GEOCHEMICAL REPORT
FOX AND STAR CLAIM GROUP
WHITEHORSE MINING DISTRICT
YUKON TERRITORY

PREPARED FOR

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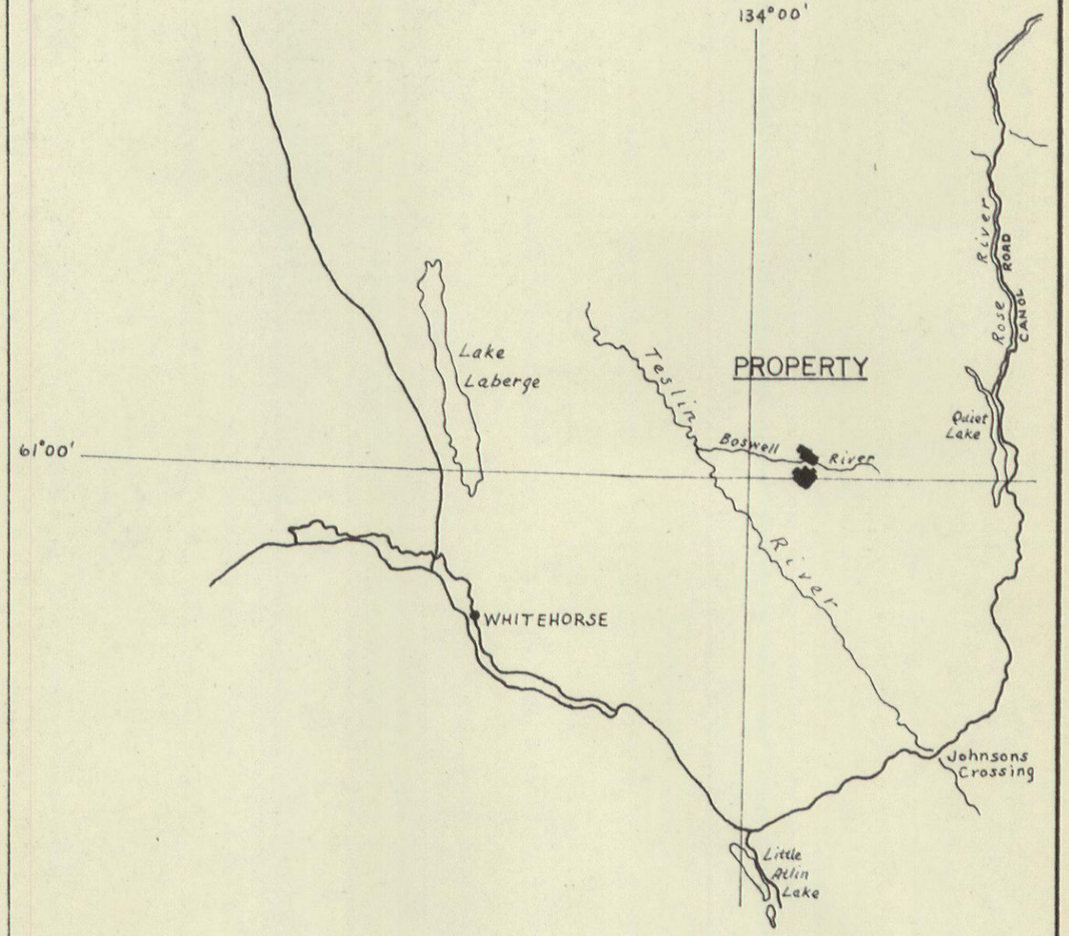
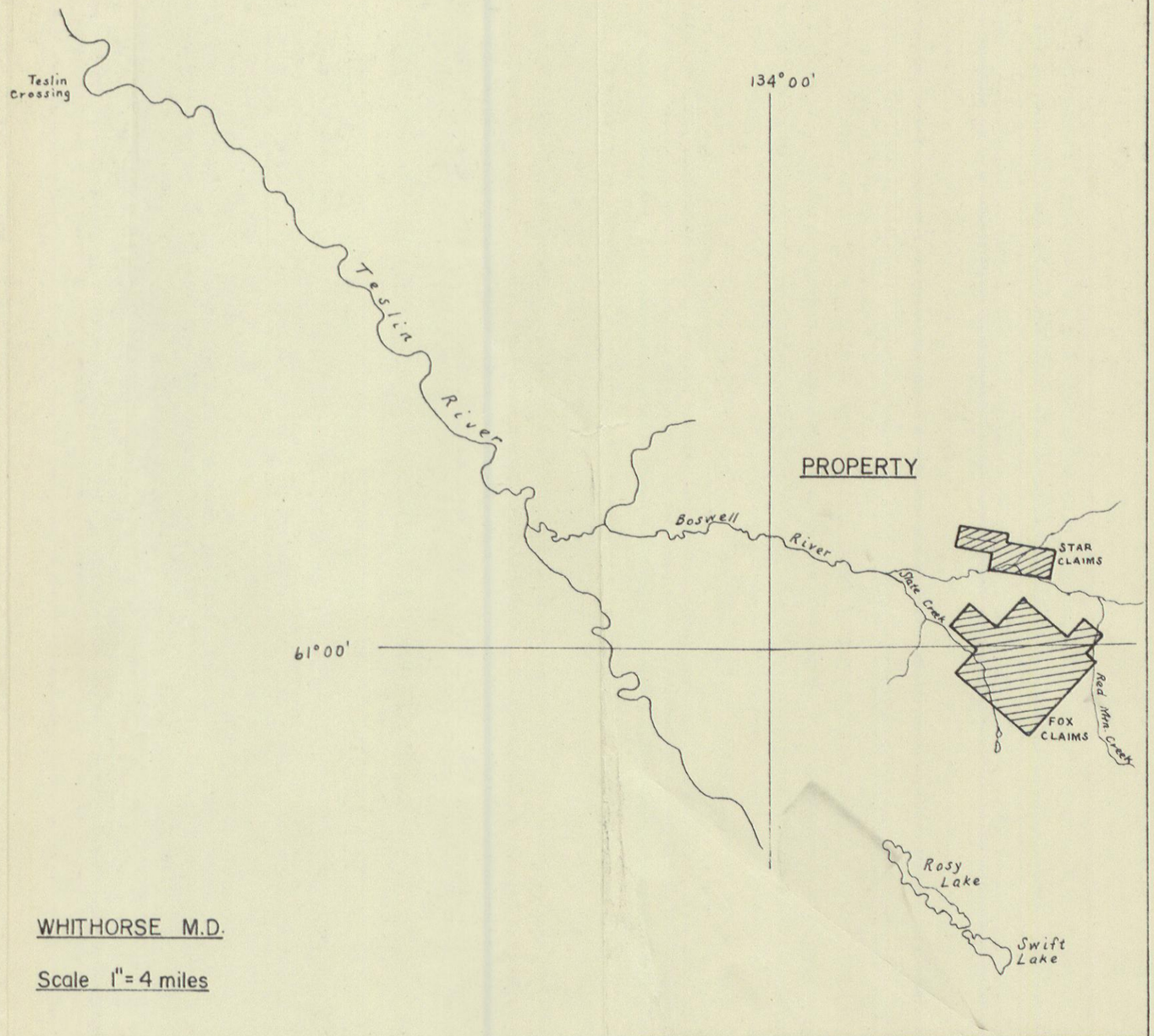
GENERAL

A geochemical soil sampling survey was undertaken on the Fox Claim area, Yukon Territory in order to locate any source areas of copper, lead and silver mineral concentrations. For location of the claim group see drawing # 5-205-1. In addition a few stream sediment samples were collected in the general vicinity of the property.

The area is of high topographic relief and hence the soil samples were collected on contour traverses rather than on a grid pattern. Analyses were undertaken on the soil samples for lead and copper using a perchloric acid extraction followed by atomic absorption determination and for cyanide extractable silver. The stream sediment samples were analyzed for cyanide extractable silver and cold acid extractable copper.



Scale 1" = 20 miles



WHITHORSE M.D.

Scale 1" = 4 miles

N

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FOX & STAR CL. GRP. - WHITEHORSE M.D. - Y.T.

LOCALITY PLAN

AUG. 1968 | DWG. 5-205-1

DISCUSSION OF RESULTS

A. Soil Sample Survey

The following concentration ranges for lead, copper and silver were selected after careful inspection and analysis of the analytical data.

Range	Pb ppm	Cu ppm	Ag ppm
Background	0-35	0-36	0-0.1
Threshold	36-55	37-54	0.2-0.3
Anomalous	56-175	+54	+0.3
	+175		

The distribution patterns of these three metals are generally similar. The only major discrepency noted is in the northwest section of the area sampled where anomalous lead values are more widespread than those for copper and silver.

In general the data outline a relatively continuous and extensive anomalous area in the central-southeast part of the property. As mentioned above anomalous lead values extend northwest across the ridge and then spread out around the flank of the hill. The lead anomaly is still open to the northwest.

The area of highest lead values has been outlined using the +175 ppm lead anomalous range. Within the area so delimited a peak value of 13,900 is recorded. In such a steep topographic environment there is no doubt that at least some mechanical dispersion of minerals will occur. Hence, the anomalous area defined by these three metals may be dispersed downslope from the bedrock source. The area enclosed by the +175 ppm lead value, however, suggests close proximity to the bedrock source as part of this anomalous zone coincides with a topographic high.

The anomalous metal values occurring along the valley area in the southwest section of the property may simply reflect accumulation of metal which has

migrated from a source on a higher elevation. It should be noted, however, that anomalous copper values with associated but somewhat patchy anomalous lead values were detected to the southwest of the drainage, indicating the occurrence of some mineralization in the southwest part of the property.

B. Stream Sediment Survey

The addition of the stream sediment sample data does not aid the interpretation of the soil data. As can be seen the anomalous silver and to less extent copper values are relatively widespread compared to the anomalous soil data. Indeed the silver values are anomalously high over almost the entire area of drainage sampled.

A stream sediment survey is most applicable when undertaken over a relatively large area in order to assess the broader mineral potential of the area and outline relatively large anomalous zones for more detailed investigation. The area thus covered by the stream sediment survey is too confined and in general all lies within the mineralized area.

Three soil traverse lines were sampled across a known mineral occurrence in the Star Claim area.

The data are too few to make any conclusive interpretation except that the anomalous values on the centre traverse line coincide with the known mineral occurrence. There is also a suggestion of a relatively continuous but patchy anomalous trend across the three lines following a northeast-southwest direction.

CONCLUSIONS AND RECOMMENDATIONS

The lead, copper and silver soil results have outlined a relatively large and strong anomalous area in the central-southwest section of the property. More patchy anomalous values were also detected along the drainage in the southwest part of the property.

The highest lead values are located on a topographic high suggesting little downslope migration from the bedrock source.

It is doubtful if geochemical surface methods can provide additional relevant data to locate the bedrock source of the mineralization more accurately. Geophysical methods will also be extremely limited in this type of terrain and mineralization.

It is recommended, therefore, that stripping of the overburden should commence in the area of highest lead values in order to examine the interpreted source rocks at this locale. The geological interpretation of this initial examination should then direct further investigations.

BARRINGER RESEARCH LIMITED

John L. Walker

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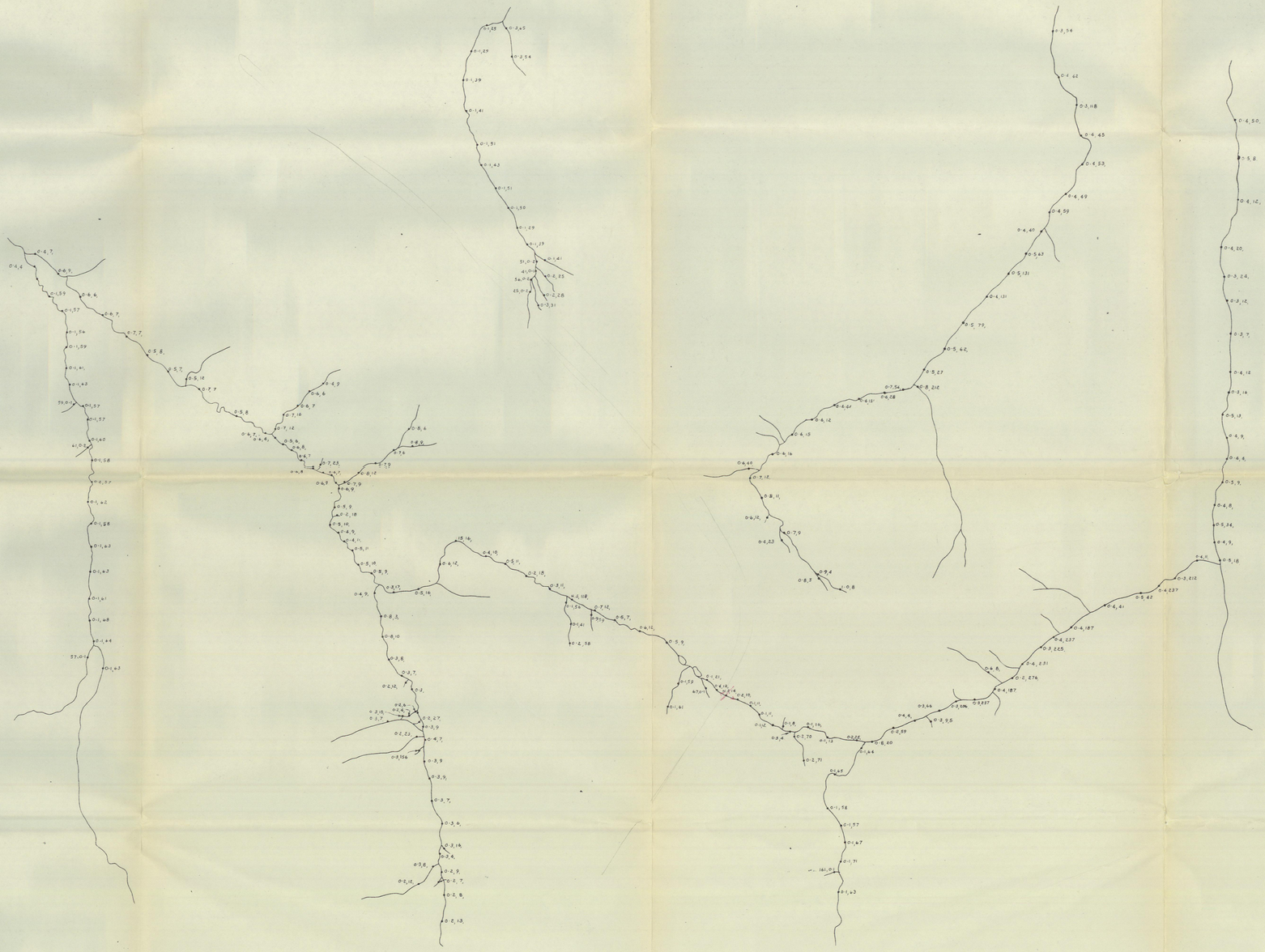
Consulting Geochemist

JLW:np



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LEGEND

Ag. ppm.	
Background	0 - 0·1
Threshold	0·2 - 0·3
Anomalous	+ 0·3

Cu. ppm.	
Background	0 - 15
Threshold	18 - 21
Anomalous 3rd.	22 - 33
Anomalous 2nd.	34 - 57
Anomalous 1st.	+ 57

Sample point

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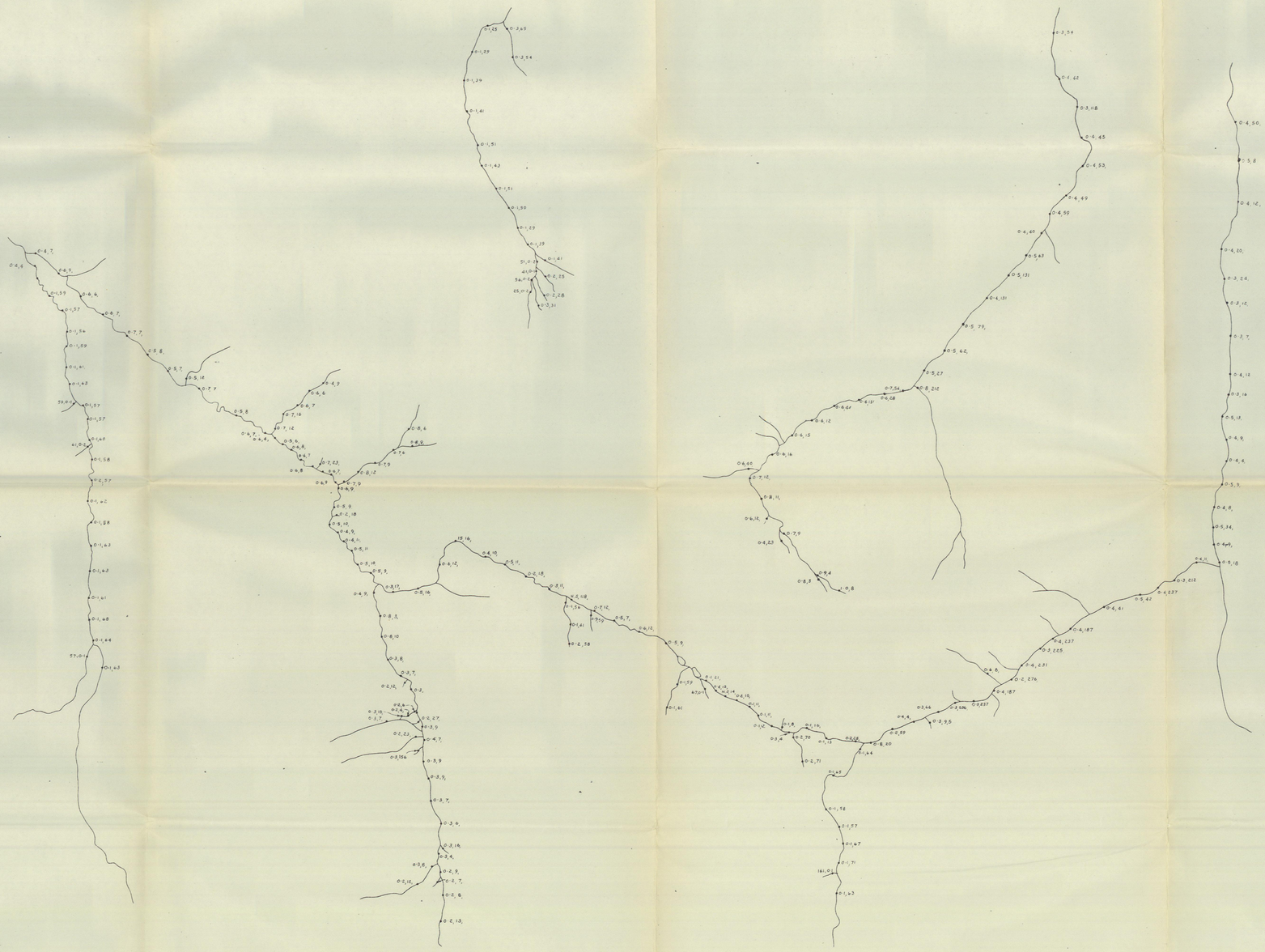
GEOCHEMICAL STREAM SEDIMENT SURVEY
SILVER

AUG. 1968 | Scale 1" = 1000' | DWG. 5-205-2



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LEGEND

Sample point 0-3,14

Ag. ppm.	
Background	0 - 0·1
Threshold	0·2 - 0·3
Anomalous	+ 0·3

Cu. ppm.	
Background	0 - 15
Threshold	16 - 21
Anomalous 3rd.	22 - 33
Anomalous 2nd.	34 - 57
Anomalous 1st.	+ 57

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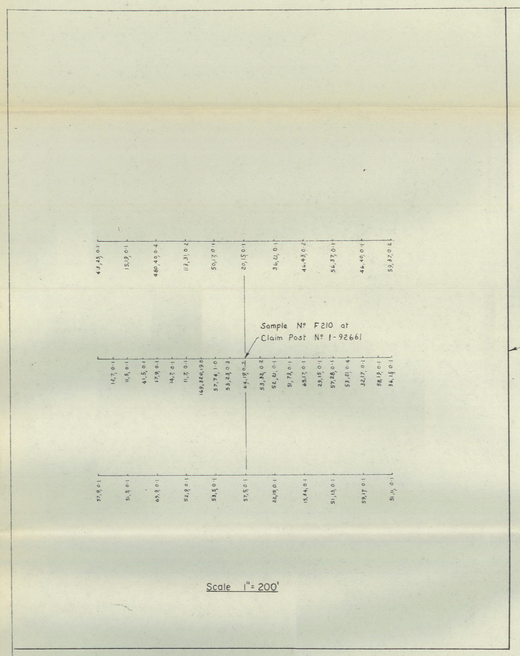
GEOCHEMICAL STREAM SEDIMENT SURVEY
COPPER

AUG. 1968 | Scale 1" = 1000' | DWG. 5-205-3



N

LEGEND

Pb. ppm.		Cu. ppm.		Ag. ppm	
Background	0 - 35	Background	0 - 36	Background	0 - 0·1
Threshold	36 - 55	Threshold	37 - 54	Threshold	0·2 - 0·3
Anomalous 3rd.	56 - 95	Anomalous	+ 54	Anomalous	+ 0·3
Anomalous 2nd.	96 - 175				
Anomalous 1st.	+ 175				

Sample point • Pb, Cu, Ag

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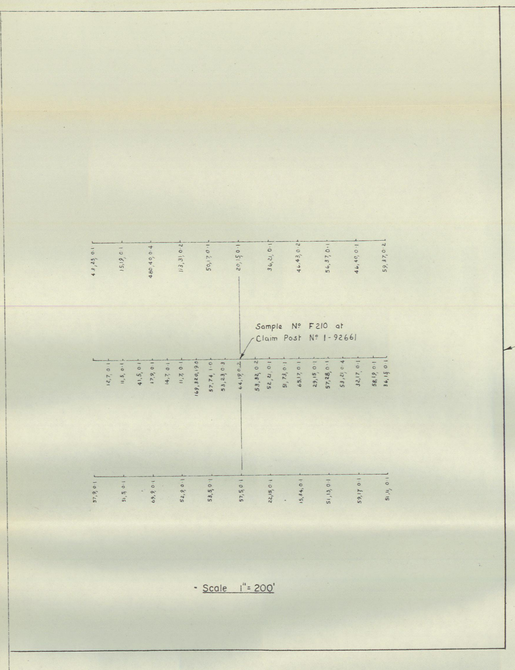
GEOCHEMICAL SOIL SURVEY
LEAD

AUG. 1968	Scale 1" = 1000'	DWG. 5 - 205 - 4



Scale 1"= 200'

LEGEND

Sample point • Pb, Cu, Ag

Pb. ppm.	
Background	0 - 35
Threshold	36 - 55
Anomalous 3rd.	56 - 95
Anomalous 2nd.	96 - 175
Anomalous 1st.	+ 175

Cu. ppm.	
Background	0 - 36
Threshold	37 - 54
Anomalous	+ 54

Ag. ppm	
Background	0 - 0·1
Threshold	0·2 - 0·3
Anomalous	+ 0·3

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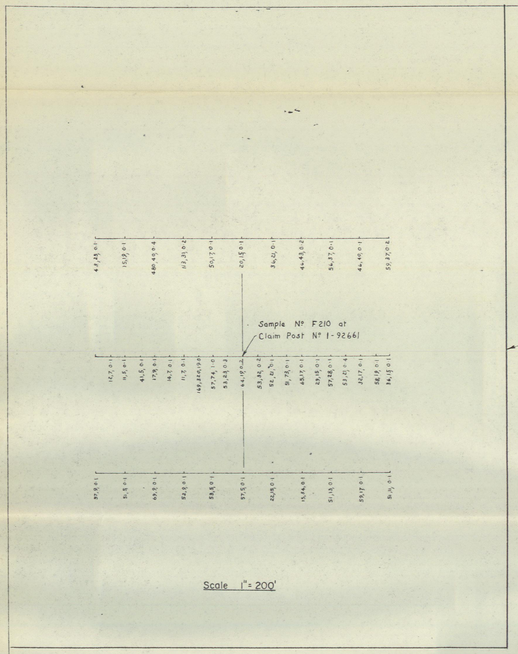
GEOCHEMICAL SOIL SURVEY
COPPER

AUG. 1968 | Scale 1"= 1000' | DWG. 5-205-5



N

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LEGEND

Pb. ppm.	
Background	0 - 35
Threshold	36 - 55
Anomalous 3rd.	56 - 95
Anomalous 2nd.	96 - 175
Anomalous 1st.	+ 175

Cu. ppm.	
Background	0 - 36
Threshold	37 - 54
Anomalous	+ 54

Ag. ppm	
Background	0 - 0·1
Threshold	0·2 - 0·3
Anomalous	+ 0·3

Sample point • Pb, Cu, Ag

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GEOCHEMICAL SOIL SURVEY
SILVER

AUG. 1968 | Scale 1"= 1000' | DWG. 5-205-6