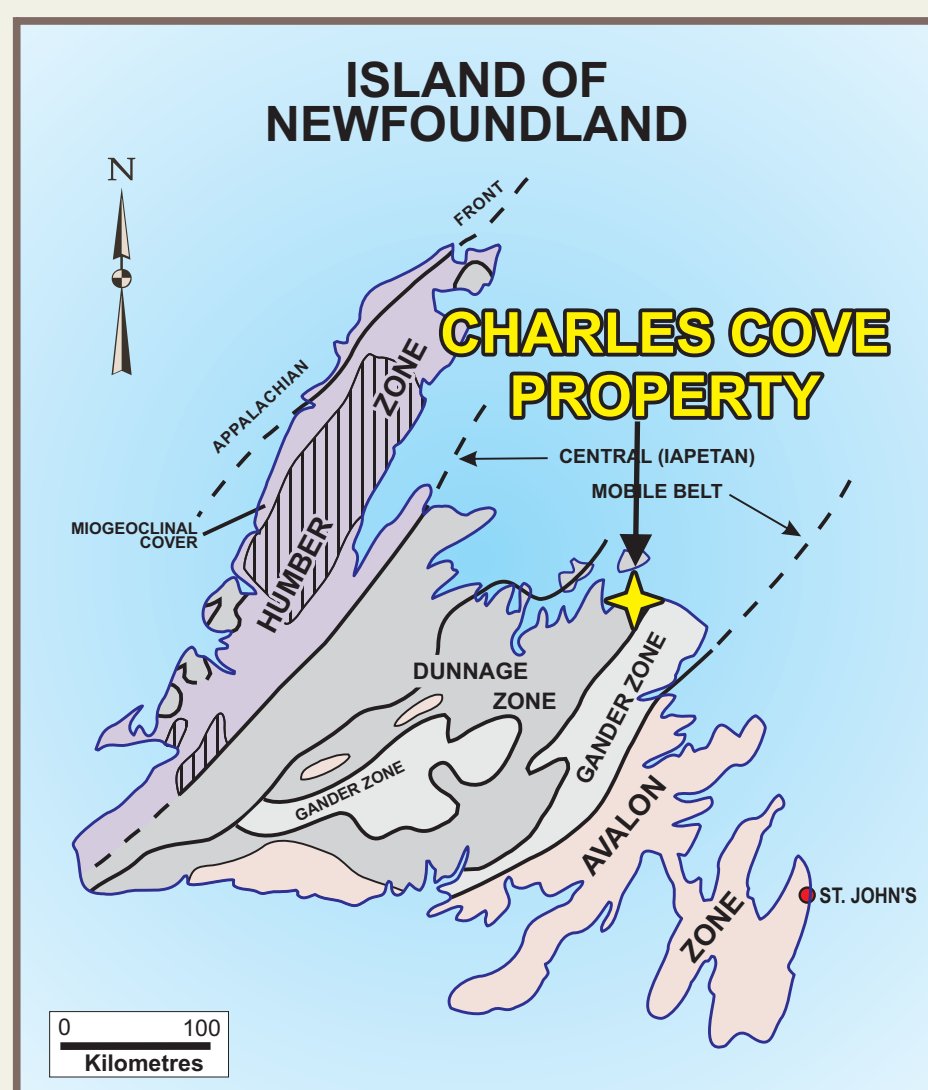


# NEWFOUNDLAND & LABRADOR

## Explore The Opportunities

### Charles Cove Tungsten-Gold



Map 1. Property Location Map

The *Charles Cove Property* consists of 7 claims located in northeastern Newfoundland, on the western side of Gander Bay (NTS 2E/8). The property is accessed from Route 331 which is 3.5 km to the southwest.

#### Regional Geology

The property lies within the Indian Islands Subzone of the Dunnage Zone close to the boundary between the Gander and Dunnage zones. Regionally, the Dunnage Zone comprises a basal disrupted lower Ordovician ophiolite (Gander River Complex) which is imbricated with diverse assemblages of unconformably overlying sedimentary rocks of late Arenig to Caradoc age (Davidsville Group). The Davidsville Group in turn has been over-riden by a composite allochthon (Hamilton Sound Group) including sulphide-rich shale, basalt flows and volcanic breccia. The Hamilton Sound Group is unconformably overlain by the Indian Islands Group, a marine shelf assemblage.

#### Local Geology

The northern part of the property is underlain by black shale of the Middle Ordovician Main Point Formation, assigned to the Hamilton Sound Group by Currie (1997). The Llandoverly and younger Indian Islands Group, Charles Cove Formation, Map 2, unconformably overlies the Hamilton Sound Group. The stratified rocks are intruded by Siluro-Devonian granitoids; the northern exposure

of granitoid is termed the Charles Cove Granodiorite (Map 2).

#### Mineralization

Four historic mineral occurrences lie within the property, viz the *Charles Cove W Prospect*, the *X-Zone Au Showing*, the *Gina Au-W Showing* and the *Berni Au-Pb-Cu-Ag-Mo Showing*. The *Charles Cove W Prospect* was discovered in 1953 by T.O. H. Patrick of the GSC who reported a large quartz vein in the vicinity of Charles Cove, containing visible scheelite. Norlex Mines Limited carried out stripping, trenching, geological mapping, UV prospecting and pack-sack drilling in the early 1970's and mapped the NNW-striking vein as being hosted by the granodiorite, extending for more than 1 km and varying in width from 60 cm to 4.5 m. Mineralization within the quartz vein consists of sporadic crystals of scheelite and minor pyrite, arsenopyrite, molybdenite and chalcopyrite. The scheelite is associated with dark grey quartz and occurs in a footwall zone adjacent to the granodiorite. A grab sample returned **2.8 % WO<sub>3</sub>** and a 30 cm drill intersection returned **1% WO<sub>3</sub>** (O'Toole, 1970). Patches of arsenopyrite up to 30 cm long were reported. Green (1989)

#### Highlights:

**Mineralized quartz vein system up to 1 km long and 4.5 m wide.**  
**Grab Samples up to 2.8% W; 30 cm drill intersection returned 1% W.**  
**Grab samples up to 14.56 g/t Au, 440 g/t Ag and 6.2% Pb**  
**Mineralization associated with greisen in granodiorite.**

veins that run roughly perpendicular to the main vein system (Wilton, 2005). Drill hole TC-03 was collared in the X-Zone and drilled towards the Gina Showing. The best intersections include **292 ppb Au over 4.21 m (6.02-10.23m)**, **325 ppb Au over 1.28m (10.67-11.95m)**, and **269 ppb Au over 2.7m (12.6-15.3m)**. More intensely altered rock generally contained more arsenopyrite and returned higher Au assays. Although these values are not economic, they are persistent over considerable lengths, indicate an auriferous zone open in three directions and show that the granodiorite hosts thick zones of alteration (Wilton, 2005).

The *Gina Showing* is characterized by a 50-75 cm wide quartz vein that is surrounded on either side by up to 60 cm wide massive arsenopyrite mineralization in the granodiorite. The quartz vein itself hosts some large (up to 3 cm) masses of arsenopyrite. Gold, **up to 1.9 g/t from grabs**, is primarily restricted to the fine-grained arsenopyrite flanking the sides of the vein (Wilton, 2004).

The *Berni gold occurrence* is hosted by a pod or lens-shaped body of semi-massive arsenopyrite in granodiorite with which it has sericitized, sheared contacts. Only a small portion of this mineralized zone is exposed and width and lateral extent of the pod are unknown. A 1998 sample of the semi-massive arsenopyrite returned an assay of **2.3 g/t Au over 80 cm** (Wilton, 2004). Assays from DDH TC-01, completed in 2005, indicates a maximum of **395 ppb Au over 0.77 m (6.44-7.21 m)** of the Berni shear zone (Wilton, 2005). The best assay value from DDH TC-02 was **1.8 g/t Au from 22.08-22.34 m** which corresponds to the centre of the Berni Zone. The sample contained semi-massive to massive arsenopyrite. A galena-bearing sample contained **7.53 g/t Ag**.

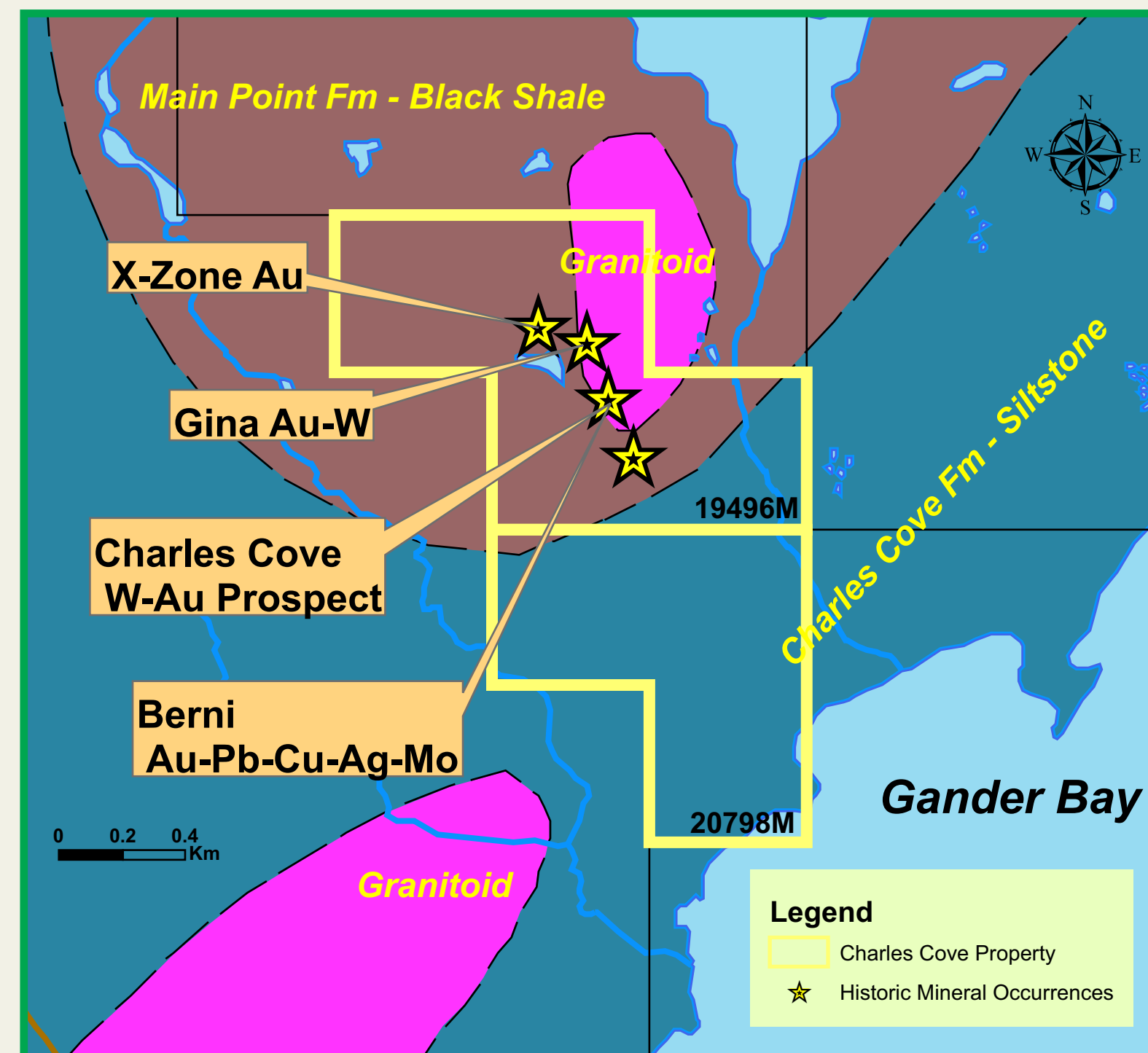
*Evans (1996) concluded that the system was a typical example of a pyrite-arsenopyrite-rich quartz vein style of gold mineralization.*

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Map 2. Property Geology and Claims Location Map

Source: Colman-Sadd, S. P., and Crisby-Whittle, L. V. J. (compilers) 2005: *Partial bedrock geology dataset for the Island of Newfoundland*. Newfoundland Department of Mines and Energy, Geological Survey, Open File NFLD/2616 version 6.0.

Mineral Occurrence Source: Mineral Occurrence Database - Geological Survey, Department of Natural Resources Website: <http://www.gov.nl.ca/mines&en/geosurvey>

reported the presence of additional quartz veins up to 3 m wide south of the original showing, containing pyrite, arsenopyrite, molybdenite and assayed up to **6.2 g/t Au**. Evans sampled the veins in 1996 and reported assays from grab samples of **1.2 and 5.76 g/t Au, and 130 g/t and 440 g/t Ag**. Work carried out in 1997 by Copper Hill Resources Inc. included airborne MAG and EM, prospecting and geochemical sampling surveys. Assays of grab samples returned up to **14.56 g/t Au, 6.2% Pb and 415 g/t Ag** (Wilton, 1998). Wilton also reported that prospecting indicated a greisen-like alteration within the granodiorite associated with the vein system.

The *X-Zone Showing* is hosted by granodiorite and contains up to 5% finely disseminated arsenopyrite. Alteration was observed to be most intense within 10 cm of narrow (1-2 cm wide) and short (1-2 m) quartz

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