Location/Identification

MINFILE Number: 092O 026
National Mineral Inventory Number: 092O2 Au1
Name(s): **ROBSON**
BONANZA, PEARSON

Status: Past Producer
Mining Method Underground
Regions: British Columbia
BCGS Map: 092O006
NTS Map: 092O02W
Latitude: 51 01 23 N
Longitude: 122 53 20 W
Elevation: 1851 metres
Location Accuracy: Within 500M

Mining Division: Lillooet
Electoral District: Fraser-Nicola
Resource District: Cascades Natural Resource District

UTM Zone: 10 (NAD 83)
Northing: 5652395
Easting: 507793

Comments: The Robson adit is 6 kilometres east of Spruce Lake, south of Tyaughton Creek, 3.5 kilometres northwest from the summit of Eldorado Mountain (Assessment Report 6002).

Mineral Occurrence

Commodities: Gold, Silver, Lead, Zinc, Copper

Minerals
Significant: Pyrite, Jamesonite, Sphalerite, Chalcopyrite, Stibnite, Boulangerite, Pyrargyrite, Pyrrhotite, Arsenopyrite
Significant Comments: Aside from the main Robson vein, the best mineralization is related to arsenopyrite-stibnite-quartz-ankerite veins along the flank of a northwest-trending, steeply east dipping, gossanous feldspar porphyry dike, cutting diorite of the Eldorado Pluton.
Associated: Quartz, Ankerite
Alteration: Quartz, Carbonate, Chlorite
Alteration Type: Silicific'n, Carbonate, Chloritic
Mineralization Age: Unknown

Deposit
Character: Vein
Classification: Hydrothermal, Epigenetic
Type: I05: Polymetallic veins Ag-Pb-Zn+/-Au
Shape: Tabular
Modifier: Sheared
Strike/Dip: 070/36N
Comments: Shear zone

Host Rock

Dominant Host Rock: Sedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Triassic	Cadwallader	Hurley	------
Paleocene	------	------	Eldorado Pluton

Isotopic Age	Dating Method	Material Dated
------	------	------
63.7 +/- 2.2 Ma	Potassium/Argon	Biotite

Lithology: Hornfels Sediment/Sedimentary, Biotite Granodiorite, Calcareous Sandstone, Calcarenite, Shale, Porphyritic Dike

Comments: The Robson vein is hosted by hornfelsed Hurley Formation turbidites along or very near the contact with the Eldorado pluton. Age date from Dawson of GSC. The turbidites are light grey to black and weather to a rusty orange. They are characterized by alternating fine siltstone to sandstone beds, ranging in thickness from a few millimetres to several centimetres.

Geological Setting

Tectonic Belt: Coast Crystalline
Physiographic Area: Pacific Ranges
Terrane: Bridge River, Cadwallader

Metamorphic Type: Contact
Relationship: Syn-mineralization
Comments: The metamorphism is probably pre-mineralization.

Inventory

Ore Zone: DRILLHOLE
Year: 2011
Category: Assay/analysis
Report On: N
NI 43-101: N

Sample Type: Drill Core

Commodity	Grade
Gold	0.741 grams per tonne

Comments: Drillhole ELD11-03, 31.7 metres
Reference: Assessment Report 32974, page 26

Ore Zone: DRILLHOLE
Year: 1986
Category: Assay/analysis
Report On: N
NI 43-101: N

Sample Type: Drill Core

Commodity	Grade
Silver	468.9500 grams per tonne
Gold	45.2400 grams per tonne

Comments: Sample across 0.79 metre.
Reference: Assessment Report 15119, page 8.

Summary Production

		Metric		Imperial	
Mined:		34	tonnes	37	tons
Milled:		0	tonnes	0	tons
Recovery	Silver	18,071	grams	581	ounces
	Gold	2,208	grams	71	ounces
	Lead	2,640	kilograms	5,820	pounds
	Copper	193	kilograms	425	pounds

Capsule Geology

The Robson polymetallic vein prospect is situated 3.5 kilometres northwest of Eldorado Mountain, approximately 17 kilometres north of Gold Bridge and 11 kilometres northwest of Tyaughton Lake.

The area is underlain by thick siltstone to sandstone turbidite sequences of the Upper Triassic Hurley Formation. The Hurley turbidites are juxtaposed against Lower Cretaceous Taylor Creek Group conglomerates and interbedded fine sandstone to shales. A diorite to quartz diorite Upper Cretaceous Coast Crystalline Complex intrusion, measuring approximately 5 by 4 kilometres, dominates the centre of the Eldorado property and Robson showing.

The showing lies within hornfelsed and altered sedimentary rocks (including calcarenite, sandstone and shale) of the Upper Triassic Hurley Formation occurring along the northwest margin of an apophysis of the Paleocene Eldorado granodiorite pluton.

Mineralization in the immediate area is dominated by visible arsenopyrite, pyrite, minor chalcopyrite, sphalerite and stibnite, and occurs within and

along the margins of quartz ± carbonate veins as disseminations and along fractures in quartz diorite and turbiditic, hornfelsed sediments. Gold is common throughout and likely associated with arsenopyrite, pyrite and/or stibnite mineralization. The Robson prospect consists of seams and veins of predominantly auriferous arsenopyrite and quartz along a southwest-trending and steeply dipping shear zone that seems to be part of a set of fractures radiating from the pluton. The vein seems to partly grade into the decomposed and altered granodiorite and related porphyritic dikes. Other metallic minerals present include pyrite, jamesonite, sphalerite, chalcopyrite, stibnite, boulangerite, pyrrhotite and pyrargyrite. Silica, carbonate and chlorite alteration are associated with the mine.

Sometime prior to 1912, numerous gold-bearing sulphide veins in the Eldorado Mountain and Bonanza Basin areas were prospected by sluicing and open trenching. In 1912, a Mr. Pearson explored small arsenopyrite veins on the Bonanza Creek claims. Exploration continued to increase in the area and, by the 1930s, numerous adits had been driven along arsenopyrite veins in the Taylor, Eldorado and Bonanza basins. Prior to 1939, a 6.1-metre-long adit had been excavated and the claim owners were reportedly shipping approximately 1.8 tonnes of ore per day (Geological Survey of Canada, Paper 43-15, pages 27 to 28).

The deposit was mined in 1939 and 1940, by the J.G. Mining Company, producing a total of 34 tonnes of ore that yielded 18 kilograms of silver, 2.2 kilograms of gold, 193 kilograms of copper and 2640 kilograms of lead (Assessment Report 14428). Bralorne Mines later optioned the property. Work completed by Bralorne included repairing an old 21.3-metre-long adit and extending it 39.6 metres, facing a second adit and advancing it 12.2 metres and diamond drilling a total of 213.4 metres, as well as considerable open-cut work.

Between 1967 and 1969, Bridge River United Mines Limited carried out an exploration program of geological mapping, geochemical sampling, trenching and electromagnetic geophysical surveying. Exploration continued from 1975 to 1976, when Chevron Standard Limited completed a program of geological mapping and soil grid sampling.

The property was later acquired by Mutual Resources Incorporated in 1979. The company began extensive road building and trenching, though the location of the trenches is unknown because they were never properly marked on maps included in the assessment reports. In 1985, Mutual Resources optioned the property to Cinnabar Resources Limited. Exploration that year consisted of detailed geophysical and geochemical surveying over areas with anomalous gold, silver, arsenic and stibnite values. Three short 0.3-metre channel samples were taken from the Robson trench. The following year, Mutual Resources drilled five diamond drill holes totaling 152 metres. Three of the five holes intersected the Robson veins. A 0.79-metre diamond drill interval assayed 468.95 grams per tonne silver and 45.24 grams per tonne gold (Assessment Report 15119).

The property was later acquired by Ken Shannon in 1999. In 2005, Rudi Durfield conducted prospecting and silt sampling over the Bonanza Gold project area, including the Robson claim. The follow year, Durfield carried out geological mapping, hand trenching and rock sampling in the Robson trench and adit area as part of an exploration program on the surrounding Bonanza Finger property. The Bonanza Finger property then became known as the Eldorado Gold project and, in 2008, Mel Stewart and Rudi Durfield collected silt and rock samples over the project area and the Robson claim.

In 2009, J. Drobe completed a geological and geochemical evaluation of the Robson Gold property on behalf of Ken Shannon. Work that year consisted of geological mapping, prospecting and rock-chip sampling.

In 2011, GFE Exploration Corporation, a subsidiary of Gold Fields Limited, optioned the property from Ken Shannon. Exploration that year consisted of a helicopter-borne magnetic survey, geological mapping, prospecting, talus fine- and stream-sediment sampling and diamond drilling. One NQ diamond drill hole totaling 367.89 metres was drilled to test the validity of surface gold geochemical anomalies. Drillhole ELD11-03 intersected 31.7 metres of 0.741 gram per tonne gold (Assessment Report 32974).

Beginning in 2005, Durfeld Geological Management Ltd. conducted regional exploration over the large Eldorado Project area, including the Robson. In 2011 Durfeld teamed up with GFE Exploration Corporation to conduct an airborne magnetic survey. Further mapping and sampling continued throughout the area in 2012.

In 2021 K. Shannon instigated a petrographic study of 4 rock samples, determining that a feldspar porphyry dike from the Robson showing is likely genetically relate to the Eldorado stock. Also in 2021, Durfeld Geological teamed up with K.Shannon and Gelum Resources Ltd. to conduct more prospecting and soil and rock geochemical sampling in the Robson area (Assessment Report 40306). In 2022, the team instigated a program of mapping and sampling, helicopter-borne electromagnetic (VTEM) and aero magnetic surveying and subsequent geological modelling. A float grab sample of laminated quartz-ankerite sulphide veining from the Robson area returned 23 grams per tonne gold. A phase 1 drilling program was also completed, mostly in the Northern Light region approximately 3 kilometres south of Robson (Assessment Reports 40639, 41206). A phase 2 drilling program was completed in the Robson area in 2023 (Assessment Report 41516).

Bibliography

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GSC MAP 29-1963
GSC MEM 130 (Map 1882)
GSC OF 534; 2207
GSC P 43-15, pp. 27, 28
GSC SUM RPT 1912, pp. 206, 207

Date Coded:	1985/07/24	**Coded By:**	BC Geological Survey (BCGS)	**Field Check:**	N
Date Revised:	2024/10/31	**Revised By:**	Del Ferguson (DF)	**Field Check:**	N