



Occurrence Details

Occurrence Number: 116H 083
Occurrence Name: Pe
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 4/29/2025 4:43:47 AM

General Information

Secondary Commodities: molybdenum, nickel, palladium, platinum, vanadium, zinc
Deposit Type(s): Sediment hosted Shale-Hosted Ni-Zn-Mo-PGE (Nick)
Location(s): 65°56'42.95" N - -136°2'4.81" W
NTS Mapsheet(s): 116H16
Location Comments: Location data is for drill hole PE07-07.
Hand Samples Available: No
Last Reviewed:

Capsule

WORK HISTORY

In Sept/2006 Strategic Metals Ltd staked PE cl 1-12 (YC44965) 7 km to the southeast. The company collected two chip samples along the north shore of the Peel River at the same time.

Staked within PE cl 13-149 (YC45251) in Feb/2007 by Strategic Metals Ltd. The company immediately optioned the PE and six other claim groups, collectively called the NiMo (nickel-molybdenum) project to Southampton Ventures Inc in return for cash, shares and certain work commitments.

During 2007 Southampton Ventures collected 2 chip, 37 soil and 6 silt samples on the PE claims. Additional silt and soil samples were collected immediately north of the claims. The company also drilled 7 holes (749.82 m). In Apr/2009 the company changed its name to Quetzal Energy Ltd.

GEOLOGY

The area is located on the west side of the Richardson Trough a north to northwest-trending intracratonic depression formed during Early to Middle Paleozoic time. Deep water shale and argillaceous limestone of the Ordovician to Silurian Road River group are deposited within the trough atop Cambrian and Proterozoic age strata. Younger Paleozoic sediments unconformably cap the Road River Group within the trough and elsewhere in the surrounding broader basin. The entire stratigraphic section is folded by a large-scale anticline that plunges to the north. This anticline is called the Richardson Anticlinorium and its axis approximately coincides with the centre of the trough. To the east, the Richardson Trough is bound by the Trevor fault and to the West the Deception fault.

The occurrence is underlain by a fault bounded block of shallow west-southwest dipping shales assigned to the Middle to Upper Devonian Earn Group and Ordovician to Silurian Road River Group. The Earn Group is comprised of sandy shale belonging to the Imperial Formation which conformably overlies siliceous shale of the Canol Formation. Calcareous shale assigned to the Road River Formation unconformably underlies the Canol Formation or is faulted against it by an unnamed north trending fault that parallels the eastern boundary of the claim block. The claim block is mostly underlain by Imperial Formation while two narrow slivers of Canol Formation are exposed in the northeast and southeast corners. The contact between the Earn Group and Road River Group is not seen on the claim block. However the contact has been mapped on the southern side of the Peel River on the adjoining EL claims.

In 1994 Dr. Wayne Goodfellow of the Geological Survey of Canada noted strong nickel mineralization on the northern bank of the Peel River in the southeast corner of the PE claims. The mineralization lies along strike of a thin nickeliferous massive sulphide layer, known as the NiMo horizon that is found at the contact between the Canol Formation and Road River Group across the river to the south on the adjoining EL property.

A similar massive sulphide horizon is reported at the same stratigraphic location at the Nick occurrence (Minfile Occurrence 106D 092) located 122 km to the southwest. The Nick massive sulphide horizon covers an area greater than 80 km² and comprises pyrite, vaesite, melnikovite-type pyrite, sphalerite and wurtzite hosted in a gangue of phosphatic-carbonaceous chert, silica and bitumen. Rock assays from the Nick horizon typically average 3% nickel, 0.20% molybdenum, 0.82% zinc, 0.82% vanadium, 310 ppm platinum and 150 ppb palladium over narrow widths (i.e. < 10 cm). Strategic Metals stake the PE claims to explore for this type of mineralization.

Follow-up chip sampling carried out by Southampton Ventures over the nickel mineralization discovered by Dr. Goodfellow returned values of up to 3.45% nickel, 1420 ppm molybdenum and 9680 ppm zinc, over narrow intervals. Soil sample lines located on and off the claim block were orientated approximately perpendicular to the inferred Canol Formation-Road River Group contact. Results returned elevated amounts of nickel, molybdenum, zinc and other indicator minerals. The drill holes tested the inferred contact between the Canol Formation and Road River Group. Holes 1a and 1b were abandoned due to ground conditions. The remaining holes all intersected black shales, assigned to the Upper Devonian Imperial Formation. None of the holes intersected the intended contact.

Work History

Date	Work Type	Comment
9/30/2006	Geochemistry	Two chip samples collected from Goodfellow showing.
7/31/2007	Drilling	7 holes, 749.82 m
6/30/2007	Geochemistry	Collected on and off property.
6/30/2007	Geochemistry	Collected on and off property.

Related References

Number	Title	Page(s)	Reference Type	Document Type
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2003-9(D)	Yukon Digital Geology (version 2)		Yukon Geological Survey	Open File (Geological - Bedrock)
2006-3	Mineral Assessment of the Eagle Plain Study Area, Yukon.		Yukon Geological Survey	Open File (Geological - Bedrock)

Drill core at YGS core library					
Number	Property	Year Drilled	Core Size	Photos	Data
PE07-03	PE	2007	BTW	2	2
PE07-06	PE	2007	BTW	2	3
PE07-07	PE	2007	BTW	20	3