

REPORT ON THE
BORNITE CREEK COPPER PROPERTY

by

G. D. TIKKANEN

August, 1959.

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Summary:

Four diamond drill holes on the Bornite Creek Property failed to establish continuity of three bornite occurrences. The bornite mineralization seems to be isolated in very small high grade pods. Work was suspended since these pods are too small to warrant further expenditure.

Location:

The Bornite Creek Property is located two miles southeast of Sockeye Lake, or about nineteen miles south of Haines Junction, Y.T.

The property can be reached by float-equipped aeroplane, landing on either Sockeye Lake or on a small lake at the mouth of Bornite Creek. A second method of access is via the Haines Road, across Kathleen Lake, and then by jeep road from Kathleen Lake to the property.

History:

Copper was first discovered on Bornite Creek by Kindle, of the Geological Survey of Canada, in 1950.

Little work was done on the discovery until 1958, when Yukon Star Mines, formed by a group of men of Whitehorse, staked claims and opened up several showings. This work improved the exposures and Conwest Exploration Company Limited undertook further work, working under an option agreement with Yukon Star Mines.

Geology and Mineral Occurrences:

The copper is confined to a 400 foot wide belt of fine grained, badly fractured green andesite. The mineralization is in the form of bornite, with minor chalcopyrite. The bornite appears to be localized along small faults and fractures in the andesite.

The main area worked is along the south side of Bornite Creek, at an elevation of about 3500 feet. Here three occurrences of bornite are found, all situated to give a strike of true east, should the zones be continuous. The length of this postulated zone would be 400 feet. The dip is near vertical.

The green andesite is flanked on the west by a band of sediments, mainly graphitic argillite, and on the east by a strong vertical fault striking with 60 degrees west. Rocks on the east side of this fault are fine grained brown to light yellow and purple weathering andesites.

A second showing, also in the green andesite, is located one-half mile northwest of the main area. Here a small flat lying occurrence of bornite is exposed. The deposit is approximately 2-3 feet thick, about 10 feet wide and is exposed along a length of about 10 feet, and disappears into the hillside. This zone is also localized along fractures, and seems to be a very small zone.

Work done and Results:

In the main area four diamond drill holes were spaced about 100 feet apart and drilled to cut the zone 100 feet below the surface. No mineralization was encountered and a continuous zone was not indicated. It would appear that the copper is confined to very small plums or pods, mainly bornite, in the order of 100 to 200 tons in size. These small pods present a very small target for a diamond drill.

Total footage drilled was 795 feet.

Some bulldozer work was done on the second showing to expose it but no drilling was done. Work started on July 31st and finished on August 26th, 1959.

Conclusions:

Work done on the Bornite Creek Property would indicate that several high grade but very small pods of bornite occur along fractures and faults in the green andesite. These pods could not be traced to depth by diamond drilling. The extremely small dimensions of the pods, and the erratic nature of their occurrence, make them very difficult targets for diamond drilling. Since no ore was blocked out it is recommended that Conwest drop their option on the property.

Respectfully submitted,


G. D. Tikkanen.



LEGEND

 Green Andesite

COLLAR:

2+00W
 0+42S
 ELEV. 3515'

DIP 0°
 BEARING 180° AST.

BORNITE CREEK PROPERTY

August
 1959

D.D.H. No. B-1
 SECTION
 LOOKING EAST
 1" = 40'

Drn. by
 GDT

Creek



LEGEND



Green Andesite

COLLAR
4+00W
0+915
EL. 3491'

DIP -35°
AZ. 180°AST.

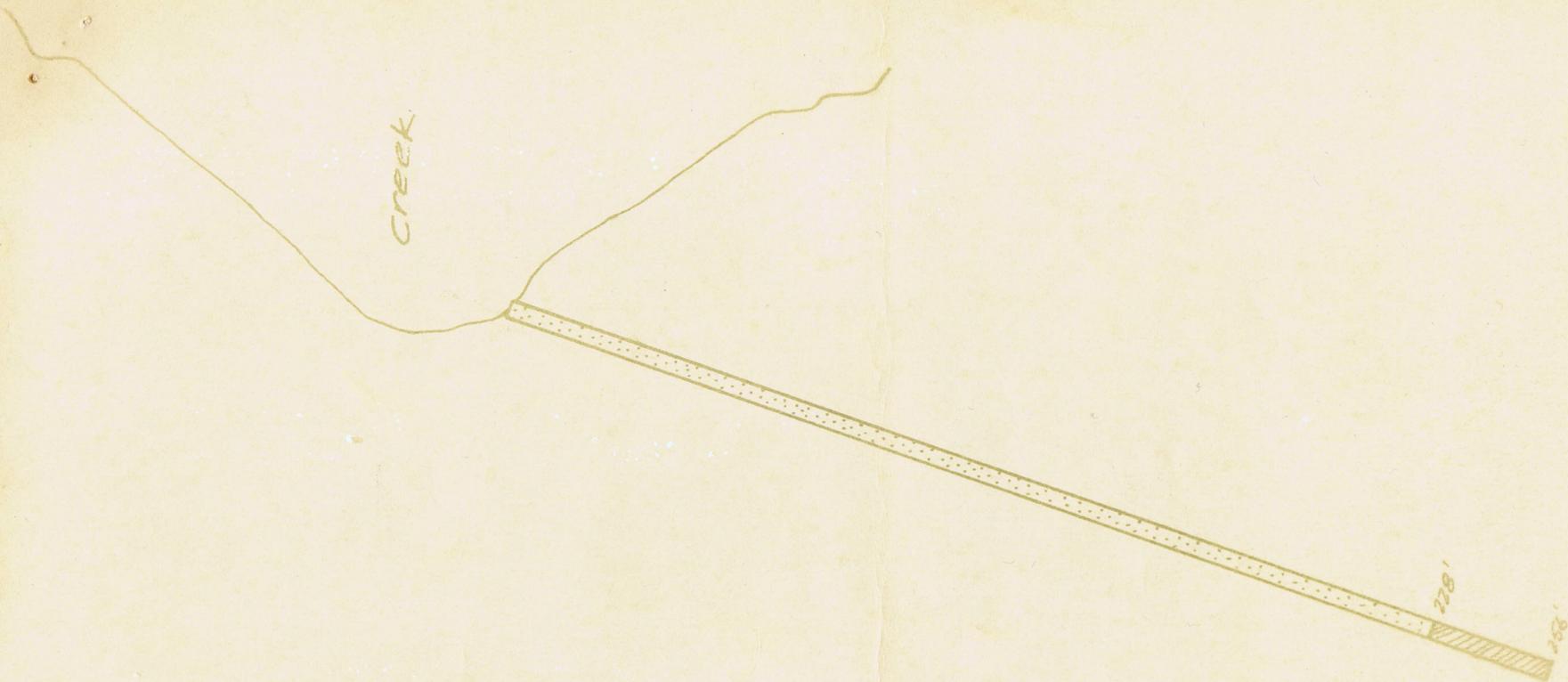
BORNITE CREEK PROPERTY

AUG.
1959

D.D.H. No. B-2
SECTION
LOOKING EAST

DRN. BY
GDT.

1" = 40'



LEGEND

-  Green Andesite
-  Graphitic Argillite

COLLAR:
 5+40W
 0+50S
 EL. 3442'
 DIP -20°
 AZ. 180°AST

BORNITE CREEK PROPERTY		
AUG 1959	D.D.H. No. B-3 SECTION LOOKING EAST	DRN BY G.D.T.
1" = 40'		



LEGEND

 Green Andesite

COLLAR

3+00W
 0+60S
 EL. 3503'

DIP -20°
 AZ. 180°AST.

BORNITE CREEK PROPERTY		
AUGUST 1959	D.D.H. No. B-4	DWN. BY G.D.T.
	SECTION LOOKING EAST	
1" = 40'		