Occurrence Details

Occurrence Number: 105O 030
Occurrence Name: Grizz
Occurrence Type: Hard-rock
Status: Showing
Date printed: 8/6/2025 8:03:01 AM

General Information

Secondary Commodities: gold, molybdenum, silver, tungsten
Deposit Type(s): Porphyry Mo (Low F-Type)
Location(s): 63°34'18" N - -131°5'4" W
NTS Mapsheet(s): 105O11
Location Comments: 1 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Grizz cl (YA40956) in Sep/79 by Inco Ltd, which performed limited mapping and geochemical sampling in 1980.
The showing was restaked within the Sun cl 1-139 (YA62957) in 1981 by AGIP Canada Ltd. The Sun claims were part of AGIP¿s larger Emerald Lake project. AGIP carried out reconnaissance prospecting and silt sampling on the claims in 1981 followed by a more detailed exploration program in 1982. AGIP changed its name to AGIP Resources Ltd in 1988.
In Apr/95, B. Lueck restaked the Sun claims within My cl 1-154 (YB44205). In the summer of 1995 APC Ventures Ltd carried out an intensive geochemical sampling program on the My claims. In 1996 Yukon Gold Corp drilled 2 diamond drill holes on the Tom Zone (length unknown), neither of which were filed for assessment credit. In Jun/97 the My claims were optioned to Cyprus Canada Ltd which carried out a reconnaissance sampling program over two areas of the claim block.
In Aug/97 Cyprus Canada staked XDD cl 1-56 (YB81152) to the north and Bee cl 1-28 (YB81076) to the east and south.

Capsule Geology

The showing is located between the east end of the Emerald Lake Pluton and the Horn Peak outlier. Smit (1984) described the pluton as a saturated, metalumious, alkaline to calcalkaline, epizonal syenite to granite of upper Cretaceous age, (92 Ma) which passively intrudes Cambrian to Devonian sedimentary rocks of the Selwyn Basin. Smit described 3 phases within the pluton. The Main phase consists of pink to white orthoclase megacrysts with large hornblende crystals and finer grained plagioclase, orthoclase and some quartz. The Biotite phase is finer grained than the Main phase and contains fine to medium grained biotite but little hornblende. The Blue Trachytic phase consists of a bluish grey colored rock that is generally more mafic than the other phases and contains roughly aligned to trachytic orthoclase megacrysts and finer grained mafics, orthoclase, plagioclase and sometimes quartz.
The Main phase makes up 75% of the pluton, the Biotite phase occurs in the central-south portion and the Blue Trachytic phase occurs in the west end and the Horn Peak outlier. Contacts between the phases are gradational. Between the Main and Blue Trachytic the transition is a few to several metres wide. The border between the Main and Biotite phases is even more gradational and the Biotite and Blue Trachytic phases are never in contact. The Main phase was observed intruding the Blue Trachytic phase, but no intrusive relationships were observed between the Main and Biotite phases.
The contact between the intrusion and sedimentary rocks is generally quite shape, but in rare instances gradational over a few centimetres. The contact region displays a well developed hornfelsic contact metamorphic aureole extending for several km away from the margins of the intrusions. There is some injection of dykes into country rock but most only go a few meters outside the mapped pluton boundary. The intrusion remains coarse grained right to its outer contacts and even the dykes are coarse grained. Aplitic , rarely pegmatitic, dykes intrude all phases of the pluton. Uncommon dykes include, in the west, a few composed almost entirely of orthoclase and one which contains aligned orthoclase crystals in a more mafic matrix. In the southwest corner, the Blue Trachytic phase has been cut by white weathering, orthoclase megacrystic granite dykes of similar appearance to the Main phase.
Vugs were observed throughout the pluton. They can be up to several meters across but are usually just a few centimeters across and ubiquitious. They are most common in the western half of the pluton and contain quartz, tourmaline, orthoclase, biotite and sometimes sulphide mineralization. Quartz crystals larger than 0.5 m long have been found.
Mineralization appears to be a late event which involved highly differentiated post magmatic fluids moving through and leaving precipatates in fractures and open joints. Veins with quartz, orthoclase, tourmaline and biotite gangue contain bismuth, copper, gold, molybdenum and tungsten mineralization. The veins are generally less than a centimeter wide, occur in all phases of the pluton but are locally concentrated. The veins do not noticeably alter the surrounding wall rock.
There is some confusion regarding the exact location of the occurrence. The showing¿s original description described minor molybdenite and scheelite in quartz veins cutting a small outlier at the east end of the Cretaceous Emerald Lake pluton. Work carried out by AGIP in 1981 and Cecile¿s 1998 geological map located the showing in intruded sedimentary rocks located between the Emerald Lake Pluton and the Horn Peak outlier. Soil sampling carried out by AGIP in 1981, in the vicinity of the showing, returned up 525 ppb Au. Chip samples from the same area returned up to 120 ppb Au. A change in corporate direction (i.e. company focused on oil and gas and uranium exploration) lead AGIP to allow their claims to lapse.
APC Venture Ltd¿s exploration program was focused at locating and sampling mineralized showings previously located by AGIP and prospecting for new mineralized showings. APC identified 4 separate areas of mineralization, of which two, the Glacier and Mt Soleil zones occur in the vicinity of the Emerald occurrence (Minfile Occurrence #105O 009).
1) The Meadow zone is located 2.5 km to the southwest and consists of stockwork and disseminated quartz-sulfide mineralization in a biotite phase of the pluton. The mineralization is intersected by several recent vertical fault zones. Chip sampling of weathered rock returned significant gold and silver grades covering a large area. (.75 g/t Au and 25 g/t Ag over 40 m).
2) The Tom zone is located 1.5 km to the southwest and consists of parallel sheeted quartz veins ranging from 1 to 10 cm in width which occur over a large area at the contact between the pluton and sedimentary rocks. Initial chip sampling of the zone returned 530 g/t Au (15.5 ounces/ton) over 1 m. A second chip sample collected 100 m along strike returned 15.9 g/t over 10 m. Significant visible gold is associated with bismuthinite and quartz in quartz-feldspar pegmatite veins.
Vein occurrences in the neighboring sediments are also gold bearing. A chip sample collected by AGIP returned 13.38 g/t Au over 1.5 m. Soil sampling carried out by AGIP, in the same area, returned anomalous Au values of 100-600 ppb over a distance of 125 m.
Yukon Gold Corp drilled two diamond drill holes (footages unknown) on the Tom zone in 1996 but neither hole returned any significant mineralized intersections.
Cyprus Canada Ltd collected 17 chip and grab samples, comprised of both the intrusive and sedimentary rocks, located near the contact zone. The best result was 90 ppb Au.

References

AGIP CANADA LTD, Jun/82. Assessment Report 091055 by T. Garagan.

AGIP CANADA LTD, Feb/83. Assessment Report 091430 by T. Garagan.

APC VENTURES LTD. Mar/96. Assessment Report 093484 by J.J. Irwin.

ALLIANCE PACIFIC GOLD CORP, 6 Aug/97. News Release.

CECILE, M.P. 1998. Geology and structure cross-section, Arrowhead Lake, Yukon Territory; Geological Survey of Canada Map 1943A, scale 1:50 000.

GEOLOGICAL SURVEY OF CANADA Open File 1118.

CYPRUS CANADA INC. Apr/98. Assessment Report 093827 by X. Jong and D Broughton.

GEOLOGICAL SURVEY OF CANADA Paper 53-7, p. 40-41.

GEORGE CROSS NEWSLETTER, 11 Aug/97.

SMIT, H., 1984. Petrology, chemistry, age, and isotope study of the high potassium Emerald Lake Pluton, Eastern Yukon Territory. Unpublished B.Sc. Thesis, University of British Columbia.

YUKON EXPLORATION AND GEOLOGY 1995, p. 14, 16. 1996, p.25, 30.

Work History

Date	Work Type	Comment
12/31/1997	Other	
12/31/1996	Drilling	Number of holes drilled: 2 Two holes drilled on Tom zone, no details available.
12/31/1995	Other	
12/31/1982	Geology	
12/31/1982	Other	
12/31/1981	Geochemistry	Program was reconnaissance in nature.
12/31/1981	Other	Program was reconnaissance in nature.
12/31/1980	Geology	
12/31/1980	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096026	2011	Assessment Report, 2011 Surface Geochemical Exploration Program	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry		
093827	1997	1997 Geological Assessment Report on Emerald Lake Claims	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry		
091076	1982	The Geology of the Old Cabin Claims	Detailed Bedrock Mapping - Geology, Process/Interpret - Pre-existing Data		
090866	1981	Assessment Report on Geological Mapping, Geochemical Sampling and Trenching, Ice Claims	Orthophoto - Airphotography, Rock - Geochemistry, Silt - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other, Handblast - Trenching		
091057	1981	Supplementary Assessment Report for Ice Claims 1-143	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Line Cutting - Other, Handblast - Trenching		
019809	1968	Hess Area Project Proposed Property Follow-Up 1968 Field Season	Research/Summarize - Pre-existing Data		
019033	1968	Atlas Explorations Limited Project Report 1968 Hess River Area	Silt - Geochemistry, Soil - Geochemistry, Regional Bedrock Mapping - Geology		
018947	1967	Hess River Project Report	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology		
019032	1967	Hess River Project Report	Data Compilation - Pre-existing Data		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC015562	Geochemical map with location and results - Emerald Lake		Property File Collection	Geochemical Map
ARMC015559	Frequency distribution Cu-Pb-Zn soils - Emerald Lake area		Property File Collection	Geochemical Map
ARMC011942	Geochemical values - 105-O-11 detail area - Arrowhead Pass - MacMillan project		Property File Collection	Geochemical Map