



Occurrence Details

Occurrence Number: 105B 088
Occurrence Name: Smith
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 7:47:21 AM

General Information

Primary Commodities: tin
Secondary Commodities: copper, zinc
Aliases: MC
Deposit Type(s): Skarn Sn
Location(s): 60°12'7.8" N - -131°44'43.35" W
NTS Mapsheet(s): 105B04
Location Comments: Based on collar location of DDH K81-5 in AR 090971
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as MC claims in Jun/78 by Welcome North ML and optioned to Klinkit JV (DuPont of Can EL & Duval Corp), which explored with mapping and geochem sampling in 1978 and 1979 on the property. Two holes (DDH 81-5 and 81-6, 418 m) were drilled in 1981. In 1984, the joint venture drilled 4 holes (218 m) northeast of the occurrence before dropping the option. The DuPont interest was transferred to CSA Mls Inc in 1984 and to Goldsearch Inc in 1985. The area was restaked as Slip cl (YB262) in Jun/87 by McCrory Holdings Ltd. In 2018, Jaycee Prospecting Syndicate restaked the area as JC 1-101 claims and flew an airborne magnetic and radiometric survey over the property.

Capsule Geology

The Smith occurrence lies within a belt of Yukon-Tanana Terrane rocks. This belt of rocks is part of an accreted island arc assemblage consisting of bimodal volcanics, coeval plutons and sedimentary rocks, as well as younger Jurassic and Cretaceous intrusions. The Smith occurrence is hosted in Triassic Jones lake Formation meta-sedimentary rocks in proximity to an apophysis of the mid-Cretaceous Seagull Batholith.

Cassiterite mineralization occurs in poorly developed vein, skarn and greisen zones developed in hornfelsed clastic and carbonate rocks of the Jones Lake Formation adjacent to aplite dykes related to the Cretaceous Seagull Batholith. The best mineralization consists of two zones 15 m apart, called the Main Zone and the Sheeted Vein Zones. The zones strike northwesterly and are steeply dipping.

Diamond drillhole K81-5 (030° azmth), intersected both Zones. The Main Zone consists of irregular siliceous pyroxene skarn bounded by a steep quartz vein up to several metres wide. The Main Zone grades from a magnetite-cassiterite assemblage through a quartz-chalcopryrite-sphalerite-galena assemblage to a quartz-tourmaline assemblage. Other skarn minerals included diopside, garnet, pyrrhotite, axinite and fluorite. The Sheeted Vein Zone is about 50 m across and consists of a crackle zone with fractures that are mineralized with pyrite, chalcopryrite, sphalerite, galena, magnetite and cassiterite. DDH 81-5 intersected 0.13% Sn over 1.0 m at 41.60 m depth and 0.2% Sn over 1.0 m at 78.6 m depth. Both laboratory and portable XRF analyzer were used to analyze core. The portable XRF analyzer values for Sn were exponentially over-reported and, therefore, considered inaccurate.

DDH81-6, 400 m to the north of the occurrence, and drilled at 204° azimuth, did not intersect significant tin mineralization.

| Work History | | |
|--------------|---------------------|-------------------|
| Date | Work Type | Comment |
| 12/31/1982 | Geology | |
| 12/31/1981 | Drilling | Two holes, 418 m. |
| 12/31/1979 | Geology | |
| 12/31/1979 | Trenching | |
| 12/31/1979 | Other | |
| 12/31/1979 | Geochemistry | |
| 12/31/1978 | Geology | |
| 12/31/1978 | Geochemistry | |
| 12/13/2018 | Airborne Geophysics | |
| 12/13/2018 | Airborne Geophysics | |

| Assessment Reports that overlap occurrence | | | | | |
|--|------|-------|-----------|-------|--------|
| Report | Year | Title | Worktypes | Holes | Meters |

| Number | Year | Title | Work Types | Drilled | Drilled |
|------------------------|------|---|--|---------|---------|
| 097201 | 2018 | Memorandum Report of Exploration Work 2018 - Jaycee Tin Property | Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry | | |
| 096722 | 2014 | STAKING, SOIL SAMPLING, PROSPECTING AND AIRBORNE GEOPHYSICS REPORT – SEAGULL TIN PROJECT | Magnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry | | |
| 090971 | 1981 | Drill Logs for DU, Swift and Slide claims | Diamond - Drilling | 5 | 995.75 |
| 090803 | 1979 | Report of Geological and Geochemical Surveys on Slouce Project | Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Petrographic - Lab Work/Physical Studies, Hand - Trenching | | |
| 090470 | 1978 | Klinkit Joint Venture: 1978 Field Programme for Duval International Corporation and Du Pont of Canada Exploration Limited | Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Geotechnical - Studies | | |

Drill core at YGS core library

| Number | Property | Year Drilled | Core Size | Photos | Data |
|-----------------------------|----------|--------------|-----------|--------|------|
| DDH-JC-81-5 | JC | 1981 | BQ | 0 | 3 |
| K81-2 | Swift | 1981 | NQ | 26 | 2 |
| K81-5 | Swift | 1981 | NQ | 24 | 3 |
| K81-6 | Swift | 1981 | NQ | 32 | 3 |
| DDH-80-K1 | Smith | 1980 | NQ | 36 | 3 |
| DDH-80-K2 | Smith | 1980 | NQ | 30 | 3 |
| DDH-80-K3 | Smith | 1980 | NQ | 30 | 3 |
| DDH-80-K6 | Smith | 1980 | NQ | 24 | 0 |
| DDH-80-K7 | Smith | 1980 | NQ | 24 | 2 |