



Occurrence Details

Occurrence Number: 106C 006

Occurrence Name: Plume

Occurrence Type: Hard-rock

Status: Prospect

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General Information

Secondary Commodities: cobalt, copper, lead, nickel, uranium

Aliases: Slab

Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias)

Location(s): 64°59'13" N - -133°56'48" W

NTS Mapsheet(s): 106C13

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked in Oct/75 as the Bromadrosia cl 1-6 (YA1314) by Wernecke Joint Venture (Standard Oil Company of British Columbia & Aquitaine Company of Canada Ltd) and optioned in 1976 to Eldorado Nuclear Ltd, which explored by mapping, radiometric surveys and hand trenching. Restaked as part of a larger block of Eagle claims (1-161 1=YA41720, not staked consecutively) in Jul/80 by Mountaineer Mines Ltd and Pan Ocean Oil Ltd which drilled 9 holes (1165 m) later that year. Pan Ocean's interests were transferred to Aberford Resources Ltd in 1982. In 1982, Eldorado changed its name to Eldor Resources Ltd. Restaked in 1992 as Slab cl 1-84 (YB28600) by Pamicon Development Ltd. The next year, Pamicon formed a joint venture with Equity Engineering Ltd, explored with a program of geological and geophysical surveys, and tied on 40 Otter cl (YB42249) to the northeast in Oct/93. The joint venture partners transferred 100% interest in the Slab and Otter claim groups to Westmin Resources Ltd. in Jan/94. In early 1994 Westmin entered into a joint venture with Newmont Exploration Ltd. and in June they contracted Pamicon and Equity to carry out soil and stream sediment sampling, rock geochemistry and limited geological mapping on the Slab cl 209-212 (YB22343) and Otter cl 1-40 (YB42249). In Jul/94 Pamicon drilled 1 hole (SB94-3 - 294 m) on Slab cl 5 (YB28604). Pamicon conducted visual and thin section analysis of the core and mineralization. As part of their 1995 exploration program on the Fair claims, Pamicon carried out limited mapping and rock sampling on the adjoining Otter cl 34-40.

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 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.

The claims are underlain by Fairchild Lake Group limy argillite which is altered to calc-silicate adjacent to a Wernecke Breccia body and metadiorite dykes. Mineralization consists of fine to coarsely disseminated brannerite with minor chalcopyrite and cobaltite. Samples taken from the Eldorado trenches all returned less than 0.001% U3O8.

The 1980 drilling indicated two mineralized zones in silicified and fenitized siltstone on the margins of a metadiorite intrusion. The upper zone occurs at the boundary of siliceous and calcareous siltstone and contains chalcopyrite, pyrrhotite and pyrite with minor galena and cobaltite as blebs and disseminations. The lower zone is confined to a greisenized metasiltstone breccia and consists of oxidized blebs, fracture fillings and fine crystals of arsenopyrite, pyrite, chalcopyrite and skutterudite.

References

ELDORADO NUCLEAR LTD, Sep/76. Assessment Report #090151 by C.J. Riley.

ELDORADO NUCLEAR LTD, 1976. Assessment Report *#061564 by C.J. Riley.

EQUITY ENGINEERING LTD, Dec/94. Assessment Report #093218 by K.A. Owerko and D.A. Caulfield.

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.A., LAUGHTON, J.R., BRIDEAU, M-A., Thorkelson, D.J., Brookes, M.L. and Baker, T., 2002. New mapping around the Slab iron oxide-copper-gold occurrence, Wernecke Mountains (parts of NTS 106C/13, 106D/16, 106E/1 and 106F/4), Yukon. In: Yukon Exploration and Geology 2001, D.S. Emond, L.H. Weston and L.L. Lewis (eds.), Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada, p. 125-138.

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 and PAN OCEAN OIL LTD, 1981. Assessment Report *#090817 by D.L. Dick and D.R. Harmeson.

PAMICON DEVELOPMENTS LTD. Sept/94. Assessment Report #093224 by R. Vance.

PAMICON DEVELOPMENTS LTD. Jan/96. Assessment Report #093381 by M. Stammers.

THORKELSON, D.J. AND WALLACE, C.A., 1994. Geological Setting of mineral occurrences in Fairchild Lake map area, (106C/13), Wernecke Mountains, Yukon. In: Yukon Exploration and Geology, 1993, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 79-92.

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 #093119 by M.A. Stammers.

WESTMIN RESOURCES LTD, Jan/94. Assessment Report #093181 by M.A. Stammers.

YUKON EXPLORATION AND GEOLOGY 1981, p. 187-188.

Work History

Date	Work Type	Comment
12/31/1995	Geochemistry	
12/31/1995	Geology	
12/31/1994	Drilling	One hole, 294 m. Diamond drill hole was collared on Slab claim # 5.
12/31/1994	Geology	
12/31/1994	Geochemistry	
12/31/1994	Geochemistry	
12/31/1994	Other	
12/31/1993	Geology	
12/31/1993	Ground Geophysics	Also IP survey.
12/31/1980	Drilling	Nine holes, 1,165 m.
12/31/1980	Other	
12/31/1976	Ground Geophysics	
12/31/1976	Geology	
12/31/1976	Trenching	
12/13/1993	Geochemistry	Also rock sampling.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095646	2007	2007 Geological, Geochemical and Geophysical Report on the Wernekes 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 Wernekes Project	Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other		
093181	1993	1993 Summary Report on the Slab 1-208 Claims	Orthophoto - Airphotography, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, Magnetics - Ground Geophysics		
093119	1992	1992 Geochemical Report on the Slab 1-84 Mineral Claims	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
090817	1981	Assessment Report on the Eagle, Otter, and Vole Claims	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Scintillometer - Ground Geophysics, Prospecting - Other, Backhoe - Trenching, Handblast - Trenching	14	1590.16
090151	1976	Report on Prospecting and Trenching Bromadrosis 1-6 Claims	Rock - Geochemistry, Prospecting - Other, Hand - Trenching		
061564	1976	Report on Prospecting and Trenching Bromadrosis 1-6 Claims	Rock - Geochemistry, Prospecting - Other, Hand - Trenching		
060926	1973	Report on the D.I.T. Group of Mineral Claims, Fairchild Lake Area	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC010156	Assays map - Slab Mountain		Property File Collection	Geochemical Map
ARMC013010	Report on Slab Mountain - Fairchild Lake area Y.T. for Cyprus Exploration Ltd.		Property File Collection	Report
ARMC013011	Correspondence, maps, notes - 1965-1973 - Slab Mountain		Property File Collection	Miscellaneous Company Documents