82E/SW-25

MEGNETOMETER & GEOLOGICAL SURVEY PROGRESS REPORT BELAIR MINING CORP. LTD.,

JUNE - AUGUST - J. A. TREGILGES

INTRODUCTION:

A geological survey in conjunction with a Magnetometer was started on June 17, 1958 with the intention of extending the Serpentine Dyke to the N/W and S.E. and to find by geophysical means Lens of Chromite.

METHOD: Using Brunton & Chain.

A base line was run from Bridon 3-4-5-6 claim posts

North 30° West and S 28° - 30° E. Stations were erected every

50 ft. along the base line and cross lines were cut 200 ft. and

500 ft. from it at right angles. The cross lines were extended

from 300 - 1200 ft. as seemed necessary.

The geology was then noted while the Magnetometer readings were taken.

GEOLOGY:

The Serpentine Dyke in which the Chromite Lens occur may be said to be running N130 - 40° W and South 30 - 55° East from 0 - 00 on the base line.

Generally the Dyke is bounded to the West by Schists and to the East by Quartzites and Gabbros.

To the North basic instrusives have contorted it into a wavy structure. Here the float consist of 80% Serpentine in some areas; it has been noted that this Serpentine does not

travel far from its source. As of writing there is no known reason why the Dyke should not continue to the N/W despite basic intrusive interruptions.

To the South the deposit definitely widens to about 1000 ft. and this is verified by occasional outcropings of Serpentine.

Here the boundaries are more definite and consistent. I think the Dyke will extend a long way to the S.E.

STAKING:

On August 2nd, Dave 1-2-3-4-5-6-7 & 8, Jon 1-2-3-& 4 were staked to the S.E. to cover the extension of the Zone. It is probable more will be staked later.

OBSERVATIONS:

From Station 10/00S the elevation falls off rapidly to 26/00S with a change in elevation of 500 ft. It is possible that this is due to faulting. The Magnetometer gives values of equal intensity to those at and nearby the Chromite Lens exposed on the outcrop. It seems that one of the resulting actions of magnetic segregation is to give a higher magnetic content to the perimter of a Chromite Lens and thus higher Magnetometer readings. Lower readings in a Zone of higher should be given careful consideration.

To the West it was noted high readings continued sometimes for 100 ft. or more into the Schists then fell off. This is probably due to the fact that when the Dyke was originally intruded some of its high magnetite content was injected into

the wall rocks as they were being metamophosed to Schists. A period of gradation between the Serpentine and Schists has been noted mineralogically.

RECOMMENDATIONS:

- a) The Zone of high values which extend to the South for a distance of some 7000 ft. with a width of 400 500 ft. be further surveyed using a 50 ft. grid and to be drilled on the basis of results obtained.
- b) The Magnetometer survey be extended as fast as possible to the N/W and S.E. and the areas of interest to be staked.

At present the Survey is being conducted along the lines of recommendation (b), however, it should be a matter of company policy as to which has priority.

CONCLUSION:

Undoubtedly the survey this far proves the existence of a vast Serpentine Dyke which has a great economic possibility.

Besides Chromium, there well may be Nickel and Platinum occurrences.

The very fact that Chromite Lens occur on the exposed portion augers well for the unexposed part. To the South it widens considerably thus bigger Lens of Chromite may be encountered, also there is every reason to believe that it extends for a long way yet.

To the North the Dyke could easily widen as it did to the South.

To the South the Magnetometer gives a consistent high value

over a great distance and the Chromite content may be in direct ratio.

I think the results obtained so far <u>definitely</u> warrants further exploration and diamond drilling which I recommend without reservation.

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