

GEOCHEMICAL REPORT

TELKWA CANYON "B" GROUP CLAIMS

Houston-Tommy Creek - Omineca M.D., B.C.

CLAIMS: Telkwa Canyon "B" Claims consisting  
of the Mineral Claim Numbers:

B - 1 to 52 inclusive,  
B - 69 to 88 inclusive, and  
FB-1 to FB-8 inclusive. *B1-8 Frs*

LOCATION: Houston-Tommy Creek  
Latitude 54°22' Longitude 127°7'  
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: August 20, to September 2, 1967

93L/6E

~~93L-6~~

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TELKWA CANYON 'B' 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.

February 5, 1968

|                                   |
|-----------------------------------|
| Mining Records Office<br>RECORDED |
| AT.....                           |
| RECEIVED.....                     |

SUMMARY:

A geologist and four assistants worked from August 20 to September 2, 1967 collecting stream-silt samples from all streams in and around the Telkwa Canyon 'B' claims. The following is a report of the silt sampling and the results obtained which are to be applied as assessment work.



Location: Omineca Mining Division

Latitude - 54°22'North Longitude - 127°07'West

The center of the claim block is situated 19 miles west of Houston, B.C.

Access is by helicopter from Houston.

Claims:

The Telkwa Canyon 'B' claims were staked in 1965 and 1966. The 80 claims are grouped as follows:

Orange Group

Claim No'S. B-1, B-2, B-3, B-5, B-6, B-7, B-9,  
B-10, B-11, B-12, B-17, B-23, B-25,  
B-26, B-27, B-28, B-29, B-30, B-31,  
B-32, B-72, B-74, B-76, B-78, B-80,  
B-81, B-82, B-83, B-84, B-85, B-86,  
B-87, B-88, FB-1, FB-3, FB-5, FB-7..

B 1-52  
B 69-88  
FB 1-8

Blue Group

Claim No's. B-33, B-34, B-35, B-36, B-37, B-38,  
B-39, B-40, B-41, B-42, B-43, B-44,  
B-45, B-46, B-47, B-48, B-49, B-50,  
B-51, B-52, FB-8.

Green Group

Claim No's./B-4, B-8, B-13, B-14, B-15, B-16,  
B-18, B-19, B-20, B-21, B-22, B-24,  
B-69, B-70, B-71, B-73, B-75, B-77,  
B-79, FB-2, FB-4, FB-6.

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

Map - #1

Geology:

The Telkwa Canyon 'B' claims contain fairly flat lying volcanics and sediments of the Hazelton Group. An intrusive dioritic plug occupies the northeast corner of the claim block. Copper mineralization has been found associated with several faults that traverse the area as well as dissemination in the volcanics.

Geochemistry:

A stream silt sampling program was conducted over the entire claim block and the peripheral area. A total of 304 samples were taken, of these 77 samples are within the claim block boundary. Since the samples collected outside the claim block are not applicable to assessment work, only the samples values within the claim block 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 42 ppm - background
- 43 to 54 ppm - threshold
- 55 to 78 ppm - third order anomaly
- 79 to 126 ppm - second order anomaly
- 126 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 yielding anomalous coppers condition are represented on the accompanying map.

Copper mineralization had been found previous to the geochemical survey in the northeastern corner of the claim block. However, anomalous samples tend to extend the area of interest, and shows that further work is warranted.

A second anomaly was found centering on claims B4, B-6, B-15 and B-17. Only scattered copper mineralization had been found previously, but the magnitude and quantity of the anomalous silt sample values indicate significant undiscovered copper metallization. Further work is definitely warranted in this area.

Silt sample values from the remaining claim area are low and indicate a lack of significant copper metallization.

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: L.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.

DOMINION OF CANADA:  
 PROVINCE OF BRITISH COLUMBIA.  
 To WIT:

In the Matter of

L. Lawrence McClelland Appelgate  
 of Vancouver

in the Province of British Columbia, do solemnly declare that

Expenditures - Telkwa Canyon "B" Group Claims - 1967

|                                                               |                         |
|---------------------------------------------------------------|-------------------------|
| Project Geologist - L.M. Appelgate - Aug. 20 to Sept. 2, 1967 | \$ 90.00                |
| Assistant - J.W. Lentsch - Aug. 20 to Sept. 2, 1967           | 80.00                   |
| Assistant - D.J. Robertson - Aug. 20 to Sept. 2, 1967         | 80.00                   |
| Assistant - B. Herring - Aug. 20 to Sept. 2, 1967             | 80.00                   |
| Assistant - W. Morris - Aug. 20 to Sept. 2, 1967              | <u>80.00</u>            |
| Total Labour:-                                                | \$ 410.00               |
| Camp and Supplies                                             | 112.00                  |
| Airborne Work                                                 | 2150.00                 |
| Assays                                                        | <u>91.00</u>            |
| Total:                                                        | <u><u>\$2763.00</u></u> |

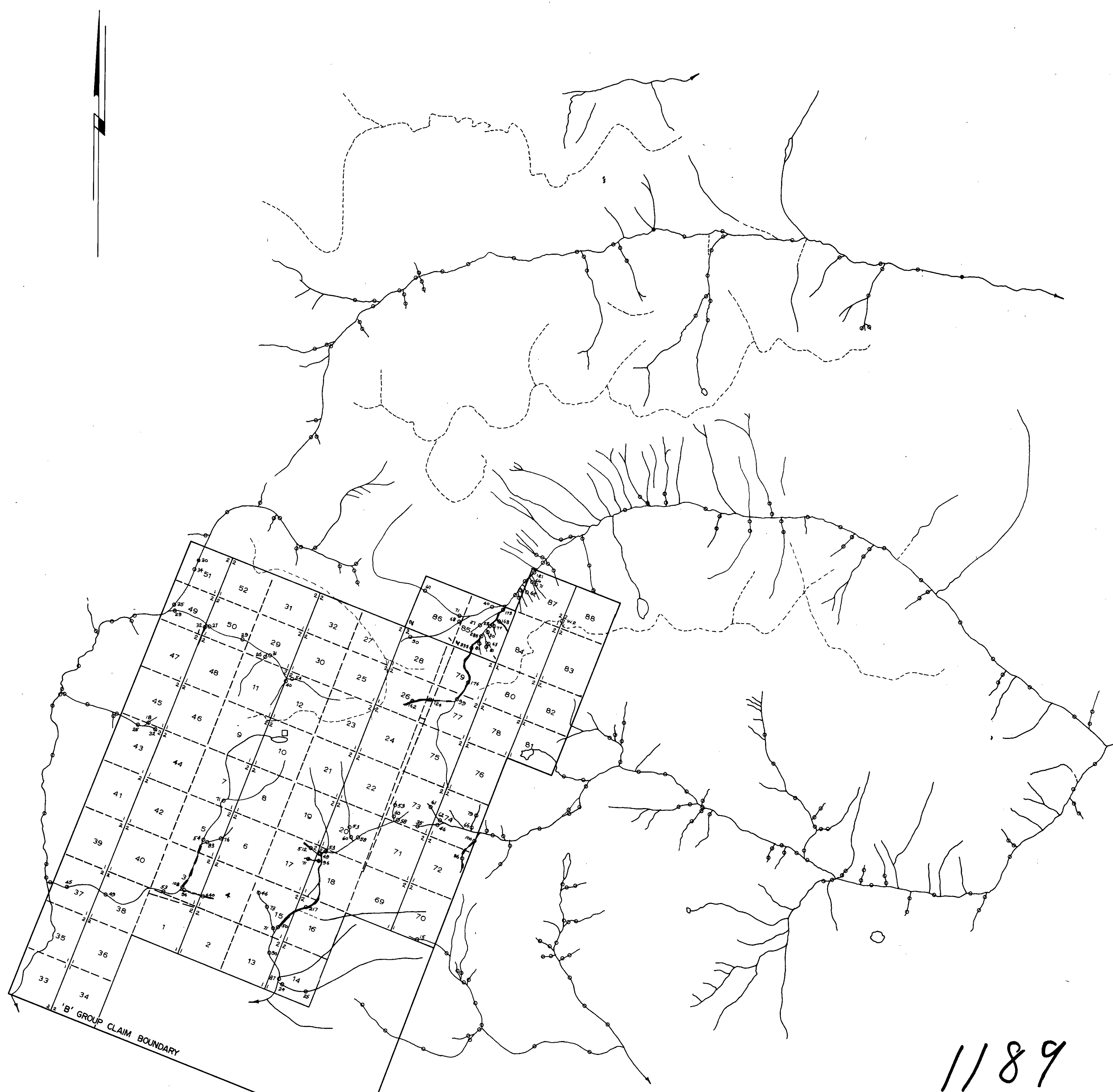
And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

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*

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





Department of  
Mines and Petroleum Resources  
ASSESSMENT REPORT  
NO. 1189 MAP 1

LEGEND

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

To accompany geochemical report by Larry  
M. Appelgate, B.A.Sc., on the Telkwa Canyon  
'B' group claims, on Houston Tommy Creek,  
Omineca Mining Division, dated  
February 5, 1968.

*Larry M. Appelgate*  
*John A. de Leon P. Eng. Feb 9/68*

PHELPS DODGE CORPORATION OF CANADA, LIMITED  
VANCOUVER OFFICE

HOUSTON-TOMMY CREEK  
Silt Samples

SCALE: 1" = 1715' DATE: OCTOBER, 1967 SURVEYED BY: DRAWN BY: L. M. A.

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'B' GROUP CLAIM BOUNDARY