## Occurrence Details

**Occurrence Number:** 106E 022
**Occurrence Name:** Sphinx
**Occurrence Type:** Hard-rock
**Status:** Showing
**Date printed:** 12/16/2025 5:06:12 PM

## General Information

**Secondary Commodities:** copper, iron, uranium
**Deposit Type(s):** Iron Oxide Breccias & Veins (Wernecke Breccias)
**Location(s):** 65°5'19" N - -134°32'24" W
**NTS Mapsheet(s):** 106E02
**Location Comments:** .5 Kilometres
**Hand Samples Available:** No
**Last Reviewed:**

### Capsule

Work History

Staked as Royal and Roy cl (YA5627) in Jul/76 by Yukon Revenue ML, which explored by prospecting. The Sphinx cl (YA7188) was added to the southeast in Sep/76 by Anglo Bomarc ML, transferred in 1976 to Cutlass EL and in 1977 to Great Hercules Res L, which restaked as Sphinx cl (YA30032) in Apr/78.
Pamicon Developments Ltd staked Quartet 1-16 cl (YB28700) 3 km to the northeast in Jul/92. Pamicon formed a joint venture with Equity Engineering Ltd and Westmin Resources Ltd and explored with a geochemical survey in Jun/93.

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. Cambrian carbonate and siliciclastic rocks lie unconformably to the west. According to Thorkelson (2000), Wernecke Breccia development is best modeled as a set of hydrothermal and/or phreatic breccias; brecciation being caused by explosive expanson 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 argillite of the Early Proterozoic Quartet Group, which is cut by a Wernecke Breccia body. The Royal group covers a copper-hematite occurrence with minor associated radioactivity peripheral to a breccia. Chalcopyrite also occurs in weak fractures which cut the breccia.

References

GEOLOGICAL SURVEY OF CANADA Paper 77-1A, p. 33-37.

GEORGE CROSS NEWSLETTER, 14 Dec/76.

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.

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.

### Work History

| Date | Work Type | Comment |
|---|---|---|
| 12/31/1976 | Other | |

### 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 |
| 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 | | |

| | | | | | |
|---|---|---|---|---|---|
| 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 | | |