

GEOCHEMICAL REPORT

TELKWA CANYON "A" GROUP CLAIMS

Upper Telkwa River - Omineca M.D., B.C.

CLAIMS: Telkwa Canyon "A" Claims consisting of Mineral Claim Numbers:

- A - 1 to 18 inclusive,
- A - 21 to 38 inclusive,
- A - 41 to 44 inclusive,
- A - 47 to 108 inclusive, and
- A-1 and A-2 Fractions.

LOCATION: Headwaters of the Telkwa River  
Latitude 54°30' Longitude 127°04'  
Omineca M.D., British Columbia

AUTHOR: L. M. Appelgate, B.A.Sc.,

ENDORSED BY: John L. De Leen, B.A.Sc., M.A.Sc.,  
E.M., P. Eng. No. 3675.

OWNED BY: Phelps Dodge Corporation  
of Canada, Limited

DATES OF WORK: July 26, to August 18, 1967

934/5E  
934 - 511

8811

1188

TELKWA CANYON 'A' GROUP CLAIMS

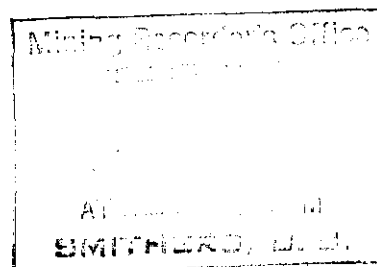
GEOCHEMICAL REPORT

AUTHOR: L. M. Appelgate, B.A.Sc.

ENDORSED BY: John L. De Leen, B.A.Sc., M.A.Sc.,  
E.M. P. Eng. No. 3675

Vancouver, B.C.

December 21st, 1967.



SUMMARY:

A geologist worked with four assistants from July 26, to August 18, 1967, collecting stream silt samples from all streams in and around the Telkwa Canyon 'A' group claims.

The following is a report of the silt sampling and the results obtained. This report and 104 feet of pack drilling comprises the work to be applied as assessment on the Telkwa Canyon 'A' group claims.

T A B L E O F C O N T E N T S

	<u>Page No.</u>
Summary	I
Introduction	1
Claims	1
Geology	2
Geochemistry	2
Method	2
Interpretation	3

MAPS IN FOLDER

Silt sample locations and values. #/

Location: Omineca Mining Division

Latitude - 54°30' - Longitude - 127°4'

The centre of the claim group is situated about 28 miles southwest of Telkwa, B.C.

From the village of Telkwa, access is (a) by road, 20 miles, up the Telkwa River valley, then (b) by helicopter, 16 miles, to the headwaters of the river.

Claims:

The Telkwa Canyon "A" claims were staked in 1964, 1965, and 1966. These claims are grouped as follows:

Red Group

Claim No.s. 22, 24, 26, 28, 30 to 38 inclusive, 42, 44, and 77 to 96 inclusive.

Blue Group

Claim No's. 1 to 7 inclusive, 9, 21, 23, 25, 27, 29, 41, 43, 48, 50, 52, 54, 56 to 70 inclusive, 97, 98, and A-1 Fraction.

Yellow Group

Claim No's. 8, 10 to 18 inclusive, 47, 49, 51, 53, 55, 71 to 76 inclusive, 99 to 108 inclusive and A-2 Fraction.

All claims are owned by Phelps Dodge Corporation of Canada, Limited.

Geology:

The geology of the claim group consists of Hazelton volcanic-tuff-breccias and minor andesites which have been intruded by the Howson Batholith. Copper mineralization has been found in the intrusive rocks and in overlying volcanic units in fractures and disseminated.

Geochemistry:

A stream silt sampling program was conducted over the entire claim group and the peripheral area. A total of 345 samples were taken, of these 110 samples are within the claim group boundary. Since the samples collected outside the claim group are not applicable to assessment work, only the sample values within the claim group boundary will be discussed.

Method:

Silt samples of organic-free material were taken from stream beds at intervals of approximately one quarter mile. The samples were placed in paper sample bags and shipped to the Company Laboratory at Smithers, B.C., for assaying.

At the Laboratory, the stream sediment samples were carefully dried overnight at relatively low temperatures and subsequently sieved to 80 mesh, collecting approximately 2 to 5 grams for analyses.

Partial extractions for copper were carried out using a hot 0.5 N hydrochloric acid digestion, followed by Atomic Absorption determinations with a Perkin Elmer 303 model. Analytical accuracy was controlled by standards and periodic re-checks.

Interpretation:

All of the copper results, including those of samples taken outside the property boundaries were then tabled to show the frequency distribution and to aid in determining the local background. The following is a general statistical breakdown related to the background range, known mineralization and geology:

0	to	40 ppm	-	background
41	to	60 ppm	-	threshold
61	to	100 ppm	-	third order anomaly
101	to	180 ppm	-	second order anomaly
181	and	above	-	first order anomaly

The first order anomalies are considered significant, particularly those supported by good downstream "back up" values and anomalous conditions showing up on adjacent drainage.

Two areas showing first order copper anomalies are outlined. The largest area covers the center of the claim group and extends to the southern corner. Copper mineralization was known to occur in this area prior to

this program, however, definite limits to the metallization are now established and the values indicate that there is little likelihood of any important, unknown metal occurrences.

The second anomalous area is located in the northeastern portion of the claim group, centering on claim No.'s A-55 and A-56, where only a small area of copper mineralization was previously known. This anomaly justified a small follow-up program which indicated several localized, high grade areas of mineralization in veins and disseminated in volcanic-tuff-breccias.

Dr. J. Walker of Barringer Research Ltd., the Company's consultant, reviewed the above results and conclusions and remains in accord with the writer.

Report by:

Larry M. Appelgate

L. M. Appelgate, B.A.Sc.

Endorsed by:

John L. De Leen

John L. De Leen, B.A.Sc.,  
M.A.Sc., E.M.,  
P. Eng. No. 3675.

Vancouver, B.C.

December 21st, 1967.



DOMINION OF CANADA:  
PROVINCE OF BRITISH COLUMBIA:  
To Wit:

In the Matter of

I, Lawrence McClelland Appelgate  
of Vancouver

in the Province of British Columbia, do solemnly declare that

Expenditures - Telkwa Canyon "A" Group Claims - 1967

Project Geologist	- L.M. Appelgate	- July 26 to Aug. 18, 1967	\$ 569.00
Assistant	- J.W. Lentsch	- July 26 to Aug. 18, 1967	504.00
Assistant	- D.J. Robertson	- July 26 to Aug. 18, 1967	504.00
Assistant	- Wayne Morris	- July 26 to Aug. 18, 1967	504.00
Assistant	- B. Herring	- July 26 to Aug. 18, 1967	<u>504.00</u>
		Total Wages:-	\$2,585.00
Camps and Cookery			450.00
Transportation			6,619.00
Assays			342.00
Diamond Drilling			<u>1,404.00</u>
		Total:	<u>\$11,400.00</u>

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the *City*  
of *Vancouver*, in the  
Province of British Columbia, this *9*  
day of *February*, 1968, A.D.

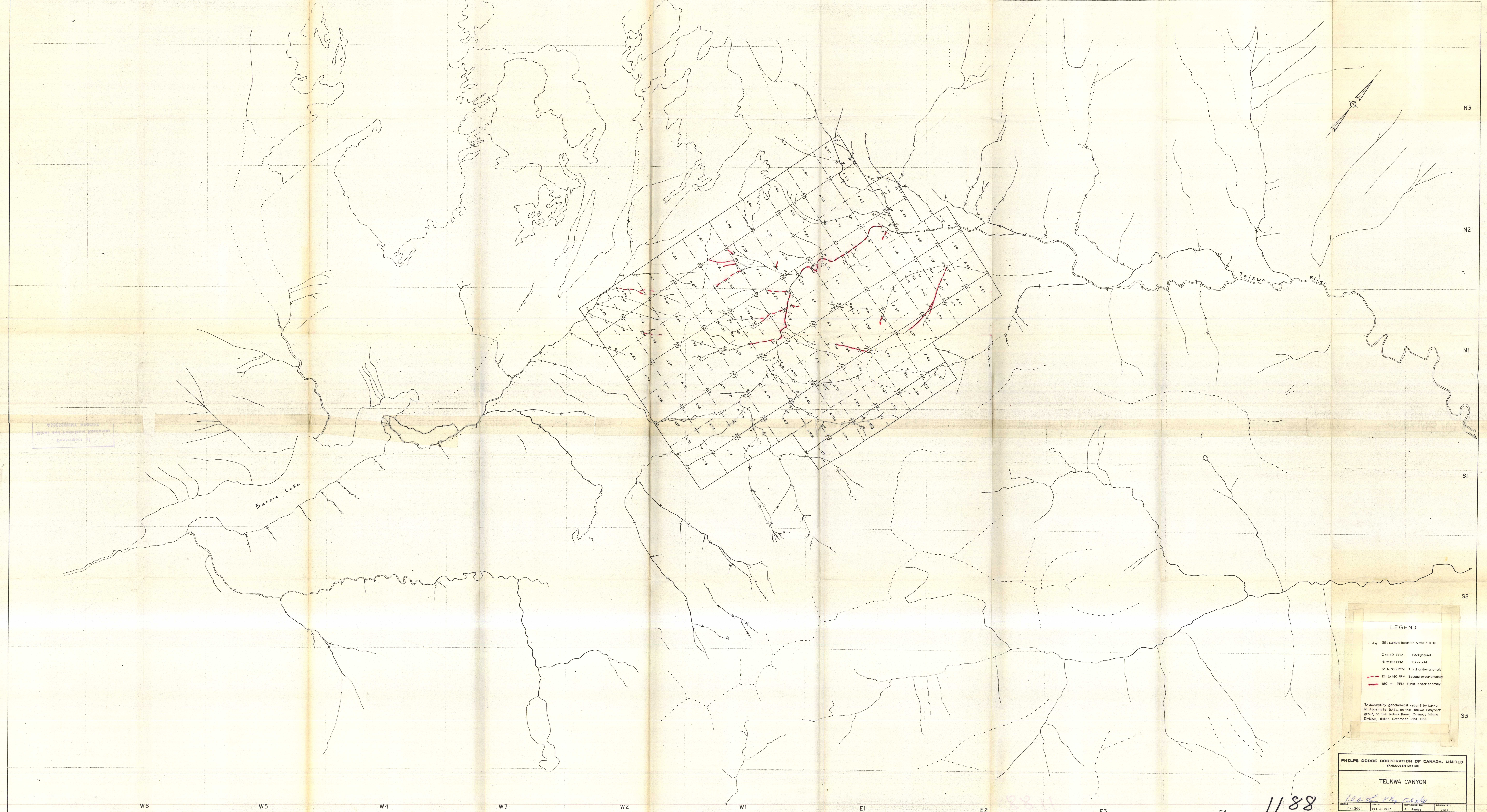
*Lawrence M. Appelgate*

*A. Jeanette*  
A Commissioner for taking Affidavits within British Columbia or  
A Notary Public in and for the Province of British Columbia.

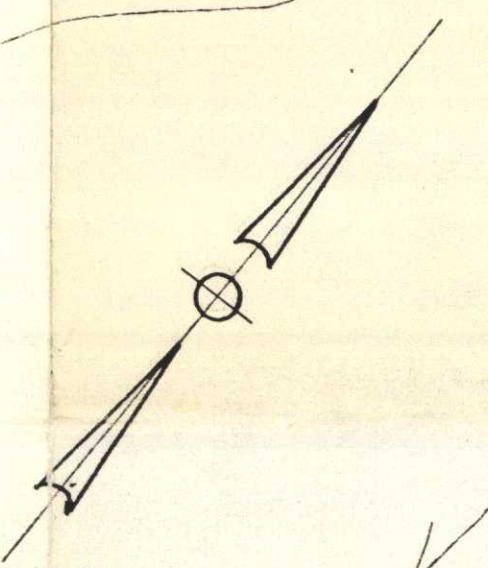
★ 0

Sub-mining Recorder





1:25000  
 1:25000  
 1:25000



**LEGEND**

- Silt sample location & value (C10)
- 0 to 40 PPM Background
- 41 to 60 PPM Threshold
- 61 to 100 PPM Third order anomaly
- 101 to 180 PPM Second order anomaly
- 180 + PPM First order anomaly

To accompany geochemical report by Larry M. Aspegate, B.C.G., on the Telkwa Canyon group, on the Telkwa River, Chilsea Mining Division, dated December 21st, 1967.

**PHELPS DODGE CORPORATION OF CANADA, LIMITED**  
 VANCOUVER OFFICE

**TELKWA CANYON**

1188

Scale: 1" = 1200'  
 Date: Feb. 21, 1967  
 Drawn by: L. G. A.  
 Checked by: L. G. A.

W6 W5 W4 W3 W2 W1 E1 E2 E3 E4 E5

N3  
 N2  
 N1  
 S1  
 S2  
 S3