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REPORT and
EXPLORATION PROGRAM 1967
on the
PROPERTY OF
GIANT METALLICS MINES LTD. (N.P.L.)
ADAMS PLATEAU, B.C.
by
MACDONALD CONSULTANTS LTD.
11 - 425 Howe Street, Vancouver, B.C.

APRIL 1, 1967

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MACDONALD CONSULTANTS LTD.

SUITE 11 - 425 HOWE STREET, VANCOUVER 1, B.C.

INTRODUCTION

This is an evaluation of and recommendation for work in 1967 on the property held by Giant Metallics Mines on the Adams Plateau, B.C. based on the study of reports on work carried out by previous owners of the ground and on the results of the exploration program '1966' of Giant Metallics Mines.

The geology and mineralization of the area was described repeatedly in previous published and unpublished reports. This report is confined to the conclusions arrived at from all available information, it describes the mineralization and geological conditions of the target areas for the exploration program '1967' and outlines further work.

CONCLUSIONS FROM PREVIOUS WORK

There are two types of mineralization present in the area:

1. Silver-Lead-Zinc-Copper-Phyrrhotite mineralization in order of importance. The mineralization is of the replacement type. Geological features favoring this type of deposition are:
 - a. Host Rock: Calcareous and limey sections of the metamorphic Schuswap series.
 - b. Folding: In the case of the EX #1 showing, the widest part of the massive mineralization was found on the crest of a local anticlinal fold.

Dragfolding was observed at the Mosquito King Showings. All previous diamond drilling was done prior to the

I.P. Survey and guided by surface indications only. Although not all the results are available, apparently good mineralization was found in places. Since the main showings were never in one hand to provide a greater potential and area for exploration, the ground was dropped by previous companies holding and working on part of it.

Structural features were indicated in the mineralized sections by a recent airphoto interpretation of the writer and by the I.P. Survey on anomaly A2. The significance of these with respect to ore controls will have to be established by work on the ground this summer.

An Induced Polarization Survey carried out by Hunttec in 1966 showed that the area is widely mineralized. Several anomalies of primary interest were located in areas which have hitherto received little or no attention because of the lack of outcrops or other surface indications. Some of the I.P. anomalies are in the extension of the EX #1 and Mosquito King showings, but were not investigated by drilling to date.

Seven of these I.P. anomalies deserve primary attention and require diamond drilling.

The remainder of the anomalies require further geological and gelchemical surveys.

2. Phyrrhotite-Magnetite-Chalcopyrite Mineralization

Some mineralization of this type has been observed in

association with the Silver-Lead-Zinc mineralization.

However, an apparently strong zone of this type of mineralization can be traced from the headwaters of Bowler Creek on Mineral Claims E #1 - 8 to the Garnet group of mineral claims. As the information on this mineralization is incomplete and the writer was not yet able to inspect the property and ascertain the dimensions and characteristics of the mineralized zone which is reported to be up to 300' wide and up to 2 miles long, with parts of massive pyrrhotite-chalcopyrite mineralization. One diamond drill hole, 200' deep, the location of which is uncertain, was reported to have intersected 'almost massive pyrrhotite' over its entire length, 'chalcopyrite mineralization was visible throughout the core'.

This zone definitely warrants further investigation by surveying of the claims and showings in order to establish its trend, followed by a geological, geochemical and geophysical survey. If the results of this initial work warrant it, they should immediately be followed up by diamond drilling. The main objective of the initial work would be to establish whether the mineralization is replacement mineralization along bedding planes or a steep dipping mineralized zone of weakness as it was indicated in some of the information.

EXPLORATION PROGRAM 1967

This program is tentative and will be subject to revision and modification after the property has been examined in detail and some of the information is verified.

Eleven target areas were established and the following work schedule is recommended:

The program is aimed at the most promising target areas first with the intention of defining the extent and the economic value of the mineralization on the greater part of the I.P. anomalies, by core drilling and/or trenching on the most prominent ones.

EX #1 Showing: Priority 1

Establish exact location of showing, workings and if possible, previous diamond drilling in relation to the I.P. Anomaly 'K'.

Map area of showing and I.P. anomaly in detail, measure the dimensions and sample the showing systematically in order to establish the grade and tonnage.

Diamond drill three holes as laid out by Hunttec after correlation with above work. A total of approximately 1000' of core drilling will be required.

I.P. Anomaly I-2 on Pat #1: Priority 2

This anomaly is located just north of a number of showings of mineralization on line AC of the grid pattern. The area should be mapped, sampled and surveyed in detail before diamond drilling the 'narrow but highly conductive chargeable mass centred at 5 + 00S', as indicated by the Hunttec I.P. Survey.

I.P. Anomaly 'G': Priority 3

This anomaly lies in the west extension of the Mosquito King Showings with little outcrop showing on the ground. Some Gossans and float of galena and sphalerite make this anomaly

an interesting target. Diamond drill holes #3-66 and #5-66 were drilled in 1966 prior to receipt of the final interpretation of the I.P. Survey and appear to have missed intersecting the conductive zone.

I.P. Anomaly 'B': Priority 4

This anomaly crosses line B, A, and O in the east extension of the Mosquito King showings, with float and Lead-Zinc mineralization found in place in the area of the anomaly, this target should be carefully assessed by surveying, detail mapping and sampling before diamond drilling is started. Since the conductive body is interpreted as lying approximately 40' below surface, investigation by diamond drilling is the most logical follow-up.

I. P. Anomalies A2, A1, E, C2: Priorities 5 to 7

All these anomalies should be tested by a geochemical survey before diamond drilling. Their priority is lower because of the relatively weaker conductivity of the causative bodies. However, the I.P. Survey as well as the airphoto interpretation indicate structural features on anomaly 'A2' which make this a worthwhile target for further investigation.

Last year's soil sample results were obtained from the Rubianic acid and dithizone cold extraction methods in the field. It is recommended that the soil samples from this program be assayed by the hot aqua regia method in anticipation of more quantitative results.

Garnet #1, 2, 10, 11: El 'South of Bunny's Cabin';

El-8, Headwater of Bowler Creek: Priorities 1A to 3A

This area represents the second type of mineralization as mentioned earlier in this report. The verbal reports and information received are very encouraging but too little

detailed information is available to reach any conclusions at this time.

Samples of the pyrrhotite mineralization revealed assay values between 0.23 and 0.68% Copper.

It is recommended that this mineralized zone be assessed by a systematic program of mapping, surveying, soil sampling and possibly a ground magnetometer survey, before trenching and further diamond drilling is laid out in detail.

Main objective of the work on these targets is to verify the continuity of the mineralization in width and along strike.

'Trench #1' Quartz-Galena Vein: Priority 4A

This vertical 4 foot quartz vein, containing abundant galena and pyrite is not typical of the area, but some more work should be done in the way of sampling and trenching. The showing is within the boundaries of the 'L' I.P. Anomaly and the strike is similar to the trend of the high chargeability.

The showing was first discovered by trenching on a total heavy metal geochemical anomaly. Detailed soil sampling, prospecting and trenching may very well lead to a good drilling target.

The following is a tabulated schedule of the program. The priorities show that the emphasis should be put both on the best I.P. Anomalies in the grid area and on the E1, Garnet 1, 2, 10, 11 and E1-8 mineral claims.

Depending on the results of the program as they emerge during

TARGET AREAS	PRIORITY	A	B	C	D	E	F	G	H
continued -									
Garnet #1, 2, 10, 11 E1, 'South of Bunny's Cabin	1A	X	X	X	?	?	X	?	?
	3A	X	X	X	--	--	X	--	?
E #1-8 headwater of Bowler Creek	2A	X	X	X	?	?	X	--	?
'Trench #1' Pb S - Si O ₂ - vein	4A	--	X	--	--	--	X	--	X?

COST ESTIMATE

Trenching	\$ 3,000.00
Diamond Drilling: 2850'	30,000.00
Field Crew - including field manager, geologist, surveyor, 2 soil samplers & two helpers: 3 months	23,220.00
Camp operation and food	4,725.00
Mobilization and Demobilization	3,000.00
Assaying	2,000.00
Freight and communications	1,000.00
Engineering equipment and supplies	800.00
Consulting Geologist	3,000.00
Geological report, compilation of all results, maps	1,500.00
Contingencies @ 10%	<u>7,200.00</u>
Total Cost Estimate:	\$ <u>79,445.00</u>

Respectfully submitted,

MACDONALD CONSULTANTS LTD.

H. Wober, P. Eng.

CERTIFICATE

I, Helmut Wober, with business and residential address in Vancouver, B.C. do hereby declare:

1. I am a consulting mining engineer.
2. I am a graduate of the Montanistische Hochschule Leoben, Austria, 1963.
3. I am a registered professional engineer in the Yukon and British Columbia.
4. I have gained experience in mining and exploration geology in positions of responsibility with Nordisk Mineselskab A/S in East Greenland and in 1961 and 1962, with United Keno Hill Mines from 1964 to 1966. I held the position of Chief Mine Geologist with United Keno Hill Mines when I resigned to join MacDonald Consultants Limited, in May 1966.
5. I have personally studied all available information on the geology of the areadescribed.
6. I do not have, nor do I expect to have, any interest, direct or indirect, in any properties referred to in this report.

Respectfully submitted,

H. Wober, P. Eng. (Yukon and B.C.)