



Location/Identification

MINFILE Number: 082KSE057
Name(s): BEULAH
LAST HOPE, KEY, HOMESTAKE, LAST CHANCE
Status: Prospect
Mining Division: Golden
Electoral District: Columbia River-Revelstoke
Resource District: Rocky Mountain Forest District
Regions: British Columbia
BCGS Map: 082K049
NTS Map: 082K08W
UTM Zone: 11 (NAD 83)
Latitude: 50 26 56 N
Northing: 5588717
Longitude: 116 23 43 W
Easting: 542934
Elevation: 2950 metres
Location Accuracy: Within 1KM
Comments: Location from Open File 1990-26.

Mineral Occurrence

Commodities: Silver, Lead, Copper, Zinc, Gold
Minerals
Significant: Galena, Sphalerite, Bournonite, Tetrahedrite
Associated: Quartz, Barite
Alteration: Malachite, Azurite
Alteration Type: Oxidation
Mineralization Age: Unknown
Deposit
Character: Vein, Shear
Classification: Replacement, Hydrothermal
Type: I05: Polymetallic veins Ag-Pb-Zn+/-Au

Host Rock

Dominant Host Rock: Sedimentary
Stratigraphic Age **Group** **Formation** **Igneous/Metamorphic/Other**
Middle Proterozoic Purcell Mount Nelson -----
Isotopic Age **Dating Method** **Material Dated**

Lithology: Dolomite

Geological Setting

Tectonic Belt: Omineca
Physiographic Area: Purcell Mountains
Terrane: Ancestral North America
Metamorphic Type: Regional
Grade: Greenschist

Inventory

Ore Zone: SAMPLE
Category: Assay/analysis

Year: 1926
Report On: N
NI 43-101: N

Sample Type: Bulk Sample

Commodity	Grade
Silver	2000.0000 grams per tonne
Gold	3.4000 grams per tonne
Copper	0.8000 per cent
Lead	57.0000 per cent

Comments: Sample was 52 tonnes of high-grade ore.

Reference: Property File - Galloway, J.D. (1926): Report on Key Group.

Capsule Geology

The Beulah occurrence is located at 2897 metres elevation above sea level, near the summit of Mount Catherine in the Golden Mining Division.

Regionally, the area is underlain by Proterozoic clastic sedimentary rocks of the Purcell and Windermere supergroups and by lower Paleozoic strata of the Beaverfoot and Mount Forster formations (Geoscience Map 1995-1).

The Purcell Supergroup strata include the Aldridge, Creston, Kitchener, Dutch Creek and Mount Nelson formations. The Windermere Supergroup unconformably overlies the Purcell Supergroup rocks and includes the Toby Formation and Horsethief Creek Group (Paper 1990-1).

In the vicinity of the occurrence, rocks of the Kitchener and Dutch Creek formations have been further subdivided and assigned to the Van Creek and Gateway formations. The Van Creek Formation correlates with the Lower Kitchener Formation while the Gateway Formation is equivalent to the lower portion of the Dutch Creek Formation. The Mount Nelson Formation has been subdivided into seven discrete members, a lower quartzite, a lower dolomite, a middle dolomite, a purple dolomite, an upper middle dolomite, an upper quartzite, and an upper dolomite (Open File 1990-26).

Rocks of the Horsethief Creek Group, Beaverfoot and Mount Forster formations are folded and overthrust by rocks of the upper portion of the Dutch Creek Formation and the lower members of the Mount Nelson Formation. The sedimentary rocks have undergone regional metamorphism to at least greenschist facies.

The prospect has been explored with several trenches and a 45 metre long adit. Mineralization is hosted within a sheared quartz-barite vein cutting the middle dolomite member of the Mount Nelson Formation (Open File 1990-26). The vein varies in width from 5 to 60 centimetres and has been followed along strike for a distance of 150 metres. Galena, bournonite, sphalerite and tetrahedrite occur as narrow streaks and massive pockets the entire length of the vein. Malachite and azurite are common in surface exposures.

In 1926, a 52 tonne ore bulk sample was collected from the adit and shipped to the Trail smelter. Although recovery from the bulk sample is not known, the average grade of the shipment was 2000 grams per tonne silver, 57 per cent lead, 0.8 per cent copper and 3.4 grams per tonne gold (Property File - Galloway, J.D. (1926): Report on Key Group).

Bibliography

EMPR AR *1915-95; 1924-224; 1925-224; 1926-240; 1927-482
EMPR FIELDWORK 1989, pp. 29-23
EMPR GEOS MAP 1995-1
EMPR OF 1990-26, p. 36
EMPR PF (*Galloway, J.D. (1926): Report on Key Group; 82KSE General
File - Geology map by P. Billingsley, 1958)
GSC MAP 1326A
GSC MEM 148; 369
Pope, A.J. (1989): The Tectonics and Mineralization of the Toby-
Horsethief Creek Area, Purcell Mountains, Southeast British
Columbia, Canada, unpublished Ph.D. Thesis, University of London,
England

EMPR PFD 4201, 750107

Date Coded: 1985/07/24

Coded By: BC Geological Survey (BCGS)

Field Check: N

Date Revised: 2009/08/06

Revised By: Sarah Meredith-Jones (SMJ)

Field Check: Y