

NEWFOUNDLAND & LABRADOR

Explore The Opportunities

Silver Cliff / Argentia Au-Ag-Pb-Zn



Map 1: Property and Location

The **Silver Cliff Property/Argentia** consists of 9 claims on the NW coast of the Avalon Peninsula, Eastern Newfoundland, NTS Sheet 1N/5. The property is approximately 3 km NE of the community of Argentia and is easily accessible from secondary roads (Maps 1 and 2).

Regional Geology

The region forms part of the Avalon Zone of the Newfoundland Appalachians and is underlain by the Late Proterozoic Musgravetown Group, a mixed assemblage of mafic and felsic intrusive and extrusive rocks and pyroclastic, clastic and terrestrial red to green sedimentary rocks.

Local Geology

The property is underlain principally by the Bull Arm Formation (BAFm, Map 2), the base of the Musgravetown Group, comprising mafic and minor felsic flows, crystal and lithic tuffs and clastic sedimentary rocks. The Silver Cliff abandoned mine workings are hosted in tuffs and include a drift, a shaft and exploratory workings in a vertical vein system. The vein occurs in a brecciated fault zone with galena and sphalerite forming lenses and a matrix around volcanic fragments. The main fault underlies the brook flowing north-northwesterly into Placentia Bay and has a displacement of at least several hundred feet.



MacKay Vein and Adit Portal (Can for scale), 12.4 g/t assay Au taken from 15 cm wide chip sample from above the middle of adit

Previous Work and Mineralization

The Silver Cliff Mine veins were located around 1882 by John Burke and sold for \$4,500 to an English company which operated for a short time. Intermittent operations continued until the mine closed in 1925. Only two veins, the Fowler vein and the MacKay vein, have been developed. The MacKay vein was developed by three tunnels; two of these named MacKay and Camp adits, are just over 400 feet and about 100 feet in length, respect. The Fowler vein was developed by a number of prospecting tunnels. In the 1970's, Commodore Mining Co. Ltd. carried out geochemical and geophysical surveys over the Argentia Military Reserve Area and the old Silver Cliff claim. Soil sample results included values exceeding **2000 ppm Pb and Zn** in the vicinity of, and upstream from the old Silver Cliff Mine. **A VLF survey identified a potential orebody >450 m in length (Cant, 1974).** In addition, the present owner has identified a number of other potential VLF targets on the property. Most of the veins contain base metals and barite in quartz-carbonate matrix or in carbonated bleached zones in the country rock. Chalcopyrite does occur but is less common than galena or sphalerite.

MacKay Vein

The width of the orebody ranges from 0.76 m to 3.66 m, averaging 1.07 m to 1.37 m (Hatch, 1925). Assays of up to **356 oz/ton Ag were reported** (Howley, 1918). The grade of ore concentrates from the mill in the 1920's were **20 to 30 oz/t Ag and 60% Pb** and historic grab samples have given up to **61% Pb, 20 oz/t Ag, 1 g/t Au** from the MacKay Vein (Hatch, 1925). Assays of a 1 m channel sample across the vein at the adit portal, returned **3.19 oz/t Ag, 5.08% Pb, 4.9% Zn and 0.02 oz/t Au** (McCartney, 1955). Recent assays by the present owner from rocks at the adit portal, included **12.4 g/t Au, 243 g/t Ag, 13.4% Pb, 15.9% Zn; from mine dumps 17% Pb, 12% Zn, and 223 g/t Ag; and 39.15 g/t Au and 167 g/t Ag** from oxidized outcrop 50 m from the adit portal in a vein offset. Recent work by the present owner in 2013, consisted of a soil survey of 133 samples west of the mine (Figure 1). **Significant anomalous values for Au, Ag, Pb and Zn** were outlined in the centre and NE of the survey grid. The gold anomaly in the centre is defined by a 3 samples ranging from **400 – 428 ppb Au** (Figure 1). Ag, Pb and Zn anomalies in the NE have up to **14.4 g/t Ag and up to .25% Pb**. Ag, Pb and Zn correlate well but Au does not correlate well with the other metals. Thick tills (Liverman and Taylor, 1994) have been mapped in the area with an ice direction of ENE. Most of the metal anomalies may be sourced from the former mine and tailings although there could be a possible extension to the original veins (e.g., MacKay). *The gold anomalies, however, remain unsorted.*

Fowler Vein

The Fowler Vein has been worked for a distance of 80 m in the vicinity of the mine-site and outcrops periodically in washouts along the Broad Cove Brook Ravine.

Falls Vein

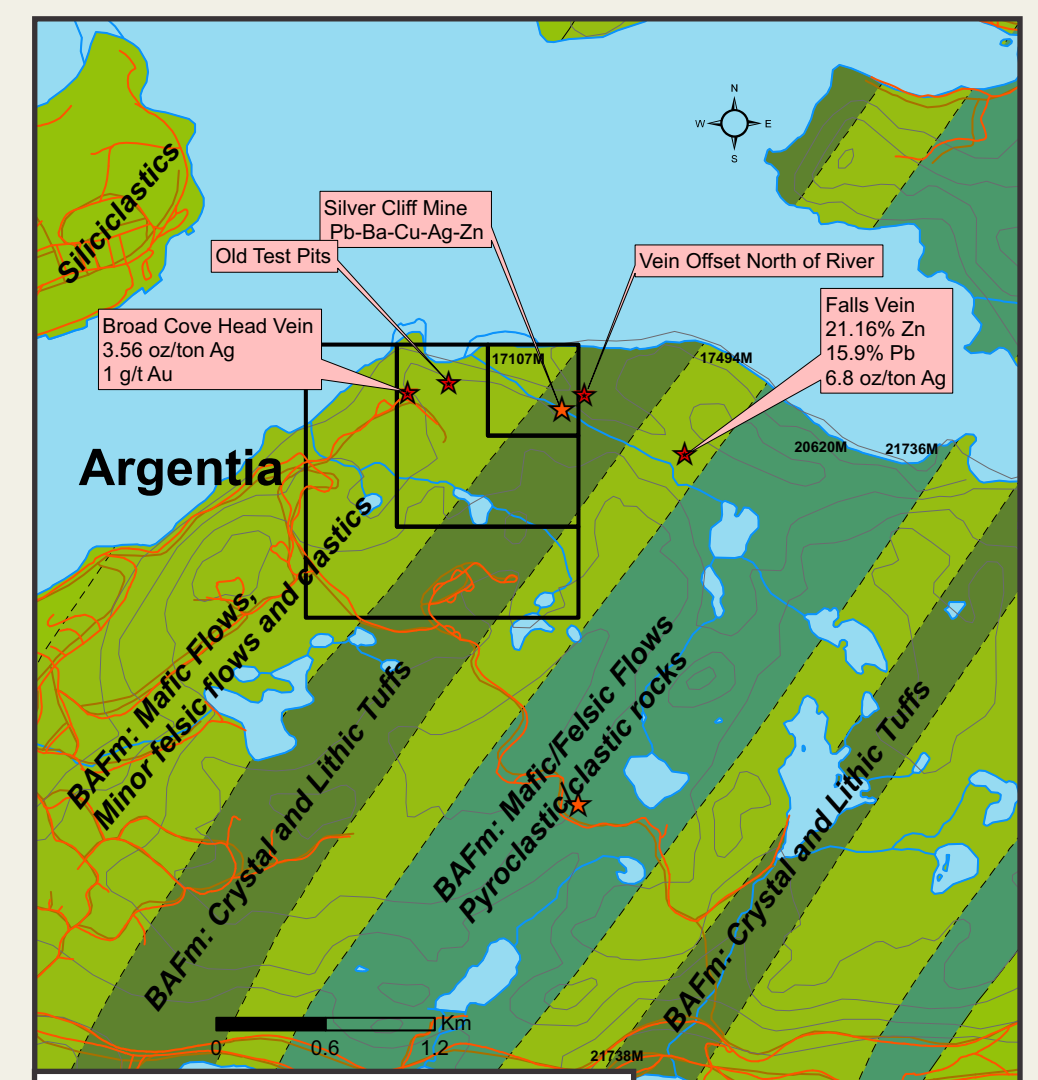
The Falls Vein of Broad Cove Brook occurs adjacent to red rhyolite intruding altered conglomerate (Baker, 1927). Oxidized outcrop from the Falls Vein assayed **21.16% Zn, 15.9% Pb, 6.8 oz/t Ag** (Hatch, 1925). Significant massive zinc mineralization has been found in mine dumps, in blocks of sphalerite up to 15 cm across.

Broad Cove Head / Collins Pit

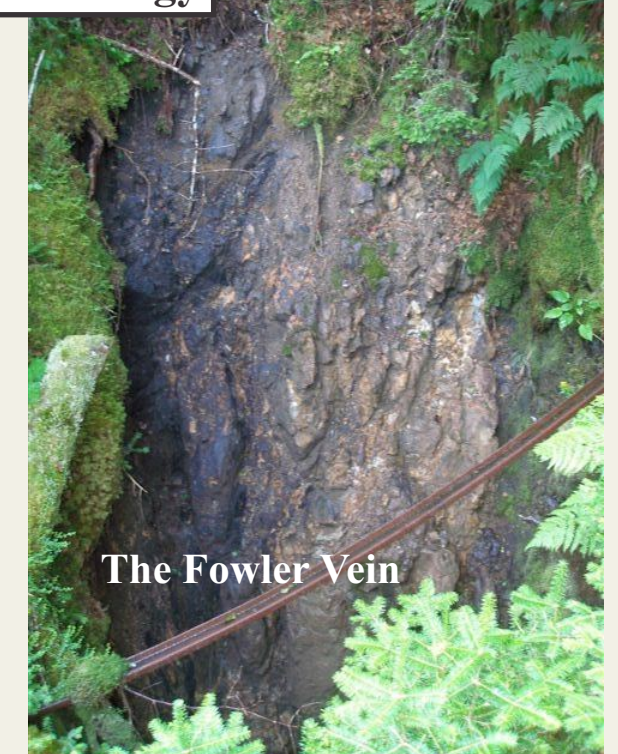
Historically, samples from a tunnel and several tests pits have returned assays of oxidized outcrop up to **3.56 oz/ton Ag and 1 g/t Au**. During the past year, a local contracting company has exposed the oxidized zone of a vein; assays are pending at this time.

Mineralization Model

A deposit model which fits some of the characteristics of the Silver Cliff Mine vein has been described by Lefebure and Church (1996). Polymetallic Ag-Pb-Zn+/-Au-rich (sulphide) veins containing sphalerite, galena, silver and sulphosalt minerals in a carbonate and quartz gangue, can be subdivided into those hosted by metasediments and another group hosted by volcanic or intrusive rocks. The latter type of mineralization is typically contemporaneous with emplacement of a nearby intrusion. These features fit the Silver Cliff Mine mineralization. Such polymetallic veins occur in the mines of Creede - Colorado, Keno Hill - Yukon and the Coeur d'Alene District - Idaho. The vein structures are controlled by steeply-dipping faults. The mineralization at Silver Cliff may be related to the intrusion of the Devonian Red Island Granite, which lies immediately in the offshore to the west.



Map 2: Claims and Geology



The Fowler Vein

Highlights

- ✍ **Dormant Mine**
- ✍ **Grabs up to 356 oz/t Ag, 60% Pb, 21% Zn, 39 g/t Au**
- ✍ **No drilling**
- ✍ **Open along strike and at depth**
- ✍ **Similarity to Coeur d'Alene district**
- ✍ **Good potential for further new vein discovery**
- ✍ **Restricted property access from 1941-1994**
- ✍ **20 veins recorded on property**

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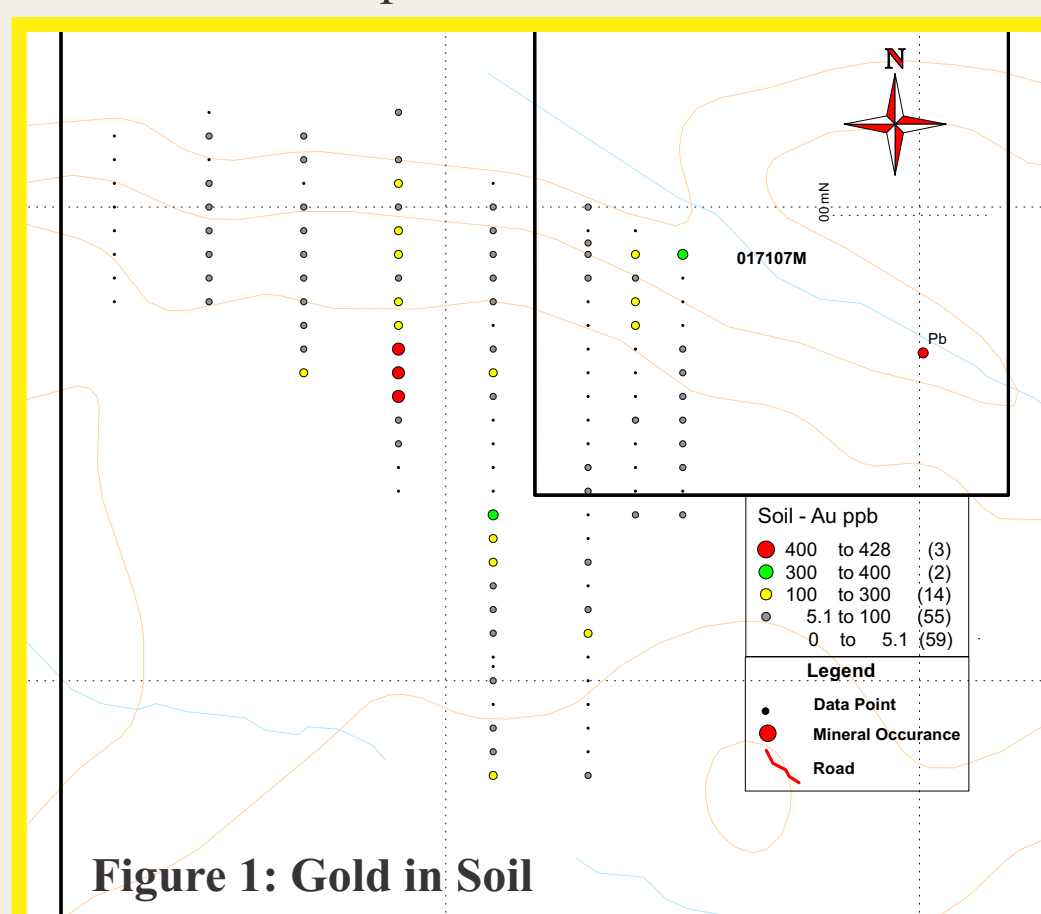


Figure 1: Gold in Soil

Produced By:



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