Location/Identification

MINFILE Number: 104N 027  National Mineral Inventory Number: 104N11 Au1
Name(s): BOULDER CREEK

Status: Past Producer
Mining Method: Open Pit
Regions: British Columbia
BCGS Map: 104N063
NTS Map: 104N11W
Latitude: 59 39 38 N
Longitude: 133 25 20 W
Elevation: 1233 metres
Location Accuracy: Within 1KM
Comments: Boulder Creek was worked for about 3.5 kilometres and it flows south into the west end of Surprise Lake, about 17 kilometres northeast of Atlin.

Mineral Occurrence

Commodities: Gold, Tungsten
Minerals
Significant: Gold, Wolframite
Significant Comments: Placer gold and wolframite.

Mineralization Age: Unknown
Deposit
Character: Unconsolidated
Classification: Placer
Type: C01: Surficial placers

Host Rock

Dominant Host Rock: Sedimentary
Stratigraphic Age
Upper Paleozoic
Quaternary
Upper Cretaceous
Upper Paleozoic

Formation
Cache Creek Complex
Nakina
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Igneous/Metamorphic/Other
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Glacial/Fluvial Gravels
Surprise Lake Batholith
Ultramafic Intrusions

Isotopic Age
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Dating Method
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Material Dated
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Lithology: Gravel, Ultramafic, Greenstone, Serpentinite, Alaskite

Comments: Placer occurrence located near the southwest margin of the Surprise Lake batholith.

Geological Setting

Tectonic Belt: Intermontane
Physiographic Area: Teslin Plateau
Terrane: Plutonic Rocks, Cache Creek

Inventory

No inventory data

Capsule Geology

Boulder Creek flows south into the west end of Surprise Lake about 17 kilometres northeast of Atlin. The stream is about 6 kilometres long and braids into three separate streams near its mouth where most of the placer work has been done. From the years 1898 to 1945, 1920 kilograms of gold were taken from the creek (Bulletin 28). The creek was extensively hydraulic mined at the lower end and has received a resurgence of work in the 1980s. It is the third largest producer in Atlin.

The headwaters of the creek are located within a fine grained alaskite body of the Late Cretaceous Surprise Lake batholith (Surprise Lake Plutonic Suite). The creek then flows out of the pluton and over Upper Paleozoic ultramafic and volcanic rocks of the Cache Creek Complex. The volcanic rocks belong to the Nakina Formation and comprise mafic greenstone flows and minor volcanic greywacke. The ultramafic rocks are often altered to serpentinite.

Most of the gold was taken from the lower end of the creek and very little at the upper end where it flows over the batholith. There is significant placer wolframite in Boulder Creek and several wolframite showings in areas surrounding the headwaters of the creek.

Hydraulic mining was done on Boulder Creek from 1927 to 1941 and produced most of the gold recovered from the creek. A dam was built on the upper reaches of the creek to supply water for operations lower down.

Bibliography

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GSC OF 864
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GSC SUM RPT XII, 1899; XIII, 1900

Date Coded: 1985/07/24 Coded By: BC Geological Survey (BCGS) Field Check: N
Date Revised: 2015/04/09 Revised By: Laura deGroot(LDG) Field Check: N