Occurrence Details

Occurrence Number: 115H 055
Occurrence Name: Lib
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 8/6/2025 1:46:04 AM

General Information

Secondary Commodities: arsenic, gold
Aliases: Kluane, Killer Gold, Ruby Range Project, DalBianco
Deposit Type(s): Vein Au-Quartz
Location(s): 61°10'30" N - -137°41'55" W
NTS Mapsheet(s): 115H04
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Lib cl 1-12 (YB6311) in Aug/87 by R. Dalbianco, who performed prospecting, sampling and hand trenching in 1987 and optioned the claims to Silverquest Resources Ltd. Silverquest optioned the property to Pezgold Resource Corp, which performed prospecting and geochemical surveys in 1988.
Restaked as Delor cl 1-10 (YB37735) by J.P. Ross in Jan/93. Ross optioned the claims in Sep/93 to Cash Resources Ltd which staked 14 fractional Delor claims (11-24, YB38302) and conducted a program of hand trenching, geochemical sampling and prospecting. Cash added Delor cl 25-48 (YB47116) to the claim block in July/94 and Delor cl 49-129 (YB54418) in Aug/94. During the summer of 1994 the company carried out grid soil sampling, prospecting, some geological mapping and experimental geophysical surveys.
In Mar/95 E.C. Long staked Dun cl 1-8 (YB57453) on the southern end of the Delor claim block.
In the spring of 1995 NDU Resources Ltd optioned the Ruby Range project ((Malou, Shut, Agnus claims = Minfile Occurrence #115H 047), and Delor claims)) from Cash Resources. A total of 14 diamond drill holes (1874 m) and 25 excavator trenches were dug on various mineralized zones located on the property. In the vicinity of this occurrence NDU drilled 8 diamond drill holes (1283.7 m) on the Rikus zone and 3 diamond drill holes (309.7 m) on the Malou zone. The company also dug 8 trenches (302 m) on the Rikus zone and 9 trenches (330 m)on the Malou zone. NDU also carried out geological mapping and geophysical surveys in the vicinity of the occurrence. At the end of 1995 NDU dropped their option on the claims.
In Apr/97 Cash Resources transferred ownership in the Delor claims to Ross.
In Spring/2002 Cash Minerals Ltd (formerly Cash Resources) reoptioned the Malou and Delor claims from Ross and again combined them with their Shut and Angus claims to forming the Ruby Range project.

Capsule Geology

The Kluane property is underlain by Late Mesozoic metasedimentary rocks of the Kluane schist and Latest Cretaceous to Eocene rocks of the Ruby Range suite. The Kluane schist consists of a fairly monotonous package of biotite-quartz schist, muscovite-quartz schist and rare lenses of altered and strongly deformed ultramafic rock and marble. Metamorphic grade reaches upper greenschist with local zones of amphibolite. The Kluane schist is intruded by intrusions of the Ruby Range Suite. The Ruby Range suite ranges in age from ca 65 Ma to 52 Ma and consists of biotite granodiorite and hornblende quartz-diorite (Israel et al., 2010).
Three main rock types underlie the Kluane property; 1) biotite-quartz schist of the Kluane schist; 2) migmatitic paragneiss of the Kluane schist; and 3) granodiorite to quartz-diorite of the Ruby Range suite. In the southernmost portion of the claim block, dark grey to black biotite-quartz schist dominates. The schist often forms blocky outcrops that locally weather a brown-orange colour along fractures and joints. Biotite and quartz are the main minerals with the biotite forming the main foliation surfaces. Minor amounts of garnet and staurolite are found as accessory minerals. White to slightly rusty quartz veins of varying widths are ubiquitous and many veins are laterally discontinuous and often have sigmoidal or lozenge shapes. Structurally overlying the schist is a relatively thick package of dark-grey to black and orange weathered migmatitic paragneiss. The paragneiss is characterized by biotite and quartz layers separated by more leucocratic layers comprised of feldspar and quartz. The leucocratic layers appear to be injected melts that may be derived by local partial melting or by melts sourced by intrusions that have migrated along foliation planes.
Marble lenses and rare skarn zones are found within the gneiss on the east-facing slope above Killermun Lake. Exposures of marble are typically white to pale green on both weathered and fresh surfaces, display weak silicification, and range up to 7 m thick and 100 m long. Skarns consist of medium to coarse-grained garnet and diopside. The marbles are often rusty weathering and difficult to distinguish from the surrounding gneiss, unless the rock is broken.
The northern half of the property is comprised of coarse to medium-grained, biotite, granodiorite and hornblende +/- biotite, quartz-diorite of the Ruby Range suite. These rocks generally weather a light grey to white and are locally feldspar porphyritic. Smokey grey quartz grains are common in the granodiorite and less so in the quartz-diorite. The granitic rocks are unfoliated and cross-cut all ductile fabrics found in the Kluane schist except for a strongly foliated border phase that is sporadically observed in outcrop near the boundary with the paragneiss. Foliation in the border phase parallels those found in the Kluane schist and has been attributed to syndeformation intrusion of the earliest phases of the Ruby Range suite (Israel et al., 2010).
Two sets of narrow unfoliated dykes have been noted on the property in several areas underlain by Kluane schist. The dykes are up to one metre wide and are best distinguished by grain size. One of these dykes, from the central part of the property, has been dated at 55.3 Ma. This overlaps a 55.8 Ma age obtained from the main phase of the Ruby Range found just outside the northern portion of the property.
Prospecting up to 2002 has identified numerous vein and float occurrences within a 5 500 by 3 500 m area in the central part of the claim group that are usually associated with north trending recessive topographic linears. These occurrences have been grouped into eight zones, only two of which (Rikus and DalBianco(this occurrence location)) contain mineralized outcrops.
The original occurrence consists of north-northwest striking quartz-carbonate veins cutting biotite schist ("Kluane Schist"). The Dalbianco #1 vein contains mainly arsenopyrite, specimens of which grade up to 123 g/t Au. The vein is exposed for a length of 50 m and channel samples assay up to 29.8 g/t Au over 0.37 m.
The adjacent Dalbianco #2 vein returned assays up to 6.51 g/t Au over 0.61 m, while the parallel Wanger vein, 120 m to the east, assayed up to 9.95 g/t Au over 0.27 m.
A gold soil geochemical anomaly with values ranging up to 1500 ppb Au coincides with the mineralization and extends 1000 m to the edge of the sampled area. Other gold geochemical anomalies are also present on the grid.
The 1994 soil sampling program on the Delor claims outlined a 3.5 km long by 300 m to 1 000 m wide Au and As anomaly. Additional smaller but more intense anomalies were also found. Hand trenching also enlarged the exposed vein structure in the Dalbianco zone. Chip samples of arsenopyrite-rich material assayed as high as 41.07 g/t Au across 0.15 m but most returned less than 9 g/t Au. Seven trenches across the discovery vein and alteration zones, over a 63 m strike length returned a weighted average assay of 2.03 g/t Au across 3.37 m.
The Rikus zone was discovered 1.5 km northeast of the Dalbianco zone by prospecting and hand trenching. The zone is composed of two relatively continuous veins plus smaller veins and fractures. The vein system is 50 to 100 m wide and has been traced 350 m horizontally and 245 m vertically. The two main veins range from 0.2 to 0.75 m in width and are composed of massive milky white quartz that is often strongly fractured parallel to strike. Sulphides consist of up to 20 % arsenopyrite which is generally fine grained (<1 mm diameter) and displays preferential alignment parallel to the fracture direction within the quartz. Most arsenopyrite in this zone has a blue-green hue unlike the more brassy appearance at the Dalbianco zone. Weak clay-altered haloes up to 1.0 m wide are developed around the veins. The two main veins and wallrock were sampled in five hand trenches over a strike length of 60 m and yielded weighted average grades of 4.30 g/t Au across 3.2 m and 3.94 g/t across 3.65 m. Individual veins assayed up to 45.43 g/t Au over 0.6 m.
An orientation HLEM geophysical survey was conducted over the Rikus and Dalbianco zones with mixed results. Eight diamond drill holes (1 283.7 m) were completed on the Rikus zone in 1995, over a strike length of 400 m. All the holes encountered narrow mineralized intersections. The best result in hole 95-3 returned 2.83 g/t Au over 6.80 m including a 0.10 m wide vein plus 1.0 m of altered wallrock in the footwall and 5.7 m in the hanging wall. The excavator trenches explored targets in the vicinity of the Rikus zone. Five trenches tested soil geochemical anomalies west of the main Rikus veins but exposed only weak structures with near background levels in Au and As and three other trenches failed to reach bedrock. A Maxmin EM geophysical survey north of the Rikus zone suggested that the mineralized veins continue across a recessive topographic linear.
Three diamond drill holes and 9 excavator trenches tested three topographic linears and two soil anomalies at the Malou zone. (Although called the Malou zone, the zone is actually located on the Delor

claims approximately 750 m northwest of the Rikus zone). The linears are north-trending and consist of strongly altered wallrock containing a stockwork of narrow quartz-arsenopyrite veinlets. The drill holes tested the downdip continuity of the narrow stockwork veins uncovered in trenches at surface. The drill holes generally confirmed the veins at depth but the veins were generally too narrow to be economic. The best intersection returned 2.74 g/t Au over 0.33 m.
Work in 2002 on the Sack zone (1.4 km northeast of the Rickus zone) where mineralized float was discovered in 1995 led to the discovery of additional vein float material along a series of poorly exposed linears. Mineralized float from this area assays in the 3 to 9 g/t Au range and is typically more arsenopyrite rich than other zones.

Work History

Date	Work Type	Comment
5/1/2020	Geochemistry	
5/1/2020	Geochemistry	
5/1/2020	Trenching	
5/1/2020	Geology	
5/1/2019	Remote Sensing	
5/1/2012	Airborne Geophysics	
5/1/2012	Airborne Geophysics	
5/1/2009	Geochemistry	
5/1/2009	Geochemistry	
5/1/2009	Trenching	
5/1/2009	Other	
5/1/1995	Geochemistry	
5/1/1995	Geochemistry	
5/1/1995	Geochemistry	
5/1/1993	Geochemistry	
5/1/1993	Geochemistry	
5/1/1993	Geochemistry	
5/1/1993	Trenching	
5/1/1993	Other	
12/31/2002	Geochemistry	
12/31/2002	Geochemistry	
12/31/2002	Trenching	
12/31/2002	Other	
12/31/1995	Drilling	Eleven holes, 1,593.4 m.
12/31/1995	Geology	
12/31/1995	Ground Geophysics	MaxMin
12/31/1995	Trenching	Seventeen trenches, 632 cubic m removed.
12/31/1994	Trenching	
12/31/1994	Geology	
12/31/1994	Geochemistry	
12/31/1994	Ground Geophysics	HLEM survey.
12/31/1994	Other	
12/31/1988	Geochemistry	Also rock sampling.
12/31/1988	Trenching	
12/31/1987	Geochemistry	
12/31/1987	Trenching	
12/31/1987	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled

096090	2012	Assessment Report Describing Airborne VTEM and Magnetic Survey at the Kluane Property	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
095184	2009	Assessment Report Describing Prospecting, Hand Trenching and Soil Geochemistry at the Kluane Property	Soil - Geochemistry, Prospecting - Other, Hand - Trenching		
094415	2002	Assessment Report Describing Hand Trenching, Prospecting and Soil Geochemistry at the Ruby Range Project	Soil - Geochemistry, Prospecting - Other, Hand - Trenching		
093458	1995	Assessment Report Describing Diamond Drilling, Trenching and Geophysical Surveys at the Ruby Range Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Backhoe - Trenching	14	1874
093250	1994	Assessment Report Describing Prospecting, Soil Geochemistry, Trenching and Geophysical Surveys at the Ruby Range Project	Soil - Geochemistry, EM - Ground Geophysics, Prospecting - Other, Backhoe - Trenching		
093205	1993	Prospecting and Hand Trenching Report	Rock - Geochemistry, Prospecting - Other, Hand - Trenching		
092681	1988	Report on Soil Geochemical Survey	Soil - Geochemistry		

Related References

Number	Title	Page(s)	Reference Type	Document Type
93-002	Prospecting and Trenching on Malou and Faith Claims		Yukon Government: Energy, Mines and Resources	YMEP Report
YEG2010_07	New insights into the geology and mineral potential of the Coast Belt in southwestern Yukon.		Yukon Geological Survey	Annual Report Paper