MEMORANDUM

013341

TO: N. G. Cornish / R. E. Thurmond

FROM: M. O. Hampton

SUBJECT: REPORT ON PROPERTY EXAMINATION - DAN GROUP, SWIFT RIVER, YUKON

DATE: July 20, 1970

CONCLUSIONS AND RECOMMENDATIONS

The possibilities of finding a copper deposit in the DAN group area is good and the writer believes there is an excellent chance of finding another "Faro" orebody in the area. The latter possibility has been largely overlooked to date because the geologists were not familiar with the rocks hosting the deposits in the Anvil Range area.

It is the writer's belief that a program based in general on the original concept of the Dynasty-Cyprus joint venture is called for. Mr. Parent's magnetometer survey is definitely on the right track but it is felt that an airborne magnetometer survey conducted at low level by helicopter would give similar results much more efficiently over a wider area. It has been found that ground magnetometer follow up of airborne work in the Faro area has not added much information and closer flight lines would probably have been more profitable than the subsequent ground work. An expanded prospecting, geologic mapping, and bulldozer trenching program is required. A drilling program is required to test the anomalies. The trenching program besides a follow up tool to the magnetometer survey will be necessary as an aid in compilation of a geologic map. As permafrost has not been found in the area, road building and trenching is somewhat simplified.

It is recommended that a joint venture agreement be entered into and the necessary exploration program embarked upon.

GEOGRAPHY

The DAN group (DAN, MAX, BUD, DAREN and WET claims) consisting of some 350 claims covers some 7 miles along the Swift River in the Cresent Lake area, some 10 miles NW of the Pine Lake airstrip, which is near Mile Post 722 on the Alaska Highway. The area is shown on the Wolf Lake topographic sheet.

Access was attained via a tote road from the Pine Lake airstrip. This road in its present dry condition was readily negotiable by 2 wheel drive pickup. In wet weather or high water at the Swift River Ford, a 4 wheel drive would be advisable.

The claims are at 3500 foot (approx.) elevation in and on the slopes of a rather broad valley. The valley floor is covered with glacial outwash and morainal gravel and boulders. Some sizeable hills of morainal debris exist and kettles and other glacial features are found.

The area is treed with pine and balsam to approximately 10" in diameter and smaller shrubbery, but is in general relatively open. No muskeg nor permafrost is noted. Outcrops are not very abundant but much of the overburden on the slopes is shallow.

HISTORY

The detailed history is not available to the writer at this time, but it is believed the original find of sulphide mineralization was made by McKinnon, a prospector from Watson Lake. The area was subsequently explored by Hudson Bay Mining and Smelting, probably in the early 1950's. In 1968 Boswell River Mines acquired a large block of claims in the area and began a program of prospecting. Early in 1970 a magnetometer survey was initiated under the direction of Mr. Douglas Parent. Subsequently a trenching and drilling program has been started and general prospecting is in progress.

In mid July Mr. Ben Ouelette, President of Boswell River Mines, contacted Mr. Thurmond, desiring a joint venture partner to carry out a program on the claims. Subsequently arrangements were made for a visit to the property by the writer, accompanied by Lal Gondi on July 17, 1970.

PRESENT PROGRAM RESULTS

The magnetometer survey has to date traced out some two miles of an anomalously high magnetic linear feature. Readings up to the 7000-9000 γ range are obtained, using an arbitrary background in the 350 γ range. This linear feature appears to be "horsetailing" as the work proceeds to the NW, giving more numerous highs per section line with no significant change in the intensity of the highs. This feature appears to correspond to a feature shown on the G.S.C. magnetic map of the area (enclosed), which shows a linear anomaly terminating in a broader anomaly in the area the present survey is approaching.

A bulldozer trench was put across the anomaly and massive pyrrhotite with some magnetite, sphalerite and chalcopyrite was encountered. Further trenches were dug and more massive pyrrhotite with chalcopyrite was found. The massive pyrrhotite was found to be strataform and in one trench four

paralled sections of pyrrhotite was found, the thickest being about 6 ft. On the theory that somewhere chalcopyrite would be found in increased abundance, a drill program has been started to further determine the nature of the deposit, and hopefully locate a copper rich section. Assays to date have not been representative and can only be regarded as an indication of minerals present. Besides copper, silver, lead and zinc, tin and cobalt have shown up in interesting amounts.

The present drilling, trenching and prospecting program is relatively well equipped, and is being operated within its limitations in an orderly, efficient manner. A trailer camp suitable for about 20 men (formerly at the Canol Mines prospect) were being installed at the site at the time of the writer's visit.

GEOLOGIC OBSERVATIONS

Not having access to a geologic map of the area prior to the visit, our only previous information was from telephone conversations with Mr. Ouellette. From this brief information the writer expected a contact metasomatic, possibly with porphyry possibilities. However, after travelling nearly 400 miles and arriving at a point some 150 miles southeast of Faro, the writer was somewhat surprised to find the rocks to be the same unit as hosts the Faro orebody, the only difference being a slightly lesser degree of regional metamorphism. As well as the host rocks being the same, the pyrrhotite mineralization is identical in mode of occurrence, color, texture and inclusions to that found at the northwest end of Faro No. 1. Some sizable angular pieces of galena and sphalerite float are found amongst the glacial debris.

The strata observed in the trenches strikes N 30° W and dips 65 - 70° SW.

No fault is found with the judgement of Mr. Parent or the advice he has given the Boswell River Mines Board of Directors regarding the possibility of a zone of economic copper mineralization somewhere with the pyrrhotite. The Boswell Board has also been advised that it will take a great amount of work and financing, probably in excess of their capacity, to adequately explore the area.

Respectfully submitted,

M. O. Hampton, P. Eng.
Chief Engineer

MOH/am

Attachments

APPENDIX 1

A suggested budget for the program is as follows -

Airborne Magnetometer Survey

_____ miles @ _____

Geologists (mapping & logging)

Trenching

Diamond Drilling

Prospecting

Camp & Supervision

Travel & Communications

APPENDIX II

Present equipment on site -

D-8 Caterpillar Tractor

P-34 Longyear Diamond Drill

John Deere Tractor

20-Man Trailer Camp c/w Office & Kitchen

Assorted Utility Trailers

Assorted Pickups

30 KVA Lighting Plant

Power Saws

Gasoline Driven Rock Drills

Core Splitters

Miscellaneous Bush Gear

All appears to be in excellent condition.