

A Brief Overview of the Exploration Programme Currently Being  
Conducted on the Vault Gold Property, Okanagan Falls, B.C.

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Introduction

This report, written at the request of the president of Seven Mile High Resources Inc., of Kelowna, B.C., is intended to give a more meaningful perspective to drill results previously announced by the company from the Vault gold property located at Okanagan Falls, British Columbia. Seven Mile High Resources Inc. retains a 40% working interest in the property, while Inco Gold of Toronto, property manager, has earned a 60% interest in the Vault claims.

Exploration expenditures in excess of 1.5 million dollars over the past two years have yielded very encouraging gold-bearing diamond drill hole intercepts. Voluminous data has been generated by the Inco Gold drilling programmes, and this data, provided to the writer by Seven Mile High Resources, forms the basis of this report.

The Inco Gold data consists of hundreds of pages of drill logs and several sheets of Cross Sections and the main goal of this report is to present a concise up-to-date overview of the Vault property exploration programme. To this end, three illustrations, (Figures 1-3) have been drafted. Figure 1 is a Plan View covering the central portion of the main gold zone on the property, while Figures 2 & 3 illustrate, in Cross Section, two of the better gold zones found to date on the Vault property.

Figure 1 - Plan View of the Main Gold Zone on the Vault Property

Figure 1 which illustrates the diamond drill hole intercepts through the main gold area on the Vault property in Plan View requires a few explanations. First of all, it should be noted that the area drilled by Inco Gold extends another 130 metres to the east and west of the area shown. Some of the drilling also extends up to 200 metres to the north and south of the area covered on Figure 1. Secondly, the drill intercepts are plotted to metric scale to fit the scale of Figure 1, although they have been translated into the more popular units of "feet" and "ounces per ton" for the reader. Thirdly, the intercepts on Figure 1 represent the vertical projection of the gold intercepts to surface. These intercepts can only be joined up across Figure 1 if the ore controls are vertical, and this is not always the case on the Vault property. There is always a problem in trying to represent drill holes or ore zones of various inclinations in Plan View, and Figure 1 should, therefore, be used only as a quick, rough guide to locate the best gold zones on the Vault property. Cross Sections 625E and 775E (Figures 2&3) provide a more meaningful representation of the data, and illustrate the difficulty in trying to project the gold intercepts vertically.

Figures 2 & 3 - Cross Sections 625E and 775E of the Main Gold Zone on the Vault Property

Figures 2 & 3 represent partial cross sections of two of the better gold zones found on the Vault property to date. The cross sections are drawn to metric scale, and the gold intercepts are plotted in metric scale, but they are described in the more popular "feet" and "ounces per ton" to be consistent with Figure 1.

## Geology

The Vault property covers a portion of one of the Eocene volcanic-sedimentary basins that are common throughout the Okanagan Region of British Columbia. All of the rocks encountered in the area of extensive drilling on the Vault property (the area covered by Figure 1) are Eocene in age. Marron Formation trachyte<sup>1</sup> flows are overlain by a thick sequence of pyroclastics<sup>2</sup> and lacustrine<sup>3</sup> sediments of the Lower Marama Formation. The Eocene Formations in the drilled region appear to form the north limb of an easterly plunging synclinal structure. The synclinal structure is further exaggerated by severe east-west and north-south block faulting. The effect of the faulting has been to successively lower the base of the Marama Formation from north to south (as illustrated on Figures 2 & 3), and from west to east. The mineralized zones on the property, largely found within the Lower Marama Formation, likewise, are successively down-dropped towards the southeast.

## Mineralization on the Vault Property

Faulting has played a large role in the distribution of gold mineralization on the Vault property, but the ultimate conduit (or conduits) from which the mineralizing fluids have ascended has not yet been identified. Although the ultimate source of the mineralizing fluids has not been determined the drill records indicate that the faulted contact between the Marron and Lower Marama Formations has been favoured by the migrating fluids. Over a width of 50 metres (grid 0+50S to 1+00S) on many of Inco Gold's cross sections the ore solutions appear to have flooded out into the lowermost horizons of the Lower Marama Formation for distances of several tens of metres above the Marron Formation contact.

<sup>1</sup> trachyte is a common volcanic rock rich in potassium, and poor in silica content.

<sup>2</sup> pyroclastics are rock debris of various sizes ejected from a volcano.

<sup>3</sup> lacustrine sediments are lake bottom sediments.

Mineralization on the Vault Property - Continued

It appears that the first generous flooding of silica solutions carried anomalous values of gold and silver through the very porous lapilli tuffs<sup>4</sup> and lahar<sup>5</sup> horizons of the Lower Marama Formation. However, in most instances the first large pulse of silica did not carry "ore grade" precious metals, and the silica in fact filled and ruined the inherent porosity of the pyroclastic rocks for the later fluids which carried better precious metal values. It has been noted on this property (and on most epithermal gold properties) that the best gold values occur where there have been successive pulses of mineralizing fluids through fractures and within breccia zones that are not sealed off early in the mineralizing process. The best drill intercepts on the Vault property occur where late, near-vertical, composite<sup>6</sup> quartz veins cut through the earlier silicified zones. The late fracturing and brecciation allowing for the passage of the gold bearing solutions may be related to the block faulting illustrated on Cross Sections 625E and 775E (Figures 1 & 2).

There are examples of highly silicified, poorly mineralized lahars on the Vault property that can be explained by the foregoing discussion. There are also examples of composite veins carrying low gold values at some of the higher intersections on the property, indicating that gold precipitates out of solution over a limited vertical range above the Marron Formation contact.

<sup>4</sup> lapilli tuffs are made up of large volcanic ash particles of  $\frac{1}{8}$  to  $1\frac{1}{4}$  inch in size. (Tuff is the consolidated rock equivalent of volcanic ash).

<sup>5</sup> lahars are the consolidated rock equivalents of landslide or mudflow material of mixed sizes that are often deposited on the flanks of volcanoes.

<sup>6</sup> composite veins are made up of several parallel bands of mineralization including quartz, calcite or other minerals that are deposited at successive intervals.

## Drilling Programme on the Vault Property

Much of the drilling on the Vault property has been designed to intercept gold ore within the Lower Marama Formation immediately above the Marron Formation contact between 1+00S and 0+00S on the exploration grid. The target depth ranges from 50 to 400 metres below surface, from west to east across the property, and the target position has been displaced from one section to the next by block faulting. Therefore, the inclined drill holes, drilled from a distance of 300 to 400 metres, have not always managed to make an ideal cut through the prime target area.

Some of the lower grade gold intercepts of drill holes 72439, 72416 and 72444 on Figure 1 may be explained by the fact that these drill holes missed the centre of the prime target area. Drill hole 72442, on the other hand, with an intercept of 49.0 ft. of 0.22 oz/T gold appears to have hit the prime target.

There is clearly a need for more inclined drilling from the 72439, 72416, and 72444 drill sites. Cross Sections 625E and 775E are cut by three or more drill holes each, and even these sections require more drilling to properly define the gold-bearing zones.

It is interesting to note that although drill holes 72435 (illustrated on Figure 2) and 72437 undercut the prime target zone and penetrated the Marron Formation over their entire length, neither drill hole appears to have intercepted the "main conduit" responsible for the overlying mineralization, leaving the question regarding the origin of the mineralization still open to speculation.

One of the more exciting, and largely untested, targets on the property lies to the west of drill hole 72422 which returned an impressive 44.12 feet of 0.298 oz/T gold. The area measures 155 metres in length and extends from grid 625E to 470E, centred

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## Drilling Programme on the Vault Property - Continued

over grid 0+60 south. Two drill holes have been drilled in the region, but drill hole 72437 undercut the prime target area, as mentioned above, and drill hole 72433 intercepted assay values of only 22.1 ft. of 0.14 oz/T gold. However, it is the geochemical data of drill hole 72433 that is the most interesting feature. This data indicates that drill hole 72433 intercepted 180 feet of rock containing greater than 1000 parts per billion (ppb) gold and 700 feet containing greater than 1000 ppb silver. Also of great interest is the geochemical data from drill hole 72425 on section 470E (to the west of Figure 1). The assayed intercept recorded for this drill hole is only 4.7 feet of 0.09 oz/T gold, but the geochemical data shows that this drill hole penetrated 160 feet of rock containing greater than 1000 ppb gold and 1000 ppb silver. Drill holes 72433 and 72425 clearly outline an area of highly anomalous gold and silver values within the Lower Marama Formation on this portion of the property, and more drilling in this area is definitely warranted.

### Summary

In summary, much of the drilling on the Vault property is too widely spaced to make reserve calculations. An educated guess at this time would indicate that possibly 100,000 tons of 0.20 oz/T gold might be represented by the drill intercepts of Sections 625E & 775E. It should be mentioned that none of the other intercepts on the property are incorporated into this figure although any one, or all, of them may have potential. There is a need for more inclined drill holes on most cross sections, and a definite need for fill-in drilling between sections 625E and 475E as outlined earlier.

Although it is too early to suggest firm tonnage or grade figures for the property, it can be said with some certainty that the Vault property has the potential to yield a large gold deposit of economic grade.