

## THE SILVER WARRIOR GROUP

The Silver Warrior Group was staked to cover two significant zones of both base and precious metal mineralisation, plus numerous other high grade mineral showings.

Two types of mineralization are readily recognized on the Silver Warrior Property. These are Massive Sulphide intersecting vein systems mainly in the Index Formation and Mississippi Valley-type replacement zones in carbonate rocks of the Badshot and Index formations found in the rest of the property.

The vein-type mineralization consists of vertical and horizontal veins consisting of massive galena and some chalcopyrite and sphalerite containing varying amounts of silver and gold.

The MVT type is massive sulphides in replacement zones over substantial strike length.

The two main zones of economic interest are the Horne Ledge and the Ellsmere Zone.

**The Horne Ledge Zone** occurs at a limestone-schist contact over a strike length of **3.6 km** and **850 M** vertically. The observed width is 1 m to 5 m.

**Ellsmere Ledge Zone** also occurs at a limestone-schist contact over a strike length of **2 km**. The observed width is 2 m - 4 m. Mineralization consists of sphalerite, galena, pyrite and chalcopyrite.

SAMPLE NO.	SAMPLE WIDTH FEET (METERS)	TYPE	LOCATION	Cu (%)	Pb (%)	Zn (%)	Cd (%)	Ag (oz/ton)	Au (oz/ton)	Hg (ppb)
203111	5.0 (1.52)	Chip	Ellsmere Zone	.010	22.87	.96	.002	3.75	.006	465
203112	3.0 (.91)	Chip	Ellsmere Zone	.018	.91	.27	.001	.08	.003	590
203113	5.0 (1.52)	Chip	Ellsmere Zone	.092	2.77	8.76	.016	.04	.002	5735
203505	3.0 (.91)	Channel	Black Warrior Vert. Vein	1.007	28.42	.13	.011	56.02	.061	1320
203506	5.0 (1.52)	Chip	Black Warrior Hor. Vein	5.779	.35	16.23	.141	1.61	.114	1050
203507	3.0 (.910)	Chip	Black Warrior Vert. Vein	21.446	25.39	1.93	.016	48.51	.318	4740
203507	Duplicate			22.469	26.65	2.05	.017	46.71	.333	
203508	8.0 (2.44)	Chip	Horne Ledge Zone	.164	7.80	17.11	.081	6.33	.034	1880
203509	5.0 (1.52)	Chip	Ellsmere Zone	.217	14.00	27.83	.056	.57	.005	80000
203510	5.0 (1.52)	Chip	Ellsmere Zone	.465	26.22	5.73	.015	1.22	.007	12695
203511	Dump, 10' (3.05 m) mineralization	Grab	Ellsmere Zone	.448	7.85	27.17	.053	.51	.005	156000
203512	Dump, 10' (3.05 m) mineralization	Grab	Ellsmere Zone	.122	5.05	13.29	.035	1.20	.003	44000
203513	Dump, Main Drive	Grab	Ellsmere Zone	.039	8.74	28.47	.065	.27	.004	86000
203514	4.0 (1.22)	Chip	Ellsmere Zone	.079	27.72	13.82	.027	.95	.005	24000
203515	Dump	Grab	Spokane #1	.036	10.36	3.41	.006	2.38	.001	9015
203516	Dump	Grab	Spokane #1	.042	7.61	3.52	.007	1.29	.001	5005
203517	3.0 (.91)	Channel	Spokane #1	.071	1.23	18.19	.037	.16	.001	66000
203518	1.5 (.46)	Channel	Ellsmere Zone	.572	17.01	.82	.002	1.13	.006	4820
203519	1.5 (.46)	Channel	Ellsmere Zone	.035	.79	8.69	.021	.07	.001	35000
203520	.75 (.23)	Chip	Black Warrior Hor. Vein	.290	85.31	.96	.029	114.05	.020	5055

The most important ore mineralization in the Silver Warrior property is the Mississippi Valley-type replacement deposit of massive sulfides in limestones of the Badshot (Ellsmere) Formation and limestones of the Index Formation.

A limestone sequence on the old Ellsmere crown grant hosts a series of parallel bands of massive sulfides near the contact of the limestone with the overlying schists of the Index Formation. The traditional geological concept of this mineralization is that they are metasomatic, selective replacement of certain limestone beds by sulfides of lead, zinc and copper.

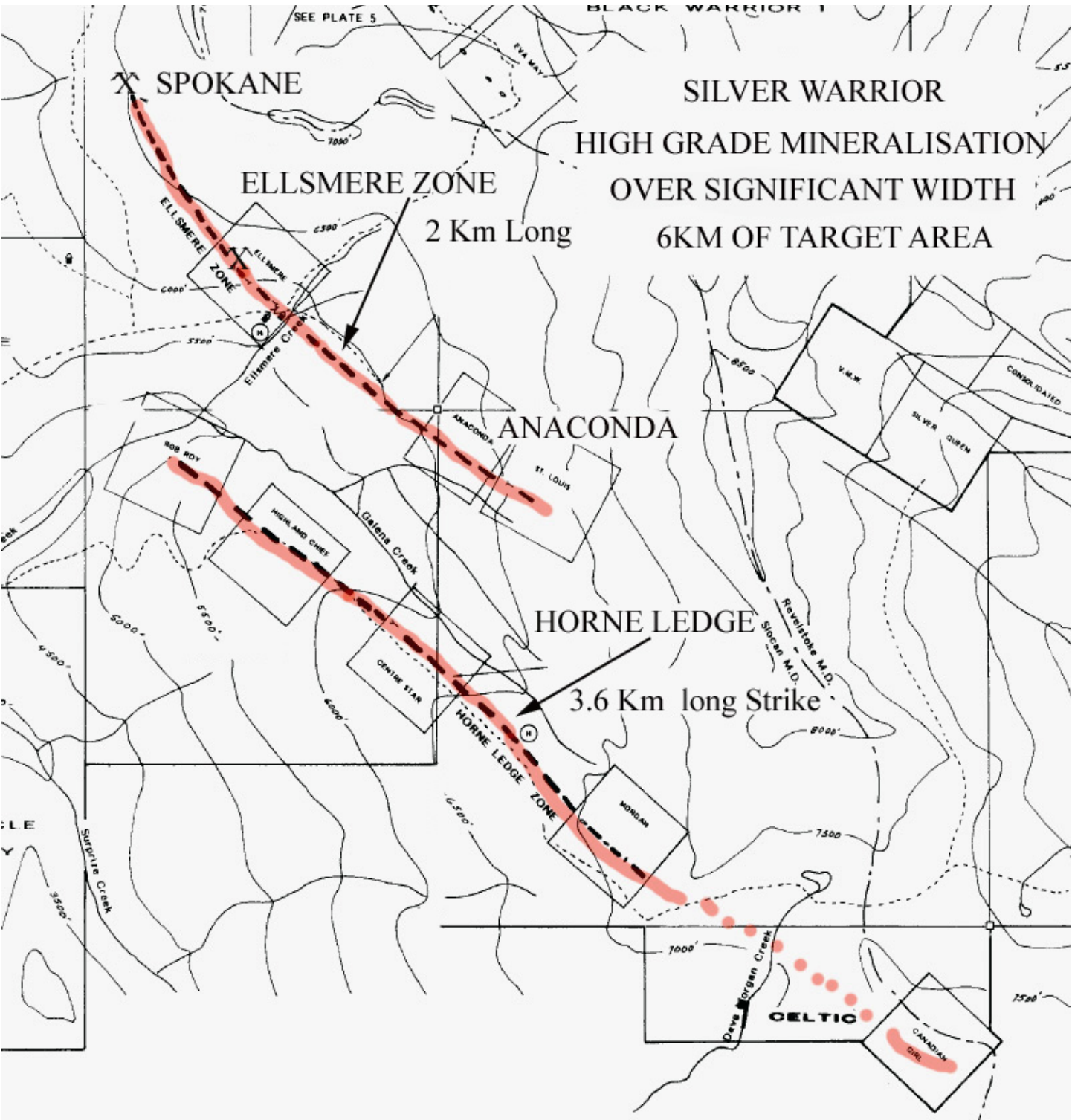
In recent years, a syngenetic, sedimentary, volcanic-exhalative origin has been proposed using the same geological features of the deposits.

Arguments on the genesis of these deposits continue to this day. These deposits however are more popularly referred to Mississippi-Valley type replacement deposits". Typically these deposits are strata-bound, that is the deposits are within the confines of a certain stratigraphy, usually carbonates (limes tones and dolomites). The sulfides are layered, essentially following the bedding.

At the Ellsmere the sulfides form distinctive layers reflecting metal zoning.

Distinct lead-rich, zinc-rich, copper-rich and iron-rich layers form separate zones. It is the lead-rich zones that the old timers went after *so* that their trenches and drifts were almost exclusively on these zones. At that time the focus of attention was on the galena-rich zones which contained the silver. Zinc then was penalized by the smelter and the sphalerite-rich zones were left alone or culled from their ore piles.

SAMPLE NO.	SAMPLE WIDTH FEET (CENTIMETERS)	TYPE	LOCATION	Cu (%)	Pb (%)	Zn (%)	Cd (%)	Ag (oz/ton)	Au (ppb)	Hg (ppb)
711	Dump, High copper-zinc zone, 12" (30 cm) mineralization	Grab	Ellsmere Zone Main Drift	7.00	1.52	10.11	.021	.66	330	23000
712	Dump, High copper-zinc zone 12" (30 cm) mineralization	Grab	Ellsmere Zone Main Drift	.110	7.60	27.19	.056	.31	180	58000
713	Dump, Lead-zinc zone, 5' - 10' (1.5 m - 3 m) mineralization	Grab	Ellsmere Zone Main Drift	.091	19.59	13.33	.025	.95	230	22000
714	Dump, Lead-zinc zone, 5' - 10' (1.5 m - 3m) mineralization	Grab	Ellsmere Zone Main Drift	.044	15.89	13.47	.027	.56	150	24000
715	Dump, Lead-zinc zone, 5' - 10' (1.5 m - 3 m) mineralization	Grab	Ellsmere Zone Main Drift	.070	14.98	18.24	.034	.45	260	24000
716	Dump, High lead zone, 5' (1.5 m) mineralization	Grab	Ellsmere Zone Main Drift	.025	43.18	7.93	.015	1.22	130	11085
716 Duplicate				.028	43.75	8.04	.016	1.33		



# Mineral Zones in the Silver Warrior Group

**The Sunset Group**, comprising the Sunset (Lot 5339), Maud (Lot 5338), Joseph (Lot 5337) and Anna (Lot 5336) claims, is located about 1 kilometre to the northwest of the confluence of Ferguson and Parisian creeks. The Comstock and Silver Bullion, not part of the Sunset group, adjoined the group downhill and the Wonderful adjoined the Sunset group on the southwest.

Bands of Lower Cambrian Badshot Formation limestone are repeated by folding. These bands are interlayered with metasediments of the Cambrian to Devonian Index Formation, Lardeau Group. Rocks on the property are described as phyllitic schist, dolomitic schist and carbonates. The Sunset lead is poorly exposed within the gradational contact of the green and grey phyllitic schist.

The Sunset group was first staked in 1899 by H.M. Carter. The group was sold to the Golden Link Mining Company in 1900. During the next year, 33.5 metres of tunnel was driven along the Sunset lead. The lead was described as a quartz ledge (vein), mineralized throughout with galena and pyrite.

Where the ledge was in contact with calcareous rocks, a 15 to 30-centimetre thick band of galena was encountered. The lead was reported to be traceable for eight claim lengths and to consist of a 1.2 to 1.5-metre thickness of quartz. In 1901, the Comstock and Silver Bullion claims were owned by the Comstock Gold Mining Company Limited.

A 15-metre tunnel had been driven on a vein measuring 60 centimetres in width and containing chalcopyrite. Samples from this vein were as high as **17.14 grams per tonne gold** and **1028.58 grams per tonne silver** (Minister of Mines Annual Report 1901, page 1019). On the Wonderful, a crosscut tunnel was driven over 30 metres in 1901.

**The Vera Group** of former Crown grants is located between Ferguson and Galena creeks, between 1 and 2 kilometres up from their confluence. Besides the Vera, the group consisted of the Josie, adjacent the Vera on its northwest, and the Alberta, adjacent the Vera on its southeast. The Rob Roy (082KNW201), not part of the group, was to the immediate southwest of the Alberta boundary.

The Vera group lies along the trend of the Horne ledge which stretches for several kilometres and contains several documented mineral prospects to the southeast, such as the Centre Star (082KNW200) and Horne (082KNW210). At some of these neighboring locals, the character of the ledge mineralization is reported to be almost impossible to determine due to the heavy oxidation and leaching of the mineralized zone. Only at certain localities did the outcrop show visible mineralization. Where observed, the mineralization appeared as massive galena with sphalerite and minor pyrite, pyrrhotite and trace amounts of chalcopyrite.

By 1898, a crosscut had been developed on the Vera for 55 metres. Two veins were traced on the surface, running parallel to one another about 30 metres apart. The first vein was intersected by the crosscut at 36 metres and found to be 1.2 metres wide consisting of quartz, iron pyrites and a small seam of galena. The crosscut was to be pushed through another 7.6 metres, where it was expected to cut a larger vein.

**The Spokane Zone** is underlain by limestone of the Lower Cambrian Badshot Formation and metasediments of the Cambrian to Devonian Index Formation (Lardeau Group) consisting of schist, phyllite, quartzite, slate and limestone.

In 1900 on the Spokane group, the property of the Canadian Lardeau Mining and Development Company, a crosscut tunnel was driven about 30 metres when the ledge was intersected. Drifts were then run 60 metres. The ledge was found to be very broken and a new tunnel was started in order to cut the lead at a greater depth. It was in 30 metres in 1900.

In 1993, Jopec Resources Ltd. examined some old workings that they felt might be those of the old Spokane group. Mineralization was described as being 9 metres thick in thin-bedded, coarse-grained limestone. Unfortunately, the mineralogy was not given. A 0.91-metre channel sample yielded 0.71 per cent copper, 1.23 per cent lead, 18.19 per cent zinc and 5.49 grams per tonne silver. Another sample (grab) taken at the same time assayed 10.36 per cent lead, 3.41 per cent zinc and 81.60 grams per tonne silver (Assessment Report 22917, page 48).

**The Ellsmere Group** was located in the Galena Creek watershed about 2 kilometres from Ferguson Creek.

Development started on the Ellsmere property in 1899 and by 1928 development consisted of a lower tunnel, 76 metres in length along the vein; a 12-metre tunnel on about the same level; an 18-metre tunnel about 90 metres higher; and number of small opencuts. The Ellsmere group of four claims consisted of the Gold Hill Nos. 1-4, none of them Crown-granted. Mr. F. Hillman of Ferguson was the owner.

The area was largely inactive until 1980s when a number of the old working came into the possession of Jack and Eric Denny through purchase or staking. The two rehabilitated many of the access trails and workings in the area of Galena Creek and to the east (to Marsh Adam Creek) and north. Some of the historically documented mineral occurrences were found and examined during this period but the mineralization was examined more as a whole than as individual showings. The following summarizes the ownership of and general work done in and around the property in question.

The Dennys commissioned geologist Gordon Turner to investigate the "Horne Ledge" and the Ellsmere zones and the first report on the area was written. In 1985, the large claim group was optioned briefly to Nakusp Resources Ltd. who did claim staking, mapping, collected 86 rock and 64 soil samples, excavated 18 metres of trench and conducted an electromagnetic survey. They referred to their project as the Silver Horn. In 1987 and 1988, the property was under option to Golden Range Resources Ltd. who conducted 150 kilometres of airborne VLF-EM resistivity and magnetic surveys and, geological mapping and sampling throughout their Black Warrior (082KNW110) and Silver Leaf groups (08KNW204), unsuccessfully attempting to relocate the latter's workings. The property reverted to the Dennys in 1989. In 1991, the property was optioned to Jopec Resources Ltd. who conducted mapping and collected 30 samples. Jopec examined the Ellsmere zone and workings at this time (Assessment Report 22917). There are five major bands of limestone in the area which are known locally as the Black Warrior, Silver Leaf, Ellsmere Ledge, Horne Ledge and Surprise limestone. These bands are part of the Lower Cambrian Badshot Formation, repeated by folding and interlayered with schist and phyllites of the Cambrian to Devonian Index Formation, Lardeau Group.

Property rocks consist of interbedded limestone and calcareous schists which strike 310 degrees and dip vertically. The ore occurs in a bed of pure white marble which lies between schist on the south and blue limestone on the north. The ore minerals are galena, sphalerite and pyrite and occur as replacements of limestone varying from a few centimetres to 1 metre in width. The replacement along the south wall is persistent, extending almost without break for 800 metre, but averaging only 7 to 10 centimetres in width. Replacement lenses of ore also occur through the body of limestone but are small and infrequent. A sample across a 38-centimetre highly mineralized section assayed 0.69 gram per tonne gold, 65.14 grams per tonne silver, 31.19 per cent lead and 1.3 per cent zinc (Minister of Mines Annual Report 1924, page 212).

**The Rob Roy and Highland Chief** Crown grants are located on Galena Creek about 1 kilometre up from Ferguson Creek.

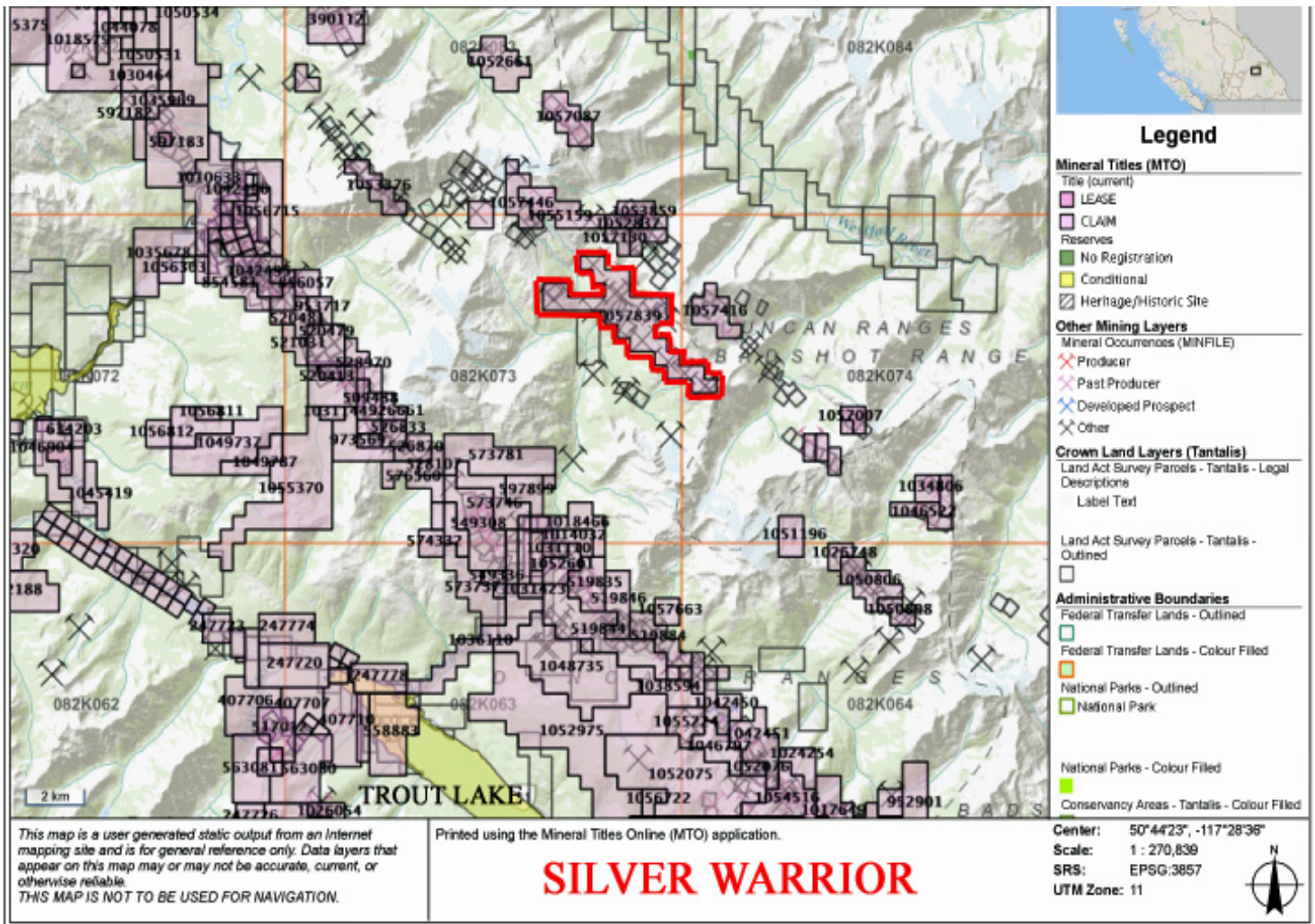
There are five major bands of limestone in the area which are known locally as the Black Warrior, Silver Leaf, Ellsmere Ledge, Horne Ledge and Surprise limestone. The Black Warrior was mapped by the Geological Survey of Canada as the Badshot Formation. It is now thought that all these bands are part of the Lower Cambrian Badshot Formation, repeated by folding. These bands are interlayered with schist and phyllites of the Cambrian to Devonian Index Formation, Lardeau Group.

In 1993, Assessment Report 22917 reported that the Horne Ledge group included Crown grants Rob Roy (Lot 4288), Highland Chief (Lot 4290), Centre Star (Lot 4239) and Morgan (Lot 1301) (082KNW210). This report further states that according to prospector Eric Denny, there are at least five mineralized zones along the Horne ledge. These four non-contiguous claims may represent some of the mineralized locals.

In each year from 1893 to 1898 some mention is made of the Horne ledge or Horne group (082KNW210). In 1899, the Rob Roy and Highland Chief were acquired by the Scottish Canadian Mining and Development Company. **The main vein is about 3.7 metres wide** with a heavy iron capping and lies at the contact of limestone and slate. Two smaller leads run parallel about 15 metres apart and contain small veins of galena. By 1900, a 91-metre crosscut had been done and "concentrating ore" was encountered in the workings.

**The Canadian Girl** area is underlain by green, grey to black chloritic and/or carbonaceous schist and limestone of the Index Formation. Horne Ledge and Surprise limestone ledges. One of these extends on to the Canadian Girl property.

At Canadian Girl, there are three subparallel zones of oxidized limestone separated by chlorite schist and bleached limestone. They contain some pyrite and galena.



**The Centre Star** extinguished Crown grant (Lot 4239) is located on the upper reaches of Galena Creek. The only early mention of the Centre Star claim is made in 1898 when it is reported to be on the Horne ledge along with numerous other claims, all having a heavy iron capping.

Where observed, the mineralization appeared as massive galena with sphalerite and minor pyrite, pyrrhotite and trace amounts of chalcopyrite.

A sample from the Centre Star claim yielded 10.4 per cent lead, 8.86 per cent zinc, 172.16 grams per tonne silver and 0.24 grams per tonne gold (Assessment Report 11979, page 24).

**The Blackburn** occurrence is thought to be located between Surprise and Morgan creek.

The Blackburn is first mentioned in 1893 and in 1894 it was reported to consist of 3 claims which were concentrating ore. Samples were reported to assay between 2057 and 2400 grams per tonne silver and up to \$18 in gold per ton (Minister of Mines Annual Report 1895, page 694). However, the Annual Report for 1897 said there was little development but there was some low grade galena showing.

A sample taken at the possible location of the Blackburn, along the Horne ledge in Dave Morgan Creek, yielded 32.02 per cent lead , 0.02 per cent zinc, 122.06 grams per tonne silver and 0.1 gram per tonne gold (Assessment Report 11979, page 24).

**The Anaconda** Reverted Crown grant (Lot 4710) is located at the headwaters of Galena Creek next to the St. Louis. **The St. Louis** is described as the most easterly of the Ellesmere limestone-Mississippi Valley-type mineralization. Generally, in the Ellesmere limestone, this type of mineralization occurs as a mixture of sphalerite, galena, chalcopyrite, pyrite and siderite in a matrix of partially silicified and dolomitized coarse-grained marble. In 1899, there was reported to be 4 claims in the Anaconda group. The formation is reported to be in schist and limestone and the ore was reported to assay high in gold and copper. By 1899, a tunnel was in 33 metres.

**This property has excellent further discovery potential**

**This property is offered for sale by way of working option to purchase.**

**For further information please contact**

**Craig Lynes:**

**Rich River Exploration Ltd.**



**Cell: 250-804-5840**

**Email:**

**[prospect@richriver.bc.ca](mailto:prospect@richriver.bc.ca)**

**Web:**

**[www.richriver.bc.ca](http://www.richriver.bc.ca)**