Location/Identification

MINFILE Number: 104N 005
National Mineral Inventory Number: 104N11 U1
Name(s): **PURPLE ROSE**
CRACKER CREEK, FISHER
Status: Showing
Mining Division: Atlin
Electoral District: Stikine
Regions: British Columbia
Resource District: Skeena Stikine Natural Resource District
BCGS Map: 104N074
NTS Map: 104N11W
UTM Zone: 08 (NAD 83)
Latitude: 59 43 19 N
Northing: 6621646
Longitude: 133 19 01 W
Easting: 594657
Elevation: 1668 metres
Location Accuracy: Within 500M
Comments: Shear zone/Purple Rose occurrence (Prospectors Sketch, Assessment Report 6469).

Mineral Occurrence

Commodities: Uranium, Thorium, Copper, Silver, Lead

Minerals
Significant: Zeunerite, Autunite, Tetrahedrite, Galena
Significant Comments: First recorded zeunerite occurrence in British Columbia.
Associated: Arsenopyrite, Pyrite, Fluorite, Quartz, Magnetite
Associated Comments: Magnetite is associated with tremolite-garnet skarn in another area where the alaskite body comes in direct contact with li
Alteration: Kaolinite, Malachite, Azurite, Tremolite, Garnet
Alteration Comments: Azurite and malachite are associated with tremolite-garnet skarn in another area where the alaskite body comes in direct contact with limestone.
Alteration Type: Argillic, Oxidation, Skarn
Mineralization Age: Unknown

Deposit
Character: Vein, Shear, Disseminated
Classification: Hydrothermal, Epigenetic, Skarn
Type: I15: Classical U veins, K08: Garnet skarn

Comments: Northwest trending shear zone.

Host Rock

Dominant Host Rock: Plutonic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Paleozoic-Mesozoic	Cache Creek Complex	Kedahda	------
Upper Cretaceous	------	------	Surprise Lake Batholith
Upper Paleozoic	------	------	Ultramafic Intrusions

Isotopic Age	Dating Method	Material Dated
------	------	------
70.6 +/- 3.8 Ma	Potassium/Argon	Biotite
------	------	-

Lithology: Coarse Grained Alaskite, Porphyritic Alaskite, Limestone, Quartzite, Tremolite Garnet Skarn, Quartz Monzonite
Comments: Hosted in batholith that has intruded Cache Creek Complex sediments and ultramafic rocks. Age date from Map 52.

Geological Setting

Tectonic Belt: Intermontane **Physiographic Area:** Teslin Plateau

Terrane: Plutonic Rocks, Cache Creek

Metamorphic Type: Contact

Comments: Hosted along the western margin of the Surprise Lake batholith.

Inventory

Ore Zone: SAMPLE **Year:** 2019

Category: Assay/analysis **Report On:** N

NI 43-101: N

Sample Type: Rock

Commodity	Grade
Silver	7.4 grams per tonne
Copper	0.007 per cent
Lead	0.14 per cent

Comments: Sample 1893052.

Reference: Assessment Report 39048

Ore Zone: SAMPLE **Year:** 1955

Category: Assay/analysis **Report On:** N

NI 43-101: N

Sample Type: Grab

Commodity	Grade
Thorium	0.0110 per cent
Uranium	0.0750 per cent

Comments: One sample also reportedly assayed 1.06 per cent copper.

Reference: Minister of Mines Annual Report 1955, pages 7-9.

Capsule Geology

The Purple Rose occurrence is located at the headwaters of Cracker Creek which drains eastward into the north end of Surprise Lake, about 24 kilometres northeast of the community of Atlin.

The primary lithology in the area is that of a coarse grained to porphyritic alaskite to quartz monzonite belonging to the Late Cretaceous Surprise Lake batholith (Surprise Lake Plutonic Suite). These rocks have intruded sedimentary sequences, composed of quartzite and limestone, of the Mississippian to Triassic Kedahda Formation (Cache Creek Complex), and greenstone of the Upper Mississippian to Permian Nakina Formation (Cache Creek Complex). Upper Mississippian to Permian Cache Creek Complex variably serpentinized ultramafic rocks (peridotite) have also been intruded by the Surprise Lake batholith in the Cracker Creek area.

The showing is associated with a northwest trending shear zone that is near the boundary of, but hosted entirely within, the alaskite to quartz monzonite body, near its contact with the sediments. The shear zone and associated mineralization has been traced over 500 metres. The alaskite is strongly "kaolinized" near the shear zone and the degree of alteration decreases away from the shear. Within the strongly altered alaskite, on the footwall of the shear zone, the uranium mineral zeunerite is found. This zone yielded the highest values of 0.075 per cent uranium and 0.011 per cent thorium oxide. Other minerals associated with the zeunerite are autunite, arsenopyrite, tetrahedrite, pyrite, galena, minor fluorite and vuggy quartz. One sample also assayed 1.06 per cent copper (Minister of Mines Annual Report 1955, pages 7 to 9).

In another area where the alaskite body comes in direct contact with limestone, the limestone is metamorphosed to a tremolite-garnet skarn with patchy magnetite and copper staining of malachite and azurite.

In 1954, the Purple Rose and Fisher claim groups were located to cover uranium showings discovered by O. Olsen and N. Fisher, of Atlin, while prospecting for K.J. Springer, of Toronto. During the summer of 1955, Barymin Company Limited completed surface stripping on showings on both groups.

In 1976, Union Oil Company of Canada Limited conducted prospecting, completed a scintillometer survey and collected rock - and silt samples.

In 2002, prospection was done by William B Wallis on the B&B and B&W 1&2 claims, who is the owner of these claims as well.

In 2017, Global Drilling Solutions on behalf of Zinex Mining Corporation conducted extensive geochemical sampling on the Ruby Creek property, as well as drilling and ground geophysics. In 2018, Global carried out further geochemical sampling on the property, and in 2019 they continued work in this region, in the form of prospection, geochemical surveying and a ground geophysical survey. Rock sample 1893052 returned 0.22 grams per tonne gold, 7.4 grams per tonne silver, 0.007 per cent copper, 0.14 per cent lead and 0.07 per cent zinc (Assessment Report 39048).

In 2021, an airborne SkyTEM survey was conducted by Stuhini Exploration on the Ruby Creek property, which revealed a number of regional trends across the property.

Bibliography

EMPR AR *1955, pp. 7-9
EMPR ASS RPT *6469, 6922, 7610, 26920, 37171, 38256, *39048
EMPR BULL 94
EMPR EXPL 1977-240; 1978-270
EMPR MAP 22; 52 (10 pages of notes)
EMPR OF 1989-15; 1989-24; 1992-16; 1996-11
EMPR PF (McDougall, J.J. (1954): Exploration and Prospecting Possibilities, Yukon and Northern British Columbia, in 104P General File)
EMPR PFD 820217, 831191
EMR MP CORPFILE (Jason Explorers Ltd.)
GSC MAP 1082A
GSC MEM 37; 307
GSC OF 551; 864
GSC P 78-1A, p. 467
DIAND OF *1990-4
N MINER Sept.16, 1954
Cordey, F. et al. (1987): Significance of Jurassic Radiolarians from the Cache Creek Terrane, British Columbia, in Geology Vol.15, pp. 1151-1154

Date Coded:	1985/07/24	**Coded By:**	BC Geological Survey (BCGS)	**Field Check:**	N
Date Revised:	2022/09/06	**Revised By:**	Niel Hugo (NH)	**Field Check:**	N