



**Location/Identification**

**MINFILE Number:** 082KNW053 **National Mineral Inventory Number:** 082K11 Pb5,Au1  
**Name(s):** RED ELEPHANT  
 BANNOCKBURN  
**Status:** Prospect **Mining Division:** Slocan  
**Regions:** British Columbia **Electoral District:** Nelson-Creston  
**BCGS Map:** 082K065 **Forest District:** Kootenay Lake Forest District  
**NTS Map:** 082K11E **UTM Zone:** 11 (NAD 83)  
**Latitude:** 50 39 24 N **Northing:** 5611659  
**Longitude:** 117 09 52 W **Easting:** 488376  
**Elevation:** 1360 metres  
**Location Accuracy:** Within 500M  
**Comments:** At 1360 metres elevation on the north side of Hall Creek, just below the mouth of Bannockburn Creek.

**Mineral Occurrence**

**Commodities:** Gold, Silver, Copper  
**Minerals Significant:** Chalcopyrite, Pyrite, Pyrrhotite, Siderite, Limonite, Gold  
**Associated:** Quartz  
**Alteration Type:** Oxidation  
**Mineralization Age:** Unknown  
**Deposit Character:** Vein  
**Classification:** Unknown  
**Type:** I01: Au-quartz veins

**Host Rock**

**Dominant Host Rock:** Metasedimentary

| Stratigraphic Age | Group  | Formation   | Igneous/Metamorphic/Other |
|-------------------|--------|-------------|---------------------------|
| Unknown           | Hamill | Marsh Adams | -----                     |

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

**Lithology:** Pyritic Phyllite

**Geological Setting**

**Tectonic Belt:** Omineca **Physiographic Area:** Selkirk Mountains  
**Terrane:** Ancestral North America  
**Metamorphic Type:** Regional

**Inventory**

Ore Zone: MAIN  
Category: Indicated  
Quantity: 26,463 tonnes

Year: 1988  
Report On: N  
NI 43-101: N

| Commodity | Grade                   |
|-----------|-------------------------|
| Silver    | 36.3000 grams per tonne |
| Gold      | 40.8000 grams per tonne |
| Copper    | 0.9300 per cent         |

**Comments:**

Reference: Roper Resources Limited, George Cross News Letter, December 14, 1988

**Capsule Geology**

The Red Elephant vein is at an elevation of approximately 1360 metres on the north side of Hall Creek, a northeasterly flowing tributary of Duncan River. The showing is to the north and east and at lower elevation than the Bannockburn [082KNW051] and Sheila [082KNW052] properties. In the late 1950s, the Red Elephant occurrence was called the "Bannockburn".

In the early 1900s, an adit was driven for 16.8 metres in a northwest direction into loose, decomposed, rusty-coloured schist. The tunnel was then split into three drifts for a total length of approximately 46 metres. In 1927, the then owners bonded the property to J. Morris and Associates of Spokane, who sunk a 21.3 metres deep shaft and developed about 68.6 metres of crosscut and drift. In 1929, the property was owned by H. McKay and W.J. Power.

Bannockburn Resources held the claim in 1983 and the company reported a new discovery, comprised of a 1 to 2 metre-wide band of "siliceous oxide material" the following year. In 1987, Mikado Resources Limited and Turner Energy and Resources Limited owned a large swath of country, including the Wagner [082KNW212] and Abbott [082KNW056] properties (which were their primary focus) and the Bannockburn basin showings as part of a major joint venture. A related company, Roper Resources Incorporated optioned the complete land package and, in 1988, undertook a small exploration and sampling programme. Two years later, it conducted a limited diamond drill programme.

The Trout Lake area is underlain by a thick succession of sedimentary and volcanic rocks of the Badshot Formation and Lardeau Group near the northern end of the Kootenay arc, an arcuate, north to northwest trending belt of Paleozoic and Mesozoic strata that is now classified as a distinct, pericratonic, terrane. The arc rocks are bordered by Precambrian quartzite in the east and they young to the west, where they are bounded by Jurassic-age intrusive complexes. They were deformed during the Antler orogeny in Devonian-Mississippian time and were refolded and faulted during the Columbian orogeny, in the Middle Jurassic. A large panel, the "Selkirk allochthon", was later offset to the northeast by dip-slip motion along the Columbia River Fault.

The Badshot Formation is composed of a thick Cambrian limestone that is a distinctive marker horizon in the Trout Lake area. It is underlain by Hamill Group quartzite and it is overlain by a younger assemblage of limestone, calcareous, graphitic and siliceous argillite and siltstone, sandstone, quartzite and conglomerate, and also mafic volcanic flows, tuffs and breccias, all of which belong to the Lardeau Group. The rocks are isoclinally folded and intensely deformed, but only weakly metamorphosed. They occur as intercalated beds of marble, quartzite and grey, green and black phyllite and schist. Fyles and Eastwood (EMPR BULL 45) subdivided the group into six formations (Index, Triune, Ajax, Sharon Creek, Jowett and Broadview) of which the lowermost (Index) and uppermost (Broadview) are the most widespread. The Triune (siliceous argillite), Ajax (quartzite) and Sharon Creek (siliceous argillite) are restricted to the Trout Lake area. The Jowett is a mafic volcanic unit.

The Red Elephant area is underlain by siliceous schist, phyllite and quartzite of the Marsh Adams formation, the uppermost unit of the Hamill group. The rocks are in the immediate footwall of the Badshot limestone and they are isoclinally folded and schistose. They strike to the northwest and dip steeply to the southwest. The Red Elephant adit was driven in a northwest direction into loose, decomposed, rusty-coloured, schist and was then split into three drifts a short distance to the east of the so-called "lime-dyke". The workings were made to evaluate spotty high-grade gold assays encountered in a poorly defined, weakly discordant, quartz vein in an altered and highly pyritic band of schist adjacent to the limestone. The contact strikes 015 and dips at 85 degrees to the west. The vein is discontinuous and locally appears as "bunches" of quartz. It is also slightly discordant. It follows the bedding of contorted schists where they are sheared against massive limestone but generally trends slightly east of north. A sample from the middle drift, collected in 1907, gave only a trace of gold and silver, while one from the left hand drift contained "\$2.40 in gold/ton" and some copper. The highest gold values were found near the portal. On surface, the vein is highly oxidized and limonitic and much of the pyrite has leached out leaving decomposed quartz with cast outlines of pyrite cubes. A sample of partially decomposed, silicified schist and honey-combed quartz exposed in an open cut near the portal assayed 42.5 grams per tonne gold. The depth of oxidation is unknown. In 1927, it was found to extend for at

least 21 metres to the base of the shaft.

In 1984, Bannockburn Resources Limited reported a new discovery, comprised of a 1 to 2 metre-wide band of "siliceous oxide material" which has been traced on strike for 130 metres. Locally, the band displays a honeycomb texture. It has produced assays of up to 43.2 grams per tonne gold. The band is subparallel to, and approximately 100 metres south of, the main vein. At that time, it was reported to have produced assays of between 12.3 and 61.7 grams per tonne gold over 0.1 metre. In 1987, Mikado Resources Limited reported results for the "new " (?) zone on the Red Elephant property. It evidently yielded chip samples that assayed 11.66, 34.01, 3.12, 5.18 and 9.50 grams per tonne gold over widths of 0.91 to 1.52 metres. The following year, Roper Resources Limited quoted an indicated resource of 26,463 tonnes grading 40.8 grams per tonne gold, 36.3 grams per tonne silver and 0.93 per cent copper (George Cross News Letter 14/12/88). In 1989, the company reported a trench sample that assayed 20.6 grams per tonne gold and 3.3 per cent copper over 1.5 metres. The following year, it described encountering massive pyrite-pyrrhotite and stringers of chalcopyrite in drill core. Gold values were reported to be low (Information Circulars, 1989, 1990).

### ***Bibliography***

EMPR AR \*1909-K112

EMPR INF CIRC 1985-1, p. 41; 1989-1, p. 24; 1990-1, p. 48

EMPR OF 1990-24

GSC MAP 235A

GSC \*MEM 161 pp. 48-49

GCNL #24, 3/2/84; 14/12/88

N MINER 3 May, 1984

**Date Coded:** 1985/07/24

**Coded By:** BC Geological Survey (BCGS)

**Field Check:** N

**Date Revised:** 2011/09/29

**Revised By:** Laura deGroot(LDG)

**Field Check:** N