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REPORT ON THE P (1-20) MINERAL CLAIMS

SUEY BAY AREA CARIBOO MINING DIVISION BRITISH COLUMBIA

FOR

NORTHWIND MINES LTD.

BY

John R. Poloni B.Sc.; P.Eng. March 8, 1972

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93A/7W GENERAC.







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MINERAL CLAIMS

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in the colombia

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INTRODUCTION

This report is prepared on the P(1-20) mineral claims owned by Mr. E. Peters in the Suey Bay area, Horsefly Lake, Cariboo Mining Division, for NorthWind Mines Ltd. The author located the claims as agent for Mr. Peters on December 10, 1971. This report is based on field observations, on published Government reports, on unpublished reports and upon a personal knowledge of the immediate area in which the Claims are located. The purpose of the report is to evaluate the economic potential of the claims.

A preliminary exploration program is recommended.

PROPERTY

The Property consists of 20 mineral claims P(1-20) located by John Poloni as agent for Mr. E. Peters, on December 10, 1971. The following claims data was obtained from the office of the Mining Recorder in Quesnel.

Name	Record No's	Record Date
P (1-20)	65178 - 65197	December 13, 1971

The claims are staked in accordance with regulations of the British Columbia Department of Mines and Petroleum Resources, and there appears to be no possible contraventions.

LOCATION AND ACCESS

Located 23 miles north east of Horsefly, B.C. between Suey Bay and Sardine Lake, the property is accessible by boat from Horsefly Landing, a distance of 18 miles. Several logging roads reach the south shore of Horsefly Lake, the nearest of which joins the Horsefly River road at 20 miles east of Horsefly. This method of access would reduce the distance via water to approximately 4 miles. The claims are located at $52^{\circ}28'$ North latitude, $120^{\circ}55'$ West longitude, N.T.S. Reference 93 A/7W. The property is easily accessible by light aircraft.

Horsefly can be reached via secondary roads leaving Highway # 97 at 150 Mile House. Road distance from Vancouver to Horsefly is approximately 380 miles.

PHYSIOGRAPHY

With elevations ranging between 2570' on Horsefly Lake to a maximum of 3300' above mean sea level, and with slopes generally less than 20° , the topography of the claims can be described as moderate.

The claims are densely timbered with immature pine and cedar, making access difficult.

East Sardine Creek and the easterly shore of Slate Bay on Quesnel Lake appear to follow a North easterly trending regional fault zone.

GLACIATION

During Pleistocene time the claims area was entirely covered with the Continental ice sheet, resulting in a mantle of glacial detritus ranging from 2 to 10 feet thick covering the south westerly parts of the claim block.

Ice Movement was generally from north to south.

CLIMATE

The precipitation in the Horsefly area ranges from moderate to heavy, generally coming during the fall and winter months. Dry, hot periods can occur during summer, but at no time are conditions too severe, to greatly hamper work.

HISTORY

No thorough exploration program appears to have been undertaken on the claims. The 20 claims in the P group cover in part ground initially staked by Magnum Consolidated Mining Co. Ltd. and Helicon Explorations Ltd. in 1966 and 1967 as a joint venture, on 108 claims called the Suey Bay project. A programme consisting of air photo interpretation, geology, geophysics, and geochemical surveys was undertaken during 1967, over the main Suey Bay copper showing, located approximately 2100' south east of P 10. This culminated in the diamond drilling of 909.7 feet in three holes. The showing is now controlled by Green Eagle Mines Ltd.

Diamond drill holes # 1 and # 2 were used to investigate a completely geophysical anomaly proven to be caused by a sequence of carbonaceous argillite or graphite invaded by fingers of quartz diorite. Diamond drill hole # 3 located on the main showing contained widely dispersed copper values of low grade in a mixture of sediments $c^{-}d$ intrusives for a length of 290 feet.

Duri z the fall of 1971 Green Eagle Mines Ltd. contracted Seigel Geophysical Contractors and Consultants to conduct an Induced Polarization program over a large geochemical anomaly centred approximately 2100 feet S 50°E from the # 1 posts of P 9 and P 10. The results of this program are encouraging and diamond drilling is planned.

GEOLOGY

Geological Survey of Canada Map 1-1963 by R.B. Campbell 1961 and 1962 shows that the claims are underlain with Triassic and/or Jurassic volcanic and sedimentary rocks, and in part cover glacial or alluvium deposits of Pleistocene and Recent age.

Rock types occurring on the Jamie claims of Green Eagle Mines Ltd. south of the P-claims have been identified as consisting of siltstone, carbonaceous shale and slate, argillite, augite porphyry, Quartz diorite, dacite, phyllite and schist.

Field observations made by the author, and an analysis of the Induced Polarization survey conducted by Seigel Associates Ltd. on the Jamie Claims made by D.R. Cochrane, P.Eng. indicate that acidic intrusive rocks may underlie parts of both of the Jamie and P-claims. This appears to be substantiated by Aeromagnetic Map 5238 G, Mackay River showing that two areas of magnetic highs exist, east and north west of Suey Bay. The magnetic high immediately east of Suey Bay corresponds to unit 10b, Map 1-1963 G.S.C. mapped as hornblende diorite by R.B. Campbell.

The main showing on the Jamie claims occurs in a strong shear zone 10.5 feet wide, striking N60^oW and dipping steeply to the north. Copper mineralization in the form of chalcopyrite, malachite, azurite, and bornite occurs with pyrite, pyrrhotite, calcite, quartz and pyrolusite. Channel sampling by Chapman, Wood and Griswold personnel in 1966 and by the author in 1971 gave 2.22% copper and 1.14 oz/ton silver across 7 feet, and 1.56% copper and 0.4 oz/ton silver across 10.5 feet, respectively. Mineralization in the showing occurs principally along shears and minor fracture planes.

Minor pyrite, pyrrhotite, and chalcopyrite frequently occurs in hair-line fractures in the sedimentary rocks, and also as disseminations and fracture fillings in tongues of quartz diorite on the Jamie claims as observed in the area of the main showing.

A strong regional shear zone with a north easterly strike, mapped by R.B. Campbell appears to cross the centre of the P(1-20) claim block. Fig. 2.

The possibility of finding copper mineralization on the P-claims is excellent and a detailed exploration program is warranted.

SUMMARY AND CONCLUSIONS

The P (1-20) group of mineral claims located between Suey Bay and Sardine Lake, near Horsefly Lake, is underlain with volcanic and sedimentary rocks of Triassic and/or Jurassic age.

Tongues of quartz-diorite intruding and the volcanic and sedimentary rocks are believed to occur on the P-claims. Copper mineralization is found as fracture fillings and disseminations in quartz-diorite on the Jamie claim immediately to the south and can occur in a similar manner on the P-claims. Copper mineralization also occurs with pyrite and pyrrhotite in hair-line fractures in the sedimentary and volcanic rocks near the south boundary of P 9 and P 10, on Jamie 71-1 and 71-2.

Interpretation of Geophysical data, by Green Eagle Mines Ltd. and the G.S.C. indicates that a Geological contact between intrusive rocks and metasedimentary rocks exists, on the P claims.

To date the highest grade copper mineralization found in the area is structurally controlled. A strong north easterly striking fault zone crossing the claims is an excellent exploration target for the discovery of copper mineralization.

The P(1-20) claims have not been examined in any thorough manner. Copper-silver mineralization is known to occur, coincident with geophysical and geochemical anomalies to the immediate south of the claims. The possibility of this occuring on the P-claims is sufficiently high to warrant a thorough preliminary exploration program.

In the writer's opinion the claims warrant detailed geochemical, geological, and geophysical programs to evaluate the possibility of the occurrence of economic copper-silver mineralization.

RECOMMENDATIONS

A preliminary work program is recommended: -

Phase I

- 1) Geochemical soil sampling at 100 foot intervals along control lines spaced at 400 feet apart.
- 2) Geological mapping and prospecting along the control grid, supplemented by photogeology.
- 3) A magnetometer survey along the established grid.
- 4) Induced Polarization survey of selected anomalous areas obtained from the previous surveys.

5) Trenching and sampling of coincident anomalies obtained in the preliminary work programs.

Phase II

1) Drilling – This phase is contingent on the findings of the previous surveys.

APPENDIX A

ESTIMATED COST OF THE RECOMMENDED EXPLORATION PROGRAM

Phase I

	Time		2 months			
	Personnel		Geologist			
		<u> </u>	2 man field crew			
	Contract	-	Induced Polarization	field crew	V	
			for maximum of two	weeks.		
1)	Line Grid					
	20 line miles	@ 150.00		•		\$3000.00
2)	Geochemical Soil S	urvey				
	20 line miles	@ 75.00				1500.00
	Analysis for (Copper 1060	0@1.25			1325.00
3)	Geological Mapping	g and Prospe	cting	• `		
	1 month @ 1	500.00				1500.00
	Photogeology	/				500.00
4)	Magnetometer Surv	rey				
	20 line miles	@ 75.00				1500.00
5)	Induced Polarizatio	on Survey				
	(Selected Are	eas) 6 miles (@ 450.00			2700.00
6)	Trenching and Sam	pling				500.00
7)	Camp Costs					750.00
8)	Transportation					1000.00
9)	Drafting secretarial	printing				250.00
10)	Engineering and Su	pervision				1500.00
	Total					\$16025.00
	Contingencie	s 10%				1603.00
	Total (Phase	D			c/f	\$17628.00

Phase II

1) Drilling – This phase is contingent on the success

f the preceding surveys.		
2000' in 4 holes @ \$18.00	b/f	\$36000.00
Contingencies 10%		3600.00
Total (Phase II)		\$39600.00
Total cost (Phases I and II)		\$57228.00
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Respectfully submitted,

"J.R. POLONI"

John R. Poloni, B.Sc., P.Eng.

APPENDIX B

REFERENCES

- 1) Lorinczi G., September 1, 1967. Summary Report for Chapman, Wood and Griswold Ltd.: Magnum -Helicon Project - Suey Bay Prospect.
- 2) Lorinczi G., May 31, 1967; July 21, 1967. Weekly reports: Magnum THX Suey Bay.
- 3) Poloni J.R., August 6, 1971. Report on the Jamie Group of Mineral Claims for Green Eagle Mines Ltd.
- Cochrane D.R. February 3, 1972. Notes on the Geochemical and Geophysical Data, Suey Bay on behalf of Green Eagle Mines Ltd.
- (5) Fominoff P.J. and Poloni J.R. December 10, 1971. Report on an Induced Polarization Survey. Horsefly Lake Area, British Columbia on behalf of Green Eagle Mines Ltd.

APPENDIX C CERTIFICATE

I, John R. Poloni of 5502 - 8B Ave., in Delta, in the Province of British Columbia DO HEREBY CERTIFY that:

- 1) I am a Consulting Geologist.
- 2) I am a graduate of McGill University of Montreal, Quebec, where I obtained a B.Sc. degree in Geology in 1964.
- 3) I am a registered Professional Engineer in the Geological Section of the Association of Professional Engineers of the Province of British Columbia.
- 4) I have practiced my profession since 1964.
- 5) I am a Fellow of the Geological Association of Canada and a member of the Canadian Institute of Mining and Metallurgy.
- 6) I am a member of the Association of Geologists of Quebec.
- 7) I have located the P(1-20) claims in accordance with the regulations of the British Columbia Department of Mines and Petroleum Resources.
- I have no direct interest in any of the properties or Securities of Northwind Mines Ltd. nor do I expect to receive or acquire any. Dated this 8th day of March, 1972.

"J.R. POLONI" John R. Poloni, B.Sc., P.Eng.



