

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Workings:

Egan Township:

The showing examined in Egan is located on lot 57, in Range I, and consists of several outcrops and shallow stripping or trenching and pits through light overburden which follow, intermittently the line of strike of a shattered zone in an approximately N-30°E direction, and dipping steeply NE (?) on the western flank of a slowly rising hillock. This zone, or parallel counter parts can be traced a distance (with certain interruptions due to drift covering) of at least 1100 feet, originating beyond lot line 57-58 to the north and extending southward across lot 57 where it is lost in a swampy area.

On lot 57, and a few scores of feet south of lot 58, can be observed an area where most of the work on this showing has been performed.

There, the zone or zones, have been uncovered by means of small pits and/or trenchings which reveal massive pegmatite, weathered, holding macrocrystalline white feldspar and quartz having the appearance of conglomerate.

A small pit at the northern section of the area showed negligible Geiger readings at the surface and 0.8 MR/HR., at two feet deep, perhaps indicating the effects of weathering.

Readings in a shallow trench along the zone, but further to the south, revealed indications of up to 3 MR/HR., and lesser values; radioactivity is somewhat spotly but generally higher in the pegmatitic phases, readings of 1.5 MR/HR being frequently registered.

The zone varies in width from three to 12 feet, with frequent "horses" of pegmatitic feldspar-rich sections, holding quartz, biotite mica and other allied minerals; the wall rock is constituted of variable gneisses or paragneisses.

A composite rock sample, gathered from the various points of possible interest, was sent to the Department of Mines, Que. and returned the following:

Uranium (U). 0.24%
Thorium (Th) 0.89%

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The above quantities correspond to about 0.35% U_3O_8 and 1.20% Th O_2; These results show indicated gross values of about $50.00 in Uranium and $120.00 in Thorium per ton for the composite sample assayed weighing 6-1/4 lbs., as well as certain amounts of rare-earth elements: cesium, lanthanum and yttrium (Ref. Dept. Mines Lab., Cert. No Zh-8166, 9/12/57) which are not taken into consideration in the foregoing evaluation but could enhance substantially the gross estimate if the extractive separation of these elements prove to be uncomplicated. (In above, evaluation is based on $7.00 per lb. for Uranium oxyde and $5.00 per lb. for Thorium oxyde)

Zirconium is also reported to occur in suggestive percentage on this showing by Mr. Bjarne Kvendbo, prospector, Morin Heights, who has worked the prospect for same time; assay results on small samples for Zirconium and holding 2.6%, 1.3% and 1.29% (Ref. Cert. Nos.(Zc-2953/54)B and No (Zc 2710)B) were shown the undersigned: these occurences of Zirconium are not surprising since the presence of this element has been reported in official documents covering the general area (G.R. 23) and in private reports (Ref. Prel. Rep. Baskatong Uranium Mining Syn., by P.E. Dumont, P. Eng., August 28th, 1957, and also present report on Lytton Township claims.)

The assay certificates referred to above, as well as others, also show returns, on smaller samples, for U_3O_8 and/or Th O_2 averaging essentially within the range obtained on the composite sample gathered in the field by the writer.

Should the arithmetic average, as obtained by Mr. Kvendbo, be admitted to hold, then the indicated values of the zirconium occurences could represent an estimated possible gross value of approximately 1.7% or 34 lbs per ton, or $170.00 per ton. (Recent quotations for zirconium are as follows: commercial sponge, $5.00 per lb.; nuclear reactor grade, $7.50 per lb: the lower price has been used in above evaluation; quotations from Carborundum Metals Co., Akron, N.Y., November 25, 1957.)

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Lytton Township:

While a considerable amount of work has been extended on several claims held in this township said work consisting of stripping, trenching and pitting through rock and drift, the workings or showings examined by the undersigned were as follows:

1- "Black Smoke Hill" located on lot 33 in Range II, at about the center of the lot.

This prospect is characterised by being located at the top of a knoll which represents a notable topographical feature of the vicinity, rising above the flat surroundings.

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The knoll, which measured perhaps 350 feet by 150 feet at the top has its longer axis in a NE trending direction and constitutes a large outcrop.

The geology consists of a wide pegmatite structure holding quartz, feldspar, black biotite mica, also some pyrite mineralisation in more or less important amounts as well as frequent occurrences of a dull black mineral identified in the field as probably Allanite; several areas are rust-covered.

The general strike of the dyke-like formations is essentially NE while the dip appears very steep.

Several small shallow pits or blast holes have been excavated on this outcrop and a composite sample weighing 13 lbs taken from six of these blastings returned about 0.04% U_3O_8 and 0.12% ThO_2, and traces of Lanthanum. (Ref. Cert. No. (Zh-8169))

Many Scintillometer readings were taken on this showing, both at the rock surface and in the pits; invariably the readings taken at the bottom of the pit were notably higher than those taken at the surface, the range being between 1.2 MR/HR and 0.15 MR/HR in the pits as compared to 0.15 and 0.03 MR/HR at the surface.

Mr. Kvendbo reports that he obtained 0.05% U_3O_8 on a 25-lb sample from this showing (Ref. Zd-3369) while Mr. Dumont also states that the dyke averages 0.04% U_3O_8 and 0.32% ThO_2, as well as 0.37% Rare earths.

Mr. Dumont further reports having obtained values in zirconium from this locality ranging from 0.12 to 0.77%, or from $12.00 to $77.00 on the same price basis as previously herein reported.

2- Another showing visited in this township is located in the immediate vicinity of Ranges II and III, namely about 50 feet E of the Range line on lots 31 and 32 in R-II; the showing is known as the Ragnar Pit or Trench.

This working consists of a lengthy shallow excavation measuring some 700 feet, with certain interruptions, and is almost directly NS in direction, the lot line between 31 and 32 cutting the trench into two geographical segments of about equal lengths; that is, approximately 350 feet on lot 31 and 350 feet on lot 32, the segment on lot 31 having been more explored that the other. The average width of the trench is about two or three feet, and at a point located about 50 feet from the lot line, a deeper and wider excavation or pit has been put down measuring some four feet square in area.

The geology observed along this trench and in the pit consists of pegmatitic greenish feldspar, limestone, mica, quartz

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with gneissic walls and shows evidence of intense and tight folding and shearing in an almost NS direction, some cross-folding being observed locally as well as foliation: the dip is mainly steep but variable.

Radiometric readings taken in the pit showed good activity up to 1.8 MR/HR, but returned the following: (Ref. Zh-8167), U_3O_8 approx. 0.03% and ThO_2 - approx. 0.63%, and some values in Lanthanum and Cesium.

Another sample from a minor excavation on lot 32, returned the following: (Ref. Zh-8168) U_3O_8, approx. .015%, and ThO_2, approx. 1.27% as well as good values in Lanthanum and Cesium and fair indications for Praseodynum and Neodynium.

These values confirm the assays obtained by Dumont and Kvendbo; the latter further reports to have obtained returns in zirconium of 7.9%, and 0.76% as well as others on the various claims held in the township.

Mitchinamecus Group

This group consists of the following mining claims held by the following licenses as registered at the Department of Mines, Quebec, and are shown on Claims Maps, Joliette 50 and 60, Joliette County, on undivided forest land, each claim being 40 acres in area.

License No.	Cl. No.	Area
C-133901	1-5	200
C-120569	1-5	200
C-120568	1-5	200
C-131149	1-5	200
C-120570	1-5	200
C-133902	1-5	200
C-133903	1-5	200
C-120566	1-5	200
C-120567	1-5	200
C-130743	1-5	200
C-131148	1-5	200

Total area, 2,200 acres.
(for this group)

The claims of this group are located at a distance of about six miles northwest of Menjo Depot, McLaren Lumber Co., undivided timber concessious, close to the west side of Mitchinamecus Reservoir and Torniche Creek.

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Menjo Depot is situated some 50 odd miles North of Ferme Neuve to which it is connected by fair to good lumbering roads kept open the year round by the McLaren Company; Ferme Neuve, in turn is located about 15 miles North of Mont Laurier, the nearest rail-head of the district, which is about 150 miles northwest of Montreal.

Most ordinary produce and supplies can be obtained at Menjo Depot, where telephone facilities are also available.

Water for exploration and development purposes is readily procurable from the numerous lakes and streams with criss-cross the claims; timber is also available on the claims.

Lodging can be had at either the Depot or at the watchman's house close to the dam of the reservoir located about three or four miles from the property.

Geology

Bedrock geology, as observed at a few outcrops and "showings", on the claims comprises, in a general manner, of an assemblage holding granitic formations, pegmatitic in part, and areas of gneisses and granite-gneiss, with the pegmatite intruding (?) more or less extensive areas of pink cristalline calcite.

It was observed in many places that the formations had been cut across, at an angle to, the normal trend of formation, by pegmatitic dykes of good widths, 10-15 feet or more, striking approx. E-W, several of which can be traced over lengths of several tens or scores of feet; the ground is not easily prospected, however, being timber land and drift covered and searchings have so far been limited to the edge of water courses and lakes and/or brooks.

The presence of radioactive mineralization close to the calcity-pegmatite contacts both in the pegmatite and in the limestone was observed and also the presence of epidote was likewise noted in more or less important amounts.

While occurrences of iron and copper and nickel minerals have been reported in the region from several sources, none were observed during this preliminary inspection, except for minor pyrite and pyrrhotite with magnetite.

While it would appear, at this time, that search for economic mineralization should be mostly directed to occurrences of radioactive minerals, but in view of the above, possible deposition of the foregoing metals should not be overlooked. In fact, occurrences of magnetic material has been clearly indicated by the erratic behavior of the compass over several areas of the property.

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Showings

One of the showings examined is located on the western edge of Mitchinamecus Reservoir at a distance of about seven miles north of Menjo Depot, probably on claim I of License C-120568, where a pegmatite dyke outcrops, the strike of which is about E-W, total width is approximatively six feet. JOLIETTE 50

Black grains, visible to the naked eye can be observed across the full width of this dyke which cuts through gneiss. Radiometric readings of upwards of 4 MR/HR were registered over the central part of this zone which is made up of quartz, feldspar and cristalline pink calcite, accompanied by secondary metamorphic minerals: epidote, biotite mica, also some metallic oxydes and sulphides.

A sample made up of chippings from this zone and weighing about 5-3/4 lbs. was gathered by the writer and returned the following (Ref. Zh-8161) U_3O_8 - 0.34%; ThO_2 - 0.13%, and also traces of Yttrium, and Lanthanum. These assay results show an indicated gross value of $47.00 per ton for Uranium and $13.00 per ton in Thorium, or a total of $60.00 per ton.

Kvendbo had obtained (Ref. Zc-5073) on a 6 lbs. sample from the same area, the following:

U_3O_8 - 0.58% and ZrO_2 - 0.48%, which would give a total gross evaluation of about $81.00 for Uranium and $36.00 for Zirconium.

Another showing visited is situated on the Northwestern bank of Torniche Creek, a few hundred feet upstream from the Reservoir. A wide dyke-like structure, about 35 feet wide can be observed, rising from water level to a height of about 10 feet. Readings of upwards of 0.4 MR/HR were registered: no samples were taken.

The writer understands that the syndicates intend to amalgamate their respective claims into a single venture with the objective of incorporating a mining enterprise, holding a Quebec Charter, for the possible development and exploitation of the ground herein reviewed.

Comments, Conclusions and Recommendations

The present brief preliminary inspection over some of the several claims has revealed definite mineral values, the ultimate importance of which is at present indeterminate: it should not be forgotten that two main factors must be seriously considered in developping mineral deposits - representative average values and tonnage.

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Indicated values herein reported are encouraging and merit close investigation: the several Uranium, Thorium, Zirconium occurrences showing commercial potential should be thoroughly followed up by means of systematic and logical planning; namely, exploration, mapping, trenching and sampling in order to accomplish the two essential requisites mentioned previously.

Some of the preliminary returns are significant: indicated gross values for Uranium and Thorium of $170.00 per ton, and lesser, have been found as well as intriguing and important Zirconium occurrences above commercial grade have been reported.

Radioactive zones can perhaps best be delimited by means of scintillometer surveys and contracts can often-times be established by magnetometer.

In any case, pickets lines should be established in order to localised and determine boundaries: geology and sampling should be tied in to the resulting base map as a key plan for all operations, past, present and future.

Commensurate with the results of the above, diamond drilling could be undertaken in a rational manner.

Yours truly,

Raymond Le-Blanc

RAYMOND LEBLANC, P. Eng.,
Mining Engineer and Professor
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Montreal, April 17th, 1958.

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C E R T I F I C A T E

I, Raymond Leblanc, of Montreal in the Province of Quebec, certify:

1. THAT I am a Professional Engineer residing at 4074 Marcil Ave, Montreal, Que., and also maintain an office in the same city;

2. THAT I am a graduate of the University of Montreal, B.A.Sc., in Civil and in Chemical Engineering, 1937, 1938, that I am also a graduate of McGill University, B. Eng., in Mining Engineering, 1939 and also hold Master's Degrees from both of these Universities, M. Eng. (Mining and Metallurgy, McGill) and M.Sc., (Industrial Chemistry, University of Montreal) 1940, and have been practicing my profession as Professional Engineer for some 18 years;

3. THAT I am a Member of the Corporation of Professional Engineers of the Province of Quebec and also of several other technical societies, such as Canadian Institute of Mining and Metallurgy (C.I.M.M.), American Society for Metals (A.S.M.) and others;

4. THAT I have no direct or indirect interest whatsoever in the Development Licenses and Mining Claims covered thereby referred to in my report dated April 17th, 1958, on claims held by Baskatong Uranium Syndicate and Lytton Uranium Syndicate.

5. THAT the report is based on personal experience in the regions mentionned as a result of several visits, over the years, to ground in the vicinity as well as reference to Official Publications and private communications and reports; in every case, the information is reliable, in my opinion.

DATED this 17th day of April, A.D. 1958.

Raymond Leblanc

RAYMOND LEBLANC, P. Eng.,
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