Occurrence Details

Occurrence Number: 115F 047
Occurrence Name: Epic
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 12/16/2025 3:19:16 PM

General Information

Secondary Commodities: cobalt, copper, molybdenum, nickel, palladium, platinum
Aliases: Cessna
Deposit Type(s): Ultramafic Mafic Gabbroid Cu-Ni-PGE
Location(s): 61°58'57" N - -140°35'2" W
NTS Mapsheet(s): 115F15
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Cessna cl 1-4 (64486) etc. in Mar/63 by F. Harbottle and others. Restaked as Fox cl 1-8 (90349) and Pig cl 1-8 (90357) in May/64 by T. Eikland and as Hawk cl 1-8 (92287), Owl cl 1-8 (92295) and Jumbo cl 1-8 (92303) in Jul-Oct/65 by C. Eikland. The claims were optioned in Oct/65 by Cominco Ltd, which conducted a detailed mapping program in 1966.
Restaked in Aug/73 as Kim cl 1-4 (Y76422) by the Nickel Syndicate (Canadian Superior Exploration Ltd, Aquitaine Company of Canada, Home Oil Ltd and Getty Mines Ltd).
Restaked as IV cl 1-20 (YA95769) in Aug/86 by Polestar Exploration Inc, which performed mapping and geochemical sampling later in the year and in 1987. Harjay Exploration Company Ltd tied on HWY cl 1-14 (YB8560) to the northeast in Oct/87. G. Harris restaked the HWY claims as HWY cl 1-4 (YB25635) in Apr/89.
Restaked as White cl 1-18 (YB38234) in Aug/93 by Expatriate Resources Ltd which purchased the adjoining Micro, Weng, Cana and Onion claims (Minfile Occurrences #115F 045 and #115K 077) at the same time. Expatriate consolidated all of the claims into the Canalask Property.
In Oct/96 Expatriate surrounded the White claims with numerous non-sequential blocks of WR claims (6-20, etc...(YB96873). Between 1993 and 1998 all exploration work on the property was carried out on claims located on the east side of the White River (Minfile Occurrence #115F 045). In Sep/97 Expatriate flew an airborne geophysical survey over the entire property. In 1998 the company carried out prospecting and silt sampling over the length of Miles Ridge and soil sampling over selected areas of the ridge.
In Oct/99 the Canalask property (including this occurrence) was optioned by Uravan Minerals Inc which carried out extensive prospecting, geological mapping, geochemical sampling programs and detailed ground Mag, HLEM and IP geophysical surveys over the western half of the property in 2001, including the area immediately surrounding this occurrence. In the summer of 2002 Uravan drilled 2 diamond drill holes (410.5 m) on Canalask property. One hole (181.4 m) was collared on White cl 2 (YB96596) to test the Sax-Cessna embayment. Uravan dropped its option at the end of 2002 and returned the property to Expatriate. Expatriate transferred the property to StrataGold Corporation in May/2003.

Capsule Geology

The area is located on the west side of the Alaska Highway in the vicinity of the White River. The area lies along the northwest margin of the Wrangellia Terrane within a steeply dipping package of Late Paleozoic and Early Mesozoic volcanic and sedimentary rocks. These rocks have been subdivided into two groups, the Skolai Group and the Nikolai Group. The mafic-ultramafic White River Intrusive complex intrudes at or near along the contact between the Station Creek and Hansen Creek formations (Skolai Group). The Shakwak-Denali Fault system bounds the area to the northeast and the Duke River Fault to the southwest.
The Skolai Group is comprised of the Pennsylvanian to Permian Station Creek Formation and the Lower Permian Hansen Creek Formation. The Station Creek Formation, represents the oldest rocks in the area, and forms the lower part of the Skolai Group. The lower 600 m of the formation consists of pale green pyroclastic andesites and interbedded phyllites. The upper 400 m of the formation consists of interbedded black phyllite, siltstone, argillaceous limestone and cherty argillites with minor tuff horizons. Together the formation regionally exceeds 1 000 m in thickness.
The Lower Permian Hansen Creek Formation forms the upper part of the Skolai Group and consists of various sedimentary rocks including black phyllite, chert siltstone, limestone and conglomerate. The basal contact with the Skolai Creek Formation is described as gradational and arbitrarily placed at the uppermost volcanic unit. The Hansen Creek Formation regionally attains a maximum thickness of 800 m.
The Nikolai Group consists of a kilometer or more thick sequence of Middle to Late Triassic basaltic flows and interbedded limestone with local volcanic breccia and conglomerate, chert and argillite that overlies the Skolai Group rocks along an angular unconformity. Flows are thin (2 to 10 m), vesicular to amygdaloidal and are locally hematite stained indicating shallow water to sub aerial deposition.
The volcanic and sedimentary sequence is intruded by the Lower to Middle Triassic White River Intrusive Complex, part of the larger Kluane Mafic-Ultramafic Belt which occurs within the Kluane Ranges of the Yukon. The White River Intrusive Complex consists of a sill-like body of ultramafic and mafic rocks that have an average thickness of 450 m and dip to the southwest. It intrudes at the contact between the Station Creek Formation volcanic breccia and tuff and the overlying Hansen Creek Formation limestone and clastic sedimentary strata. The northern margin of the complex represents the original intrusive basal contact zone, whereas the southern margin delineates the upper intrusive contact. The mafic-ultramafic complex grades abruptly into a marginal quartz- carbonate alteration zone. This enveloping alteration zone occurs at the footwall and hanging wall contacts where it is developed over a width of approximately 50 m. Contacts are poorly exposed with highly variable dips ranging from vertical to shallow.
The intrusions generally exhibit good zonation, characterized by a marginal gabbro that forms the base of the intrusion. These gabbros are generally fine grained, often mineralized and are overlain by melano-gabbro, clinopyroxenite, peridotite and dunite. Mineralization consists of gabbro and pyroxenite hosted magmatic sulphide concentrations occurring as massive to net textured pods or lenses hosting economic quantities of nickel-copper + platinum group elements + gold.
The original occurrence lies northeast of the mafic-ultramafic complex and marks the location where minor amounts of pyrite, chalcopyrite and molybdenite mineralization were observed by Cominco Ltd in calcite stringers in shear zones. The shear zones measure up to up to 6 m wide and cut andesite and Cretaceous diorite. Numerous small isolated outcrops containing minor amounts of nickel, /or copper and molybdenite mineralization were outlined at various points along the mafic-ultramafic complex. All exploration work carried out after 1966 was centered on this complex.
Polestar Exploration Inc cut a grid overtop the mafic-ultramafic complex which is centered over Miles Ridge. Rock and soil sampling outlined a linear copper-nickel anomaly over much of Miles Ridge and coincident platinum and palladium anomalies were outlined south of the occurrence near the northeast contact of the ultramafic intrusion. In addition soil sampling outlined a 350 m long continuous nickel, copper, platinum and palladium anomaly approximately 2.5 km to the southeast, coincident with the mafic-ultramafic complex. The 1988 ground magnetic geophysical survey outlined the mafic-ultramafic complex very clearly and the accompanying VLF survey outlined several strong anomalies. It appears Polestar never followed up any of the anomalies.
Expatriate¿s 1996 airborne geophysical survey outlined numerous broad resistivity lows thought to represent anomalous concentrations of disseminated sulphide mineralization. Prospecting carried out in 1998 identified the Cessna Zone approximately 500 m south of the occurrence. The zone measures approximately 800 m long and straddles the mafic-ultramafic complex. A 4 m chip sample collected from a poorly exposed sheared limonitic rock identified as a gabbro occurring along the footwall contact of the mafic-ultramafic complex returned 2 090 ppm nickel, 1 770 ppm copper, 0.14 g/t platinum and 0.63 g/t palladium. Several hundred metres southeast of this area, a grab sample of green stained peridotite with pale colored xenoliths returned values of 3 090 ppm nickel, 2 040 ppm copper and 2 140 ppm chromium.

Prospecting 2.5 km southeast of the occurrence outlined the Polestar Zone. This zone is located on the northeast contact of the mafic-ultramafic complex and is located within Polestar Exploration¿s 1988 soil geochemical anomaly. The zone measures approximately 500 m long. A composite chip sample collected from an outcrop of sheared gabbro returned values of 2 080 ppm nickel, 1 770 ppm copper < 0.14 g/t platinum and 0.42 g/t palladium. A grab sample collected 100 m to the east and consisting of siliceous altered footwall material returned values 0f 1 010 ppm nickel and 1 065 ppm copper.
Silt sampling across Miles Ridge revealed that streams draining the footwall contact of the mafic-ultramafic complex returned highly anomalous values for nickel and copper. Further prospecting determined that all known areas of mineralization are associated with pronounced embayments on the floor of the complex suggesting the embayments are centers for enriched sulphide mineralization.
Uravan Minerals 2001 exploration program outlined two new showings in the vicinity of this occurrence. The first showing, called the Pix Showing lies at the contact between the mafic-ultramafic complex and the enveloping quartz carbonate alteration zone, approximately 700 m southwest of the occurrence. Although poorly exposed, rock samples consisting of strongly altered gabbro returned values of between 0.115 ¿ 0.466 % nickel and 410 ¿ 855 ppb platinum and palladium. The second showing, referred to as the Cessax Showing is located approximately 1 km southeast of the occurrence. It is also located at the contact between the mafic-ultramafic complex and the enveloping quartz carbonate alteration zone. A grab sample of marginal gabbro collected at the gabbro, quartz carbonate contact returned vales of 0.385 % nickel, 0.056 % copper, 161 ppm cobalt and 934 ppm platinum group elements. Neighboring streams draining the showing returned highly anomalous (>1 000 ppm) nickel values. Detailed geological mapping pin pointed the location of the actual Cessna showing (formerly referred to as the Cessna Zone).
The ground HLEM survey defined a prominent conductor associated with the footwall contact of the mafic-ultramafic complex. The IP survey outlined a conductor (A2) conformable and parallel to the footwall contact of the complex. Prospecting and geological mapping outlined the Sax-Cessna Embayment which defines an area located along the mafic-ultramafic complex between the Sax (Minfile Occurrence #115K 077) and Cessna showings where the footwall contact thickens appreciably and possibly hosts concentrations of sulphide and platinum group elements.
The 2002 drill holes tested the Discovery (Minfile Occurrence #115K 077) and Sax-Cessna embayments. Both holes intersected broad intersections of low grade nickel plus platinum group mineralization in ultramafic rocks (clinopyroxenite). Mineralization occurred in zones of net-textured and disseminated magnetite plus ferro-chromite and sulphide minerals. Intersections ranged in grade from about 1 100 ppm to 3 100 ppm nickel and 90 ppb to 634 ppb platinum plus palladium over intervals greater than 20 m in both holes.

References

COMINCO LTD, Jul/66. Assessment Report #017472 by T. Muraro.

DODDS, C.J., AND CAMPBELL, R.B., 1992. Overview, legend and mineral deposit tabulations for Geological Survey of Canada Open Files 2188, 2189, 2190 and 2191.

EXPATRIATE RESOURCES LTD, Feb/98. Assessment Report #093957 by R.C. Carne.

EXPATRIATE RESOURCES LTD, Aug/2003. Assessment Report #094421 by J. Moore.

HULBERT, L.J. 1997. Geology and metallogeny of the Kluane Mafic-Ultramafic Belt, Yukon Territory, Canada: Eastern Wrangellia ¿ A new Ni-Cu-PGE Metallogenic Terrane. Geological Survey of Canada, Bulletin 506, 265 p.

ISRAEL, S., 2004. Geology of Southwestern Yukon (1:250 00 scale). Yukon Geological Survey, Open File 2004-16.

POLESTAR EXPLORATION INC, Jan/88. Assessment Report #092092 by G.H. Giroux and J.H. Montgomery.

POLESTAR EXPLORATION INC, Aug/88. Assessment Report #092522 by R. Wolfe.

STRATAGOLD CORPORATION, Apr/2005. Web Site: www.stratagold.com

URAVAN MINERALS INC, Apr/2002. Assessment Report #094331 by I. Fraser.

URAVAN MINERALS INC, News Release, 23 Aug/2002.

URAVAN MINERALS INC, Apr/2003. Web Site: www.uravanminerals.com.

YUKON EXPLORATION 1987, p. 244.

YUKON EXPLORATION AND GEOLOGY 2002, p, 14-15, 24, 26.

Work History

Date	Work Type	Comment
12/31/2002	Drilling	Two holes, 410.5 m. One hole (181.4m) was collared on this occurrence.
12/31/2001	Geochemistry	
12/31/2001	Geology	
12/31/2001	Ground Geophysics	Also EM and IP surveys.
12/31/2001	Other	
12/31/1998	Geology	
12/31/1998	Geochemistry	
12/31/1998	Geochemistry	
12/31/1998	Other	
12/31/1997	Airborne Geophysics	Expatriate flew airborne survey over entire property.
12/31/1986	Geology	
12/31/1986	Geochemistry	Also rock sampling.
12/31/1966	Geology	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094933	2007	Assessment Report for White River (""CanAlask') Ni-PGE	VTEM - Airborne Geophysics, Rock - Geochemistry, Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Data Compilation - Pre-existing Data		
094862	2006	Assessment Report on Year - 2006, Geological, Geochemical and Geophysical on "Canalask-Onion" Portion of the White River Nickel Project	Rock - Geochemistry, Silt - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Line Cutting - Other		
094599	2006	NI 43-101-Compliant Report on the 2006 Exploration Program on the White River Nickel Project-Xstrata plc (Falconbridge Ltd.)	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Line Cutting - Other, Prospecting - Other		
094331	2001	Assessment Report Summarizing Geological, Geochemical and Geophysical Surveys in the Miles Ridge Area, Canalsk Proprty	Rock - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Hand - Trenching		
093957	1998	Assessment Report Describing Geological, Geochemical and Prospecting Surveys in the Miles Ridge Area, Canalask Property	Rock - Geochemistry, Silt - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
092092	1988	Geological, Geophysical and Geochemical Report on the I, IV and V Mineral Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics		