## **GM 08550-A** REPORT ON THE PROPERTY





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REPORT ON THE PROPERTY OF SNOWSHOE MINES LIMITED VASSAN and DUBUISSON TOWNSHIPS Province of Quebec, Can.

The present report is based on the knowledge gained through the study of the diamond drilling carried out on the property by Que-On Mines, Limited, and report thereon by Mr. K. C. Shaw, M.E., (Sept. 1st, 1937), on the magnetometer survey made by Mr. Th. Koulomzine during the winter of 1941-42, on the results of the diamond drilling carried out under the direction of the writer, and on the general knowledge of the area, gained through work in the district during the last eighteen (18) years.

TITLES: The property of Snowshoe Mines, Limited, is composed of two (2) groups of claims comprising respectively two (2) and thirty-three (33) claims, located in the townships of Vassan and Dubuisson, Province of Quebec, Canada.

The claims which are under development licenses, cover 50.05 and 1308.06 acres respectively. They are registered at the Quebec Bureau of Mines under numbers A-49196-49197, 55130 to 55159 included, 60342, 60345 and 60346.

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## TOPOGRAPHY-

ECONOMIC CONDITIONS: The property is located immediately west of the Western Quebec Mines Ltd., and of the Siscoe Gold Mines, and to the exception of claim 60346, on the first group, and of three (3) small islands on group 2, (the larger group), all the property is underlain by the waters of lake Demontigny.

The property is reached from the Siscoe dock, which is at a distance of six (6) miles from the town of Val d'Or over a good gravel road. Val d'Or is served by the Montreal-Noranda branch of the Canadian National Railways.

The south corner of the property is two (2) miles north from the Railway and the transmission line of the Northern Quebec Power Company, while the south boundary is at about one and a half  $(1\frac{1}{2})$  miles south of another line of the said power company.

The islands located on claims 55147 and 55148, would be sufficiently large to accomodate a shaft and a complete mining plant, this could also be done from Island No. 3, of Western Quebec Mines, Limited, a concern controlled by the same parent company, Que-On Mines, Limited.

All the facilities had in well established mining towns can be secured in the town of Val d'Or.

HISTORY: Under the direction of Mr. Shaw, six (6) diamond drill holes were bored, a total of 2770 feet of drilling. Holes 1 and 2 were drilled from Island No. 1, (Potter Island), while the others were drilled, in the northeastern portion of the property. Hole No. 5 failed to reach the rock. To the exception of diamond drill Hole number 6, which gave an assay return of \$30.52, over a width of 2.5 feet; no value of interest was disclosed by this drilling. The property then laid dormant until the winter of 1942-43, when a high precision magnetometer survey of the western portion of the property and of the Western Quebec Mines was carried out by Messrs. Leo Brossard and Th. Koulomzine, of Val d'Or.

This survey indicated the presence of a relatively large cupola of small stock of an acid intrusive, which upon its exploration by diamond drilling on the Western Quebec, immediately to the east, was then proved to be of granodioritic composition like that of the Siscoe Mines, Limited.

The drilling which was started in January, 1946, under the direction of the writer, has added further proof of this geological feature. It has also disclosed a rather interesting gold mineralization.

<u>GEOLOGY:</u> The general geological conditions existing on the property and the immediate vicinity, are well shown on the map of Dr. G. W. H. Norman of the Department of Mines and Resources, Ottawa.

This map shows:-

a. An area of Keewatin volcanics of general south of easterly strike, which are intruded by a series of acid intrusives.

b. The granodiorite stock of the Siscoe Gold Mines, Ltd.

c. A large fault zone which conforms fairly well with the strike of the volcanics, and which passes south of the said Siscoe granodiorite stock, this has been indicated by both diamond drilling and underground work, to extend north easterly to the south of the Western Quebec islands, (formerly Camp Bird Mines). .3.

d. A eries of feldspar porphyry and granodiorite dikes, such as disclosed by the diamond drilling.

Not shown on this official map, a larger stock granodiorite, has lately been outlined on the Snowshoe Mines, Limited, to the west, and on the Western Quebec property, by a high precision magnetic survey, followed by diamond drilling, such as shown on the joined map.

ECONOMIC GEOLOGY: Most of the gold mines of the district i.e, the Perron, Lamaque, Sullivan and Siscoe mines, are associated with granodiorite intrusives. Many other potential producers present the same genetic relationship.

The nearest producing mine is the adjacent Siscoe. There, most of the gold is found in quartz-tourmaline veins, occuring in the granodiorite; the gold is associated with coarse pyrites and much of the gold is free, thus the greater percentage of it can be recovered by easy means, such as on blanket or on amalgamation tables.

Some of the Siscoe's gold is also found in the so called "K" zone mentioned above, or in shears associated with said "K" zone.

The work done so far on the property of the Snowshoe Mines, Limited, has indicated general geological conditions which are quite similar to those existing at the Siscoe Gold Mines, Limited.

The diamond drilling has shown a series of gold intersections in the granodiorite, some of which are of a commercial grade over minable widths. These values are more or less linked structurally with series of micro-diorite dikes occuring in the granodiorite.

WORK: Beside the work done under Shaw, mentioned above under the title "History", twelve (12) diamond drill holes have been bored down under the direction of the writer.

To the exception of holes 17 and 18, all these holes were bored down vertically at relatively large intervals along the contact of the granodiorite stock.

Interesting gold values were had in all areas drilled but most particularly along the northern and southeastern portions of the stock where some commercial values were obtained. The following tabulation illustrates the best intersections had to date:-

D.D. HOLE	FOOTAGE	WIDTH	VALUE (gold \$35 per oz)
6	135.0-137.5	2.5	\$30.52
7	93 <b>.5-</b> 94.0	1.5	2.10
7	120.0-121.5	1.5	5.95 L
9	150.0-161.0	11.0	2.08
9	165.0-171.0	6.0	6.761-
9	196.0-198.0	2.0	2.10
10	417.0-418.0	1.0	7.00
11	447.0-449.0	2.0	2.69
13	455.0-467.0	12.0	5.66 4
14	135.0-140.5	5.5	4.90
15	300.0-302.0	2.0	2.80
15	315.0-320.0	5.0	4.37

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D.D. HOLE	FOOTAGE	WIDTH	VALUE (gold \$35 per oz)
16	87.0- 92.5	5.5	\$ 4.71
16	381.0-383.0	2.0	2.10
16	450.0-452.5	2.5	2.10
16	458.0-460.0	2.0	3.50
16	462.5-464.5	2.0	2.45
17	152.0-153.5	1.5	8.75
17b	228.0-230.0	2.0	5.95 L
17b	643.0-644.3	1.3	3.50
17b	644.3-645.0	0.7	3.15
17b	657.3-658.3	1.0	3.85
17b	825.0-826.0	1.0	2.63
18	213.5-215.0	1.5	5.95 -
18	258 <b>.5-259</b> .5	1.0	4.90
18	286.0-288.0	2.0	3.85
18	795.0-796.5	1.5	4.20 1

The above results showed wide spread gold values, (values below \$2 are not shown) commercial grade over minable widths were had in holes 6, 9 and 13.

To date, this diamond drilling has shown results comparable to those obtained on the Western Quebec Mines, Limited, which shares the eastern contact of the said granodiorite stock. The joined plan shows the location of the drill

holes and of the values obtained in the drilling.

RESUME AND RECOMMENDATIONS: The property is in the prospect stage, neither proved nor disproved. It presents very good geological features, namely a granodiorite stock, .6.

in which some commercial gold intersections have been had.

The diamond drilling done so far, is of a very preliminary nature, no attempt having been made to correlate values by close diamond drilling. •7.

Much of the contact zone of the granodiorite has yet to be drilled, and much more diamond drilling will then have to be done to delineate the possible extent of the veins, both in depth and in strike.

Over 50,000 feet of diamond drilling will be necessary to perform that task.

If this diamond drilling shows the necessity of underground exploration, a strong probability at the present stage, a shaft will have to be sunk and over 10,000 ft. of cross-cut and drifting done.

The more advanced steps of putting the mine into production, will necessitate a further expenditure. A good estimate of it could be made only after the completion of the underground exploration mentioned above.

It is our considered opinion that in view of the results obtained to date, and of the particularly favourable geological conditions existing on the property, that, (a) all the monies required for the diamond drilling be secured immediately, (b) that further funds for an underground exploration, which is very probable, should also be "earmarked".

> Respectfully submitted. (Sgd) Paul D'Aragon.

April 2nd, 1947.