



## Occurrence Details

**Occurrence Number:** 106E 028

**Occurrence Name:** Rapitan

**Occurrence Type:** Hard-rock

**Status:** Showing

**Date printed:** 4/29/2025 2:15:51 AM

## General Information

**Secondary Commodities:** copper, uranium

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

**Location(s):** 65°8'25" N - 134°29'58" W

**NTS Mapsheet(s):** 106E01

**Location Comments:** 1 Kilometres

**Hand Samples Available:** No

**Last Reviewed:**

### Capsule

#### Work History

Staked as Rapi cl (YA1456) in Jan/76 by Great Bear Mg L, which explored by reconnaissance geochem and radiometric prospecting. The MS and Riox cl (YA1851) were added to the north in Mar/76 by Rio Alto EL and explored by a track-etch radon survey while the Jim cl (YA5525) were added to the west in Jun/76 by Zenith Mg Corp L.

In 1977, Great Bear Mg L changed its name to Aries Res Inc and Rio Alto optioned its claims to Marline O (Alberta) which conducted airborne radiometric and grid soil and geophysical surveys in 1978.

Pamicon Developments Ltd staked Quartet 1-16 cl (YB28700) 3 km to the southwest in Jul/92. The claims were transferred to Westmin Resources Ltd. in Jan/94.

#### 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. To the west, Wernecke Supergroup rocks are unconformably overlain by Cambrian carbonate and siliciclastic 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.

The claims cover limy argillite of the Early Proterozoic Quartet Group cut by several Wernecke Breccia bodies. Minor brannerite float was reported from the Rapi and Jim groups and uranium and copper anomalies were located on the Rapi claims. A specimen of breccia containing weak brannerite mineralization from the Rio Alto claims returned an assay of 0.07% U3O8.

#### References

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).

GREAT BEAR MINES LTD, Dec/76. Assessment Report #090197 by C.K. Ikona.

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.

MARLINE OIL CO. LTD, Jan/79. Assessment Report #090415 by P.S. White.

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

RIO ALTO EXPLORATION LTD, Jun/77. Assessment Report #090204 by P.S. White.

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 #093123 by M.A. Stammers.

### Work History

| Date       | Work Type           | Comment           |
|------------|---------------------|-------------------|
| 12/31/1978 | Airborne Geophysics | Airborne survey . |
| 12/31/1978 | Geochemistry        |                   |
| 12/31/1978 | Other               |                   |
| 12/31/1977 | Geochemistry        |                   |
| 12/31/1976 | Ground Geophysics   |                   |
| 12/31/1976 | Geochemistry        |                   |

|            |                   |  |
|------------|-------------------|--|
| 12/13/1978 | Ground Geophysics |  |
|------------|-------------------|--|

### Assessment Reports that overlap occurrence

| Report Number          | Year | Title   | Worktypes   | Holes Drilled | Meters Drilled |
|------------------------|------|---|---|---------------|----------------|
| <a href="#">095646</a> | 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        |
| <a href="#">094954</a> | 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  |               |                |
| <a href="#">094956</a> | 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   |               |                |
| <a href="#">062055</a> | 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          |
| <a href="#">090197</a> | 1976 | Preliminary Geochemical Report on the Rapi Mineral Claims                         | Silt - Geochemistry, Prospecting - Other  |               |                |