

MC CULLOCH'S GOLD HILL PROPERTY



Chunk of VG in quartz (subcrop) found on the property

The McCulloch's Gold Hill Property is in the Revelstoke Mining Division and is located about 100 kilometres north of Revelstoke on the east side of Lake Revelstoke.

The veins on the property are said to be the source of the gold that caused the Big Bend Gold Rush in the 1800's

Local topography is fairly steep on most areas of the claims; however, most of the known showings are in what is known as the Groundhog Basin, an open alpine meadow area above tree line.

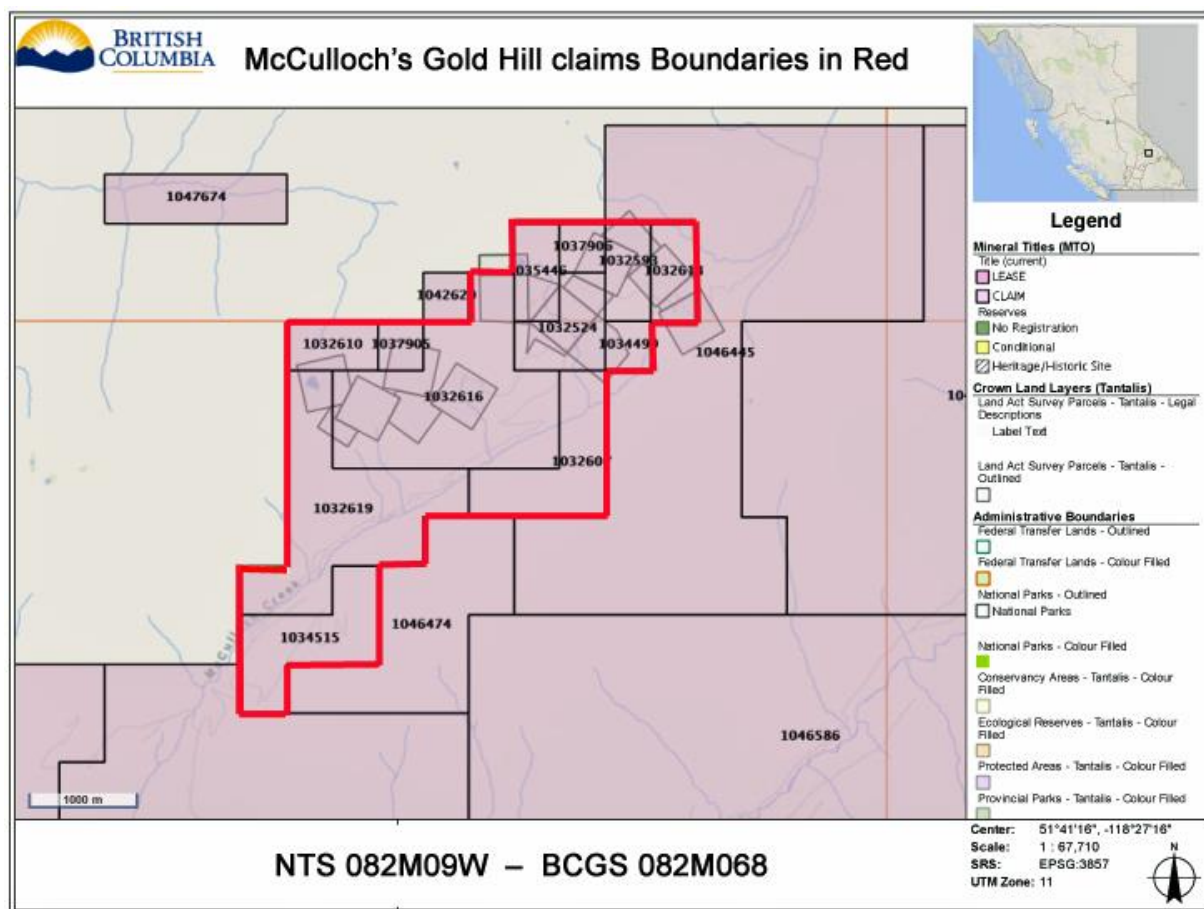
Exploration in the area of the property dates to the turn of the 20th century. On the Ole Bull Claim, a shaft was sunk on a gold bearing quartz vein in 1896. Two samples collected prior to 1900 from the Big Bend Belle Claim returned assays of 1.7 ounces gold per ton and 2.1 ounces gold per ton.

Exploration work in the 1960's included constructing a road into the area and mapping and sampling.

Work in the Groundhog Basin in 1980 and 1981 consisted of preliminary geological mapping, prospecting, geochemical silt sampling and a fluxgate magnetometer survey. This was followed in 1982 by additional reconnaissance geological mapping, prospecting, geochemical soil sampling and prospecting for scheelite. In 1996 Orphan Boy Resources Inc. conducted trenching, sampling and drilling at Orphan Boy and Lund Shear Zone showings.

The McCulloch's Gold Hill Property is in the Selkirk Mountains of southeastern British Columbia approximately 90 air kilometres north of Revelstoke (NTS: 82M/09W; BCGS: 082M.068

Access is by road, 100 kilometres north of Revelstoke along Highway 23, then 11 kilometres east along French Creek Main to the McCulloch Creek Road and some 3 to 5 kilometres north along the McCulloch Creek Road and then logging spurs and old mine access road



Some of the old crown Grants are still active over the veins, however the new VG and VMS target occurs outside of these CG's. The CG's are now controlled by an estate and are likely available for acquisition.

ACCESSIBILITY, CLIMATE AND PHYSIOGRAPHY

Access to the property is via French Creek Main Forest Service Road (FSR), which branches east off of Highway 23 100 kilometres north of Revelstoke along Highway 23.

Road access to the property is via McCulloch Creek FSR, which branches northeasterly off the French Creek Main FSR at kilometre 11. The Main McCulloch FSR provides road access from the south to the south and north portions of the property.

French Creek Main and its spurs are private radio-controlled logging roads of Louisiana Pacific Canada, Ltd. (Malakwa, B.C.)

Vegetation consists of mature stands of cedar, hemlock, balsam and spruce. Well drained areas, creek draws, and logging block plantations are often clothed in a dense undergrowth of slide alder and devil's club.

The lower portions of the slopes have been logged for the mature stands of cedar, hemlock, douglas fir and spruce. Within the lower elevations there is also thick underbrush consisting of devil's club, alder, and willow. As elevation increases the vegetation gradually thins to brush and alpine vegetation along with regions of bare rock at the highest locations.



Photo: C. Lynes 2018

Photo taken looking upstream of McCulloch Creek valley from an old mining access road on the McCulloch's Gold Hill Property. The area in the photo is an active placer gold mining operation
HISTORY

Exploration in the property area began in the late 1860's with the discovery of course placer gold in the lower Goldstream River and its tributaries French, Graham, McCulloch and Old Camp Creeks.

Gold-bearing quartz veins were subsequently discovered in the Groundhog Basin at the head of McCulloch, Graham and Old Camp Creeks and the first crown granted mineral claims there were recorded in the late 1890's. Subsequent exploration of the lode occurrences has been episodic, beginning in the 1940's and continuing with campaigns by Stanmack Mines Ltd (1960's) and more recently Ark Energy Ltd., Aurun Mines Ltd and Orphan Boy Resources Inc. (early 1980's to 1996).

The Goldstream Cu-Zn massive sulphide deposit was discovered in 1972. In 1975 Noranda Exploration Co. Ltd. optioned the property and later the same year outlined a deposit of 3.175 mt grading 4.49% Cu and 3.24% Zn. Regional exploration programs were conducted by Noranda during the period 1976-77 and 1986-87 and the Goldstream mine produced briefly under Noranda during the interval 1983-84. In 1989 Bethlehem and Goldneve acquired the Goldstream deposit from Noranda and subsequently placed the mine into production during the interval Apr/1991 to Jan /1996.

In 1990- 94 Bethlehem and Goldneve discovered the nearby C-1, Brew and Grid base metal occurrences. In 1999 the Goldstream mine, infrastructure and property were acquired by Orphan Boy Resources Inc. from Bethlehem & Goldneve. In 2000 Craig Lynes while working for Bethlehem Resources, discovered the Spire base metal occurrence and in 2001 Orphan Boy prospector John Boutwell discovered the Boutwell occurrence, both along the Goldstream trend. In 2006 Craig Lynes also discovered the Lynes Au-Ag-Zn-Cu-Pb showing # 082M 284

Summary of Historical Work in the property area.

Placer gold mining in the French Creek – Goldstream area began in 1865 when gold was first discovered in the Goldstream River, and **McCulloch** and French Creeks. A large, unknown, amount of gold is known to be recovered from the time of discovery up until 1886, when official records of gold production began.

Recorded placer gold production up until 1935 includes 5,405 ounces with an average gold fineness between 905 and 913. French Creek was the most productive source, accounting for 86.6% of the gold recovered from the Goldstream River, and **McCulloch** and French Creeks.

Previous prospecting has discovered native gold bearing angular quartz float on the McCulloch Gold Hill property.

GEOLOGICAL SETTING

The regional geology of the Goldstream area has been described in detail by several authors: Gunning (1929), Wheeler (1965), Hoy et al (1979) and Read and Brown (1981), Logan and Drobe (1994), Logan and Colpron (1995), Logan (2000) and Logan et al (1995, 2008).

The property is located in the northern Selkirk Mountains, which are composed of polydeformed and metamorphosed Late Proterozoic to Early Paleozoic metasedimentary and metavolcanic rocks of the Selkirk allochthon. These rocks formed along the western margin of ancestral North America and were displaced eastward, post metamorphism and deformation, during the Late Jurassic to Eocene.

The Selkirk allochthon is part of the Kootenay Terrane, which forms a belt of lower to mid-Paleozoic rocks along the suture between ancestral North America to the east, and the Intermontane Belt to the west. Predominately two main suites of granitic rocks intrude this area of the Selkirk allochthon. The first is the Middle Jurassic (ca. 180-165 Ma) Nelson Suite of granodiorite and quartz monzonite. The second is the mid-Cretaceous (ca. 110-90 Ma)

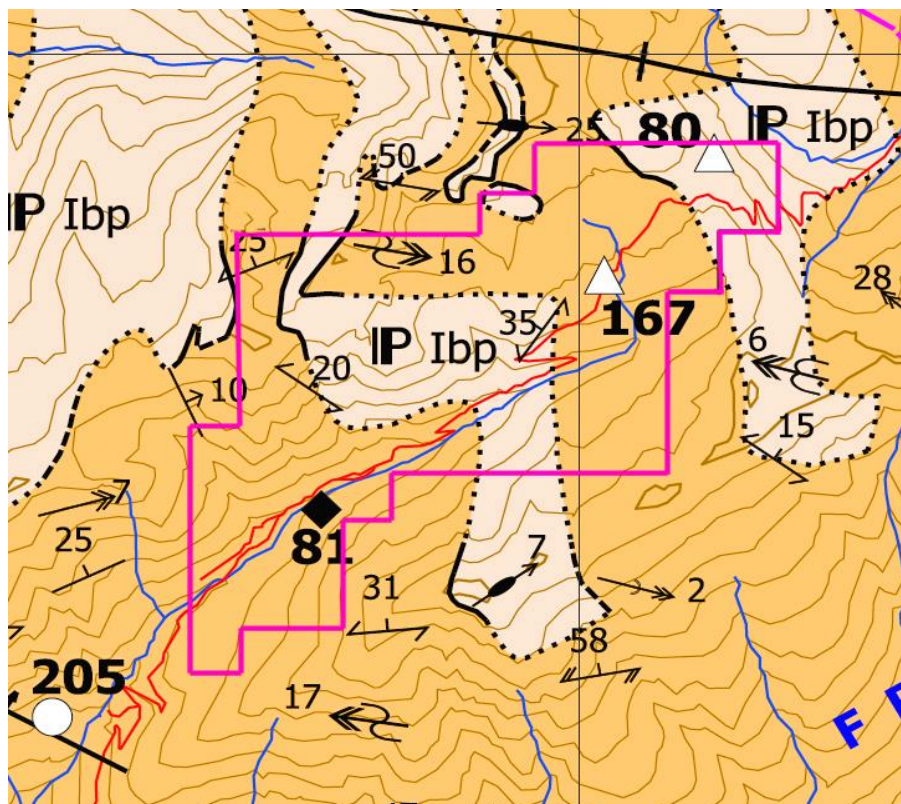
Boyonne Suite of quartz monzonite, diorite, and two-mica granite (i.e. Goldstream pluton). Lesser amounts of Late Cretaceous (ca. 70 Ma) leucogranites and Early Mississippian (ca.360 Ma) orthogneiss are present (Logan, 2000).

In the Goldstream area, where the French Creek property is located, the Selkirk allochthon is composed of four tectonic fault bounded slices. The western part of the allochthon contains the Clachnacudainn, Goldstream, and French Slices which form the hanging wall of the Columbia River Fault Zone to the west. The remainder of the allochthon is comprised of the Illecillewaet Slice (Logan and Drobe, 1994). The stratigraphy of the Selkirk allochthon consists of similar lithologies of the Upper Proterozoic Horsetheif Creek Group, the Eocambrian Hamill Group, the Cambrian Badshot Formation and the lower Paleozoic Lardeau Group.

The **Horsetheif Creek Group** consists mainly of phyllitic and slaty pelites, interbedded sandstone, conglomerate and minor carbonate rocks. The Eocambrian Hamill Group, which unconformably overlies the Horsetheif Creek Group, consist mostly of feldspathic and quartzose arenites and mafic metavolcanic rocks. The Mohican Formation, which forms the uppermost part of the Hamill Group is composed of orthoquartzite, phyllite, carbonate, dolostone, greenstone, and marble and occurs directly east of the French Creek Fault in the hanging wall, where older Hamill and Horsetheif Creek Groups have been thrust over the younger Lardeau Group (Logan et al, 2008). Stratigraphically overlying the Mohican Formation are archeocyathid-bearing limestones of the Badshot Formation.

The **Lardeau Group** conformably overlies the Badshot Formation in the Illecillewaet Slice and contains six recognized formations. The Index Formation is the lowest and consists of dark grey and green, rhythmically bedded phyllite, limestone, minor quartzite and phyllitic volcanic rocks with ultramafic intrusions near the top. Above the Index Formation lie the Triune, Ajax, Sharon, Jowett and Broadview Formations in stratigraphic order and consist of chlorite schist, pillow basalt, breccia, tuff, massive greenschist, subarkosic wacke and arenite, phyllite, and quartz arenite (Logan et al, 1995). Easterly trending zones of regional metamorphism are present within the Selkirk allochthon. They grade from biotite – chlorite at the Goldstream River to sillimanite at Bigmouth Creek as metamorphic grade increases to the north into the French Creek slice, from the south in the Goldstream slice.

Property Geology Map (Claims shown in pink boundary)



Graphitic Phyllite unit of the Index Formation (IP Ibp)

The graphitic phyllite unit (**IP Ibp**) of the Index Formation is highly prospective for hosting massive sulphide deposits within the property, it is mapped as two north - south trending occurrences which extend to the top of the northeast trending ridge between McCulloch French, and Old Camp Creek.

MC19CR08 - 12.75 gpt Au is a new discovery (2019) of an angular (subcrop) chunk of micaceous schist hosting a discordant gold bearing quartz vein mineralised with pyrite and galena.

This discovery area is outside of most of the modern exploration to date on the property.

The source is very close. This sample is interesting in that it also contains Galena.

Abundant Galena is known to occur with the course gold in the placer deposits of McCulloch Creek

Abundant Mineralised Quartz occurs on the property.



Mineralization and Showings

Exploration and mining activity in the Goldstream area has been spotty since the 1860's when placer gold was first discovered in McCulloch and Graham creeks.

Primary mineralization in the area occurs as three predominant deposit types: volcanogenic massive sulphide deposits, base metal veins, and $Au \pm Ag \pm W$ veins.

Most notable is the Goldstream VMS Besshi type Cu-Zn deposit, located five kilometres south east of the McCulloch Gold Hill; property boundary.

One of many auriferous discordant quartz veins on the property



Volcanogenic Massive Sulphide

The past producing **Goldstream** deposit is a Besshi type VMS which produced 2.224 MT at 4.49% Cu, 3.24% Zn and 20g/t Ag. It is hosted in a structurally inverted succession of fine-grained calcareous and siliceous black phyllite, phyllitic marble, micaceous quartzite and greenstone of the Index Formation and dominated by fine grained pyrrhotite, chalcopyrite and sphalerite.

The C-1 zone, 8 kilometres southwest of the property hosts a Cu-Zn sulphide occurrence comprised of one or more layers of disseminated, banded and locally semi-massive pyrrhotite and sphalerite, with trace amounts of chalcopyrite and galena. The occurrence is within dark green chlorite schist, marble and black graphitic phyllite.

The Upper Montgomery Besshi type VMS showing, located 8 kilometres to the southwest is also hosted in the Index Formation within a rusty weathered, thinly foliated actinolite schist and siliceous metachert. It consists of two semi-massive sulphide zones, 3.8 and 3.2 metres thick, dominated by pyrrhotite with minor sphalerite and chalcopyrite, separated by 26 metres of greenstone, graphitic pelite and carbonate units (Logan and Colpron, 2006).

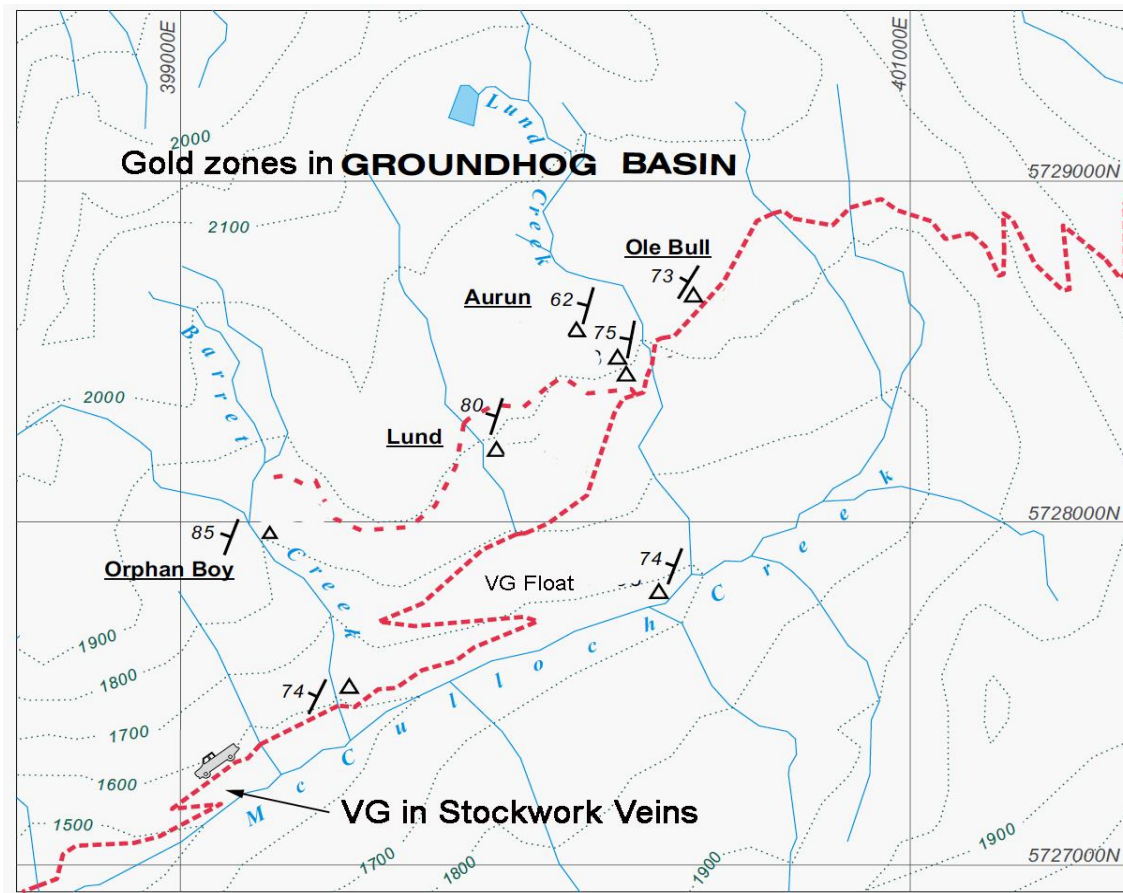
Base Metal Veins

A number of base metal vein showings occur in the northern Selkirk Mountains. Within 6 kilometres of the French Creek property lie the Stan, Pat 700 and Next 1 showings. The Stan showing consists of galena in narrow quartz stringers within the Lardeau Group. The Pat 700 showing consists of narrow discordant quartz veins carrying minor galena and chalcopyrite within chlorite schist of the Lardeau Group. Vein sets rarely exceed 0.5 metres, strike north with steep westerly dips and may contain silver values as well. The Pat 700 showing consists of a trench that revealed chalcopyrite within metasediments and metavolcanics of the Lardeau Group.

Au±Ag±W Veins

The Orphan Boy and Ole Bull (Stanmak) showings in the Groundhog Basin, 300 metres west of - the French Creek property are potential intrusion-related gold systems. They are hosted in the Index Formation of the Lardeau Group, within calcareous dark phyllite and schist, green chlorite schist, greenstone, phyllite, micaceous quartzite and coarse grits. At both Orphan Boy and Ole Bull, two sets of quartz veins are present. Mineralized veins are discordant, strike northeast, dip steeply to the west and contain a 1-5 centimetre alteration envelope consisting of sulphides, carbonates and sericite. A second set of quartz veins are present, which are barren, concordant and up to 3 metres thick (Logan, 2000). At Ole Bull, mineralized veins are 0.15 to 4 metres in width, composed of milky quartz and often contain minor pyrite and fuchsite with lesser pyrrhotite. Scheelite occurs in some of the gold bearing veins.

Gold occurs in quartz veins as well as within the country rock immediately adjacent to the auriferous veins. A 1984 grab sample assayed 44.6 g/t Au. A 1942 tungsten assay returned 9.1% tungsten and a grab sample in the Ole Bull adit returned 371.0 g/t Ag (BC MINFILE 082M080). At Orphan Boy, mineralized veins also range from 0.15 to 4 metres in width, are composed of milky quartz with pyrite, lesser pyrrhotite and gold, with scheelite occurring in some of the auriferous veins. A 35 centimetre sample of a vein in the shaft area returned 8.37 g/t Au (BC MINFILE 082M167).



Exploration programs were initiated to evaluate the McCulloch Gold Hill property area for **VMS** discovery potential and to document logistical features to aid in further ground exploration with this target model in mind.

It was decided that a grass roots approach would be taken to initial exploration. Historically exploration has been focused in the groundhog basin for native gold bearing veins. Potential new zones could be located in many areas of the property with similar geology.

The original access road was walked and prospected by a prospector and a geo-technician. Perusal of assessment reports related to the property has indicated the potential for discovering a massive sulphide deposit similar and within the same horizon as the local Goldstream Cu-Ag-Zn deposit.

Massive Pyrrhotite float was discovered in 2017 along the old mine access road. It was decided to do a strip of 37 soils along the road to test for elevated Copper and Manganese in this area. The Goldstream Besshi massive sulphide deposit has a manganiferous marker horizon in the footwall of the deposit called the garnet zone. From the 2018 program, two zones of elevated Cu-Mn were noted for further follow-up.

Angular Massive Pyrrhotite float - 97% sulphides. Sample possibly derived from a VMS type of deposit. Very similar to the local Goldstream Mine C-1 Zone

Previous prospecting, geochemical surveys, geological mapping and drilling have outlined a number of areas proven to host both native Au and base metal mineralization.

Gossans and drilling on the property have produced massive sulphides that have been interpreted to be a VMS type of deposit. The program in 2017 discovered massive sulphide float that is interpreted to be from a VMS type environment. Further prospecting for this target type is warranted. The 2018 program showed two areas of elevated Cu and Mn that are important mineral associations in the Goldstream Mine horizon.

The property still remains largely underexplored, with large areas in the north western portions having seen very little modern exploration work. Further exploration on the property should include property scale and detailed geological mapping and prospecting with emphasis on locating a VMS type of deposit and native gold bearing veins.

Course Angular Gold - McCulloch Gold Hill - Big Bend

The veins of economic interest are the discordant auriferous quartz veins. These veins strike 010° to 020° and dip steeply (70° to 80°) to the west. The range from 0.15 to 1.20 metres in width, averaging 0.30 metres. Mineralization consists of minor pyrite (to 2%) and lesser pyrrhotite, producing a characteristic limonitic rusty weathered surface. Scheelite and galena are locally present.

Gold occurs both in the quartz veins and in the country rock immediately adjacent to the veins.

The discordant auriferous quartz veins are found in the Ole Bull zone, the Ole Bull adit (now known as the Aurun zone), the Lund adits, the Orphan Boy shaft and the Orphan Boy adit.



Further exploration is definitely warranted. The soil geochemistry grid completed along the Lund Shear zone has located a large Au anomaly in the southwest corner of the property. This anomaly is open both to the south and to the west.

This previous soil sampling grids needs to be expanded and Soil geochemistry should be completed to help define drill target areas within the system. Soil geochemistry should also be utilized to test the southeast slope of the upper McCulloch creek valley to attempt to explain the anomalous base metal values obtained by previous operators.

A kill zone has been found in the Shamrock claim area (western property), however very little follow-up has been done in this area. This is a good target for prospecting and sampling, as the cause of the dead trees and ground vegetation is likely from a high concentration of minerals.

A mineral zone discovered in the area ran up to 75 opt Ag and another sample ran 5% Cu with Zn.

This zone is mapped as the same lithology as the Goldstream Cu-Zn Deposit

Helicopter supported prospecting and sampling would be the best way to evaluate this target. A drone photo survey would be useful in providing a clean detailed aerial view of the property to aid in ground prospecting. Kill zones colour anomalies or gossans and old workings would be quite visible in the Alpine and sub alpine parts of the property, from the air. This would be more cost effective than the use of a helicopter.

Prospecting of two key areas is recommended. The western half of the Groundhog basin should be prospected, concentrating more in the areas of the old expired crown grants, now held as part of the McCulloch Gold Hill claim group. A VMS type of deposit should be searched for in this area. The northern two-thirds of the claim group should also be prospected, utilizing silt and soil geochemistry and diligent prospecting to start. This program will require some helicopter support.

This property has excellent further discovery and development potential

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

For further information please contact

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