

PRELIMINARY REPORT ON EXPLORATION OF
VANGORDA AND SWIM PROPERTIES
ANVIL DISTRICT, YUKON

008726

BY

A. E. AHO

Faro, Y.T.
August 27, 1973

INTRODUCTION

Exploration was started in August 1973 under agreements between Kerr Addison Mines and Vangorda Mines as owners, and AEX 73 Syndicate whereby the syndicate may earn interests in the above properties, excluding certain claims covering known zinc-lead sulphide deposits.

Since the beginning of August the writer studied old and new data and examined the properties with the objective of conceiving and carrying out further exploration as outlined below.

DISTRICT EXPLORATION

Recent detailed geologic mapping of the district shows complex deformation with the known sulphide bodies apparently localized along one or more graphitic horizons in a phyllite unit within a nappe plunging about 10° northwest, cut by faults, and truncated by the Anvil batholith on the northeast.

Depth potential appears to be limited only by methods of detection and economic considerations.

Geochemical survey coverage is complete except for deeper overburden areas, and most known anomalies have been investigated.

Geophysical coverage of the district consists of virtually complete airborne and ground magnetic surveys, shallow-penetrating airborne electromagnetic surveys, and local gravity and ground electromagnetic coverage. Turam is now being run over most of the geologically favourable phyllite as a deeper penetrating electromagnetic guide to graphitic units and mineralization. Case histories of several geophysical methods tried over the deeper portions of the Faro orebody indicate that ore at depths of 550 to 600 feet was detectable by Turam while other methods were not definitive. Current geophysical exploration thus consists of magnetic and Turam coverage with gravity for target definition.

VANGORDA PROPERTIES

Geologic, geochemical and geophysical data lead to a preliminary conclusion that the best potential lies on the northwest portion of the properties between the Vangorda, Champ and Firth deposits.

Faro Aug 27/73

Dear Bill:

Enclosed herewith is the report. Since I cannot use a secretary here, could you please have it typed up and distributed as you see fit & also please send me back a copy. Hope it's all legible.

Have just called Arctic D.D. to start whenever they get mobilized. Will keep you informed & give you a call to come up if we get something good. Very best regards. Faro.

Bill:

In case of ore intersection for 1st phone call I may use a code ~~code~~ asking for a spare part for something as follows:

- 373 Depth First intersected
 - A Iron sulphides
 - B low grade
 - C good grade
 - 86 No of feet cut so far (ie 373' to 459')
 - C continuing in sulphides
 - E ended
- (eg 373 A 86C)
We can either correct the number (eg 86A to 175E) or ask for additional spare part (eg 480 C 120 E)

This should do for an initial message or two until someone comes up - Hope you need to come up soon

Faro.

MINERAL EXPLORATION



Arvo E. Aho, Ph.D., P. Eng.

VANCOUVER, CANADA

SANTIAGO, CHILE

Between Vangorda and Champ, possibilities exist northwest down plunge from Vangorda but interpretation is still uncertain and could be complicated by faulting. Detailed study aided by overall Turam coverage should clarify interpretation, leading to drill targets.

Between Champ and Firth exhaustive study of all data, field examination and a Turam survey over part of the area has led to selection of a drill target on the Grum and Chuck claims on the following basis:

1. Geologic location on the Champ - Firth graphitic unit, dipping $15-20^{\circ}$ SW and plunging $10-15^{\circ}$ NW; no exposed greenstones to account for magnetics.
2. Subtle northerly-trending aeromagnetic anomaly of 60 gammas relief, 6000 feet long and 1000 to 2000 feet wide; more extensive than the Faro anomaly but identical in outline to the Faro deposit. Ground magnetics with 150 gammas relief match well and are suggestive of Vangorda-type variations with dip conformable to geology.
3. Steep Bouguer gravity gradient flanking the east side of the magnetic anomaly and flattening into a broad "nose" coincident with the southern part of the magnetic anomaly. Relief on profile is in the order of one milligal.
4. Airborne EM indicating a northerly-trending conductor on the east flank, apparently the graphitic unit which lies under low topography.
5. Turam over the southern part, confirming the AEM conductor but also defining a lesser or deeper conductor coincident with the magnetics and gravity, with shape of curves similar to those over the Faro orebody.
6. No recorded surface geochemical anomaly, probably due to rock cover and glacial overburden.

Assuming dip and plunge from surface geology, geophysical indications and possible projections from the Champ, depth from surface to the southern part of the target may be in the order of 400 to 600 feet. This southern portion of the broader anomaly area is to be tested by drilling early in September.

About 25 line miles of Turam coverage is planned to be completed between Vangorda and Firth in September to help define further drill targets.

SWIM PROPERTY

Much of this property appears favourable for further exploration but sparsity of outcrop and questionable reliability of some of the

geophysics necessitates more intensive work to clarify interpretation. Two areas of preliminary interest are apparent, mainly from geochemistry, mineralization and some geophysics:

- (a) West corner of claim block where the end of a geochemical anomaly coincides with a local residual gravity high with some magnetics at the boundary of Swim 15 claim and Anvil's property. An outcrop sparsely mineralized with galena lies on the adjoining Anvil property but their residual gravity map shows nothing of interest.
- (b) Campsite area on Swim Lake where a geochemical anomaly and mineralized float occur on the northwest side of an indicated magnetic anomaly from which the float might be derived by glaciation. A local Turam survey showed a coincident conductor which is planned to be drilled after magnetics are checked.

To aid detailed interpretation of all the Swim data and to guide further exploration, about 50 line miles of Turam survey are planned to cover most of the claim block this fall.

CONCLUSION

Work to date, including local Turam surveys, have defined two justifiable targets, on the Grum and Swim claims, on which drilling is to be started about the first week of September.

Turam surveys covering the Swim property and northwest part of the Vangorda properties are planned for September and October.

The present program holds promise of early conclusive results, but must be considered only as a first step in more intensive and costly exploration before reasonable probabilities of success.

Respectfully submitted,

AEA/rb

Dr. Aaro E. Aho

cc: J. H. Stovel
W. M. Sirola ✓
J. Bruk
H. S. Cornwell
G. M. Hogg

cc: sent Dr. Aho Sept. 4/73