Occurrence Details

Occurrence Number: 115I 175
Occurrence Name: Stu - Zone D
Occurrence Type: Hard-rock
Status: Showing
Date printed: 12/15/2025 1:07:27 PM

General Information

Secondary Commodities: copper, gold
Aliases: Stu, Carmacks North
Deposit Type(s): Porphyry Alkalic Cu-Au
Location(s): N - W
NTS Mapsheet(s): 115I07
Location Comments: Location from assessment report selected from google earth image
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

The earliest work in the area occurred in the 1800's, when prospecting for vein-style copper-gold showings occurred in the Povoas Formation rocks along the shores of the Yukon River. In 1899, the MAUD claims were staked along the north side of Hoochekoo Creek, likely covering the Stu - Zone D occurrence.

To the east, the Bay cl 1-21 (Y60061), cl 23 (Y60083), 25 (Y60085) and cl 39-204 (Y60099) were staked in Jan/71 by Hudson's Bay Oil & Gas Company Ltd, which performed grid soil sampling, ground magnetic and EM surveys in 1971 and an IP survey in 1974.

United Keno Hill Mines Ltd prospected the property in 1976, restaked it as Stu cl 1-120 (YA8616) in Feb/77, and explored with geological mapping, deep soil sampling (0.9 m average), ground magnetic and EM 16 surveys in 1977. The company added Stu cl 122-123 (YA19722) in Sep/77, carried out an IP survey in 1978 and bulldozer trenched in 1979.

In May/80 the company staked Stu cl 123-192 (YA48976) around the remaining Stu claims and staked Noon cl 1-108 (YA48868) to the south. Later in the year United Keno Hill Mines drilled 28 diamond drill holes (1 504 m) on the Stu claims and carried out geological mapping and soil sampling programs on the Noon claims.

In 1981 United Keno Hill Mines flew a regional airborne electromagnetic and magnetics survey over their claim holdings. The company followed up with geological mapping and soil sampling programs on the Stu and Noon claim blocks. In 1982 the company trenched the most promising geochemical targets. In 1989 the company drilled 30 percussion drill holes (1 823 m) over previously dug trenches located in the southwest corner of the Stu claim block.

Restaked as Stu cl 1-24 (YC19496) in Jun/2002 by B Kreft, who used a Yukon Mining Incentive Program (YMIP) grant to prospect and sample the three known zones. No further assessment work appears to have been carried out and the claims lapsed in Jun/2004.

In Dec/2004 B. Harris restaked occurrence/zone A within Stu cl 1-10 (YC37770) and occurrence/zone B within cl 21-28 (YC37788). In 2005 Harris carried out a reconnaissance prospecting program aimed at locating old drill holes and trenches and re-sampled old drill core.

In Aug/2005 Harris staked Stu cl 55-72 (YC40201) to the north and west. In Sep/2005 Harris restaked occurrence/zone C (located to the southeast) within Stu cl 11-20 (YC40249). Harris also staked cl 29-30 (YC40201) over open ground to the north and cl 39-54 (YC40262) to the west, north and northeast at the same time.

In 2006 Harris carried out magnetic susceptibility testing on old drill core, GPS surveyed as many of the previous trenches and drill holes that could be re-located and sampled some of the historic trenches.

In Apr/2006 S. Ryan staked Bread cl 1-24 (YC46806) 2 km south of occurrence/zone A. Ryan collected a string of 30 soil samples in Aug/2006 and in Nov/2006 optioned a 100% interest in the Bread claims and 14 other neighboring claim groups to BCGold Corp in return for cash, shares and certain work commitments. In Apr/2007 BC Gold staked Bread cl 25-36 (YC60054) on the south side of the existing Bread claim block. The company flew a regional airborne magnetic and radiometric survey over their claim holdings later in the year

In Jul/2007, Harris added Stu cl 73-132 (YC65256) to his existing claim block. In 2008, Harris geologically mapped around the three mineralized zones (occurrences), collected rock and soil samples and performed a petrographic study of mineralized samples collected from the three known mineralized zones.

In 2010, Harris prospected, geologically mapped and rock sampled four historic trenches located in the northwest corner of the claim block. Harris also prospected and collected reconnaissance soil samples in; 1) the area located between zones A and C, 2) the area located north of zone C and 3) the area located west of zone B.

Zone D was discovered in 2011 by Northern Tiger Resources during a soil sampling and mapping program across their DEL claims¿.

In 2012, Harris carried out a brief property evaluation and collected 5 rocks samples from mineralized outcrops in order to perform magnetic susceptibility and petrographic studies.

In Sep/2013, Harris cleared overgrown roads and trails, collected rock and soil samples from various areas within zone B and carried out further magnetic susceptibility measurements on the newly collected samples.

The Bread claims expired in Apr/2014. In Jul/2014 Harris restaked the claims as Che cl 1-30 (YF46357). During the same month Harris staked Koo cl 1-58 (YF46387) to the southeast (Minfile Occurrence #115I 126) and WC cl 1-72 (YF20701) and WCF cl 1-11 (YF46407) to the south and Hoo cl 1-28 (YF29773) and 35-46 (YF46387) to the southwest. The WC, WCF and Hoo claim blocks cover the former WC claim block (Minfile Occurrence #115I 128) formerly owned by Copper North Mining Corp.

Between July and Mid-October 2014 Harris carried out 18 man days of work on the Stu claims. The work consisted of cleaning out and resampling numerous trenches located at the three zones. In addition hand trenching and rock sampling was carried out at a new showing located in the east-central portion of zone A and an archaeology survey was under taken.

In Nov/2014 Harris staked Peanut cl 1-12 (YE10064) and cl 17-28 (YE10076) to the southwest (Minfile Occurrence #115I 127) over top expired Peanut claims formerly owned by BCGold Corp. Harris also staked Led cl 1-5 (YE10088) and cl 9-16 (YE10093) to the southeast (Minfile Occurrence #115I 010). By the end of 2014 the newly named Stu property consisted of 376 contiguous mineral claims.

Between 2015 and 2017, Harris carried out a series of small exploration programs on the Stu property. The programs consisted of mechanical and hand trenching, rehabilitation of historic drill core, collection of XRF data, prospecting, rock sampling and reconnaissance scale geological mapping. The work was carried out on the Stu, Koo, WC and WCF claim blocks.

In September 2018, Harris signed an agreement with Granite Creek Copper Ltd, granting Granite Creek 100% interest in the Stu Copper Project.

GEOLOGY

The Stu mineral occurrences are some of several metamorphosed copper deposits which occur along the boundary between the Yukon Tanana and Northern Stikine terranes and include the Carmacks Copper deposits and occurrences (15 in total) to the south and the Minto Mine deposits to the north. These occurrences occur in a region known as the Carmacks-Minto belt. A study by N. Kovacs, et. al. (2016) on the Carmacks Copper deposit provided new insight into the paragenesis of these occurrences. According to Kovacs, et. al., Carmacks Copper and the associated occurrences are hosted in compositionally heterogeneous, foliated and folded, and variably migmatitic metamorphic rocks, which occur as elongate, NNW-trending inliers in Early Jurassic granitoids of the Granite Mountain batholith (GMB). Hypogene copper mineralization is restricted to metamorphic host rocks, and occurs both as foliation-parallel chalcopyrite-dominant stringers in schistose rocks, and as net-textured bornite-chalcopyrite-dominant sulphides in the migmatitic rocks prevalent along the eastern margin of the metamorphic inlier. The latter style of mineralization is interpreted to form from a sulphide melt phase generated during partial melting of a previously mineralized protolith, during emplacement of the Granite Mountain batholith.

On the Stu Property, Minto Suite granitoid is the dominant rock type. It is cut by aplite, microgranite and pegmatite dykes and contains lenses of foliated to gneissic quartz-feldspar-hornblende-biotite granodiorite which contain most of the mineralization. Locally outcrops of Carmacks volcanics overlie and mafic intrusions intrude the other rock types.

The Hoocheekoo Fault runs down the east side of the property separating the GMB from the Triassic aged Povoas Formation. Smaller east-west cross structures are expressed as creeks such as Camp, Nancy Lee and Hoocheekoo.

The most common phase of the granodiorite is dark grey to grey on weathered surfaces and grey white to grey on fresh surfaces. It is medium grained with lesser fine grained or coarse-grained occurrences and is typically porphyritic with 5-15% potassium feldspar phenocrysts. When foliated it has a slightly higher mafic content and foliation is weak to strong. The gneissic phase is fine to medium grained with a moderate to strong foliation or banding. An extreme variation in mafic content has been observed.

There are 3 advanced and 7 early-stage mineral occurrences on the Stu Copper Property. In all zones with exposed bedrock, foliation strikes northwest. In Zones A and B the dip is moderately to steeply northeast and in Zone C steeply southwest. Copper mineralization (with occasional Au or Ag) is contained in foliated to gneissic granodiorite, similar to mineralization at Carmacks Copper and the Minto deposits. Chalcopyrite is the most common copper sulphide, bornite is seen in drill core, but rarely on the surface.

Malachite is the dominant supergene copper mineral with lesser tenorite, chalcocite, azurite, chrysocolla and possible brochantite. The supergene minerals display textures indicative of transport and open space filling.

Zone D is located 350 southwest of an anomalous soil grid (As, Bi and Mo) and is described as a 25 cm malachite-bearing fracture zone oriented 160/70 NW hosted in an andesite augite-feldspar porphyry outcrop. A 30 cm chip sample across the fracture zone contained 0.972% Cu and 0.741 g/t Au. A grab sample from the occurrence returned 0.737% Cu and 0.407 g/t Au.

Work History

Date	Work Type	Comment
12/13/2019	Geochemistry	
12/13/2019	Geology	
12/13/2019	Geochemistry	
12/13/2012	Ground Geophysics	
12/13/2012	Ground Geophysics	
12/13/2009	Airborne Geophysics	
12/13/2009	Airborne Geophysics	