



Occurrence Details

Occurrence Number: 106C 086
Occurrence Name: Anoki
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 4/29/2025 9:42:46 PM

General Information

Secondary Commodities: cobalt, copper, silver, uranium
Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias)
Location(s): 64°58'53" N - -133°15'56" W
NTS Mapsheet(s): 106C14
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Ram cl 1-48 (YA14243) in Nov/76 by Mountaineer Mines Ltd and optioned to Pan Ocean Oil Ltd, which explored with mapping, soil sampling and radiometric surveys in 1977 and 1978. Mountaineer changed its name to Canadian Mineral Corporation in 1979.
Restaked as Ram 1-20 cl (YB28672) in Jun/92 by a joint venture consisting of Pamicon Developments Ltd, Equity Engineering Ltd and Westmin Resources Ltd, which explored with limited sampling, prospecting and mapping in 1992. In Jan/94, the joint venture partners transferred 100% interest in the Ram claims to Westmin Resources, which then formed the Fairchild Joint Venture with Newmont Exploration Ltd. In Sept/94 the Fairchild Joint Venture contracted Pamicon and Equity to carry out preliminary mapping, stream sediment sampling and prospecting.
D. and J. Hajek staked Co cl 1-20 (YB65589) to the east in Jul/96.

Capsule Geology

The region is underlain by a metamorphosed and altered sequence of Early Proterozoic Wernecke Supergroup clastic and carbonate rocks (Fairchild Lake Group, Quartet Group and Gillespie Lake Group, from oldest to youngest) that are intruded by Early to Middle Proterozoic mafic sills and dykes, and cut by Middle Proterozoic hematitic Wernecke Breccia. According to Thorkelson (2000), Wernecke Breccia development is best modeled as a set of hydrothermal and/or phreatic breccias; brecciation being caused by explosive expansion of volatile-rich fluids. Hunt (2005) attributed Wernecke Breccia formation to periodic over-pressuring of dominantly basinal fluids, which lead to repeated brecciation of host strata and mineral precipitation. To the east, the Wernecke Supergroup is juxtaposed against younger rocks along the southeast-trending Richardson Fault array, which is interpreted to represent deep-seated, long-lived vertical structures that have undergone considerable vertical, and possibly right-lateral movement.
Exploration work carried out by Pan Ocean Oil Ltd found mineralization consisting of pitchblende, brannerite and chalcopyrite in fracture zones within breccia bodies cutting Wernecke Supergroup strata. Five specific zones and numerous small showings were found in a 1 400 by 2 100 m belt running north-south along the west side of the claim block. Chip samples ranged up to 0.91% uranium oxide (U3O8), and 0.38% copper across 2 m from a hand trenched zone on the southeast side of Ram Creek. Follow-up sampling in the same area in 1979 returned 0.10% uranium oxide (U3O8) across 1 m at a depth of 2 m.
Industry mapping shows the Ram claim group is underlain by complexly folded and faulted Wernecke Supergroup strata cut by hematitic breccia and diorite intrusions. Unconformably overlying Middle Proterozoic Pinguicula Group sedimentary rocks outcrop just east of the property. A diorite sill intrudes an inferred thrust fault in the centre of the claim block. Wernecke Breccia occurs peripheral to the diorite. In 1992, minor cobaltite was noted in a quartz vein near the northwest boundary of the claims, and tetrahedrite float assaying 3.3% copper and 408.0 g/t silver was found on the east side of the claim. Various specimens were assayed for gold but returned only trace.
Stream sediment sampling in 1994 returned several anomalous copper and gold values from the northwest and central drainages of the property.

References

HUNT, J., 2005. The geology and genesis of iron oxide-copper-gold mineralisation associated with Wernecke Breccia, Yukon Canada, PhD thesis, James Cook University, Australia, 2 volumes, 120 p.
MOUNTAINEER MINES LTD, Feb/79. Assessment Report #090421 by C.K. Ikona and M.A. Stammers.
PAMICON DEVELOPMENTS LTD, Mar/80. Assessment Report #090589 by C.K. Ikona and D.A. Yeager.
PAMICON DEVELOPMENTS LTD, Feb/95. Assessment Report #093266 by H.M. Klatt and M.A. Stammers.
PAN OCEAN OIL LTD, Feb/78. Assessment Report #090284 by C.K. Ikona and M.A. Stammers.
THORKELSON, D.J. AND WALLACE, C.A., 2000. Geology and mineral occurrences of the Slat Creek, Fairchild Lake and "Dolores Creek" areas, Wernecke Mountains, Yukon (106D/16, 106C/13, 106C/14). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Bulletin 10, 73 p.
WESTMIN RESOURCES LTD, Dec/92. Assessment Report #093115 by M.A. Stammers.

Work History

Date	Work Type	Comment
12/31/1994	Geology	
12/31/1994	Geochemistry	
12/31/1994	Other	

12/31/1992	Geochemistry	
12/31/1992	Geology	
12/31/1992	Other	
12/31/1977	Ground Geophysics	
12/31/1977	Geology	
12/31/1977	Geochemistry	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095634	2007	YUP February Internal Technical Report, Season 2007 Describing Mapping, Prospecting and Diamond Drilling at the Lumina Property	Gamma-Ray Spectrometry - Airborne Geophysics, Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other	15	4367.20
094953	2006	Assessment Report Describing Airborne Geophysics, Mapping, Prospecting and Diamond Drilling	Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Drill Core - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other	22	2602.89
095598	2005	Assessment Report Describing Diamond Drilling and Prospecting at the Lumina Property	Gamma-Ray Spectrometry - Airborne Geophysics, Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Prospecting - Other	7	503.63
093266	1994	1994 Geological and Geochemical Assessment Report on the Ram 1-20 Claims	Rock - Geochemistry, Silt - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
093115	1992	1992 Geochemical Report on the Ram 1-20 Mineral Claims	Rock - Geochemistry, Silt - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
090589	1979	Geophysical Report on the Ram 1-48 Mineral Claims	Rock - Geochemistry, EM - Ground Geophysics, Gamma-ray Spectrometry - Ground Geophysics, Line Cutting - Other, Handblast - Trenching		
090284	1977	Geological Report on the Ram 1-48 Mineral Claims	Rock - Geochemistry, Water - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		