



MINFILE Detail Report
BC Geological Survey
Ministry of Energy, Mines and Petroleum Resources

Location/Identification

MINFILE Number: 092JNE066 **National Mineral Inventory Number:** 092J15 Sb1

Name(s): GRAY ROCK
BELLORE, EASTER, IBEX, TRUAX GOLD, ROBIN, GREY ROCK

Status: Past Producer **Mining Division:** Lillooet

Mining Method: Underground **Electoral District:** Fraser-Nicola

Regions: British Columbia **Resource District:** Cascades Natural Resource District

BCGS Map: 092J087

NTS Map: 092J15E **UTM Zone:** 10 (NAD 83)

Latitude: 50 48 15 N **Northing:** 5627872

Longitude: 122 42 00 W **Easting:** 521238

Elevation: 1833 metres

Location Accuracy: Within 500M

Comments: Eleven kilometres southeast of Goldbridge at headwaters of Truax Creek.

Mineral Occurrence

Commodities: Silver, Antimony, Lead, Zinc, Gold, Copper

Minerals **Significant:** Stibnite, Galena, Pyrite, Copper, Sphalerite, Arsenopyrite, Realgar, Tetrahedrite

Significant Comments: Stibnite; disseminated in quartz, massive on vein walls.

Associated: Quartz

Alteration: Sericite, Fuchsite

Alteration Type: Sericitic

Mineralization Age: Unknown

Deposit **Character:** Vein, Massive

Classification: Hydrothermal, Epigenetic

Type: I09: Stibnite veins and disseminations

Shape: Irregular **Modifier:** Fractured

Strike/Dip: 070/50S

Comments: Three main veins, approximately 6 veins are parallel; numerous less than 50 centimetre wide shoots off main veins cut by numerous faults. Vein #1 fractured; offset is 35 metres. Dips vary from 50-65 degrees.

Host Rock

Dominant Host Rock: Metasedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Permian-Triassic	Bridge River	Undefined Formation	-----
Cretaceous-Tertiary	-----	-----	Bendor Pluton

Isotopic Age	Dating Method	Material Dated
-----	-----	-----
-----	-----	-----

Lithology: Meta Greywacke, Hornfels, Quartzite, Granodiorite Dike, Aplite Dike, Granite Dike, Quartz Diorite Dike, Rhyodacite Dike, Cherty Breccia, Conglomerate

Geological Setting

Tectonic Belt: Coast Crystalline **Physiographic Area:** Pacific Ranges

Terrane: Bridge River, Cadwallader

Metamorphic Type: Contact
Grade: Hornfels

Inventory

Ore Zone: NO. 1 VEIN
Category: Combined
Quantity: 70,488 tonnes

Year: 1966
Report On: Y
NI 43-101: N

Commodity	Grade
Silver	342.8000 grams per tonne
Lead	2.1000 per cent
Antimony	3.0000 per cent

Comments: Total of proven, probable and possible reserves.
Reference: Assessment Report 837.

Ore Zone: NO. 1 VEIN
Category: Measured
Quantity: 17,780 tonnes

Year: 1966
Report On: Y
NI 43-101: N

Commodity	Grade
Silver	342.8000 grams per tonne
Lead	2.4000 per cent
Antimony	4.0000 per cent

Comments: Calculated from drift 18 metres below surface, 9 metres above and below sampled drift.
"Proved ore".
Reference: Assessment Report 837.

Summary Production

	Metric	Imperial
Mined:	7 tonnes	7 tons
Milled:	0 tonnes	0 tons
Recovery	Antimony	3,765 kilograms
		8,300 pounds

Capsule Geology

The mineralized veins of the Grey Rock occurrence are hosted by the Mississippian to Jurassic Bridge River Complex (Group) metasediments-greywacke, hornfels, minor conglomerates, recrystallized chert breccia and silicified limestone and volcanics. The metasediments are complexly intruded by dykes of granodiorite, aplite, granite, quartz diorite and quartz latite; extensions of the Cretaceous to Tertiary Bendor batholith are found approximately 300 metres to the south. Quartz filled parallel fissures transect both metasediments and dyke rocks. The mineralized veins are found mainly in the metagreywacke. The quartz infillings in the dykes are generally barren.

There are three main veins and up to six in a parallel system, striking northeast and dipping 50 to 65 degrees southeast. The vein-fissures vary in width from several centimetres to 2 metres, and have numerous faulted minor offshoots. The main (#1) vein is continuous downdip for at least 123 metres, averaging 1 metre in width and is offset 35 metres by fractures. The mineralization occurs in lenticular masses and is constant throughout the length of the vein. Stibnite occurs as disseminations and streaks in the quartz gangue and as massive layers on the vein walls. Smaller amounts of pyrite, grey copper with associated silver, sphalerite, galena, arsenopyrite, tetrahedrite and fuchsite are found in the main #1 vein; #2 and #3 veins contain only discontinuous lenses of high grade stibnite.

Proven ore reserves are 17,780 tonnes of 4.0 per cent antimony, 2.4 per cent lead, and 342.8 grams per tonne silver. Combined with probable and possible reserves, totals are 70,488 tonnes of 3 per cent antimony, 2.1 per cent lead and 342.8 grams per tonne silver. Assay results are in grams per tonne: 0.34 gold, 40.1 silver, 8.0 per cent antimony, 0.15 per cent arsenic and trace iron (Assessment Report 837). Assays for #1 vein are reported as 1557 grams per tonne silver, 3.9 per cent lead and 10.7 per cent antimony over 1.1 metres by 30.5 metres strike length (Minister of Mines Annual Report 1954). In 1951, 3765 kilograms of antimony were recovered from 7.3 tonnes of sorted ore. There are two adits (6500 feet and 6800 feet) with "several hundred feet" of drifting on #1 vein.

Earlier prospects (Commerce, Stewart, B & M, Birthday) may have been later incorporated into Gray Rock mine; all are located near the head of Truax and Fergusson creeks (listed under National Mineral Inventory No. 92J15 Sb7).

Bibliography

EMPR AR *1936-F43; 1949-107; 1950-110; 1951-123; 1952-113; 1953-100; *1954-104; 1968-162
EMPR ASS RPT 305, *837, 6059, 12099, 13992, 18434, 20450
EMPR FIELDWORK 1974, p. 35; 1985, pp. 303-310; 1986, pp. 23-29; 1987, pp. 93-130; 1988, pp. 105-152; 1989, pp. 45-72; 1990, pp. 75-83
EMPR GEM 1973-252; 1976-E124
EMPR GEOLOGY 1975-G58
EMPR Inspections Branch File #60681-85, 202558
EMPR OF 1987-11; 1988-3; 1989-4; 1990-10; 1998-10
EMPR PF (Report by H. Sargent, 1939; Traverse map of property, ca. 1950s; Sketch map of mine site, 1987; Geology map of underground workings, 1953; Composite showing drillholes, assays and underground workings, 1954)
EMPR PFD 11444, 11445, 11446, 11448, 11449, 11450, 11451, 11453, 11455, 11456, 11458, 11459, 11460, 11461, 520283, 520284, 600163, 600164, 600574, 650387, 751725
GSC MAP 431A
GSC MEM 130; 213
GSC OF 482
GSC P 43-15; 73-17; 77-2 (GSC 76-50)
CANMET IR MD2893 (Flotation Tests on an Antimony Ore from the Gray Rock Mining Company, Limited, Bridge River District, British Columbia, 1950, copy in Property File)
CJES 1987, Vol. 24, pp. 2279-2291
Falconbridge File
Sebert, C.F.B. (1987): Description of 22 Mineral Properties, Bridge River Mining Camp, Unpublished B.Sc Thesis, University of British Columbia
Placer Dome File
EMPR PFD 650190, 11445, 11446, 11447, 11448, 11449, 11450, 11451, 11452, 11453, 11454, 11455, 11456, 11457, 11458, 11459, 11460, 11461, 752888, 752889, 752890, 752891, 820321, 820413, 600162, 600163, 600164, 600574, 802125, 672971, 672972, 672973, 673455, 673468, 520282, 520283, 520284, 650387, 751725

Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	Y
Date Revised:	2019/07/31	Revised By:	Larry Jones (LDJ)	Field Check:	Y