Occurrence Details

Occurrence Number: 116B 142
Occurrence Name: Graps
Occurrence Type: Hard-rock
Status: Showing
Date printed: 12/17/2025 12:51:33 AM

General Information

Secondary Commodities: barium, lead, nickel, zinc
Deposit Type(s): Sediment hosted Shale-Hosted Ni-Zn-Mo-PGE (Nick)
Location(s): 64°39'49" N - -138°3'45" W
NTS Mapsheet(s): 116B09
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Graps cl 1-61 (YA63952) in Aug/81 by Cominco Ltd, which performed mapping and geochem sampling later in the year.
Restaked as Rein cl 100-181 (YB44359) by Pendisle Resources Inc (a precursor company to Blackstone Resources Ltd) in May/95. The claims were transferred to Blackstone later in the year. The claims comprise the east half of Blackstone¿s Taiga property (Minfile Occurrence #116B 170). Blackstone carried out mapping and prospecting on the claims in 1996 and 97 and drilled two diamond drill holes, but concentrated the bulk of their efforts on the west half of the Taiga property.
In 1998 Blackstone continued exploring the Rein claims with diamond drilling, mapping and prospecting but all of the work was focused on the west half of the Taiga property.

Capsule Geology

The occurrence lies within the Taiga Basin. The basin consists of Ordovician to Silurian Road River Group dolomite and black calcareous shales overlaid by Devon to Mississippian Earn Group siliceous shales, chert and conglomerates with minor carbonate units near the lower contact. It lies within an off-self sequence of the Mackenzie Platform, underlain and overlain by shallow water carbonates and forming a sub-basin north of the main Selwyn Basin. To the south, the Taiga Basin is bounded by the northerly-directed Dawson Thrust Fault. Cambrian to Devonian mafic volcanics are spatially related to the Dawson Fault.
The oldest rocks exposed on the Rein claims are carbonaceous and calcareous, graptolitic shales of the Road River Group. They are conformably overlain by an interbedded unit of argillite, calcareous shale and siltstone, limestone and chert-siliceous shale of the Lower Earn group. Limestone and baritic limestone balls up to 1.0 m in diameter form a distinctive marker that lies at the top of this sequence. A chert and chert pebble conglomerate unit caps the entire succession. Thrust faults related to the Dawson Fault have thrust limy shale and phyllitic carbonate of the Ordovician-Silurian Road River Group over the younger Earn Group sequence.
Cominco held their claims for about 8 years but there is no record or their work. It is likely that the company was searching for shale hosted lead-zinc-barite mineralization.
In 1996 Blackstone Resources discovered a thin bed of pyrite-vaesite mineralization on the west half of the Taiga property which assayed as high as 3.58% Ni over 45 cm. Soil sampling returned a ten km long Ni-Mo-Zn anomaly which extended onto the east half of the Taiga property (this occurrence).
The stratiform vaesite occurs in a shale horizon located at the contact between Middle Devonian Lower Earn Group black chert and a distinctive concretionary unit of Lower Devonian age which forms the top of the Road River Formation. The concretionary unit consists of limestone and baritic limestone balls up to 1.0 m in diameter in a matrix of black, siliceous mudstone. In the area of the MM zone (Minfile Occurrence #116B 170), the unit directly overlying the limestone ball unit is described as being a carbonaceous, fossiliferous, baritic and phosphatic black shale.
Deposits of this type are believed to form from low temperature organic-rich fluids in Red Sea-type brine pools in a rift environment. Vaesite deposits of this type have been mined in southern China. Hulbert et al. (1992) proposed a metallogenic model in which nutrient-rich hydrothermal fluids became enriched in base and precious metals scavenged from underlying organic-rich Silurian and Devonian strata, where the metals were adsorbed on decaying organic material. The mineralization found on the Rein claims is though to be similar in nature to that found at the Nick deposit (Minfile Occurrence #106D 092).
Twelve short reconnaissance BTW diamond drill holes tested the 3 target areas in 1997, resulting in significant intersections over previously unreported widths. The best intersection was returned by Hole REN97-08, which tested a portion of the MM zone. It intersected 25.5 metres of 0.51% Ni with 0.41% Zn, including a 5.3 meter intersection grading 1.42% Ni and 0.70% Zn. The MM zone drilling showed that the nickel mineralization occurs both above and below a thick (>10m?) brecciated and stockwork veined barite bed. The upper of the mineralized horizons contains higher concentrations of nickel, is fossil-rich and contains baritic limestone balls.
Two drill holes (59) m were collared on the east half of the Taiga property to test a Ni-Mo-As-Pd- Zn soil anomaly. The first hole was lost after 5 m. The second intersected the Earn Group-Road River contact but returned no evidence of the characteristic limestone balls normally present beneath the contact. Assays of the core returned negligible amounts of Ni and other elements.

References

BLACKSTONE RESOURCES LTD, Press Release, 21 Jun/97, 27 Jun/97, 27Aug/96; 11 Nov/96, 5 May/97, 14Aug/97, 17 Oct/97, 23 Oct/97, 10 Nov/97.

BLACKSTONE RESOURCES LTD, Aug/99. Web Site: www.bzz-blackstone.com

BUTTERWORTH, B.P. and CAULFIELD, D., 1998. Taiga Property: A Stratiform Ni-Zn-PGE target in north-central Yukon. In: Yukon Exploration and Geology 1997, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p.125-127.

EQUITY ENGINEERING LTD, Feb/97. Assessment Report #093594 by D.A. Caulfield.

EQUITY ENGINEERING LTD, Jan/98. Assessment Report #093750 by D.A. Caulfield.

HULBERT, L., CARNE, R.C., GREGOIRE, D.C. and PAKTUNC, D., 1992. Sedimentary nickel, zinc and platinum group element mineralization in Devonian black shales at the Nick property, Yukon, Canada: a new deposit type. Exploration and Mining Geology, Vol. 1, p. 39-62.

YUKON EXPLORATION AND GEOLOGY 1996, p. 22, 31; 1997, p. 21-22, 37-38; 1998, p. 23-24, 28, 30.

Work History

Date	Work Type	Comment
12/31/1997	Drilling	Number of holes drilled: 2 Amount of work done: 59 METRES Drilling tested mineralization potential in area.
12/31/1997	Geology	Carried out on entire Rein claim block.
12/31/1997	Other	Carried out on entire Rein claim block.
12/31/1996	Geology	
12/31/1996	Other	
12/31/1981	Geology	
12/31/1981	Other	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
093986	1998	1998 Geological, Geochemical and Diamond Drilling Report on the Rein Property	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology	14	832.20
093594	1996	1996 Exporation Program on the Rein Property	Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC016778	Geochemical map - 116B/9		Property File Collection	Geochemical Map