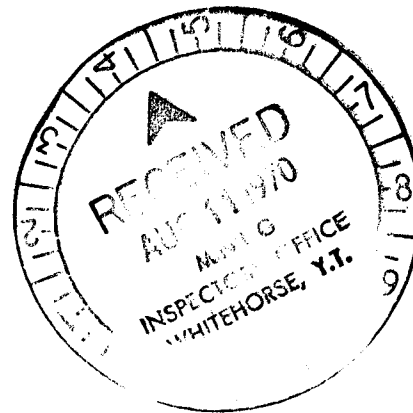


Stream Sediment Sampling Report
on
NICKEL HILL - PATHFINDER GROUP
Dawson Range, Y.T.



ALRAE ENGINEERING LTD.

This report has been examined by the Geological Evaluation Unit and is recommended to the Commission to be considered as representation work in the amount of

\$ 19,275.57

D.R. Craig

Resident Geologist and
Resident Mining Engineer

August 5, 1970

Considered as representation work under
Section 53 (4) Yukon Quartz Mining Act.

[Signature]

Commissioner of Yukon Territory

TO PROTECT OUR CLIENTS, THE PUBLIC AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS AND EXTRACTS FROM OUR REPORTS MUST RECEIVE OUR WRITTEN APPROVAL.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
LOCATION AND ACCESS.	1
SAMPLING	1
ANALYZING.	1
RESULTS.	2
CONCLUSIONS AND RECOMMENDATIONS.	2
COSTS.	3

MAPS

Scale

Dawson Range Project -
Stream sediment sampling for Cu and MoS₂ 1" = 1,000'

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INTRODUCTION

Stream sediment samples were taken on the Stu and Mist claims from May 14th to June 30th, 1970. The control for this sampling was the topographic map 70-4, taken from aerial photography by Lockwood Survey Corporation Limited. These samples were collected by employees of Alrae Engineering Ltd., and processed by Fraser Laboratories Ltd., of North Vancouver. The samples were analyzed for copper, molybdenum and zinc. Molybdenum readings were not significant so were not plotted on the enclosed maps.

LOCATION AND ACCESS

The Stu and Mist claims are located in the Dawson Range, Y.T. adjacent to Casino Silver Mines, latitude 62°40'N, longitude 138°37'W.

Access to the property is by fixed wing aircraft to the Casino airstrip and thence five miles by helicopter, or through the bush, to the Nickel Hill-Pathfinder claims. A winter road access to the property is also available from Burwash Flats on the Alaska Highway.

SAMPLING

The control for the stream sediment sampling was the topographic map of the area prepared from aerial photography by Lockwood Survey Corporation Limited. Samples were taken at 500 foot intervals along all water courses in the area.

ANALYZING

Samples were analyzed by Fraser Laboratories Ltd., of North Vancouver. The samples were dried then sieved through a 100 mesh screen. One-half gram was then digested in a mixture of nitric and perchloric acids, diluted to 25 ml. and tested with the atomic absorption spectrophotometer against pure standards.

RESULTS

<u>Copper</u>	<u>ppm</u>	<u>No. of Samples</u>	
	0 - 10	33	
	11 - 20	220	
	21 - 30	36	
	31 - 40	7	
	41 - 50	2	Anomalous @ 4%
	51 - 60	7	= 12.36 samples
	61 - 70	3	or
	71 - 80		ppm >40
	81 - 90		
	91 - 100		
	> 100	<u>1</u>	
		Total	309
<u>Zinc</u>	0 - 25	10	
	26 - 50	18	
	51 - 75	75	Anomalous @ 4%
	76 - 100	62	= 7.6 samples
	101 - 125	18	or
	126 - 150	2	ppm >126
	151 - 175	3	
	176 - 200	1	
	> 200	<u>1</u>	
		Total	190

CONCLUSIONS AND RECOMMENDATIONS

The major area for future investigation is along Rhude Creek in the southeast section of the claims. This is the only area showing a copper anomalous indicator, with the majority of anomalous readings along the creek. The zinc is erratic and no definite area of mineralization is indicated.

It is recommended that a soil sample grid be laid out and systematic sampling be instituted over the Rhude Creek area of the claims.

COSTS

Labour

J. Veitch	Supervision	1 month	\$ 1,200.00
G. Holmes	Sampling	1 month - 18 days	1,071.00
R. Graff	Sampling	1 month - 18 days	1,071.00
W. Olsson	Sampling	1 month - 18 days	1,200.00
D. Reinke	Sampling	23 days	905.15
R. Montgomery	Mapping	1 day	21.25
N. Presho	Mapping	1 day	21.25
M. Primrose	Mapping	1 day	21.25
A. Welters	Laboratory		100.00
R. Jury	Supervision		750.00
E. Robbins	Drafting		115.00
R. Nichols	Sampling	1½ days	67.50
R. Samuels	Laboratory		345.00
C. Nelson	Sampling	11 days	319.00
L. Altman	Sampling	11 days	319.00
A. Wall	Sampling	11 days	374.00
			<u>374.00</u>
			\$ 7,900.40

Expenses

Travel, camp supplies, rentals as per enclosed invoices		\$ <u>11,375.17</u>
	TOTAL	\$ <u>19,275.57</u>

Respectfully submitted:

G. Trowsdale

George Trowsdale, P. Eng.

