Occurrence Details

Occurrence Number: 106D 075
Occurrence Name: Bland
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 4/29/2025 4:27:34 PM

General Information

Secondary Commodities: copper, gold, uranium
Aliases: Slats
Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias)
Location(s): 64°58'23" N - -134°24'21" W
NTS Mapsheet(s): 106D16
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Staked as Les cl 1-6 (YA7054) in Sep/76 by Noranda Mines Ltd following reconnaissance airborne radiometric and magnetic surveys.
In Sept/93 Newmont Exploration Ltd conducted an airborne geophysical survey over the area using proprietary company equipment. The following month Pamicon Development Ltd on behalf of Westmin Resources Ltd restaked the showing within Slats cl 1-132 (YB22572). Early in 1994 Westmin formed the Fairchild Joint Venture with Newmont. In the summer of 1994, the joint venture group contracted Pamicon and Equity Engineering to carry out prospecting, geological mapping, airborne radiometric and magnetic surveys and stream sediment and contour soil sampling on the property. In Jul/95 the joint venture added Slats cl 133-140 (YB64394) to the southwest side of the claim block and drilled 4 diamond drill holes (512M) on the claim block.
Restaked as Blend cl 1-42 (YC42507) in Nov/2005 by Fronteer Development Group Inc. In Jan/2006 Fronteer (80%) and Rimfire Minerals Corporation (20%) signed an agreement with Newmont Exploration Canada Ltd and NVI Mining Ltd (which bought Westmin's assets) to purchase all claims and exploration data relating to 700 mineral claims owned by the Fairchild Joint Venture in the Wernecke Mountains, Yukon. Fronteer Development was appointed operator of the project. In the summer of 2006 Fronteer Development carried out an airborne gravity survey over their entire claim holdings.
In 2007 Fronteer carried out geological mapping, rock and soil sampling and prospecting programs on the claims followed by 6 diamond drill holes (886m).

Capsule Geology

The occurrence is at the western margin of the Wernecke Supergroup inlier, a metamorphosed and altered sequence of Early Proterozoic 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 Wernecke Breccia. To the east, Wernecke Supergroup rocks are unconformably overlain by Middle Proterozoic Pinguicula Group rocks. 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.
Noranda Mines Ltd reported minor disseminations of brannerite associated with a Wernecke breccia body that intrudes limy argillite of what they thought was Lower Proterozoic Fairchild Lake Group but which Thorkelson and Wallace later determined was Gillespie Lake Group.
Thorkelson and Wallace (1993) described a gradational transition from unaltered dark argillite to purplish brown metasomatised argillite with red bands and hematitic fractures through a zone of crackle breccia to the main breccia zone where specular hematite is abundant in both clasts and matrix.
Mapping and prospecting in 1994 outlined a northwest trending structural and lithological belt of Wernecke breccia, diorite and metasomatised rocks hosted by altered dolomitic shale of the lower Gillespie Lake Group. Along this trend breccia, diorite and metasomatised sediments contain chalcopyrite and gold in interstitial disseminations and veins.
This belt is known as the Wallbanger area, and includes the Bland showing, the Frosty area, located in the northwest corner of the Slats property immediately adjacent to the Pike claims (Minfile #106E 040), and the Frog showing located 2.5 km south across Slats Creek from the Frosty area.
The Arctos showing occurs in the far southwest corner of the Slats property and appears to encompass the southern Pitch showing (Minfile #106D 078). Preliminary mapping outlined metasiltstone and shale cut by a northerly trending fault which parallels diorite and Wernecke Breccia. Mineralization occurs as shears and quartz veins hosting chalcopyrite, bornite and cobaltite (?) within Wernecke breccia and metasomatized sedimentary rocks as well as minor disseminated chalcopyrite in the diorite and sediments. Little information was released regarding Newmont Exploration's two airborne geophysical surveys.
The four 1995 diamond drill holes returned low grade copper (max = 1 395 ppm) +/- low grade gold and uranium mineralization in quartz veins located at and adjacent to the boundary between the Wernecke breccia and diorite dykes and between Wernecke breccia and surrounding Gillespie Lake rocks. Few details were released regarding the 2007 diamond drilling but Fronteer Development's 2007 Exploration Summary shows that the holes returned low grade copper +/- gold and uranium mineralization. Hole STM07-01 returned 6.6 m grading 0.24% copper and 0.03 g/t gold while hole STM07-04 returned 1.8 m grading 0.02 g/t gold and 0.010% uranium (U).

References

FRONTEER DEVELOPMENT GROUP INCORPORATED AND RIMFIRE MINERALS CORPORATION, Apr/2007. Assessment Report #094956 by R.S. Hefferman, R. Black, H. Awmack and D. Baker.

FRONTEER DEVELOPMENT GROUP INC. News Releases, 19 May/2006, 10 Jul/2006.

FRONTEER DEVELOPMENT GROUP INC. March/2009. Web Site: www.fronteergroup.com. (contains 2007 Wernecke Exploration report).

GORDEY, S.P. AND MAKEPEACE, A.J., 2003. Yukon Digital Geology, version 2.0, S.P. Gordey and A.J. Makepeace (comp); Geological Survey of Canada, Open File 1749 and Yukon Geological Survey, Open File 2003-9 (D).

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.

PAMICON DEVELOPMENTS LTD, Feb/95. Assessment Report #093262 by A. Montgomery and M. Stammers.

PAMICON DEVELOPMENTS LTD, Nov/95. Assessment Report #093436 by M. Stammers.

THORKELSON, D.J., AND WALLACE, C.A., 1993. Development of Wernecke Breccia in Slats Creek (106D/16) map area, Wernecke Mountains, Yukon. In: Yukon Exploration and Geology 1992, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 77-87.

THORKELSON, D.J. AND WALLACE, C.A., 1998. Geological Map of Slats Creek map area, Wernecke Mountains, Yukon (106D/16). Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, Gesocience Map 1998-9, 1:50,000 scale.

THORKELSON, D.J. AND WALLACE, C.A., 2000. Geology and mineral occurrences of the Slats 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.

YUKON EXPLORATION & GEOLOGY 1995, p. 12, 16; 2007, p. 32-33, 40, 42.

Work History

Date	Work Type	Comment
12/31/2007	Drilling	Six holes, 886 m. No drill logs have been received. Minimum results released via 2007 exploration report.
12/31/2006	Geochemistry	
12/31/2006	Geology	
12/31/2006	Airborne Geophysics	
12/31/1995	Drilling	Four holes, 512 m. Information not released for public consumption.
12/31/1994	Geology	
12/31/1994	Geochemistry	
12/31/1994	Geochemistry	
12/31/1994	Airborne Geophysics	Also radiometric survey.
12/31/1993	Airborne Geophysics	Also radiometric.Regional program. Airborne survey flown by Newmont Exploration led to claims being staked.
12/31/1976	Geochemistry	
12/31/1976	Airborne Geophysics	Also radiometric survey.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095646	2007	2007 Geological, Geochemical and Geophysical Report on the Werneckes Project	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Scintillometer - Ground Geophysics, Prospecting - Other, Backhoe - Trenching, Hand - Trenching, Handblast - Trenching	28	6537.96
094956	2006	2006 Geological, Geochemical and Geophysical Report on the Werneckes Project	Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other		
093262	1994	Geological and Geochemical Assessment Report on the Slats 1-132 Claims	Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Magnetics - Ground Geophysics, Prospecting - Other		
090969	1981	Geological, Geochemical and Geophysical Report on the Pike Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Hand - Trenching		