

### Location/Identification

<b>MINFILE Number:</b>	082FNW087	<b>National Mineral Inventory Number:</b>	082F14 Pb22
<b>Name(s):</b>	<b><u>RAINBOW (L.14615)</u></b> MCINNIS		
<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>	Kootenay Lake Forest District
<b>BCGS Map:</b>	082F095		
<b>NTS Map:</b>	082F14E	<b>UTM Zone:</b>	11 (NAD 83)
<b>Latitude:</b>	49 58 27 N	<b>Northing:</b>	5535764
<b>Longitude:</b>	117 06 42 W	<b>Easting:</b>	491993
<b>Elevation:</b>	1890 metres		
<b>Location Accuracy:</b>	Within 500M		
<b>Comments:</b>	Location of adits from Geological Survey of Canada Map 273A.		

### Mineral Occurrence

**Commodities:** Lead, Silver, Gold, Zinc

**Minerals**

<b>Significant:</b>	Galena, Sphalerite, Pyrite
<b>Associated:</b>	Calcite, Siderite
<b>Mineralization Age:</b>	Unknown

**Deposit**

<b>Character:</b>	Vein, Shear
<b>Classification:</b>	Hydrothermal, Epigenetic
<b>Type:</b>	I05: Polymetallic veins Ag-Pb-Zn+/-Au

### Host Rock

**Dominant Host Rock:** Metasedimentary

Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Upper Triassic	Slocan	Undefined Formation	-----
Middle Jurassic	-----	-----	Nelson Intrusions

Isotopic Age	Dating Method	Material Dated
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**Lithology:** Andalusite Schist, Quartzite, Granodiorite Dike, Porphyritic Granite

### Geological Setting

<b>Tectonic Belt:</b>	Omineca	<b>Physiographic Area:</b>	Selkirk Mountains
<b>Terrane:</b>	Quesnel		
<b>Metamorphic Type:</b>	Regional, Contact		
<b>Grade:</b>	Greenschist, Hornfels		

### Inventory

No inventory data

### Summary Production

		Metric	Imperial
	<b>Mined:</b>	6 tonnes	6 tons
	<b>Milled:</b>	0 tonnes	0 tons
<b>Recovery</b>	Silver	17,200 grams	553 ounces
	Gold	31 grams	1 ounces
	Lead	2,963 kilograms	6,532 pounds

### ***Capsule Geology***

The Rainbow occurrence is situated on Utica Creek, on Crown grant Lot 14615 at 1890 metres elevation above sea level, in the Slokan Mining Division.

Workings include a shaft and 2 adits. The latter are about 70 metres apart vertically and the collar of the shaft about 30 metres above and 40 metres southwest of the portal of the lower adit. All three lodes are encountered in the lower adit level. This adit was driven as a crosscut for 38 metres to the most easterly lode, and continued for about 43 metres southwest as a drift on the lode. A crosscut from near the face of the drift was driven 55 metres to the northwest cutting a second lode at 26 metres, and a third lode, known as the "McInnis vein", at 50 metres. The second lode is about 1.2 metres wide with gouge on both walls and is composed of crushed rock containing a little calcite and siderite. The McInnis lode at this level is about 3 metres wide but shows little mineralization. Higher up, however, this lode was intersected at 9 metres from the portal by the upper crosscut adit, and was followed southwest by a drift for 18 metres. In this drift a few lenses of vein matter were encountered at the face of the lode was about 45 centimetres wide.

Regionally, the area lies on the western margin of the Kootenay Arc, in allochthonous rocks of the Quesnel Terrane. In the vicinity of the occurrence, the Quesnel Terrane is dominated by the Upper Triassic Slokan Group, a thick sequence of deformed and metamorphosed shale, argillite, siltstone, quartzite and minor limestone. Rocks of the Slokan Group are tightly and disharmonically folded. Early minor folds are tight to isoclinal with moderate east plunging, southeast inclined axial planes and younger folds are open, southwest plunging with subhorizontal axial planes. The sedimentary sequence has been regionally metamorphosed to lower greenschist facies.

Immediately south of the occurrence, the Slokan Group has been intruded by the Middle Jurassic Nelson intrusions which comprise at least six texturally and compositionally distinct phases ranging from diorite to lamprophyre. The most dominant phase is a medium to coarse grained potassium feldspar porphyritic granite. Several feldspar porphyritic granodiorite dikes, apparently related to the Nelson intrusions, also cut the sedimentary sequence near the occurrence (Paper 1989-5). The sedimentary sequence has been affected by contact metamorphism from the emplacement of the nearby Nelson intrusions.

Rocks on the Rainbow property are massive andalusite schist and quartzite of the Slokan Group, striking 035 degrees and dipping steeply southeast. The occurrence consists of three brecciated veins emplaced along narrow shears parallel to the foliation. The veins have been explored with a shaft and two adits about 40 metres apart vertically. All three veins are exposed in the lower adit. The veins vary from 1.3 to 6 metres in width and consist mainly of crushed wallrock cemented by calcite and siderite. Galena, sphalerite and pyrite form narrow seams, 10 to 40 centimetres wide, on the footwall side of the vein and are concentrated in lenses and stringers at irregular intervals along the vein.

Production from the occurrence in 1924 and 1926 yielded 17,200 grams of silver, 2963 kilograms of lead and 31 grams of gold from 6 tonnes of ore.

### ***Bibliography***

EMPR AR 1926-265  
 EMPR BC METAL MM01365  
 EMPR BULL 29  
 EMPR INDEX 3-210  
 EMPR P 1989-5  
 GSC MAP 273A; 1091A  
 GSC MEM 173; \*184, p. 242; 308, p. 130

<b>Date Coded:</b>	1985/07/24	<b>Coded By:</b>	BC Geological Survey (BCGS)	<b>Field Check:</b>	N
<b>Date Revised:</b>	1995/11/17	<b>Revised By:</b>	Gilles J. Arseneau(GJA)	<b>Field Check:</b>	N