

**Location/Identification**

<b>MINFILE Number:</b>	082FNW154	<b>National Mineral Inventory Number:</b>	082F14 Ag69
<b>Name(s):</b>	<u><b>ANNA (L.14468)</b></u> MILDA H (L.14466), HAMILTON FR. (L.14467), MILDA H. FR. (L.14514), SALLY (L.5199), CHARLES (L.5200), HENRY (L.5201), MAY FR. (L.5317)		
<b>Status:</b>	Past Producer	<b>Mining Division:</b>	Slocan
<b>Mining Method</b>	Underground	<b>Electoral District:</b>	Nelson-Creston
<b>Regions:</b>	British Columbia	<b>Forest District:</b>	Arrow Boundary Forest District
<b>BCGS Map:</b>	082F074		
<b>NTS Map:</b>	082F14W	<b>UTM Zone:</b>	11 (NAD 83)
<b>Latitude:</b>	49 47 36 N	<b>Northing:</b>	5515725
<b>Longitude:</b>	117 23 16 W	<b>Easting:</b>	472090
<b>Elevation:</b>	1633 metres		
<b>Location Accuracy:</b>	Within 500M		
<b>Comments:</b>	The Anna property comprises the Anna, Milda H. and Hamilton claims and fractions, located on the north side of Springer Creek, adjoining the Ottawa mine (082FNW155) on the east. It is accessible by 8 kilometres of good road east of Slocan.		

**Mineral Occurrence**

**Commodities:** Silver, Lead, Copper, Zinc, Silica

<b>Minerals</b>	<b>Significant:</b>	Tetrahedrite, Galena, Pyrite, Sphalerite, Argentite, Silver, Stephanite, Chalcopyrite
	<b>Associated:</b>	Quartz, Barite
	<b>Mineralization Age:</b>	Unknown
<b>Deposit</b>	<b>Character:</b>	Vein
	<b>Classification:</b>	Epigenetic, Mesothermal, Industrial Min.
	<b>Type:</b>	I05: Polymetallic veins Ag-Pb-Zn+/-Au
	<b>Strike/Dip:</b>	010/35E

**Host Rock**

<b>Dominant Host Rock:</b>	Plutonic		
<b>Stratigraphic Age</b>	<b>Group</b>	<b>Formation</b>	<b>Igneous/Metamorphic/Other</b>
Jurassic-Cretaceous	-----	-----	Nelson Intrusions
<b>Isotopic Age</b>	<b>Dating Method</b>	<b>Material Dated</b>	
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<b>Lithology:</b>	Granite		

**Geological Setting**

<b>Tectonic Belt:</b>	Omineca	<b>Physiographic Area:</b>	Selkirk Mountains
<b>Terrane:</b>	Plutonic Rocks		

**Inventory**

No inventory data

**Summary Production**

<b>Metric</b>	<b>Imperial</b>
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<b>Mined:</b>	177 tonnes	195 tons
<b>Milled:</b>	0 tonnes	0 tons

<b>Recovery</b>	Silver	912,127 grams	29,326 ounces
	Silica	45,359 kilograms	99,999 pounds
	Lead	1,289 kilograms	2,842 pounds
	Zinc	148 kilograms	326 pounds
	Copper	110 kilograms	243 pounds

### **Capsule Geology**

The Anna property comprises the Anna, Milda H. and Hamilton claims and fractions, located on the north side of Springer Creek, adjoining the Ottawa mine (082FNW155) on the east. It is accessible by 8 kilometres of good road east of Slocan.

The claims were apparently owned and prospected by Mr. K. Zimmerman from about 1904 until 1925 with the exception of the years 1919 and 1920 when the mine was worked under lease by Mr. E. Hyde. During 1926 and 1927 the property was worked under lease by Mr. N. Bertrandias of Portland.

The mine was idle from 1927 until 1960 when Silver King Mines Limited optioned 5 claims and began to drive the No. 4 level. Part time work was carried on into 1964. Development work to this date had been carried on in 5 adits, three of which were short prospect tunnels driven during the early years of operations. No. 3 adit has about 164.5 metres of drift and 15.2 metres of crosscut tunnel. Work on No. 4 level consists of 213.3 metres of drift, 60.9 metres of raises, and 39.6 metres of crosscut. Some 286.5 metres of diamond drilling was done in 9 holes in 1962.

In November 1965 the company name was changed to Kirsch Silver Mines Ltd. Silver Benn Mines Ltd. held the claims in 1969.

On the Anna, two shear zones in coarse grained Nelson granite parallel each other, striking 010 degrees and dipping 35 degrees east. The property has been worked from three main adits and one prospect adit.

The ore in the shear zones occurs as siliceous stringers and lenses. The east zone is about 15 metres wide and has been explored for about 30 metres vertically but, so far it has yielded no ore. The west zone is about 5 metres wide, bounded by fault gouge on well-defined walls, and traversed by a series of cross fractures and parallel fissures in which the ore occurs. The zone is also cut at a small angle by two parallel basic dikes.

In the original workings, the lowest adit was driven northerly along the east shear zone for about 73 metres, at which point a crosscut 15 metres long runs to the west shear where this zone has been drifted on northerly. At about 55 metres along this drift a winze was sunk intercepting a 7-centimetre paystreak carrying tetrahedrite and native silver. Subsequently, numerous ore shoots have been encountered along the west shear zone and much stoping has been done above the level south of the winze. The ore shoots tend to cut across the shear zone from wall to wall in a northeasterly direction and en echelon style, averaging 15 metres in length, and up to 0.6 metre in width. The principal ore minerals are native silver, stephanite, tetrahedrite, some galena and sphalerite, and locally considerable chalcopyrite. Quartz is the abundant gangue mineral and occurs with some barite.

The initial shipment of ore from this mine was about 4 tonnes in 1912. Production was intermittent until 1928 then again between 1960 and 1964, when the total ore shipped amounted to 177 tonnes, averaging 5153 grams per tonne silver plus ancillary amounts of copper, lead and zinc. In 1962, 45 tonnes was used as a silica flux.

### **Bibliography**

EMPR AR 1916-199; 1918-195; 1919-126,155; 1920-146; 1921-142; 1922- 203; 1923-229; 1924-201; 1925-246; 1926-288; 1927-277; 1931-141; 1960-A54,76; 1961-78; 1962-A49,83; 1963-A49,78; 1964-A55,129; 1966-219  
 EMPR BC METAL MM01111  
 EMPR FIELDWORK 1987, pp. 31-48  
 EMPR GEM 1973-74  
 EMPR INDEX 3-188, 4-119  
 EMPR OF 1988-11  
 EMPR P 1989-5  
 EMPR PF (Plan of the Anna Mine (1925); \*Lorimer, M.K. (1967): Report on the Anna Mine for Silver Benn Mines Ltd; Lorimer, M.K. (1969): Report on the Anna Mine for Silver Benn Mines Ltd.; Starr, C.C. (1930): Notes on Mines on Springer and Ten-Mile creeks, in 082FNW152)

GSC MAP 272A, 1090A, 1091A

GSC MEM 184, p. 167; 308, pp. 133, 148

<b>Date Coded:</b>	1985/07/24	<b>Coded By:</b>	BC Geological Survey (BCGS)	<b>Field Check:</b>	N
<b>Date Revised:</b>	1997/07/22	<b>Revised By:</b>	B. Neil Church (BNC)	<b>Field Check:</b>	N