

# **Occurrence Details**

Occurrence Number: 105D 190 Occurrence Name: Ward Occurrence Type: Hard-rock Status: Showing Date printed: 6/15/2025 9:07:27 AM

# **General Information**

Primary Commodities: gold, silver Secondary Commodities: copper, lead, zinc Deposit Type(s): Epithermal Au-Ag-Cu: High Sulphidation, Porphyry Cu-Mo-Au Location(s): 60°6'4" N - -135°24'31" W NTS Mapsheet(s): 105D03 Location Comments: 1 Kilometres Hand Samples Available: No Last Reviewed:

#### Capsule

#### Work History

Staked as Sin cl (YB7178) in Aug/87 by Skukum Ventures L, who transferred a partial interest to Island Mg & ECL in Aug/88 and performed road construction, mapping, prospecting and geochemistry. The area received increased exploration focus following the discovery of the Mt. Skukum deposit in 1981 approximately 10 km to the North.

In 1988, Skukum Exploration Inc. discovered three separate vein systems in the northwest facing cirque of Mount Ward 6 km south of the Skukum Creek deposit: the Confession, Repent, and Squeaker veins. Additional prospecting south of Mount Ward identified Cu-North Showing, which graded 5.58% Cu and 0.76 g/t Au and the ERT Zone near the headwaters of Crozier Creek. The ERT zone is described as a quartz-arsenic-sulfosalt breccia zone and currently exposed over 30 m. The 1988 work also outlined a large geochemical anomaly in the southeast corner of the claim block, adjacent to the Bob claims. Chalcopyrite-bearing float from this area contained up to 5.58% Cu, 33.8 ppm Ag and 775 ppb Au. Samples taken from veins outcropping in the cirque contained up to 417.1 g/t Ag, 22.64 g/t Au, 3.98% Pb and 1.47% Cu.

In 1989, three parallel E-W oriented trenches were hand dug at the ERT Zone returned values such as: 1.46 g/t Au, 307 g/t Ag over 6.6m (TR89-1), 0.68 g/t Au and 139 g/t Ag over 1.5 m (TR89-2) and 0.54 g/t Au and 346 g/t Ag over 4.7 m (TR89-3).

Restaked as Krista cl 1-6 (YB95972) by J. Dickie in Aug/96.

In 1997, Bernie Kreft and Chuck Downie of Eagle Plains Resources spent three days prospecting at the ERT zone, resulting in another discovery (TRE Zone) which returned values of 8,890 g/t Ag. In 2019, a 9-day exploration program run by Ryan Burke collected 48 till samples, 49 rock samples and detailed geologic mapping on Pike cl 1-9 (YE96656-YE96677; YE96676-YE96677) which led to the discovery of a 40-cm wide quartz-malachite-chalcopyrite-molybdenum vein outcropping near the southern edge of the claim block returning 7.49% Cu and 138 g/t Au. On the Warden 1-4 cl (YE96672-YE96675) 40 till samples were collected at 100 m spacing on the plateau of Mt. Ward, identifying a 150m by 100m four sample geochemical anomaly.

In 2020, the property was expanded to 39 claims by Ryan Burke (Pike 1-26 and Warden 1-13), a 10-day exploration program consisted of collecting 251 till samples, 95 rock samples, a ground magnetic survey and continued detailed geologic mapping at Pike (1-26) cl. Drone surveying was also completed and resulted in the discovery of the Bonanza, Silver Train, Silver Saddle, and Upper Saddle showings. At the Warden 1-13 claims, the program consisted of collecting 42 rock samples and a drone survey.

In 2021, the property was expanded to 185 claims by Ryan Burke (Pike 1-172 and Warden 1-13). The exploration program was focused at Pike 1-175 cl, consisting of 299 rock samples, detailed geological mapping, and 395 line-km of airborne geophysical surveys over the claim block. New mineralization was identified at the historical ERT Zone as well as Bonanza, Silver Train, Ag Scree and Upper Saddle showings. The program resulted in additional discoveries of the SV, SV2, Moraine, Cro and Lead-Gold Saddle showings.

In 2022, Transition Metals Corp. optioned the Pike-Warden property from Ryan Burke and completed a exploration program consisting of prospecting, chip sampling in seven hand trenches across several mineral occurrences, as well as a 3 hole (204.2 m) RC drill program at the ERT Zone. On January 16, 2023, Transition Metals Corp released results from the RC drill program including: 16.76 m grading 93.95 g/t AgEq\*, (22-PW-01), 21.34 m grading 104.64 g/t AgEq\* (22-PW-02), and 12.19 m grading 52.96 g/t AgEq\*. 2022 outcrop and float values returned up to 11.8 g/t Au, 1,215 g/t Ag, 5.11% Cu, and >20% Pb. \**AgEq (Silver Equivalent) calculation based on gold and silver content with gold price of \$1,800 per Oz Au and silver price of \$23 per Oz USD.*\*

## **Regional and Property Geology**

The property is located within the Intermontane belt of the Canadian Cordillera. Oldest rocks in the area comprise domains and screens of Paleozoic gneiss, assigned to the Nisling Terrane by Hart and Radloff (1990), and Jurassic andesitic volcanic and siliciclastic sedimentary rocks of the Stikine Terrane and Whitehorse Trough overlap assemblage.

Stratigraphic and contact relationships are commonly obscured by the many intrusions associated with the Coast Plutonic Complex. Strata of the Jurassic Whitehorse trough are affected by a series of open to tight, northwest trending folds that probably formed in Upper Jurassic to Lower Cretaceous time, approximately coeval with activity of the Skeena Fold Belt to the south in British Columbia. The folds are superimposed on earlier, probably pre- Triassic, metamorphic fabrics and the northwest trending Tally-Ho shear zone, a major Late Triassic shear zone that is developed approximately 15 kilometres to the east of the project area (Naas, 2007).

Mesozoic plutonic rocks, which underlie much of the project area, separate the Jurassic units and Nisling Assemblage into isolated domains and screens. The most abundant rock types in the region comprise metaluminous Cretaceous intrusions of the Coast Plutonic Complex, which are subdivided into several plutonic suites by Hart and Radloff (1990). The dominant Cretaceous suites in the project area include the Mt. McIntyre plutonic suite (96 to 119 Ma), comprising the Mt. Ward granite and Carbon Hill quartz monzonite, and the Whitehorse plutonic suite (116 to 119 Ma), locally represented by the Mt. McNeil granodiorite pluton. Isolated accumulations of mid to late-Cretaceous volcanic rocks of intermediate composition of the Mt. Nansen Group are present regionally and are approximately coeval with the Coast Plutonic.

Pre-Tertiary rock types in the region are unconformably overlain by at least four Late Paleocene to Early Eocene volcanic complexes that form the Skukum Group, and are intruded by numerous associated rhyolite and andesite dikes. In the project area, these are the youngest exposed rocks and are represented by the Early Eocene Mount Skukum volcanic complex (MSVC) and the Bennett Lake volcanic complex (BLVC). Both these volcanic complexes mark the northern limit of the Sloko Volcanic Province, which extends south into British Columbia.

Late Cretaceous and Early Paleocene brittle dextral displacement associated with widespread dextral displacement throughout the Cordillera is related to reactivation of the Triassic Tally-Ho shear zone. This phase of displacement formed a brittle fault system, termed the Llewellyn fault by Hart and Radloff (1990), which exploited parts of the earlier Tally-Ho structure. Subsidiary faults generated during this tectonic episode may subsequently have been remobilized during Eocene volcanic activity to locally form caldera-bounding structures; these may also have acted as permeable structural sites for the formation of the late-volcanic vein deposits hosted by faults and shear zones in the area (Naas, 2007).

The MSVC comprises a bimodal sequence of subaerial volcanic and volcaniclastic rocks with a total thickness that locally exceeds 800 metres, and an areal extent of approximately 200 km2. Exposures of the complex adjacent to the Skukum Creek deposit are composed mainly of massive to poorly bedded, plagioclase porphyritic andesitic flows and tuff (McDonald et al, 1990, Naas, 2007). Rocks of the MSVC are locally separated from pre-Tertiary rock types by east- to northeast-trending, curved faults such as the Berney Creek fault and Wheaton lineament that may have been active synchronously with volcanism and which potentially form caldera-bounding structures (Hart and Radloff, 1990). These structures are host to or control probable synvolcanic vein and shear zone hosted Au-Ag mineralization in the district (Naas, 2007).

Separated from the MSVC by the Wheaton River, the BLVC is located 10 km south of the MSVC and is a 19-by-30 km volcanic centre composed of two fault-bounded, nested cauldrons. Each cauldron represents a resurgent cycle of cataclysmic pyroclastic eruptions. Each cycle contributed ~2000 m of rhyo-dacitic ash-flow tuffs and breccias with lesser rhyolite and andesite flows to the cauldron fill. A change from acid to intermediate volcanism during each eruptive cycle represents the tapping of a vertically zoned magma chamber (Lambert, 1974).

The BLVC is bounded by a series of arcuate rhyolite dikes that together form a roughly subelliptical arc around the periphery of the complex along a caldera-bounding structure, hereafter referred to as the "ring dike". The ring dike likely formed during caldera collapse. The dikes are nearly vertical, pinch and swell, and range from 100 to 300 metres wide. Many other leucocratic granite, rhyolite and dacite dikes are closely related spatially to the ring dike by virtue of having intruded along the ring fracture system (Lambert, 1974).

#### **Occurrence Geology**

The original Minfile occurrence (Ward) represented a centralized location encompassing the Confession, Repent, and Squeaker, ERT and Cu-North showings. Recent exploration success has expanded work on historical showings as well as identified multiple new showings which warranted separating the location of each showing out individually. Additional new occurrences are: Silver Train, SV1,

#### Boots, SV2, Moraine, Upper Saddle, Ag-Scree, as well as additional float sample occurrences that have been identified and sampled.

The original 1988 descriptions of the Confession, Repent and Squeaker Gold, silver and copper occur in three quartz-sulphide vein systems which outcrop in a cirque on the northwest side of Mt Ward. The Confession vein is described as a 10 cm wide, vuggy, milky white euhedral quartz vein with massive euhedral galena, massive chalcopyrite and minor pyrite, and malachite staining within granodiorite. The vein is traceable for 150 m along strike. Historical assays from this vein returned values such as 10.64 *g*/t Au, 378 *g*/t Ag, 3.98% Pb and 0.66% Cu. The Repent vein system is described as bull white and honey coloured quartz veins in granodiorite with chlorite selvages and blebs of pyrite and chalcopyrite. Veins pinch and swell from 1 to 30 cm. Phyllic and propylitic alteration halos extend ~1 m into surrounding granodiorite. Historical assays returned values up to 2.23 g/t Au. The Squeaker veins are described as a series of small parallel quartz veins up to 30 cm wide with fine grained pyrite, minor galena and chalcopyrite. The veins can be traced for at least 20 m. Historical assays returned values up to 19.67 *g*/t Au, 157.38 g/t Ag, 1.09% Pb, and 1.47% Cu. (Wilkins and MacKinnon, 1988) The vein sets appear to be associated with a swarm of parallel north to north-northeast trending rhyolite and dacite dikes.

### Work History

Date	Work Type	Comment			
12/31/1988	Geology				
12/31/1988	Development, Surface				
12/31/1988	Other				
1/1/2022	Geochemistry	51 rock samples			
1/1/2022	Drilling	3 holes totaling 204.2 m at ERT Zone showing			
1/1/2022	Trenching	7 hand trenches totaling 100 m in length			
1/1/2022	Other				
1/1/2021	Geochemistry	299 rock samples on Pike claims			
1/1/2021	Airborne Geophysics	395 line-km			
1/1/2021	Airborne Geophysics	VLF-EM; 395 line-km			
1/1/2021	Airborne Geophysics	395 line-km			
1/1/2021	Geology	Continued 1:5,000 scale mapping			
1/1/2020	Geochemistry	95 rock samples over Pike claims, 42 rock samples at Warden claims			
1/1/2020	Ground Geophysics				
1/1/2020	Geology	1:5,000 scale mapping			
1/1/2020	Remote Sensing	Drone surveys over portions of Pike and Warden claims.			
1/1/2020	Geochemistry	251 till samples			
1/1/2019	Geochemistry	49 rock samples			
1/1/2019	Geology	1:5,000 scale mapping			
1/1/2019	Geochemistry	48 till samples on Pike claims, 40 till samples on Warden claims			

### Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<u>092712</u>	1988	Preliminary Geological and Geochemical Report on the Sin 1-137 Mineral Claims	Rock - Geochemistry, Silt - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		

### **Related References**

Number	Title	Page(s)	Reference Type	Document Type
2	Geology and Genesis of the Mount Skukum Epithermal Gold-Silver Deposits, Southwestern Yukon (NTS 105 D/3, 6)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Bulletin
<u>1990-4(</u> <u>G)</u>	Geology of Whitehorse, Alligator Lake, Fenwick Creek Carcross and Part of Robinson Map Areas (105D/11, 6, 3, 2 & 7)		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Open File (Geological - Bedrock)