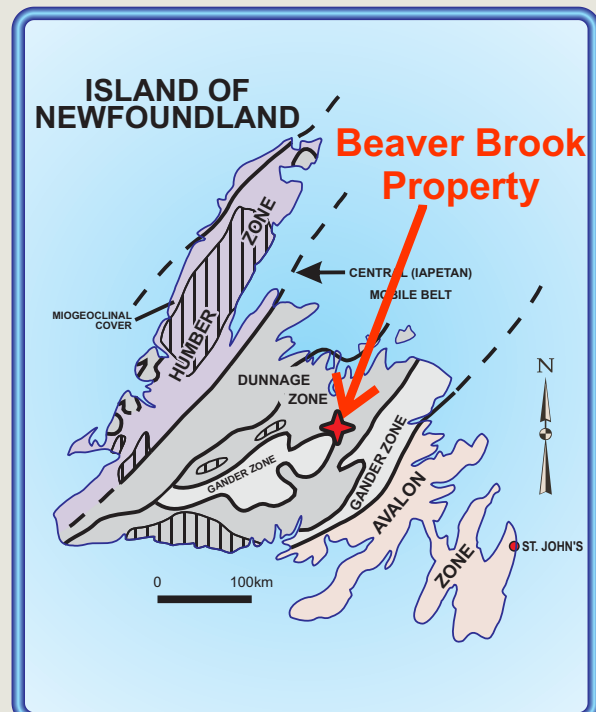


# NEWFOUNDLAND & LABRADOR

## Prospect • Discover • Develop



# Beaver Brook Au - Sb



Map 1. Property location map

The **Beaver Brook Property** is located 40 Km south of Glenwood, Central Newfoundland, (NTS sheet 2D/11, Map 1). Ready access to the property is provided by a road to the mine site and a system of logging roads.

### Regional Geology

The property lies within the Exploits Subzone (Dunnage Zone) and is underlain by sedimentary rocks of the Botwood, Davidsville and Indian Islands groups, intruded to the west by the Siluro-Devonian Mount Peyton Intrusive Suite. The latter is a regional-scale polyphase batholith, comprising a variety of gabbro, granodiorite, tonalite and granite phases. The Late Silurian to possible Early Devonian Indian Islands Group consists of several formations of variably calcareous sedimentary rocks and rare massive limestone. The Botwood Group is an extensive, thick, subaerial volcanic and sedimentary sequence thought to have formed in an epicontinental tectonic setting in subaerial to shallow marine conditions.

### Local Geology

The mineralized zone (referred to as the Hunan Line) on the Beaver Brook Sb Mine Property comprises distal turbidites and epiclastic strata, striking NE, and exhibiting lower greenschist facies metamorphism. The contact between sedimentary lithologies and the Mount Peyton Intrusive Suite is well established. The generalized stratigraphy of the Hunan Line area is based on localized information gathered at the Szechuan, Hunan, and Xingchang antimony prospects and from mapped sections between them in Cooper Brook and Beaver Brook. The regional lithologic succession consists of a unit of rhythmically-bedded siltstone underlying a distinctive pebble greywacke lithology, which in turn is overlain by a thick unit of black graphitic shale. Tallman and Evans (1994) outlined a general stratigraphic succession for the Hunan area, which includes rhythmic-bedded siltstone (footwall sequence), pebble greywacke (Hunan sequence) and graphitic shale (hanging-wall sequence). The Szechuan prospect is hosted by the siltstone unit.

### Mineralization

The Beaver Brook Sb Mine together with the Hunan and Xingchang prospects (collectively referred to as the Hunan Line prospects) were discovered by Noranda Exploration Company prospectors in 1989 during follow-up work on an 8 km long stream, silt and 4.5 km long soil Sb anomalies (Tallman, 1989; 1990). The mine mineralization occurs within two, main, closely-spaced mineralized NE-trending fault zones that are believed by the mine geologists to be offsets of one original zone. The veins are somewhat discordant when seen in section view. The mineralization occurs mostly as massive stibnite and as vug fillings within dilational fractures adjacent to and within the fault zones. Stibnite occurs alone, but more typically with carbonate and only rarely with quartz. Later unmineralized faults are present, some of which truncate the ore intersections (Squires, 2005).

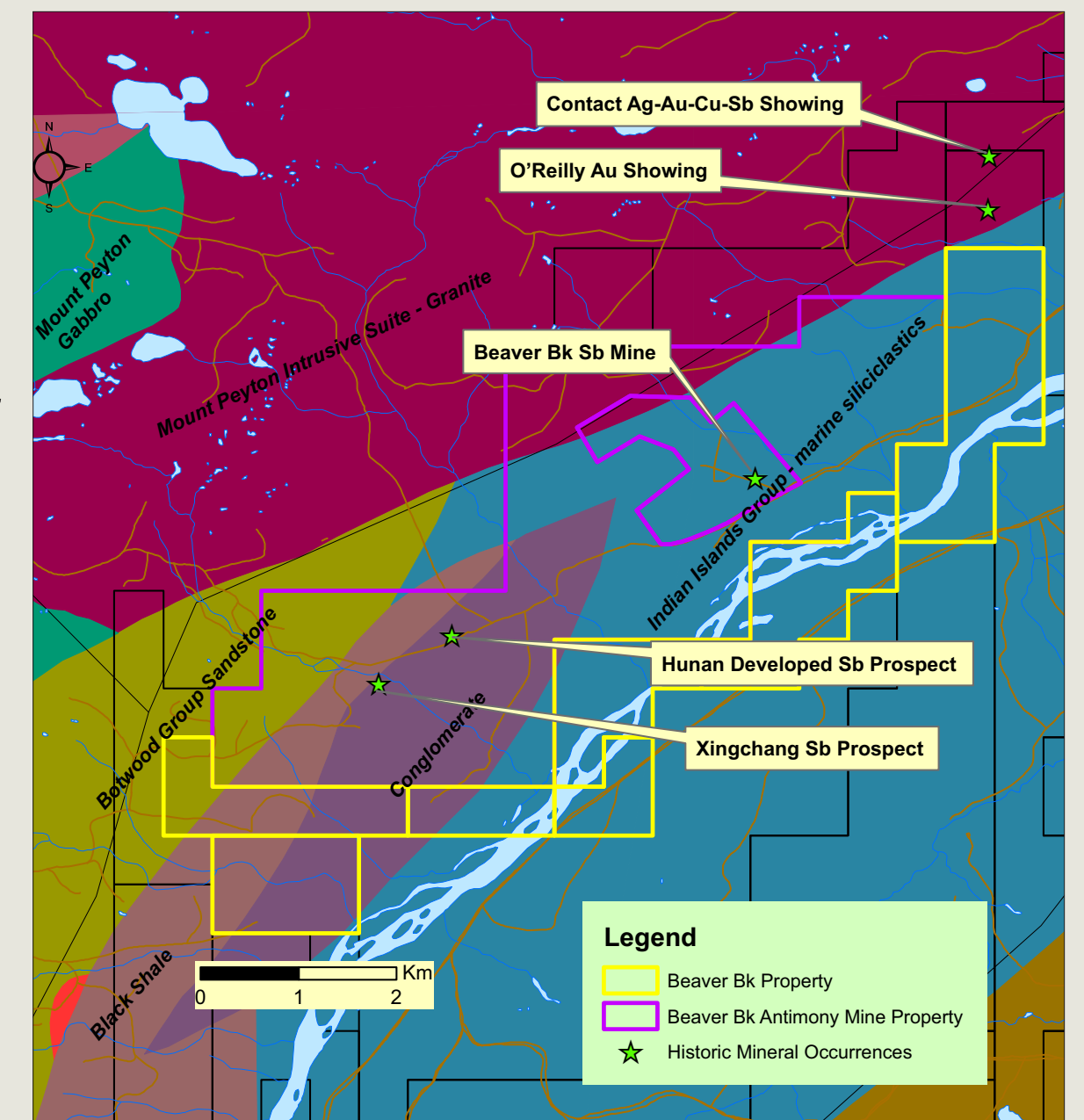
The Xingchang prospect, approximately 1.5 km on strike from the Beaver Brook property, is hosted by a 150 m wide graphitic shale (Tallman and Evans, 1994), which is fractured, brecciated and faulted proximal to the prospect. Three styles of fracture-controlled veins are present at the Xingchang prospect: 1) massive stibnite (crystals up to 15 cm long); 2) stibnite-quartz veins; and 3) sericite-chlorite veinlets with minor stibnite. Individual veins up to 25 cm wide locally form zones of parallel veins up to 1.6 m wide (Tallman and Evans, 1994).

At the Hunan Developed Prospect (proven reserves 159,000 tonnes grading 4.08% antimony using 1.5% cut-off, 2004), the mineralization intersected in a drilling program is hosted by deep-water argillaceous sedimentary rocks that contain local debris-flow beds containing a variety of exotic fragments. The presence of centimetre-scale clasts of limestone containing coral, crinoid, and bryozoa fragments indicates a Silurian age (W.D. Boyce, 2004) and suggests that the host rocks are part of the Indian Islands Group. The stibnite is hosted by a strongly sericitized, chloritized and locally carbonaceous pebbly wacke, bounded by impermeable hornfelsed siltstone and graphitic shale on each side (Sparkes, 1991).

Quartz and stibnite veins in the Beaver Brook area bear marked similarity to those seen in the low-sulphidation, epithermal gold occurrences elsewhere in the region. They also share the same host rocks, have a common Sb-Au association, and both are adjacent to the Mount Peyton Intrusive Suite (Squires, 2005).

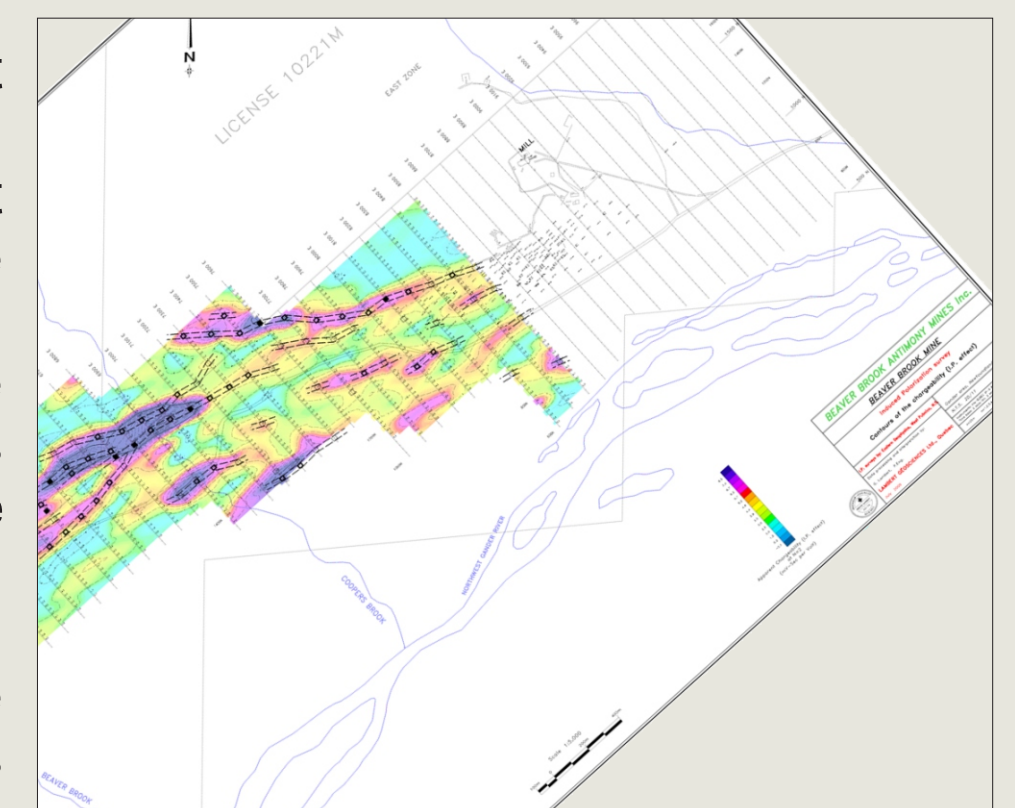
**Geophysics:** An IP survey conducted by Beaver Brook Antimony Mine Inc in 2009 (Reeves, 2009) successfully identified an east-west trending chargeability anomaly from the West Zone, through the Central Zone and intersected a second NW-SE trending chargeability anomaly immediately to the west of Cooper's Brook. The anomaly is thought to be the western extension of the structure that hosts the mineralized zone at the mine and appears to be offset by a NW-SE trending fault. The IP anomaly appears to project into the Beaver Bk Property (Map 3).

Lithostratigraphy, structure and geophysics of the Beaver Bk Sb Mine continue into the Beaver Brook Property, which therefore has excellent prospectivity for the discovery of more economic deposits of Sb.



Map 2. Claims and property geology map

P.H. Davenport, L.W. Nolan, A.J. Butler, H.A. Wagenbauer and P. Honarvar, 1999. *The Geoscience Atlas of Newfoundland*. Newfoundland Department of Mines and Energy, Geological Survey, Open File NFLD/2687, Version 1.1



Map 3. Chargeability map: Beaver Bk Mine

**FOR MORE INFORMATION CONTACT:**

**Wayde Guinchard**

**Ph: 709 690 0990**

**E-mail: waydeacm@yahoo.ca**

Revised December, 2018