



## Occurrence Details

**Occurrence Number:** 106D 072

**Occurrence Name:** Bozo

**Occurrence Type:** Hard-rock

**Status:** Prospect

**Date printed:** 6/14/2025 6:21:03 PM

## General Information

**Secondary Commodities:** barite, copper, uranium

**Aliases:** Vic

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

**Location(s):** 64°39'55" N - -134°46'22" W

**NTS Mapsheet(s):** 106D10

**Location Comments:** .5 Kilometres

**Hand Samples Available:** No

**Last Reviewed:**

### Capsule

#### Work History

Staked by Wernecke Joint Venture (Chevron Standard Ltd and Aquitaine Company of Canada Ltd) as Bozo cl 1-16 (Y97530) in Jun/75. The joint venture carried out geological mapping, geochemical soil sampling and a radiometric surveying in 1975 and briefly optioned the claims to Eldorado Nuclear Ltd in 1976. Expatriate Resources Ltd staked JD cl 1-16 (YB43149) 2 km west of the showing in Aug/94. In Jun/95 Expatriate added JD cl 17-18 (YB64173) to its holdings. During 1994 and 1995 Expatriate carried out geological mapping and geochemical sampling of the claims. Restaked as Midas cl 1-22 (YB43606) in Oct/94 by J. and D. Hajek. In Aug/2001, Cash Minerals Ltd staked Vector cl 1-2 (YC02846) 0.5 km east of this occurrence location and carried out a single day of geological mapping and geochemical rock sampling. Restaked as Vic cl 1-36 (YC48038) in Jun/2006 by Archer Cathro & Associates (1981) Ltd which carried out extensive geological mapping, geophysical and rock sampling program. In Aug/2006 Archer Cathro staked Plus cl 1-12 (YC50384) on the west side of the Vic claims. In Apr 2007 Archer Cathro sold a 50% interest in the two claim blocks to Cash Minerals Ltd. During the summer of 2007 Cash Minerals carried out further field work on the claim blocks and in the fall of 2007 collared 10 diamond drill holes (3 012m) on the Vic claims. In Jun/2008 Archer Cathro transferred its remaining 50% interest in the claims to Mega Uranium Ltd which had in Jan/2006 negotiated a 50-50 joint venture agreement with Cash Minerals commonly referred to as the Yukon Uranium Project Agreement.

#### Capsule Geology

The original claims were located 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. 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 occurrence covers a small window of Lower Proterozoic Quartet Group limy argillite exposed through a cover of Cambrian to Devonian limestone and dolomite. Middle Proterozoic Wernecke Breccia and the occasional diorite stock intrude the Quartet Group rocks. The original showing consists of minor uraninite and brannerite in a gossaned zone of pyrite, siderite and barite with minor magnetite and chalcopyrite over an area 180 by 120 m along the northern margin of a breccia body.

In 1975 the Wernecke Joint Venture discovered a 1 m wide quartz ± carbonate ± hematite vein 3 km to the west. The vein was described as containing up to 20 cm wide lenses of bornite which assayed up to 62.4% copper. Expatriate staked the JD claims to explore the vein and surrounding area for Wernecke Breccia mineralization. Expatriate found two types of mineralization on the claims: (1) quartz ± hematite ± bornite veins in Quartet Group sediments; and (2) hematite ± magnetite ± chalcopyrite ± bornite as disseminations and fracture fillings in Wernecke Breccias.

Rock and chip samples of the veins returned grades up to 22.1% copper but the mineralization is erratically distributed. The disseminated and fracture filling mineralization was identified in two outcrops and consists of 80% hematite with minor magnetite. Chalcopyrite occurs as disseminations and in white quartz stringers while malachite coats about 1% of the outcrops. Traces of bornite were also found in the quartz stringers. Two chip samples were taken across the outcrops. One returned 0.57% copper over 5 m and the other 0.25% copper over 40 m. Both chip samples contained greater than 12% iron but only background values for other elements. Soil sampling across the claim block outlined two area of coincident copper, cobalt, and molybdenum response which coincide with known outcrop and float occurrences.

Cash Minerals' work focused on a number of barite showings which were documented in 1975 but never sampled. Their work identified four en echelon, steeply dipping lenses of barite varying in length from 30 to 100 m and typically 2 to 6 m wide, but locally widening to 13 m. The barite is white to grey, coarsely sucrosic with no significant metallic contaminants. Two composite samples assayed 91.5% and 93.1% barite, with specific gravities of 4.58 g/cm<sup>3</sup> and 4.35 g/cm<sup>3</sup>, respectively.

The 2006 exploration program was focused on Wernecke Breccia zones located within a fault corridor passing through the property and where sulfide mineralization typically occurs in close association with hydrothermal magnetite and barite. Rock samples returned highs of 0.22% and 0.19% uranium oxide (U<sub>3</sub>O<sub>8</sub>) and 2.62 g/t gold. Further exploration in 2007, assisted by geophysics returned numerous outcropping localities with highly anomalous mineralization containing up to 6.86% uranium oxide (U<sub>3</sub>O<sub>8</sub>) 6.13% copper, 0.398 % molybdenum and 4.46% gold. The mineralization appears to be structurally controlled and exhibits all the hallmarks of Iron-Oxide, Copper, Gold-Uranium (IOCG-U) mineralization. The 2007 diamond drilling was focused on testing the mineralization at depth. To date no results have been released.

#### References

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EXPATRIATE RESOURCES LTD, Apr/96. Assessment Report #093538 by T.C. Becker.

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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 mineralization associated with Wernecke Breccia, Yukon Canada, PhD thesis, James Cook University, Australia, 2

volumes, 120 p.

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WERNECKE JOINT VENTURE, May/76. Assessment Report #090100 by A.R. Archer.

YUKON EXPLORATION AND GEOLOGY 2006, p. 33, 45-46; 2007, p. 28, 40, 42.

### Work History

| Date       | Work Type         | Comment  |
|------------|-------------------|--|
| 12/31/2007 | Geochemistry      |  |
| 12/31/2007 | Drilling          | Ten holes, 3,012 m. No public records located. |
| 12/31/2007 | Geology           |  |
| 12/31/2006 | Geochemistry      |  |
| 12/31/2006 | Geology           |  |
| 12/31/2001 | Geochemistry      |  |
| 12/31/2001 | Geology           |  |
| 12/31/1995 | Geology           |  |
| 12/31/1995 | Geochemistry      | Also rock samples.                             |
| 12/31/1994 | Geochemistry      |  |
| 12/31/1994 | Geology           |  |
| 12/31/1975 | Ground Geophysics |  |
| 12/31/1975 | Geochemistry      |  |
| 12/31/1975 | Geology           |  |
| 12/31/1975 | Geochemistry      |  |

### Assessment Reports that overlap occurrence

| Report Number          | Year | Title  | Worktypes   | Holes Drilled | Meters Drilled |
|------------------------|------|--|---|---------------|----------------|
| <a href="#">095597</a> | 2006 | Assessment Report Describing Geophysical Surveys and Diamond Drilling at the Bond Property | Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Diamond - Drilling, Drill Core - Geochemistry, Gravity Survey - Ground Geophysics | 3             | 652.05         |
| <a href="#">090100</a> | 1976 | Report on Soil Geochemistry, Geology, and Radiometric Survey                               | Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics   |               |                |