Location/Identification

MINFILE Number: 104N 001
National Mineral Inventory Number: 104N12 U1
Name(s): **HUSSELBEE**
BEAVER, DEEP BAY
Status: Prospect
Mining Division: Atlin
Electoral District: Stikine
Regions: British Columbia
Resource District: Skeena Stikine Natural Resource District
BCGS Map: 104N071
NTS Map: 104N12W
UTM Zone: 08 (NAD 83)
Latitude: 59 42 29 N
Northing: 6619458
Longitude: 133 51 06 W
Easting: 564613
Elevation: 751 metres
Location Accuracy: Within 500M
Comments: Claims centred around "Discovery Hill" located about 1 to 2 kilometres south of Deep Bay on the west side of Atlin Lake, approximately 17 kilometres northwest of the community of Atlin.

Mineral Occurrence

Commodities: Uranium, Thorium, Lead, Molybdenum, Copper

Minerals
Significant: Galena, Uraninite, Molybdenite, Chalcopyrite
Significant Comments: Visible galena and fluorite are minor.
Associated: Fluorite, Jasper, Pyrite, Actinolite, Calcite, Apatite, Dolomite, Hematite
Associated Comments: Only minor pyrite and jasper clasts.
Alteration: Actinolite, Apatite, Fluorite, Hematite
Alteration Type: Skarn
Mineralization Age: Unknown

Deposit
Character: Disseminated, Vein
Classification: Skarn, Igneous-contact
Type: K07: Mo skarn, I15: Classical U veins

Comments: Mineralization in irregular body of amphibolite.

Host Rock

Dominant Host Rock: Metasedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Paleozoic	Cache Creek Complex	Horsefeed	------
Middle Jurassic	------	------	Fourth of July Creek Batholith

Isotopic Age	Dating Method	Material Dated
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171 +1/-5 Ma	Zircon	Zircon

Lithology: Actinolite Skarn, Fine Grained Black Amphibolite, Volcanic Breccia, Alkali Feldspar Porphyritic Monzonite
Comments: Inferred to be derived from epiclastic volcanic greywacke and agglomerate. Age date from Fieldwork 1990.

Geological Setting

Tectonic Belt: Intermontane
Physiographic Area: Teslin Plateau
Terrane: Cache Creek

Metamorphic Type: Contact

Comments: Occurrence at the southern margin of the Fourth of July Creek batholith.

Inventory

Ore Zone: SAMPLE

Category: Assay/analysis

Year: 1953

Report On: N

NI 43-101: N

Sample Type: Grab

Commodity	Grade
Thorium	0.1600 per cent
Uranium	0.0120 per cent

Comments: Another sample assayed 0.059 per cent uranium and 0.17 per cent thorium.

Reference: Minister of Mines Annual Report 1953, page A81.

Capsule Geology

The Husselbee uranium showing lies within actinolite skarn, on "Discovery Hill", located about 1 to 2 kilometres south of Deep Bay on the west side of Atlin Lake, approximately 17 kilometres northwest of the community of Atlin.

The original showing on Discovery Hill, and also one 400 metres to the west, is composed of dark green to black, fine-grained amphibolite consisting largely of bladed amphiboles which can be up to 5 centimetres long. Lighter grey-green varieties, forming rosettes, are dominantly actinolite as the major amphibole which form rosettes. Sparsely disseminated hematite can give the rock a reddish colour. Irregular masses or pods of jasper are also common and they are often mineralized with pyrite, fluorite and galena. Partially recrystallized xenoliths of limestone are present. These indicate a possible volcanic agglomerate or breccia protolith for the amphibolite which may have been part of the upper Mississippian to Permian Horsefeed Formation of the Cache Creek Complex. Underlying the amphibolite and exposed in areas away from Discovery Hill is a variably textured and heterogeneous granodiorite to monzodiorite with pink porphyritic alkali feldspar. These are most likely part of the Middle Jurassic Fourth of July Creek batholith of the Coast Intrusions. The Fourth of July Creek batholith has been zircon dated at 171 +/- 5 million years (Fieldwork 1990).

Mineralization occurs as pyrite, galena and fluorite in jasper pods. Uraninite and apatite are present, but the identity of the thorium-bearing mineral is uncertain. A sample from the top of Discovery Hill assayed 0.012 per cent uranium and 0.16 per cent thorium oxide and a sample 380 metres to the west assayed 0.059 per cent uranium and 0.17 per cent thorium. Another sample from the area assayed 0.14 per cent uranium and 0.04 per cent thorium oxide (Minister of Mines Annual Report 1953).

Small calcite and dolomite veins cut the amphibolite and contain disseminated molybdenite, pyrite and chalcopyrite. Samples have assayed as high as 0.11 per cent molybdenite (Assessment Report 2786).

In 1953, the showing was discovered and staked by prospector B. Husselbee and minor surface work was completed at that time, with drilling in the 1960s. Work was conducted by Canadian Johns-Manville Company Limited and others in the late 1960s with trenching completed in 1967. In 2006, a scintillometer survey was completed by C. Aspinall and no further work was reported since that time. In 2011, C. Aspinall collected two samples for petrology and rare earth element (REE) analysis.

Bibliography

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EMPR OF 1989-15A; 1989-24; 1990-22; 1992-8,16; 1996-11
EMPR PF (McDougall, J.J. (1954): Exploration and Prospecting Possibilities, Yukon and Northern British Columbia, page 26 in 104P General File)
EMR MP CORPFILE (Jason Explorers Ltd.)
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GSC MAP 1082A
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Cordey, F. et al. (1987): Significance of Jurassic Radiolarians from the Cache Creek Terrane, British Columbia, in Geology Vol.15, pp. 1151-1154
EMPR PFD 650346, 810840, 820217, 674312

Date Coded:	1985/07/24	**Coded By:**	BC Geological Survey (BCGS)	**Field Check:**	N
Date Revised:	2022/08/15	**Revised By:**	Niel Hugo (NH)	**Field Check:**	N