



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

Location/Identification

MINFILE Number: 082FNW148 **National Mineral Inventory Number:** 082F14 Ag38

Name(s): **ENTERPRISE (L.1014)**
SLOCAN QUEEN (L.1015), RAINBOW FR. (L.14543), IRON HORSE NO. 2(L.5663), SUNSET FR. (L.14541),
MILLSITE, MONTEZUMA (L.5405), SUNRISE CROWN, ENTERPRISE FR. (L.4522), SUNRISE FR. (L.14542)

Status: Past Producer **Mining Division:** Slocan

Mining Method: Underground **Electoral District:** Kootenay West

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

BCGS Map: 082F084

NTS Map: 082F14W **UTM Zone:** 11 (NAD 83)

Latitude: 49 49 18 N **Northing:** 5518854

Longitude: 117 19 34 W **Easting:** 476542

Elevation: 0 metres

Location Accuracy: Within 500M

Comments: The Enterprise mineon the south side of the valley near the confluence of Enterprise and Neepawa creeks, 11 kilometres northeast of Slocan. Access to the mine from the Slocan highway is via the Enterprise Creek road.

Mineral Occurrence

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

Minerals **Significant:** Sphalerite, Galena, Tetrahedrite, Pyrrargyrite
Associated: Quartz, Calcite, Siderite
Mineralization Age: Unknown

Deposit **Character:** Vein
Classification: Epigenetic, Hydrothermal, Mesothermal
Type: I05: Polymetallic veins Ag-Pb-Zn+/-Au
Shape: Tabular **Modifier:** Faulted
Dimension: 680x300x0 metres **Strike/Dip:** 056/72S
Comments: Dips southeast.

Host Rock

Dominant Host Rock: Plutonic

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Middle Jurassic	-----	-----	Nelson Intrusions

Isotopic Age	Dating Method	Material Dated
165 - 169 Ma	Zircon	Zircon

Lithology: K-Feldspar Porphyritic Granite, Lamprophyre

Geological Setting

Tectonic Belt: Omineca **Physiographic Area:** Selkirk Mountains

Terrane: Quesnel

Metamorphic Type: Regional **Relationship:** Pre-mineralization

Grade: Greenschist

Inventory

Summary Production

		Metric		Imperial	
	Mined:	11,067	tonnes	12,199	tons
	Milled:	0	tonnes	0	tons
Recovery	Silver	32,676,718	grams	1,050,581	ounces
	Gold	2,041	grams	66	ounces
	Lead	1,674,470	kilograms	3,691,574	pounds
	Zinc	1,067,857	kilograms	2,354,222	pounds
	Cadmium	445	kilograms	981	pounds
	Copper	149	kilograms	328	pounds

Capsule Geology

The Enterprise mine is second only to the Ottawa mine in the quantity and total value of ore produced in the Slocan City mining camp. The property consists of the Enterprise (Lot 1014), Slocan Queen, Rainbow, Iron Horse, Sunset, Millsite, Montezuma and Sunrise Crown granted claims and fractions. The mine is on the south side of the valley near the confluence of Enterprise and Neepawa creeks, 11 kilometres northeast of Slocan. Access to the mine from the Slocan highway is via the Enterprise Creek road.

The main vein was discovered in 1894 and mined by Enterprise (B.C.) Mines Co. Ltd. until 1901 and then by lessees. In 1928 the property was purchased by Yankee Girl Consolidated Mines Ltd. which was obliged to close operations in 1930. From 1941 to 1943, the property was leased, during which time the mine tailings and dump were re-worked. In 1944 Western Exploration Co. Ltd. purchased the property and operated it until 1953. Subsequently, until 1977, there has been intermittent production from a number of mining and salvage operations. Production from the property began in 1896 and 11,067 tonnes of ore were mined by 1977 yielding 32,676,718 grams of silver, 1674 tonnes of lead, 1068 tonnes of zinc, 2041 grams of gold, 445 kilograms of cadmium and 149 kilograms of copper.

The Enterprise lode has been developed by nine adits, several intermediate levels and two shafts. One shaft was sunk on the lode about 15 metres above and 90 metres southwest of the uppermost adit, and the other shaft from a point about 10 metres below and a short distance northeast of the lowest adit - the difference in elevation between the collar of the upper shaft and the bottom of the lower shaft being about 335 metres.

The rock underlying the property is a light coloured, coarse-grained porphyritic granite of the Nelson batholith. More basic phases of the batholith, found locally in the mine workings, form irregular bodies of varying size that appear to be either digested inclusions or differentiates of the granitic magma. The Nelson rocks are intruded by a few small, hornblende porphyry and olivine-pyroxene lamprophyre dikes. Some of these dikes cut across the Enterprise lode whereas others are pre-mineral and disrupted by the same faults that cut the vein.

The main vein, averaging less than 0.3 metre wide, is continuous for more than 600 metres, striking 050 degrees, dipping 60 to 85 degrees southeast. On the upper levels of the mine, the vein is filled with varying proportions of quartz and ore minerals, especially galena and tetrahedrite. On the lower levels, siderite and other carbonate gangue minerals are more abundant than quartz and sphalerite is the predominant ore mineral. Most of the silver is believed to be contained in tetrahedrite and ruby silver.

The vein is interrupted by a major fault, or fault zone, and several minor faults and slips. The major fault intercepts the vein nearly at right angles about midway between the two shafts. The zone of faulting is 6 to 9 metres wide, strikes 160 degrees and dips 90 to 75 degrees northeast. The apparent displacement of the vein is about 30 metres to the left.

Aside from the extensive developments on the main Enterprise lode, some work has been done on a second lode outcropping 115 metres to the west. In 1927, it had been drifted on for about 45 metres. It is a wide shear zone composed mostly of crushed granitic rock partly cemented by quartz gangue with some calcite. It strikes 040 degrees and dips 70 southeast. In character and width, this lode bears some resemblance to a vein at the Arlington mine (082FNW152) which may be on part of a continuous structure. It seems that both lodes at the Enterprise mine and those on adjoining properties are within a single, wide zone of fissuring, shearing and brecciation, and that to the southwest this zone passes through the Arlington, Speculator (082FNW151) and intervening properties.

The showings were discovered and staked by R. Kirkwood of New Denver and J. McKinnon of Revelstoke in 1894. The property was optioned to J.A. Finch in 1895 and development work was carried out in several adits. The Enterprise (Lot 1014) and Slocan Queen (Lot 1015) were Crown-granted to J.A. Finch in 1897. Additional claims were subsequently Crown-granted, including the Enterprise Fr. (Lot 4522), Montezuma (Lot 5405), Iron Horse No. 2 (Lot 5663), and Sunset, Sunrise and Rainbow Fractions (Lots 14541-14543).

The London and British Columbia Goldfields, Limited acquired the property and incorporated The Enterprise (British Columbia) Mines, Limited as operator in about 1899. A 50 ton-per-day gravity mill was installed, and apparently operated for a period in 1902 with unsatisfactory results. The company ceased operations and lessees worked the property intermittently from 1903 into 1918. Further work was carried out from 1924 until 1927 by Messrs. Pilcher, McGuire, and Wragge under an option agreement.

The property was acquired by Stobie, Forlong & Company, of Toronto, who incorporated Enterprise Consolidated Mining Company, Limited in February 1928; the company name was changed in September 1928 to Yankee Girl Consolidated Mines, Limited. Development work, mainly on No. 7 level, continued until June 1929 when a fire destroyed equipment housed in the old mill building and operations ceased. No further activity was reported until 1941 when S.N. Ross leased the property and installed a small flotation mill to treat dump material on a seasonal basis.

Western Exploration Company, Limited purchased the property in 1944 and disposed of the mill. Development work during 1945 to 1950 was carried out mainly between Nos. 5 and 8 levels. The No. 9 level was driven from the Iron Horse shaft in 1951-52. The company ceased operations in November 1952. At that time the workings comprised an estimated 3658 metres of drifts, crosscuts, raises and two shafts about 670 metres apart horizontally. Eight adits and several intermediate levels were driven. The lowest level (No. 9) was driven from the 18.2 metre level of the Iron Horse shaft, which was sunk on an incline to a depth of 96 metres. The mine was reopened in 1967 by J. Gates, and R.J. Forgie, who purchased the property from Western Exploration. In May 1968 Enterprise Silver Mines Ltd. was incorporated to operate the mine; some ore was shipped during the year. Lessees worked the property during 1971-77. The property was held by Enterprise Resources Inc. in 1981. Arctex Engineering Ltd. carried out exploration since 1983; diamond drilling was done in 1986 and 1987. During 2000 through 2011, Arctex, on the behalf of L.B. Goldsmith completed a programs of geochemical sampling of the former dumps.

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Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	Y
Date Revised:	2020/06/09	Revised By:	Nicole Barlow (NB)	Field Check:	Y