

932239 POPLAR

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GEOLOGICAL - GEOCHEMICAL REPORT

on the

POPLAR MINERAL CLAIMS

Tagetochlain Lake Area

PROPERTY FILE

Located 30 miles SSW of Houston, B. C.  
(54°00'N, 127°00'W)  
Omineca Mining Division

by

Harold M. Jones, P. Eng.

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Map No. 1

Dwg. No. 93 L 2 A-1 Geology, Poplar Claims, Tagetochlain Lake Area, B. C. (in pocket)

Map No. 2

Dwg. No. 93 L 2 A-2 Geochemical Soils, Copper in PPM, Poplar Claims, Tagetochlain Lake Area, B.C. (in pocket)

Map No. 3

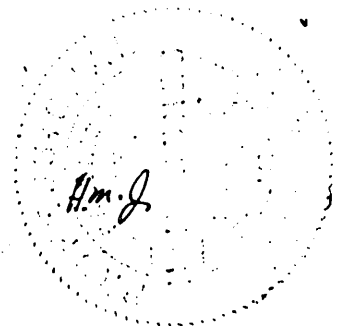
Dwg. No. 93 L 2 A-3 Geochemical Soils, Silver in PPM, Poplar Claims, Tagetochlain Lake Area, B.C. (in pocket)

SUMMARY

The Poplar Group of 20 claims is situated on the northern side of Tagetochlain Lake, which is located approximately 30 miles south-southwest of Houston, B. C. A crew varying from two to six men spent five weeks on the property conducting a program of geological mapping and soil sampling. The Poplar claims are underlain by Hazelton Group volcanic and sediments into which small granitic plugs of Jurassic or Tertiary age have been intruded.

One gossanous zone, consisting of abundant pyrite in faulted and fractured rhyolite and chert, appears to be the only obvious mineralization on the property. Most outcrops beyond this zone contain minor disseminated pyrite and occasionally very sparse chalcopyrite.

The geochemical soil survey shows numerous scattered copper and silver anomalies, many of which are coincident. To the west of the creek, several copper anomalies can be grouped as one reasonably large anomalous area. This area is drift covered and warrants some bulldozer trenching to determine the cause of the anomalies.





INTRODUCTION

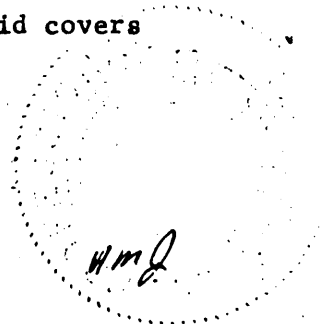
Between September 22 and October 27, 1971 a crew which varied from two to six men conducted geological mapping and a geochemical soil survey on the Poplar property, owned by El Paso Mining and Milling Company.

The Poplar property consists of twenty claims, Poplar 1 - 20 inclusive, and is located 30 miles S23°W of Houston, a small town on highway 16 about 180 miles west of Prince George. The claims lie on the northeast side of Tagetochlain Lake and extend from the shoreline back for approximately 6000 feet.

Tagetochlain Lake is accessible by 46 miles of good logging and forestry access roads. The claims lie 4 miles beyond the end of the road, on the northeast side of the lake. They can be easily reached by small boat or by walking westerly on well-worn cattle trails from the end of the road.

FIELDWORK

Two soil samplers spent 36 days and an additional two soil samplers spent 11 days conducting the geochemical soil survey, while two geologists spent 6 days completing the geological mapping of the claim group. A baseline was laid out at S70°E for 7400 feet using a Silva compass and a nylon chain. Lines were run N20°E and spaced at 200 feet with stations at 100 feet along the lines. The grid covers



an area approximately 6200 feet by 7400 feet and encompasses the entire claims group.

The soil samples were taken from the "B" horizon using either a mattock or a 1-inch diameter auger, depending on the depth of this horizon. The "B" horizon was found to vary between 6 and 18 inches, the deeper areas being caused by a blanket of black loam. A total of 2231 samples were collected and analyzed by the atomic absorption method for total copper, molybdenum and silver, with all values recorded in parts per million. Assaying was done by Chemex Labs Ltd., 212 Brooksbank Avenue, North Vancouver, B. C.

Geology was mapped on a scale of 1 inch equals 200 feet using the geochemical survey grid for control.

#### GEOLOGY

The Tagetochlain Lake area is underlain by Hazelton Group rocks of Jurassic age which in this area includes:

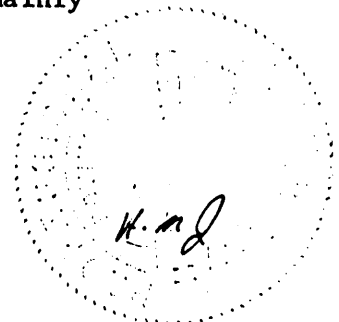
Sedimentary rocks - chert, siltstone and quartzite

Pyroclastic rocks - tuff and tuff breccia

Volcanic flow rocks - andesite and rhyolite and may include dacite and dacite breccia

These rocks are intruded by small plugs and stocks of Upper Jurassic and/or Tertiary age.

Most of the Poplar claims are covered by grassy meadows, poplar groves or marshy areas. Outcrop is very limited, mainly

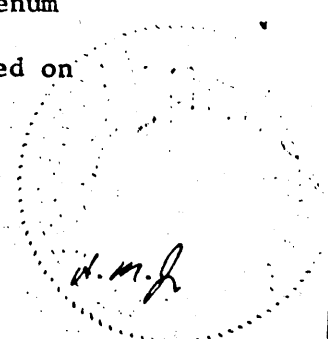


occurring on Poplar 2, 5, 6 and 19 claims (See Map No. 1). Porphyritic monzonite, mineralized with disseminated pyrite and very minor chalcopyrite, outcrops on the western end of the claim block and also at scattered locations along the southern limit of the claims near the lakeshore. This intrusive may be related to the Jurassic or Cretaceous granitic mass which outcrops on the southern side of the lake or it may be an isolated Tertiary plug.

The Hazelton Group volcanics and sediments are best exposed in the south central part of the claim group. Here, a deeply incised creek canyon exposes chert, rhyolite, and tuff or dacite breccia almost continuously over a length of 1200 feet. A very prominent gossan was seen in the canyon near the boundary of Poplar 5 & 6 claims. In this area a rhyolite-chert contact striking N25°W is exposed. Both rock types are strongly fractured with one joint set parallel to a fault striking N40°W, and the other set striking N30°E. Both the rhyolite and the chert are very well mineralized with pyrite which occur as seams along both fracture sets and along bedding planes. Most fractures have a fine coating of pyrite but seams 1/4 to 1 inch wide are not uncommon. Narrow quartz veins, mineralized with massive pyrite, occur as fracture fillings in chert.

#### GEOCHEMICAL RESULTS

A total of 2231 soil samples were collected and all were analyzed for total copper, molybdenum and silver. The molybdenum values proved to be of little significance and were not plotted on the maps.



A. Copper

The arithmetic mean of all copper values is 86 ppm. The cumulative frequency curve (Figure 3) indicates the graphic mean is 45 ppm. The background value range is thus 0 - 50 ppm copper, with the "possibly anomalous" range 100 - 200 ppm copper, "probably anomalous" range 200 - 300 ppm copper and the "definitely anomalous" values are those above 300 ppm copper. The geochemical copper soil values are plotted on Map No. 2 and contoured at 100 ppm, 200 ppm, 300 ppm, 500 ppm and 1000 ppm. The "possibly", "probably" and "definitely" anomalous zones are colored in yellow, orange and red respectively.

Three fairly large anomalies, located on Poplar 1 and 3 claims, can be grouped as one very significant anomalous area, which occurs over an area absent of outcrop.

Numerous other anomalies are present throughout the sampled area, with the greater number occurring to the west of the creek canyon. The few outcrops in this area indicate rocks of the Hazelton Group containing disseminated pyrite and very minor chalcopyrite.

B. Silver

The arithmetic mean of all silver values is 0.6 ppm. This was calculated assuming all values less than 0.5 ppm silver as 0.25 ppm silver. (0.5 ppm was the lower limit of detection of the analytical method used). The cumulative frequency curve (Figure 5) indicates a graphic mean of 0.17 ppm silver.





The background value range is taken as 0 to 0.5 ppm silver, with the "possibly anomalous" range 1.0 - 2.0 ppm silver, the "probably anomalous" range 2.0 - 4.0 ppm silver, and the "definitely anomalous" range above 4.0 ppm silver. The "possibly", "probably" and "definitely anomalous" zones are colored yellow, orange and red respectively. (See Map No. 3).

Numerous small scattered silver anomalies are outlined on Map No. 3 and, like the copper anomalies, most occur to the west of the creek canyon. Many of these coincide with the location of copper anomalies and several occur in the area of the large copper anomalous area on Poplar #1 and #3 claims.

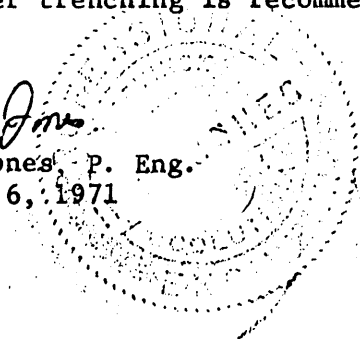
#### CONCLUSIONS

The only well mineralized zone seen on the property was in the canyon near the boundary of Poplar Nos. 5 and 6 claims, where strongly fractured rhyolite and chert are well mineralized with pyrite. Elsewhere on the claims, minor disseminated pyrite is fairly common although chalcopyrite is very sparse.

#### RECOMMENDATIONS

The soil anomalies to the west of the creek warrant further investigation. Since most of this area is drift covered, limited bulldozer trenching is recommended.

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January 6, 1971



*H.M.J.*

APPENDIX A

GEOCHEMICAL ANALYSES

93L239 POPLAR

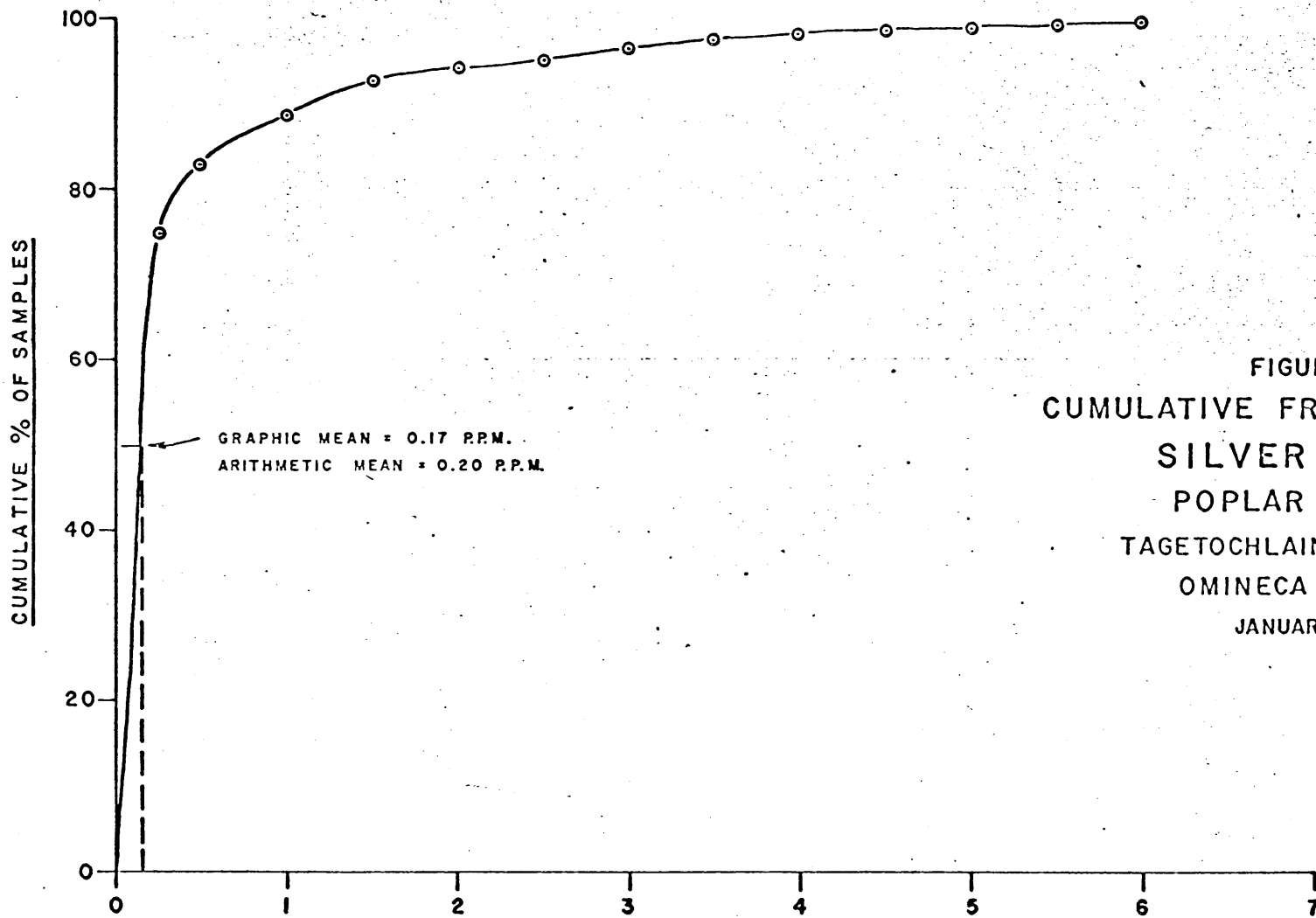
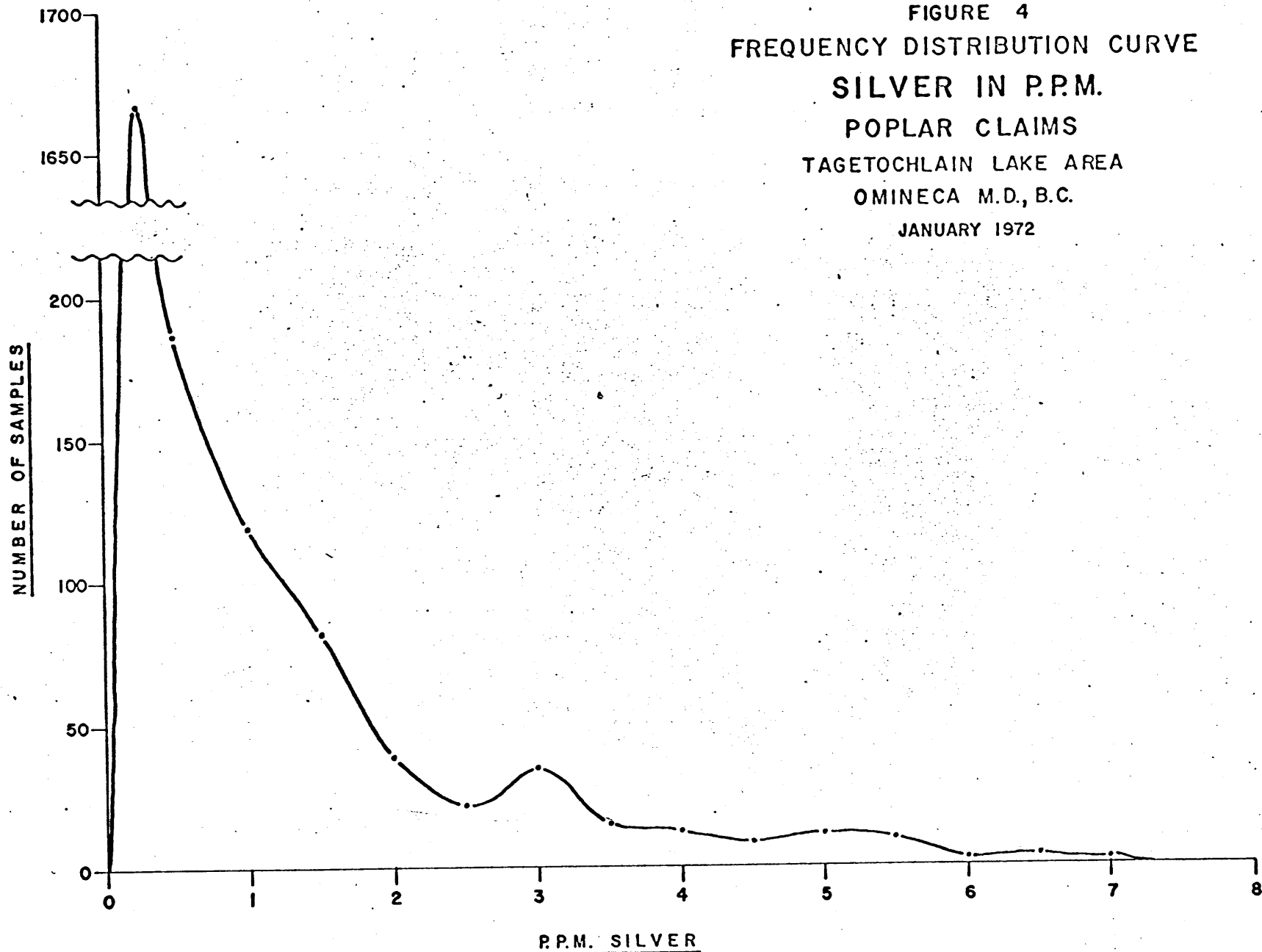


FIGURE 5  
 CUMULATIVE FREQUENCY CURVE  
 SILVER IN P.P.M.  
 POPLAR CLAIMS  
 TAGETOCHLAIN LAKE AREA  
 OMINECA M.D., B.C.  
 JANUARY 1972

FIGURE 4  
FREQUENCY DISTRIBUTION CURVE  
SILVER IN P.P.M.  
POPLAR CLAIMS  
TAGETOCHLAIN LAKE AREA  
OMINECA M.D., B.C.  
JANUARY 1972



H.M.J.

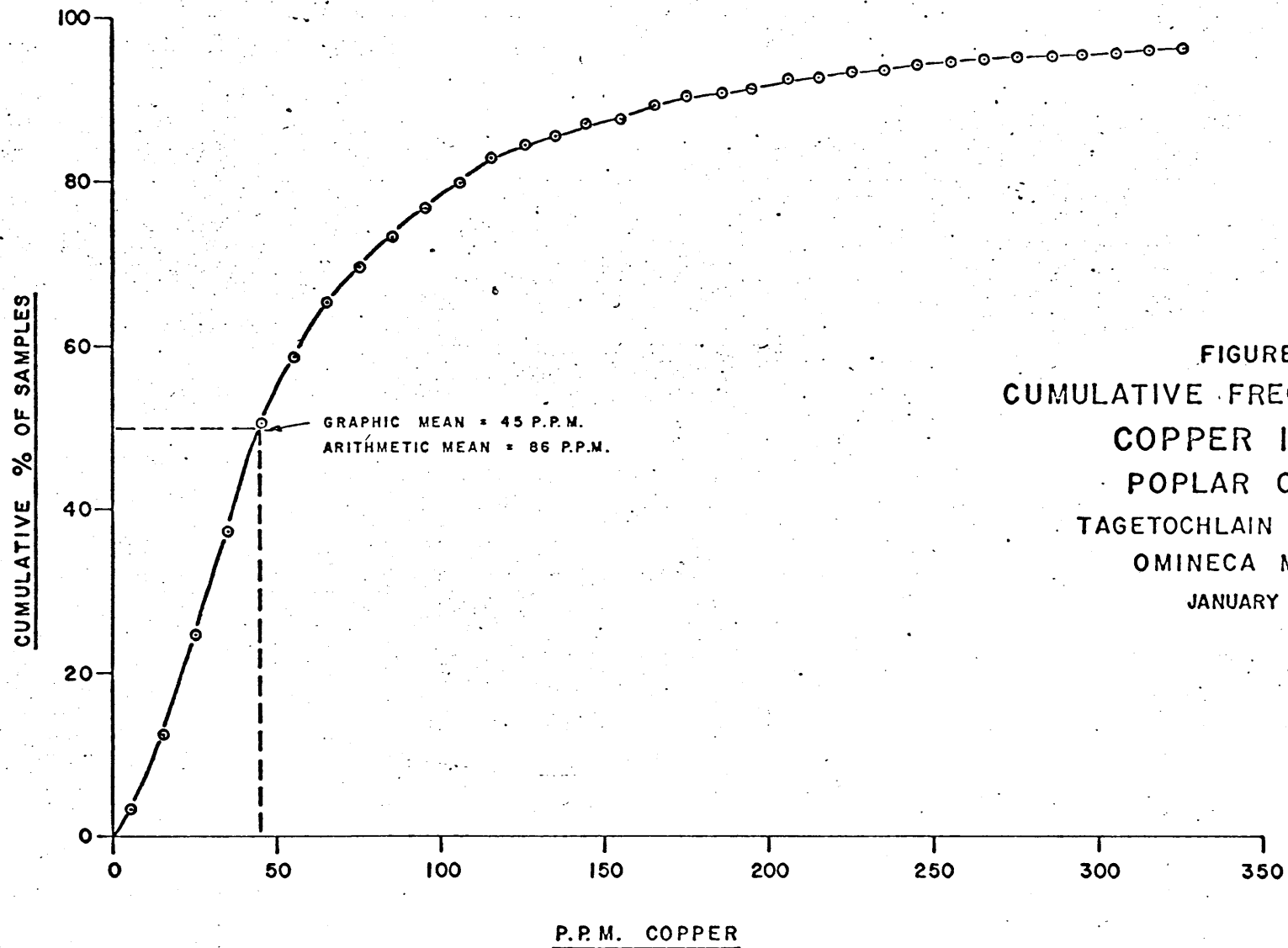
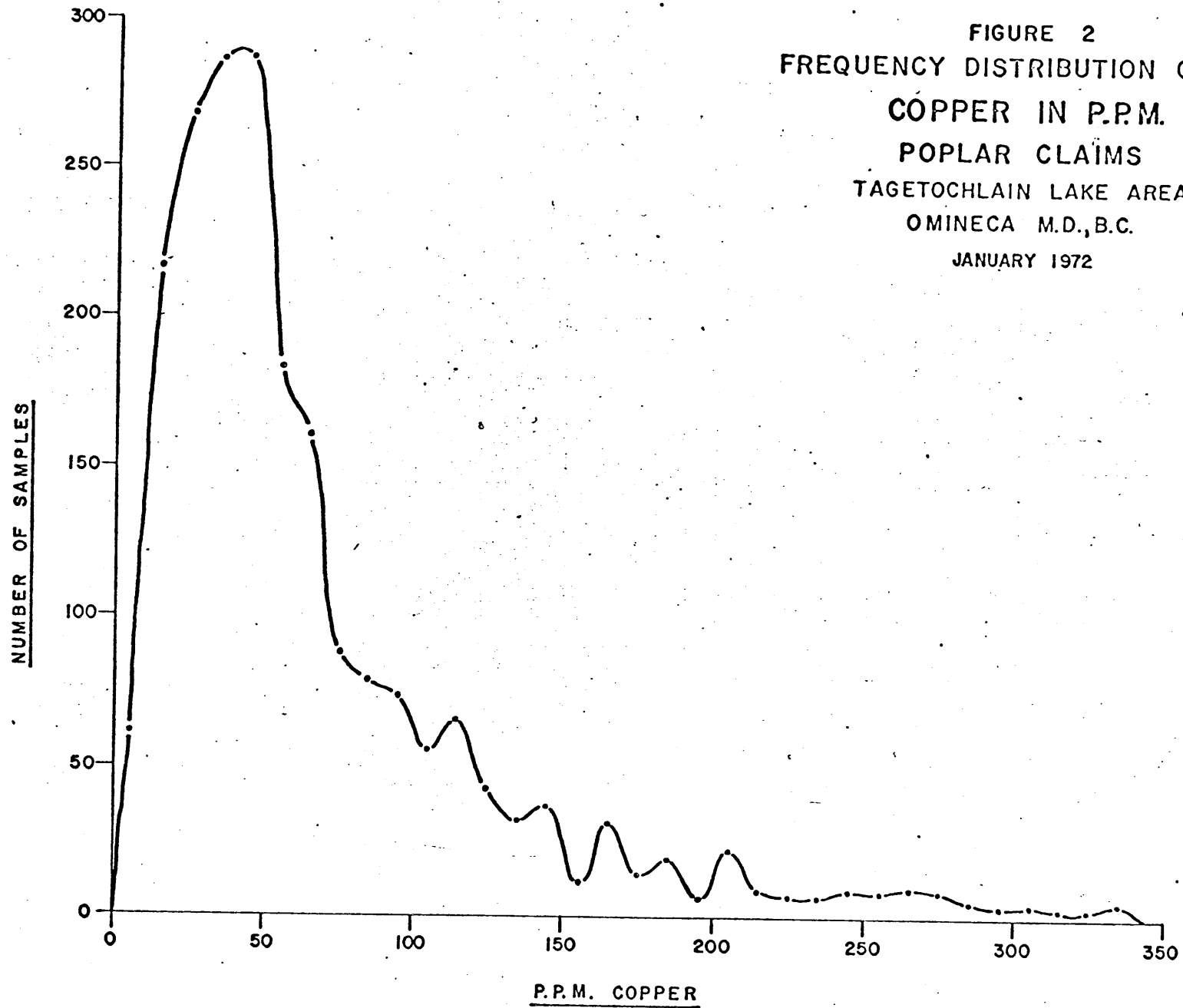


FIGURE 3  
 CUMULATIVE FREQUENCY CURVE  
 COPPER IN P.P.M.  
 POPLAR CLAIMS  
 TAGETOCHLAIN LAKE AREA  
 OMINECA M.D., B.C.  
 JANUARY 1972

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FIGURE 2  
FREQUENCY DISTRIBUTION CURVE  
COPPER IN P.P.M.  
POPLAR CLAIMS  
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JANUARY 1972



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