

GM 15531

REPORT ON GEOLOGICAL AND GEOPHYSICAL INVESTIGATION

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REPORT

ON

GEOLOGICAL AND GEOPHYSICAL INVESTIGATION

OF

PART OF PROPERTY OF

GASPESIE MINING COMPANY

LAPOTARDIERE AND LESSEPS TOWNSHIPS, QUE.

Ministère des Richesses Naturelles, Québec
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GASPESIE MINING COMPANY
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INTRODUCTION

The following is a brief report covering geological and geophysical investigation of the property of Gaspesie Mining Company in the Mount Albert area of Gaspé County.

The property was acquired because of the chromite possibilities in the area. Some early work was carried out for chromite in 1942 and 1943 and further work was recommended at that time.

During the past year a limited program of geophysical and geological investigation was carried out over a portion of the property to determine the best means of approach for the further exploration of the

property. The following report covers a description of this investigation which was carried out under the writer's supervision.

PROPERTY AND LOCATION

The property consists of 60 claims of approximately 40 acres each in Lapotardiere and Lesseps townships, Gaspé North. The claims are registered with the Department of Natural Resources under the following mining certificates:

208487 to 208489 inclusive

208404 to 208409 "

208495 to 208497 "

The property is quite accessible as the road from Ste. Anne-des-Monts through the Gaspé Park passes along the east side of the property. The terrain is very rugged from the road to the west end of the property but it is quite accessible by foot as there is a well cut trail from the highway to the centre of the property.

GEOLOGY

The property was acquired in November of 1963 so

it was not possible to make any geological reconnaissance until this summer. The general geology is described in government publications and some information has been made available from the earlier work by Chromium Mining and Smelting Corporation.

The property is situated on the east slope of Mount Albert. This is within an oval shaped mass of serpentized peridotite-dunite. In July of this year a reconnaissance geological investigation was made by Peter Kirby, geologist, and an assistant.

It was found that almost all of the property with the exception of the extreme east portion appears to be within the ultra-basic intrusive. The peridotite and dunite are interlayered in bands varying from a few inches to many feet. The strike of the layering ranges from N 80 E to N 45 W with steep southwest dips predominating.

Several known occurrences of chromite exist on the slopes and flat summit of Mount Albert and one of the purposes of the geological investigation was to locate these occurrences and determine if any of them existed on

the property of Gaspesie Mining Company. These occurrences were investigated in 1942 and 1943 by Chromium Mining and Smelting and they reported pod-like lenses with values ranging from 42 to 51% Cr_2O_3 with an average chromium to iron ratio of 2.8:1.

The investigation carried out by Kirby located three of the chromite occurrences mentioned in the early work as C3, C4 and C5. None of these were found to be on the property of Gaspesie Mining Company and their approximate location in regard to the claims is shown on the attached map. Occurrence C4 was originally believed to be on the property but field examination showed the west boundary of the Company's property to be approximately one-half mile east of the location as recorded on the Quebec Department of Natural Resources claim map.

The best of the occurrences is C5 which showed a lenticular body of chromite approximately 30 feet long and 10 feet wide. Grab samples taken by Kirby confirmed the original assays and showed the material to be of metallurgical grade. This is located on the southeast slope of the mountain. The chromite appears to be conformable

to the attitude of the layered peridotite and dunite and the occurrences are steeply dipping.

Some chromite float was found in several places along the mountain side but no occurrences in place were found on the property of Gaspesie Mining Company.

GEOPHYSICAL INVESTIGATION

Gravity and magnetic surveys have been used successfully for locating chromite masses in Turkey and also in Cuba. The writer has also supervised gravity and magnetic surveys on a test basis over some known chromite occurrences in Newfoundland which are quite similar to those found in the Mount Albert area. This work was quite successful and it was found that the lenses showed up both in magnetic and gravity surveys although the terrain had to be fairly favorable for the successful use of gravity surveys unless the body was quite large.

In January of this year a geophysical crew was sent to the property with a Sharpe A-2 magnetometer and a Sharpe gravity meter to carry out some test work on the property. Conditions were not ideal but the object was to try and obtain the information prior to the summer

so that a full scale program could be carried out during the summer months.

It was found that weather conditions were not favorable for gravity work as the strong winds encountered on the mountain slope made it impossible to read the sensitive gravity meter with any accuracy. This part of the program was abandoned and some reconnaissance magnetic work was done using claim lines as much as possible. Unfortunately, none of the chromite occurrences were located on the property so actual tests over the chromite were not carried out. However, samples brought out by Peter Kirby have since been tested and found to show a definite higher magnetic susceptibility than the surrounding peridotite. It is thus believed that a magnetic survey will be of assistance in outlining the chromite lenses. However, there are possibilities of obtaining areas of magnetic highs within the peridotite due to local concentrations of magnetite. One such magnetic high was found in the reconnaissance work but further test work over chromite in place may show that these can be differentiated.

The reconnaissance magnetic work did not show up anything of importance as most of the readings were fairly uniform. It was of some assistance in outlining the peridotite contact, especially the east contact which lies in the river valley. More detailed work is required but this can only be done to advantage in the summer months.

OTHER DEVELOPMENT

Some trenching, stripping and prospecting were carried out on the property following the geological investigation in an effort to locate chromite in place on the Gaspesie property. Rock outcrops are quite scarce and nothing of importance was located in this work.

CONCLUSIONS AND RECOMMENDATIONS

From the investigations it is apparent that chromite is present in the Mount Albert intrusive and that the chromite is of metallurgical grade. The big question mark is whether it occurs in sufficient quantity to be of economic interest.

The greater portion of the property of Gaspesie Mining Company is on the slope of the mountain and is very

rugged with slopes of 30 degrees or more fairly common. This makes exploration very difficult, especially in regard to geophysics. However, given favorable conditions such as the flat summit of Mount Albert to the west, both gravity and magnetic methods could probably be used to advantage.

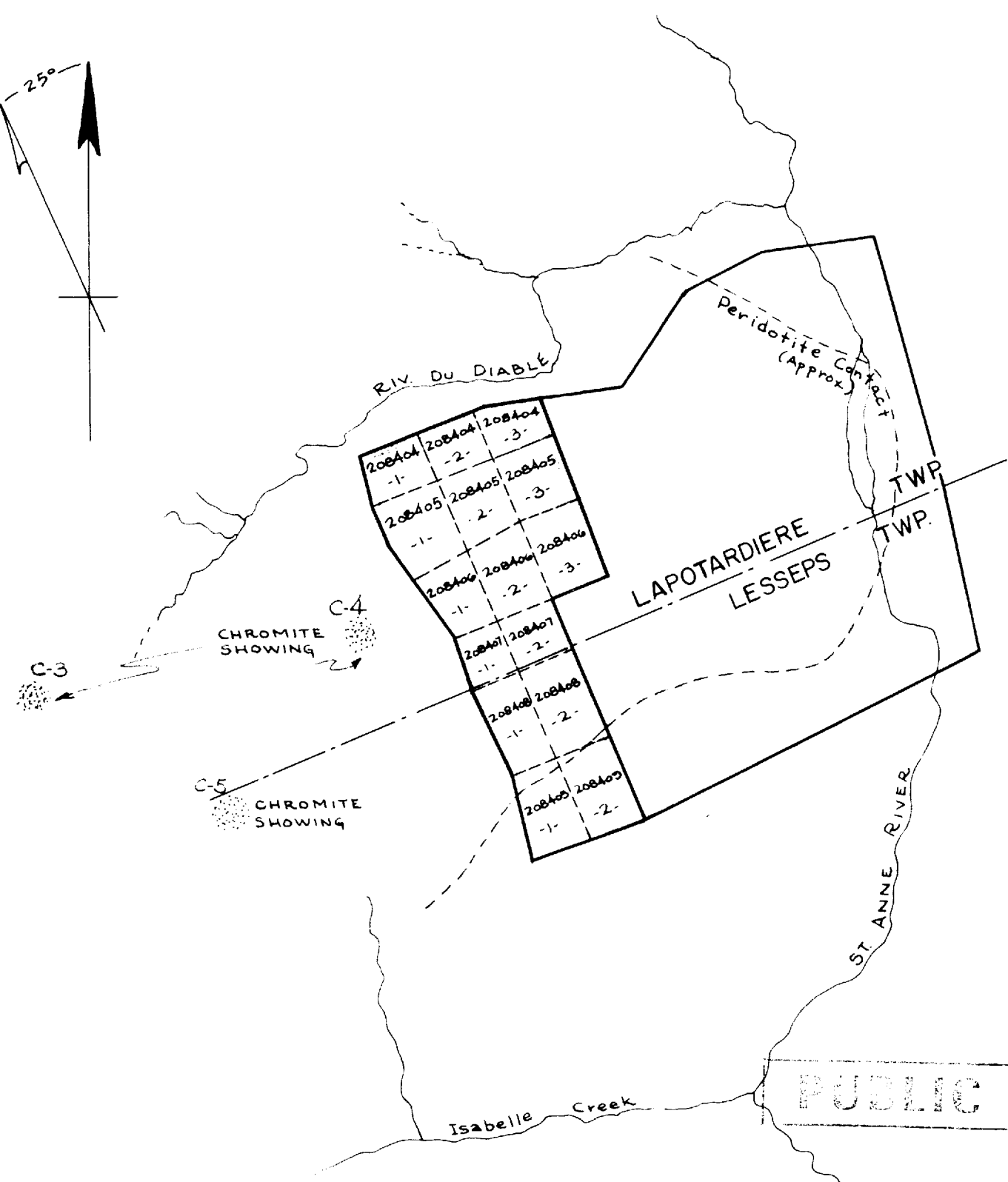
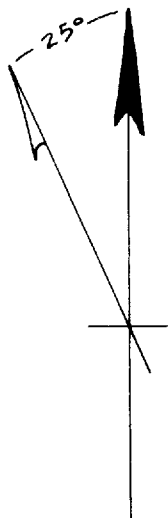
In view of the above, it is recommended that only the fifteen most westerly claims shown on the accompanying map be retained. It is also recommended that an effort be made to acquire those claims to the west on which the known chromite occurrences are located. If these are acquired, a systematic program of exploration could be planned using a magnetic survey to locate the potential areas to be followed by gravity surveys to help differentiate between chromite and magnetite.

Respectfully submitted,



H.J. Bergmann, P. Eng.

Montreal, Que.
Oct. 14, 1964.



PUBLIC

PROPERTY MAP
GASPESIE MINING COMPANY

Mt. Albert Area - Gaspé Park, Quebec
Oct. 1964

1" = 0.5 Miles

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