



Occurrence Details

Occurrence Number: 115P 048

Occurrence Name: Potter

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 6/15/2025 4:27:49 PM

General Information

Secondary Commodities: gold, lead, silver, tin, zinc

Aliases: Boulder Creek, Scheelite Dome Project

Deposit Type(s): Skarn Sn

Location(s): 63°45'33" N - -136°17'2" W

NTS Mapsheet(s): 115P16

Location Comments: 1 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Mohawk, etc cl (55397) in Mar/46 by G.F. Potter and P. Nord, following a prospecting discovery the previous fall. Potter was murdered by Nord in a dispute over the claims a few weeks after the claims were recorded and no further work was performed.

Restaked by H6000 Holdings Ltd in Aug/91 as part of a large block of 290 Che (YB19090) and 80 Mex cl (YB19364) centred on Scheelite Dome. H6000 trenched on the Mex cl in 1992 and performed reconnaissance geochemical surveys on the Che and Mex claims in 1992.

Between Oct. and Nov/94 Kennecott Canada Inc restaked the occurrence within SC cl 151-292 (YB43769). In May/95 Kennecott added SC cl 293-334 (YB44537) to the southwest end of its claim block. Between August and Sep/95 the company drilled 8 diamond drill holes (1 035 m) on various SC claims located along Highet Creek and carried out mapping, geochemical sampling and prospecting on SC claims surrounding the occurrence.

In Jan/96 Kennecott completed an airborne geophysical survey over the entire Scheelite Dome property. During the summer of 1997 Kennecott carried out geological mapping, prospecting, excavator trenching and a reverse circulation drill program consisting of 13 holes totaling 1 052 m.

In Nov/97 Kennecott granted La Teko Resources Ltd an option to earn a 100% interest in the Scheelite Dome property in return for spending \$800 000.00 on exploration by 2001.

Kennecott reserved a 49% back-in right or a 2% net smelter return royalty for itself and the original property owner (R. Riepe) continued to hold a 2% net smelter return royalty on the property.

In 1998 La Teko carried out a multi-phase exploration program consisting of reconnaissance soil geochemistry and prospecting followed by induced polarization and resistivity surveys and further grid based soil sampling followed by a seven hole diamond drill program (1 268m).

In Feb/99 Le Teko was acquired by Kinross Gold Corp. Kinross subsequently transferred the Scheelite Dome property to Copper Ridge Explorations Ltd which carried out a multidisciplinary work program involving, structural mapping, additional soil sampling and geophysical programs followed by a 13 hole, 1 357m diamond drill program. At the end of 1999 Copper Ridge earned 100% interest in the property, however Kennecott retained a 49% back-in right or a 2% net smelter return. The original vendor also holds a 2% net smelter return.

Capsule Geology

The Scheelite Dome area is underlain by the Yusezyu Formation, a Late Proterozoic siliciclastic unit of the Upper Proterozoic to Lower Cambrian Hyland Group. The metasedimentary rocks include strongly foliated muscovite-chlorite phyllites, quartzofeldspathic and micaceous psammities (quartzite), and gritty psammities that locally form massive outcrops. Rare marble and calc-silicate layers are best developed in the northwest portion of the property in the vicinity of the Cominco Zone, located on the north side of the Scheelite Dome Stock, although pods and boudins of marble and limy psammite can be found throughout the property.

The property is located on the south-dipping limb of the southwesterly striking McQuesten Antiform within the Tombstone Strain Zone. This package of rocks lies above the northeasterly vergent Tombstone Thrust. Fold and thrust deformation is believed to have occurred in Late Jurassic or Early Cretaceous times. A strong, northeasterly striking, moderately southeast dipping foliation affects the metasedimentary rocks and is the most prominent ductile fabric on the property. Small-scale isoclinal folds and crenulations are common.

The regional foliation is crosscut by three sets of moderately to steeply dipping fault and joint structures that strike east-west, northwest-southeast and north-south, respectively. The east-west and northwest-southeast structures host mineralization and therefore have received the most attention. The north-south structures are only rarely mineralized, have normal down-to-the-west displacement and appear to truncate and offset east-west structures. All of the structures form topographic lineaments.

The above structures were formed either during development of the McQueston Antiform or as a result of faulting accompanying igneous emplacement. Alternatively the structures may be extensional features related to a short-lived period of regional north-south extension coeval with Tombstone suite magmatism.

Following Jurassic-Cretaceous deformation, the Yusezyu Formation was intruded by metaluminous and reduced I-type granitic intrusions of the 94-90 million year Tombstone Plutonic Suite. The Scheelite Dome stock and others are massive, salt and pepper gray, medium grained quartz-, biotite- and hornblende bearing granite with local feldspar megacrysts. Contact metamorphic aureoles containing biotites and andalusite surround the intrusions.

Thin, medium to fine grained felsic to intermediate dykes and sills, commonly quartz and/or feldspar porphyries, and narrow lamprophyre dykes are common and are probably part of the Tombstone Plutonic Suite. The dykes preferentially intrude the east-west structures (Hulstein et al, 1999).

Four types of bedrock mineralization have been recognized in the Scheelite Dome area:

- 1) structurally controlled metasediment-hosted quartz-sulphide veins;
- 2) skarn;
- 3) Fort Knox-type granite-hosted low sulphide veins;
- 4) replacement-type occurrences.

The Potter occurrence (this occurrence) is a tin-bearing skarn formed within the Tombstone Strain Zone near the contact between psammite, grit and phyllite of the Yusezyu Formation and the northern margin of the mid-Cretaceous Minton Creek stock (Tombstone Plutonic Suite). The tin skarn contains axinite, calcite, actinolite, vesuvianite, garnet, plagioclase, epidote and quartz. Five chip samples collected by Emond and Lynch (1992) over a 25 m exposure of skarn, approximately 10-15 m thick, returned an average of 1 036 Sn. High-grade gold veins were also reported in the area but never confirmed.

Other skarn, Fort-Knox and replacement type occurrences occur throughout the Scheelite Dome property. All three types have been known to return economic to spectacular gold grades however their limited extent suggests that their economic potential remains low.

Kennecott's early work on the Scheelite Dome property identified geochemical and geophysical anomalous areas on the property. Fine fraction stream sediment sampling carried out by

Kennecott returned values as high as 140 ppb Au, while heavy mineral concentrate returned up to 6 560 ppm Au. Rock samples of quartz and arsenopyrite with lessor to trace amounts of stibnite, galea and pyrite returned up to 21.6 g/t Au. Although rock and soil samples collected in and around the Potter occurrence returned anomalous values for gold, structural mapping and geophysical survey results led Kennecott to assign the area a low exploration priority. The company then concentrated their exploration efforts on higher priority geochemical anomalies located elsewhere on the property.

While following up these anomalies Kennecott turned their attention to structurally controlled metasediment-hosted quartz-sulphide veins found throughout the Scheelite Dome property. The veins commonly contain fine grained tourmaline as well as arsenopyrite, +/- stibnite, +/- galena, +/- pyrite and they vary from breccia veins up to several metres in width occupying major fault zones, to thin quartz veinlets filling joint sets, locally closed spaced and described as sheeted veins. Visible gold found in a number of localities, usually occurs in association with arsenopyrite. Vein-wallrock contacts are sharp with narrow (commonly <1cm wide) selvages defined by bleaching, sulphidation, sericitization, silicification and tourmalinization. However, metasedimentary rocks crosscut by veins are limonite-stained and are commonly weathered to depths of 1-15 m or more implying the former presence of widely dispersed sulphides.

In exploring for these veins Kennecott and later companies adapted a multidisciplinary work program involving a combination of detailed structural mapping and the concentrated interpretation of geophysical (magnetic, resistivity and IP) and surface-geochemistry data. Soil sampling outlined a 3 km by 6 km soil geochemistry anomaly with prominent > 40 ppb Au highs. Detailed geophysical programs over the geochemical highs identified northwest-southeast fault zones and adjacent arrays of east-west striking gold-sulphide tension veins. These fault zones represent primary fluid conduits, which are linked hydrothermally by east-west trending tension veins and tension fractures. Areas endowed with a high density of closely spaced NW faults and associated veins have the highest likelihood of hosting economic concentration of Au. Mineralization was also found to occur along reactivated early N striking faults.

Five of the eight holes drilled in 1995 in the Hight Creek drainage (Minfile Occurrence #115P 003) by Kennecott returned significant results. The best intersection, hole 95-5 returned 1.20 g/t Au over 4.41 m from a bleached, light grey-green moderately foliated phyllite containing calcite and grey quartz veinlets and moderate amounts of pyrite and arsenopyrite. Hole 95-2 returned 1.03 g/t Au over 3 m from a similar rock unit.

Kennecott's airborne geophysical survey consisted of 1 275 line km of airborne multifrequency electromagnetics, high sensitivity Cesium magnetics, four channel VLF and a video survey. The survey outlined numerous prominent fault structures some of which, although not mineralized themselves, are spatially associated with mineralization. The survey also outlined 18 prominent anomalies, 10 of which are associated with known mineralization or geochemical anomalies. The survey failed to accurately outline most of the intrusive bodies.

Kennecott's 1997 reverse circulation drilling program tested areas within the large gold in soil anomaly located east of the Hawthorne Vein structure (Minfile Occurrence #115P 003). All of the holes intersected mineralization. Selected results include 0.48 g/t Au over 29 m in hole 97-4 which was abandoned at a depth of 29 m and Hole 97-11 which assayed 0.415 g/t Au over its entire 60.1 m length.

La Teko Resources' 1998 diamond drill program was carried out over the same soil anomaly targeted by Kennecott the previous year (Minfile Occurrence #115P 003). The drilling tested targets selected using a combination of controlling features including gold-in-soil and rock anomalies and chargeability and resistivity anomalies from the 1998 induced polarization survey. The targets were within a strong east-west striking gold mineralization system as outlined by anomalous gold-in-soils and bedrock over an area 4 km by 1.5 km. Mineralization was encountered in all drill holes, with the best intersection from hole 98-12 returning 7.7 m of 3.67 g/t Au. The success of the 1998 program demonstrated the effectiveness of a multidisciplinary approach to exploration.

The 1999 drilling program was successful in continuing to delineate widespread gold mineralization on the property and demonstrating the importance of northwest-striking fault zones (veins). Drill intersections were characterized by correlation with key pathfinder elements including bismuth, arsenic and antimony. Drill intersections also correlate well with areas of strong alteration, fracturing and shearing, and the presence of a large quantity of discordant quartz veining.

References

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Work History		
Date	Work Type	Comment
12/31/1996	Airborne Geophysics	Kennecott also flew magnetic, and VLF surveys over entire Scheelite Dome property.
12/31/1995	Geology	
12/31/1995	Geochemistry	Also silt and rock sampling.
12/31/1995	Other	
12/31/1992	Geochemistry	
12/31/1992	Trenching	
12/31/1946	Other	Led to staking of claims.

Assessment Reports that overlap occurrence					
Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094952	2006	Report on the 2006 Exploration Program on the Toby Zone, Scheelite Dome Project	Rock - Geochemistry, Soil - Geochemistry, IP - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Mechanical - Trenching		
093549	1996	Assessment Report on 1996 Geophysical Work at the SC 1-525 Claims	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
093482	1995	Assessment Report on 1995 Geological and Geochemical Work at the SC 205-208, 211-292 Claims	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Regional Surficial Mapping - Geology, Prospecting - Other, Photogrammatic - Studies		
090459	1978	Soil Geochemistry, Trenching, Mapping and Bedrock Sampling Undertaken on Sun Group Claims 1-112, Glow Claims 1-33, 34, 36-58, 60-86, 88, 89, and 125 and 92, Scheelite Dome area, Mayo, Y.T.	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Line Cutting - Other, Prospecting - Other, Mechanical - Trenching		