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KERR-ADDISON GOLD MINES LIMITED

AUG 9 1963

(FOR INTER-OFFICE USE ONLY)

To P.M. KAVANAGH From W.M. SIROLA Subject E.M. and S.P. TRAVERSE ACROSS VANGORDA PROPERTY Date August 7th 1963

Table with 2 columns: Name, Status. Rows include W.S.R., K.C.G., G.H.M., R.D.S., B.C.B., P.M.K., E.O.C., H.A.P., J.B.S., G.P.R., E.L.D., J.P., E.C.J., D.V.B. E.C.J. is circled.

In the process of transferring Wolfe and McRae from the Cat Group to Mye Mt. we flew them into the small lake on the Vangorda Property and had them run one traverse across the mineralized zone. We did this because there was no prior E.M. information and we wanted to determine what our S.P. equipment would do over a flat lying structure.

The mineralization is clearly detectable by both methods, despite the proximity of graphitic slates to the mineralized zone. The E.M. anomaly has a maximum dip of 20 degrees and the S.P. anomaly over the centre of the ore zone, is minus 193 millivolts. Of considerable interest to me is the fact that the graphitic slate is readily differentiated from the mineralization by having a negative centre 5 times as great as the negative centre from the mineralization (I am referring now to the S.P. method). The contrast between mineralization and graphitic rock is not nearly as pronounced with the E.M. method. I think that in combining the two methods we can usually eliminate the useless graphitic or carbonaceous anomalies and concentrate on those of lesser amplitude.

The advantage of the E.M. method is, of course, in that it gives us greater penetration, at least as far as massive sulphides are concerned.

Handwritten signature of William M. Sirola

William M. Sirola.

WS/iw.

O O

*Profile
105K
Pye Mountain*

VANGORDA AEROMAGNETIC SURVEY

Size of Area	:	120 square miles.
Direction of Flight Lines	:	N 45° E
Spacing of Lines	:	$\frac{1}{4}$ mile.
Length of Lines	=	10 miles of 4 mile line 10 miles of 8 mile line.
Average Length of Line	=	6 miles.
Total No. of Lines	=	81
Total Miles	=	81 x 6 = 486 miles, say 500 miles with turns.
Speed of Helicopter	=	45 m.p.h. or $\frac{3}{4}$ mile per minute.
Total Hours	=	$\frac{3}{4} \times \frac{500}{60} = 6\frac{1}{4}$ hours.
<u>Maps Required</u>		
Photos on scale of	:	1" = 1,000', in some form of mosaic.
Topography of Area on scale of:	:	1" = 1,000'.

In order to enable pilot to maintain the correct altitude, we will probably have to plot topographic profiles for each line. Could these be done in Toronto ?

If mineralized zone is 500' wide, aircraft flying over this at 45 m.p.h. would cover the deposit in 8 seconds. This would produce an anomaly 0.4" wide if tape on recorder is travelling at 3" per minute.

If at all possible, we should have a mechanical marker for recorder. These are available for less than \$200. and should be ordered for the Recta-Riter, at once.

We will have to have a topographic marker on the end of each line, so, line lengths will vary somewhat.

The advantage of a mechanical marker is that every topographic feature is instantly recorded on tape. Also, the beginning and end of the line can be marked on the tape. Don Hings could put this equipment on the recorder.

September 4th, 1963.

William M. Sirola.

WS/iw.



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