In 1864, gold fever struck in the south Kootenays east of Cranbrook, British Columbia as placer gold was discovered in the Wild Horse River. What followed was everything one can imagine from a mining town springing to life on the western frontier. As word spread about the bonanza, including the discovery of gold nuggets up to 36 ounces, the Fort Steele Region placer goldfields grew to become the fourth largest in Canada with the Wild Horse River producing more than 1.5 million ounces of gold between 1864 and the 1930's. The gold was collected from a pay streak approximately 6 km long that began at the confluence of Boulder Creek and the Wild Horse River.

Placer mining on the Wild Horse River and Boulder Creek continues today and the question still remains: “Where did all that placer gold actually come from....where is the lode source?”

American Creek’s Gold Hill project is located 13.5 km east of Fort Steele within the headwaters of the Wild Horse River on Boulder Creek. The property spans 835 hectares and encompasses the area believed to be one of the principal originating sources for the gold recovered from the Wild Horse River below.

The property has two main areas of significance; the Big Chief showing is located near the center of the property on the east side of Boulder Creek and the Gold Hill/Midas showing is located approximately 1.5 km to the west on the opposite side of the drainage. These showings are on-strike and are connected by the Maus fault and the Jubilee Formation bedrock indicating they are part of the same very large continuous mineralized zone. The Big Chief and Gold Hill/Midas were discovered in the late 1800’s as prospectors made their way up Boulder Creek in an effort to locate the lode source. These showings include a number of historic workings consisting of
open-cuts, prospect pits, and four small adits. The Gold Hill/Midas showing, in which the Guggenheim, Iron Cap and Long Tunnel adits are located, also contains historic workings related to various high grade gold/silver veins. Limited small-scale production of gold and silver occurred from both these areas on opposite sides of the drainage. Amazingly little modern exploration work has been conducted on the property in the last 50 years.

Cominco worked the property in 1937, and then again in 1945. The company drove 75 metres of tunnel. Samples taken over the drift width of 1.5 metres showed the muck/car samples for 13.7 metres averaged 15.1 g/t gold, 16.4 g/t silver and 2.13% lead. The face samples taken over 6.7 metres produced an average of 82.1 g/t gold, 74.2 g/t silver and 6.1% lead.

There have been numerous high grade gold samples collected from the property over the past century. A more recent example of high grade gold (13.4 ounces per tonne) is reported from a narrow quartz vein/breccia zone that occurs in the hanging wall of a northeast striking steeply northwest dipping syenite dyke (Javorsky, D., 2004). The dyke is described as a syenite porphyry and is Cretaceous in age. A 25 cm wide quartz vein sample with visible pyrite is located 40 m upslope from the Middle Adit and ran 22.32 g/t gold. High grade gold up to 442 g/t Au and 1660 g/t Ag has also been reported from selective grab samples of tetrahedrite and galena-bearing quartz-siderite material (Javorsky, D., 2004).

The Gold Hill property is located just east of the eastern limit of the Kimberley Gold Trend. A major transverse feature that crosses the generally north-northwest fabric of the Cordillera.
On the Gold Hill property, lower Cambrian sediments host the gold mineralization and are therefore economically significant. The sediments are subdivided into three distinct lithological assemblages namely the Cranbrook, Eager and Jubilee formations.

As seen in the image above, the Maus fault runs NE through the Gold Hill property spatially linking the south Gold Hill and Big Chief showings. It runs along the boundary of the Jubilee Formation. The historical workings on the Big Chief are found in the Eager formation while the richer Midas / Gold Hill workings are located within the Jubilee Formation.

The Gold Hill’s Big Chief Showing. Cross Section Line A-A’ (Pighin 2014)

‘Gold’ zones in the above cross-section are oversized for illustrative purposes and suggest hydrothermal events associated with the ‘Syenite’ intrusions.

At the Big Chief prospect, a series of parallel syenite sills or dykes are exposed over a width of 200 meters. These sills, up to eight meters thick, strike about N 40 degrees E and dip 50 degrees to 60 degrees northwest. The more intense mineralization occurs along the argillite hanging wall of two of these dykes. The mineralized zone at the Big Chief has been explored by three adits.
Pighin (2014) felt the limy Jubilee Formation rocks may have allowed for the development of thicker gold veins than in the argillaceous Eager Formations rocks. The area around the Big Chief showings are underlain by lower and middle Cambrian sediments that are composed in part by thick sequences of carbonates. Pighin speculates the Big Chief’s syenite dyke swarm which deposited gold in the Eager formation slates may produce economic gold deposits in the rock of the Jubilee formation. This is because the Jubilee Formation contains limestone. When the solutions in the intrusion come in contact with limestone a chemical reaction occurs resulting in strong gold deposition.

The historic adits (on the Big Chief) are shown in the image below-left. The known subcrop of the gold bearing felsic flow is roughly 8m by 300m and is open in both directions along strike and down dip.

The Gold Hill (Midas) mineralization occurs near the trace of the Maus fault and is projected to be on strike with the gold mineralization in the Big Chief adits.

2016 Exploration Highlights – no program in 2017 due to fire

American Creek conducted initial mapping and sampling on the property in the summer of 2016. All historic adits were located and assays confirmed historic accounts of elevated gold and silver on the property. During the exploration of the existing adits new gold veins were discovered.

Highlights include:

- Specimens taken from the Guggenheim adit graded up to 25.14 g/t gold.
• A discovery where a fallen tree had exposed a new vein with gold (6.15 g/t), silver, and lead in quartz.
• A 3.71 g/t gold specimen 150 meters upslope of Long Tunnel in the same quartz structure as Long Tunnel.
• A 14.47 g/t gold float specimen in drainage directly below Long Tunnel.
• A discovery upslope from the Middle Adit where a 30cm quartz vein sampled 22.32 g/t gold.

2018 Exploration Program

Given there has been no serious exploration using modern methodologies or technology on Gold Hill, there is a lot of exciting exploration ahead of us. Given the size of the placer deposits formed from this area there is potential for a serious deposit(s) of free gold.

Given the Jubilee Formation is favourable for gold deposition, it makes sense to test the area where the syenite dykes intersect it. There are high-grade zones along the hanging wall of these dykes within the less prospective Eager Formation giving potential for higher grade, wider deposits to form within the Jubilee formation. There is also good potential outside of the syenite dykes for high-grade mineralization such as that found on the Midas / Gold-Hill (also located in
the Jubilee Formation). Below is a diagram showing the approximate location of a drill program designed to test the contact of the dykes within the Jubilee Formation as well as testing the Jubilee bedrock in general. Should there be a deposition zone as proposed, the 2018 drill program will be testing just the tip of the iceberg.

Summary

After 150 years of placer mining on the Wild Horse River, the mystery of where all that gold originated from still remains unanswered. As the vast majority of the gold was recovered from the 6 km stretch of river immediately below the confluence of Boulder Creek, and placer gold is still being recovered from Boulder Creek itself, it makes logical sense that the primary lode source is located somewhere within the Boulder Creek watershed.

Even with the significant historic discoveries of bonanza grade lode gold being made in the Boulder Creek drainage, the Gold Hill property has only seen sporadic, intermittent exploration over the last 150 years.

The Big Chief and Gold Hill/Midas are significant mineralized showings and are geologically associated. The property has tremendous potential to host a significant high grade gold/silver deposit. Testing the Jubilee Formation at the Big Chief is the first step in changing potential into reality.