85-345-14304

FILMED

GEOCHEMICAL ASSESSMENT REPORT

on the

COKE 1-8 CLAIMS

located in

SIMILKAMEEN MINING DIVISION

92H/10E

49°44'N latitide & 120°32'W longitude

owned & operated by

Peter Peto 125 Bassett Street Penticton, B.C. V2A 5W1

written by:

P. Peto, Ph.D.

1 June 1985

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INTRODUCTION

The COKE 1 to 8, 2 post mineral claims, are situated within the Aspen Grove copper belt, north of Missezula Mountain, some 32 km north of Princeton, B.C. The claims were recorded on 25 June 1984 under numbers 2176 to 2183 inclusive. They are accessed via Highway 5 and a branch road to a microwave relay tower (figure 1). The property was formerly known as the Rum claims which was intermittantly explored for its porphyry copper potential in the last 60's and early seventies (seeassessment reports 3365, 6036, 8352 and 9407). The copper prospect was restaked because the writer believes the geology is favourable to the formation of subvolcanic copper-gold porphyry sustems such as those currently explored for in the Quesnel Trough. A total of 10 soils and 11 rock samples were therefore collected from previous diggings in order to test the geological environment for anomalous concentrations of gold.

According to the regional geology (Preto, 1979) the claim area is underlain by a north trending belt of Upper Triassic, subaqueous alkaline flows and volcaniclastics belonging to the Nicola group. These were intruded by subvolcanic, subalkaline, pyroxene microdiorite plugs emplaced along a major, north trending shear zone, which passes through the "Axe" porphyry copper deposit (figure 2). On the claims this fault separates the intrusive from well bedded volcaniclastics to the east. Phendler (1973) noted that the best copper grades were (0.27% across 200 feet) were associated with epidote alteration in core and was not observed in surface trenches. The intrusion is 2x0.5 km in size and has been previously tested by 7 diamond drill holes and 6 percussion holes.

TECHNICAL DATA

Soil samples were collected from the bottom of bulldozer trenches whereas rock samples were taken from rock cuts as shown in Figure 3. Samples were shipped to Acme Analytical Laboratories and analyzed for gold by geochemical methods. The results are listed in Appendix 1.

Rock outcrops are scarce and bedrock is often buried under 3 to 10 metres of transported glacial alluvium. However, a conspicuous rusty residual regolith 0.5 to 3 metres thick appears to directly overlay the microdiorite immediately below the glacial overburden. All soil samples were taken from the rusty regolith. Brief descriptions of the rock samples collected are given below.

R-1: 15 metre chip of highly fractured and altered microdiorite.
R-2: 5 metre chip of limonitic intrusive breccia.

R-3: 5 metre chip of limonitic, pyritic, pyroxene-microdiorite.

R-4: grabs from chloritic phyllite.

R-5: grabs from limonitic-carbonate-sericite schist.

R-6: 15 m chip of tourmaline(?) bearing intrusive breccia.

R-7: fractured and altered limonitic microdiorite beneath regolith.

R-8: pyrite-chalcopyrite-malachite bearing microdiorite.

R-9: grabs, rusty volcaniclastics.

R-10: sheared, highly pyritic, microdiorite.

R-11: 0.5 m chip, highly pyritic, microdiorite.

INTERPRETATION

Anomalous concentrations of gold were found to occur in soil samples #1, #3, #9, #10 and #11 and copper bearing microdiorite samples #1 and #7. Samples R-1, R-2. S-1, S-2 and S-3 were taken from a trench which gave 0.10% Cu across 450 feet, samples R-8 & S-10 from a trench that ran 0.20% Cu across 170 feet and samples R-10 & R-11 from a trench that ram 0.27% Cu over 180 feet. Preliminary sampling indicates that significent concentrations of gold may accompany low grade porphyry copper mineralization in a subvolcanic microdiorite intrusive similar to those found at Copper Mountain and Afton. Economic concentrations of gold mineralization might occur within narrow silicified zones cutting the intrusive as was observed in unassayed core or in an epizonal, propylitic alteration envelope overlying the downfaulted intrusive to the east of the Missezula Mountain fault. A programme consisting of a VLF-EM16 surveying, back-hoe excavation of old cat trenches, followed by detailed rock-chip sampling and some limited diamond drilling, based on previous assessment data, should, be undertaken to test the Cu-Au potential of this intrusive.

COST ESTIMATE

P. 1	Peto:	1	day	field	exam	ina	ation	@	\$300/0	lay.	• • • .	• • • •	• • • •	• • • \$	300	.00
		1	day	report	t pre	par	ation	1 @	\$300,	/day	• • • •	• • •	• • • •	••\$	300	.00
4x4	truck	υ	use:	Pentic	cton	to	clain	ıs	338km	ret	urn					

@ 20¢/km	67.54
Gasoline & oil	25.00
Meals	25.00
Expendibles, Photocopying, freight	20.00
Analytical costs: 11 soils @ \$4.60/sample	50.60
11 rocks @ \$6.75/sample	74.25

TOTAL

REFERENCES CITED

Phendler, R. (1973) Drilling report on Rum claims, 8pp, unpublished report for Kalco Valley Mines Ltd.

Preto, V. (1979) Geology of the Nicola Group between Merritt and Princeton; B.C. Bull #69, 90pp.

Respectfully sibmitted,

Peter Peto, Ph.D., F.G.A.C.

\$862.39



CERTIFICATE OF QUALIFICATION

I, Peter S. Peto, of 125 Bassett Street, town of Penticton, Province of British Columbia, DO HEREBY CERTIFY:

That I am a consulting geologist with a business address at 125 Bassett Street, Penticton, British Columbia, V2A 5W1.

That I am a graduate of the University of Alberta where I obtained my B. Sc. degree in geology in 1968 and my M.Sc. in geology in 1970 and that I am a graduate of the University of Manchester where I obtained my doctoral degree in geology in 1975.

That I am a fellow of the Geological Association of Canada.

That I have practiced my profession actively since 1975 in the province of British Columbia.

That I have no interest in the properties nor in the securities of , nor do expect to receive any.

That the information contained in this report is a result of my field investigation and from other sources made available to me and there is no material change in the status of this report as of this date.

material facts.

That I hereby consent to the publication of my report entitled

Dated this <u>3</u> day of June 1985 at Penticton, B.C. Peter Peto

, in a prospectus or statement of

Peter Peto, Ph.D., F.G.A.C.

ACME ANALYTICAL LABO 852 E. HASTINGS, VAN PH: (604) 253-3158 COM	RATORIES LTD. COUVER B.C. PUTER LINE: 251-1011	DATE RECEIVED MA	LED May 29/85
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COLONY FACIFIC	PROJECT COKE 1-8	FILE# 85-0690	PAGE# 1
	SAMPLE	Au* ppb	
	S-1 S-2 S-3 S-4 S-6	190 42 71 25 47	· · ·
	S-7 S-8 S-9 S-10 S-11	22 59 115 95 72	
	S-12 R-1 R-2 R-3 R-4	26 71 9 11 24	
	R-5 R-6 R-7 R-8 R-9	21 2 32 350 3	
	R-10 R-11	20 27	

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