



GEOLOGICAL REPORT

ON THE

SAM CLAIMS 1 - 29

N.T.S. 115-I-12

LAT. 62°43'; LONG. 137°39'

BY

W.N. PEARSON, B.SC.

WORK DONE - JULY 1-15, 1975



This report has been examined by the Geological Evaluation Unit and is recommended to the Commissioner to be considered as representation work for the amount of \$ 1825

W. Sinclair

~~Assistant Commissioner~~
~~Resident Mining Engineer~~

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

[Signature]

D.R. BAXTER
Supervising Mining Recorder

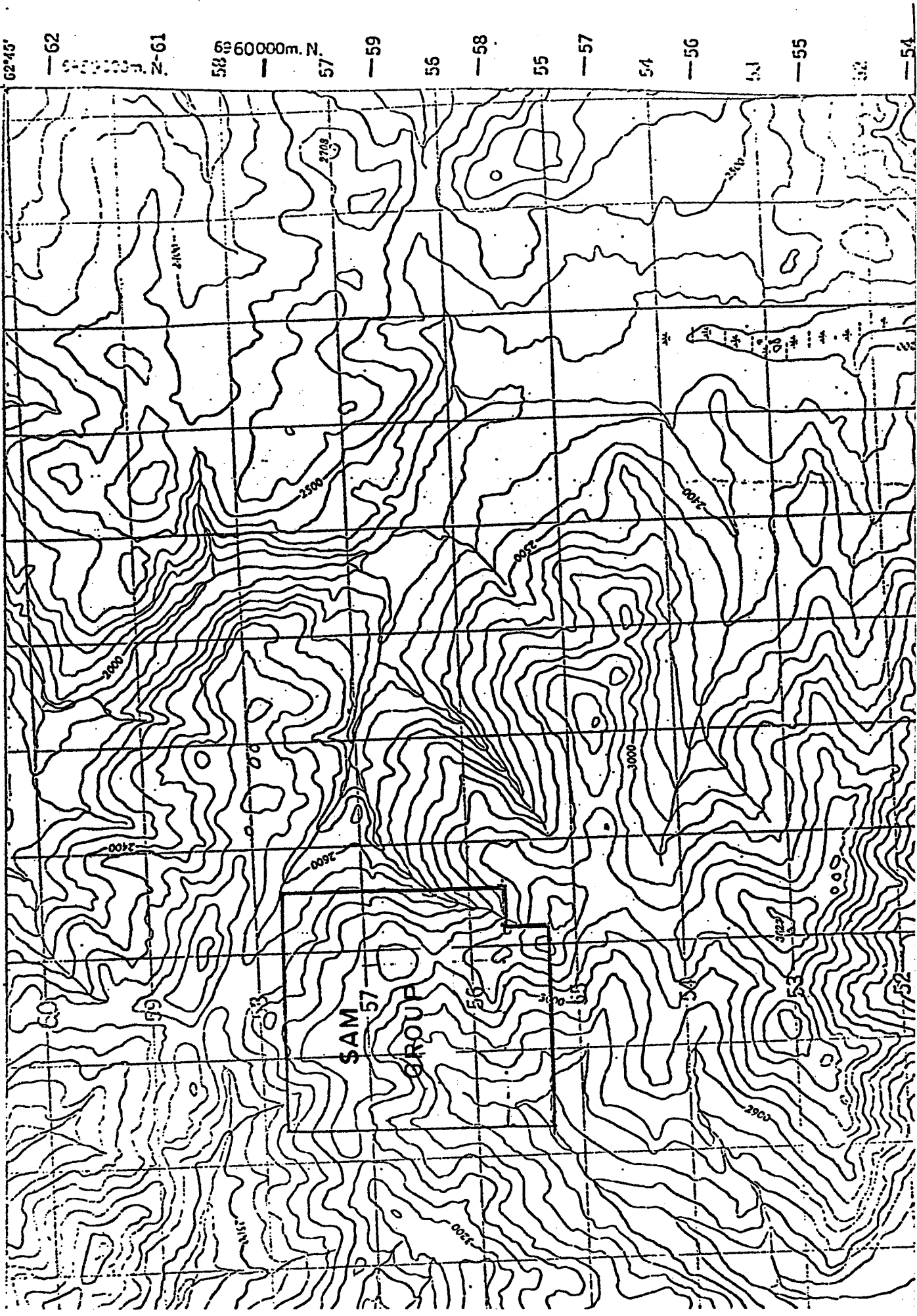
Commissioner of Yukon Territory

690033

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115-1-12
62°45'
37°30'
60000m. N.
2-61
58
60000m. N.
57
59
56
58
55
57
54
56
51
55
52
54



LOCATION MAP OF SAM GROUP

115-1-12

Scale: 1:50,000

SUMMARY

The 29 SAM claims were staked in August, 1974, to cover an area of weak copper geochemical anomalies discovered during 1974 C.S.E. reconnaissance.

In July, 1975, a trench was put across the main copper geochemical anomaly. Permafrost inhibited penetration to rock, however, in two places where anomalous copper values occur rock was reached, no mineralization was found.

The main geochemical anomaly is transported and possibly related to a perched water table.

I INTRODUCTION

The 29 SAM claims are located 15 miles due northwest of the DEF-MINTO deposit. Access is by helicopter 28 miles from Minto, about 150 miles north of Whitehorse on the Klondike Highway. The claims were staked in August 1974 to cover an area of weak copper geochemical anomalies discovered during 1974 C.S.E. reconnaissance.

II PREVIOUS WORK

In 1974 a partial grid controlled by chain, compass and claim line tie lines was cut for following soil geochemistry, reconnaissance induced polarization and magnetic surveys. (See R.V. Beavon Preliminary Report on SAM claims for discussion of results). Follow-up geochemistry outlined a tadpole shaped copper anomaly 1,600 feet long and up to 1,000 feet wide.

Induced polarization was slightly anomalous suggesting either weakly disseminated sulphides or narrow sections of high grade mineralization plunging eastward (Beavon 1974a). Geophysical anomalies are not coincident with geochemical ones. Magnetic relief was very flat.

Beavon (1974b) concludes "The presence of flanking geochemical and geophysical anomalies warrants a trenching program in 1975".

III GEOLOGY

The SAM claims, which occur in the non-glaciated area of the Yukon, are underlain by an unnamed schist and gneiss assemblage of Templeman-Kluit (1974) belonging to the Yukon Metamorphic Complex. The southern part of the claims is underlain by fine to medium-grained amphibolite which in place has feldspathic and biotite schist bands. The northern portion is underlain by leucocratic biotite quartz feldspar gneiss with minor amphibolite and feldspathic gneiss. These rock types may be metavolcanic or metasedimentary in origin.

Foliation strikes approximately east to west and dips steeply mainly northward. In the southeastern corner of the claims attitudes suggest the presence of an almost isoclinal synform with an axial plane striking approximately east to west and dipping almost vertically. To the west a hornblende mineral lineation in fine-grained amphibolite suggests the fold axis dips steeply eastward.

Outcrop is very scarce on the property. No surface mineralization has been noted.

IV TRENCH GEOLOGY

One trench 900 feet in length from station 23N to station 32N on line 44E, was put across the main copper geochemical anomaly. Permafrost made penetration to rock difficult, however in two places, 24 + 97N to 25 + 10N and 27 + 25N to 27 + 60N, where high copper geochemical values occur, 270 ppm at 25N and 155 ppm at 27N, rock was reached. Rock type was leucocratic biotite quartz feldspar gneiss. No sulphide minerals or copper oxides were noted. In places iron oxide was evident. Rock samples 18801-3 confirmed these observations. (See Certificate of Analysis).

V INTERPRETATION OF GEOLOGY ANOMALY

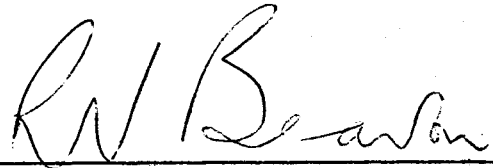
The presence of barren rock where anomalous geochemical values were obtained indicates the anomaly is transported and possibly related to a perched water table. Iron oxides present may contain enough copper to generate the anomalies.

VI CONCLUSIONS

1. Trenching, although inhibited by permafrost, revealed barren rock at two sites where anomalous copper geochemical values occur.
2. The geochemical anomaly is transported in origin and possibly related to a perched water table.

VII RECOMMENDATIONS

1. Availability of the caterpillar tractor later in the summer warrants more work after permafrost has thawed to properly complete the trench.
2. If no mineralization is evident following re-trenching then it is recommended that the SAM claims be allowed to lapse.



R.V. Beavon



W.N. Pearson

September 12, 1975

VIII BIBLIOGRAPHY

Beavon, R.V., 1974a: Preliminary Report on 1974 Exploration
of SAM Claims. N.T.S. 115-I-12

----- 1974b: Summary Report on Yukon Projects
P-113, P-114, P-115, 1974.

Templeman-Kluit, D.J., 1974: Carmacks Map Sheet; G.S.C.
open file map 200.

APPENDIX I

CLAIM STATUS

The 29 SAM Claims are recorded as follows:

<u>CLAIM NAME</u>	<u>GRANT NO.</u>	<u>LOCATION DATE</u>	<u>RECORDING DATE</u>	<u>EXPIRY DATE</u>
SAM 1-4	Y90883-Y90886	Aug. 29/74	Sept. 19, 1974	Sept. 19, 1974
SAM 5-8	Y90887-Y90890	Aug. 30/74	Sept. 19, 1974	Sept. 19, 1974
SAM 9-16	Y90891-Y90898	Aug. 31/74	Sept. 19, 1974	Sept. 19, 1974
SAM 17-26	Y90899-Y90908	Sept. 9/74	Sept. 19, 1974	Sept. 19, 1974
SAM 27-29	Y90909-Y90911	Sept. 10/74	Sept. 19, 1974	Sept. 19, 1974

APPENDIX II

PERSONNEL LIST

GEOLOGIST & PARTY CHIEF

William N. Pearson
856 West 22nd Avenue
Vancouver, B.C.

GEOLOGIST'S ASSISTANT

John R. Morgan
3181 Thompson Place
West Vancouver, B.C.

CONTRACTING

J.E. Brown Contracting Limited
Whitehorse, N.W.T.

HELICOPTER SUPPORT

Trans North Turbo Air B11 206 based in Carmacks.
Northern Mountain Bell - 47-63-B1 based in Lower
Lake Laberge.

Firefighting commitments restricted availability of
helicopters which accounts for variety used.

APPENDIX III

CERTIFICATE

I, Roy V. Beavon, of Richmond, in the Province of British Columbia do hereby certify that:

1. I am a geologist residing at 872 Millmore Road, Richmond, B.C., V7C 1S9.
2. I am a graduate of the University of Wales (Aberystwyth) with degrees of B.Sc. (1957) and Ph.D. (1960) in geology.
3. I am a member of the Canadian Institute of Mining and Metallurgy, a member of the Geological Society of America, a fellow of the Geological Association of Canada, and of the Geological Society of London.
4. I have been practicing my profession for fifteen years.

A handwritten signature in cursive script, appearing to read 'R.V. Beavon', written over a horizontal line.

R.V. Beavon

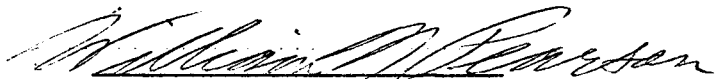
Dated at Vancouver, British Columbia
this 12th day of September 1975.

APPENDIX IV

CERTIFICATE

I, William N. Pearson, of Vancouver, in the Province of British Columbia do hereby certify that:

1. I am a geologist residing at 856 West 22nd Avenue, Vancouver, B.C.
2. I am a graduate of the University of British Columbia, with a degree of B.Sc.(1974) in geology.
3. I am a member of the Canadian Institute of Mining and Metallurgy.
4. I have been practicing my profession for four years.



W.N. Pearson.

Dated at Vancouver, British Columbia
this 12th day of September 1975.



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764 BELFAST ROAD, OTTAWA, ONTARIO, K1G 0Z5 PHONE: 237-3110 TELEX: 053-3548

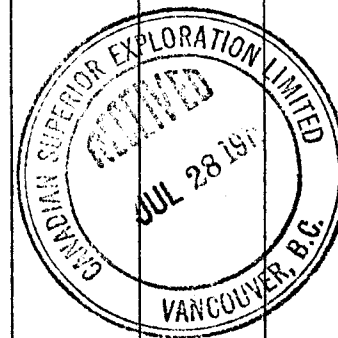
Certificate of Analysis

TO Canadian Superior
Mr. R. Beavon

REPORT NO. A-45-26
DATE July 24, 1975

I hereby certify that the following are the results of analyses made by us upon the herein described **rock** samples

MARKED	oz/ton	oz/ton							
	Au	Ag							
18801	Trace	Trace							
18802	Trace	Trace							
18803	Trace	0.02							



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NOTE:

Rejects retained two weeks
Pulps retained three months
unless otherwise arranged.

[Signature]



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Certificate of Analysis

TO Mr. R. Beavon
Canadian Superior

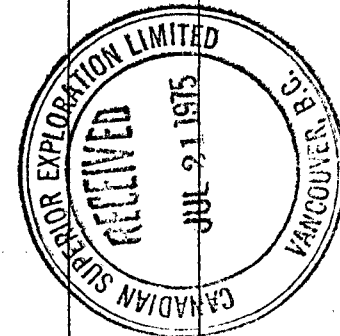
= SAM

REPORT NO. ... A-45-26

DATE July 16, 1975

I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

MARKED	%									
	Cu									
18801	< 0.01									
18802	< 0.01									
18803	< 0.01									
Au Ag results to follow										



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NOTE:
Rejects retained two weeks
Pulps retained three months
unless otherwise arranged

[Handwritten Signature]

