



Occurrence Details

Occurrence Number: 106E 031

Occurrence Name: Curie

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 4/29/2025 4:53:08 AM

General Information

Secondary Commodities: copper, uranium

Aliases: Darney

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

Location(s): 65°12'32" N - -134°43'54" W

NTS Mapsheet(s): 106E02

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Fox & Deer cl 4.8 km to the southwest, and as Owl cl (YA14823) 4.8 km to the northeast in Nov-Dec/67 by Mountaineer ML and optioned to Pan Ocean OL, which added about 500 claims and explored with mapping, geochem, radiometric and EM surveys and hand trenching in 1977 and soil and radiometric surveys, hand trenching and 544.7 m (6 holes) drilling on the Deer #1 showing in 1978.

Pan Ocean explored with geochem and geophysical surveys and several drill holes in 1979 and one hole (165 m) in 1980. Mountaineer changed its name to Can MI Corp in 1979, while Pan Ocean transferred its mineral holdings to Aberford Res L, which later changed its name to Abermin Corp.

The A and B fringe claims (YA17618) were staked to the east in Feb/78 by Scylla Corp, which explored with airborne and ground radiometric surveys, mapping and trenching.

In May/93, Archer, Cathro and Associates (1981) Ltd staked the KL 1-196 cl (YB29775) over this and three other occurrences, Minfile #s 106E 005, 106E 006 and 106E 011. Kennecott Canada Inc. optioned the property and explored with geological mapping and geochemical sampling in 1993.

A reconnaissance spectrometer survey and gravity survey were conducted over the property in 2005.

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.

Four mineralized areas are associated with Wernecke Breccia bodies cutting Early Proterozoic Quartet Group argillite.

The best showing, Deer #1 on the Deer 33 claim, is a strong 1.8-m-wide vertical shear zone exposed for a length of 6.7 m in hand trenches. Work in 1978 outlined a 396 m coincident radon and magnetic anomaly and at least 2 of the drill holes intersected radioactive material. Assays from the trenches ranged from 0.15 to 4.6% U₃O₈. Mineralization includes brannerite, pitchblende and a wide range of secondary uranium minerals. The Deer #2 showing, on the Deer 24 claim, lies 914 m to the north and consists of brannerite float adjacent to a Wernecke Breccia body.

The Fox Creek showing, on the Fox 20 claim, lies 2438 m southeast of the Deer #1 showing and consists of a 1067 by 1524 m uranium geochemical anomaly.

The Frog showing, on the Frog 19 claim, lies 3050 m east of the Deer #1 showing and reportedly shows encouraging surface mineralization.

The Owl claims, which lie 3050 m northeast of the Frog showing, cover an area of strong geochemical response (11.8 ppb U in water, 237 ppm U in silt) reported by the GSC.

In 2005, Signet minerals released results of grab rock samples collected samples. Rock samples with up to 54.3% U₃O₈ were analyzed.

References

GEOLOGICAL SURVEY OF CANADA Open File 338.

GEOLOGICAL SURVEY OF CANADA Paper 79-1A, p. 377-379.

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.

KENNECOTT CANADA INC, May/94. Assessment Report #093197 by R. Hulstein.

MINERAL INDUSTRY REPORT 1977, p. 49; 1978, p. 18-20.

MOUNTAINEER MINES LTD and PAN OCEAN OIL LTD, Jan/78. Assessment Report *#090285 by D.A. Yeager and C.K. Ikona.

MOUNTAINEER MINES LTD and PAN OCEAN OIL LTD, Jan/78. Assessment Report *#090288 by M.A. Stammers and C.K. Ikona.

MOUNTAINEER MINES LTD and PAN OCEAN OIL LTD, Aug/78. Assessment Report *#090365 by D.A. Yeager and C.K. Ikona.

MOUNTAINEER MINES LTD and PAN OCEAN OIL LTD, Feb/79. Assessment Report *#090440 by R.J. Darney et al.

MOUNTAINEER MINES LTD and PAN OCEAN OIL LTD, 1979. Assessment Report *#091310 by M.A. Stammers.

MOUNTAINEER MINES LTD and PAN OCEAN OIL LTD, Jul/80. Assessment Report *#090648 by J.F. Touborg and A.K. Chan.

SIGNET MINERALS INC., News Release, 26 Oct/05.

THORKELOSON, 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.

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 247.

Work History

Date	Work Type	Comment
12/31/1978	Drilling	Eight holes, 646.2 m.
12/31/1978	Geology	
12/31/1978	Geochemistry	
12/31/1978	Trenching	
12/31/1977	Geochemistry	
12/31/1977	Geology	
12/31/1977	Geochemistry	
12/31/1977	Geochemistry	
12/31/1977	Trenching	
12/13/1978	Ground Geophysics	
12/13/1977	Ground Geophysics	Also radiometric survey.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
094954	2006	Mineral Exploration Report for the Curie Property, North Central, Yukon Territory	Electromagnetic - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Gravity Survey - Ground Geophysics, Research/Summarize - Pre-existing Data, Backhoe - Trenching		
095603	2006	Assessment Report Describing Airborne Geophysics and Digital Data Compilation at the Win Property	Magnetic - Airborne Geophysics, Data Compilation - Pre-existing Data		
095590	2005	Prospecting, Scintillometer and Gravity Survey at the Curie Property, Northeastern Yukon Territory	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Gravity Survey - Ground Geophysics, Scintillometer - Ground Geophysics, Prospecting - Other		
093197	1993	Assessment Report on the 1993 Geological and Geochemical Investigation of the Kiwi Property KL 1-196	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
062055	1980	Report on Geology an Exploration of the Bonnet Plume Basin Yukon Territory	Diamond - Drilling, Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Environmental Assessment/Impact - Studies, Resource Estimate - Studies	53	10700
090648	1979	Report on 1979 Season Fairchild Uranium Program	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Gamma-ray Spectrometry - Ground Geophysics, Magnetism - Ground Geophysics, Backhoe - Trenching	17	1548.99
090440	1978	Summary Report on the Kiwi Lake Holdings in the Fairchild Project Area	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Magnetism - Ground Geophysics, Hand - Trenching, Handblast - Trenching	8	646.18
090365	1977	Geological and Geochemical Report on the Fox Creek Area Including Deer, Frog, Mosquito, Clam Claim Groups	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics		