Robert Wood 206-954-5192



An Exploration and Mining Project New Vulcan Hill Project, Bonner County, Idaho

Introduction:

Prospecting and Exploration are key fundamentals to any successful mining operation. That most often depends upon whether objectivity can be honestly achieved and maintained in the pursuit of a financially viable project. For the past 4 years, each exploratory step taken at Vulcan Hill has inspired and driven us to take another step forward, due to the objective financial potential each step has shown us.

Located just above Lakeview, Southeast of Lake Pender Oreille in Bonner County, Idaho, the first indication this was an area to be seriously looked at was the overwhelming smell of Sulfur. Driving up the U.S. Forest Service road #278 a short ways past the bridge crossing North Gold Creek we stopped at a cut where there was a gated adit on the hillside right off the road. It was obvious that there was a large S presence. Digging into the hillside, a large "black sooty rock" was uncovered (see Figure 2). Spending some time breaking it apart revealed there were sulfides in abundance (chalcopyrite, bornite, pyrite...see addendum pictures). It was obvious that the black rock itself was high grade magnetite. This was the starting point for further exploration (soil, rock sampling and numerous Geophysics studies). The more focused time with boots on the ground and geo studies the more impressed we became with the potential for this site. "Stay focused and be objective" became and still is our mantra. How is it that for over 100 years others have explored and covered much of the same ground, yet stopped short of seeing the total picture of this large and highly mineralized porphyry and polymetallic system?

The Company:

The New Vulcan Hill Company LLC, is the current operating vehicle. Registered in Delaware as an LLC, the NVH Project is owned by Robert Wood of Seattle, Washington. The current structure (which in the future can be changed easily) was formed as such for the purpose of utilizing a 100% tax deduction against ordinary income. Outside contractors are and have been utilized for the purposes of staking (Andrew Holesinski), geology mapping and sampling (Hugh Smith, Hayden, Idaho) and Geophysics (Garry Carlson, Gradient Geology and Geophysics, Missoula, Montana). Steve Ivie and Jeff Lambert of Coeur D Alene Mine Contracting, Pinehurst, Idaho, did work on opening three gated adits at Vulcan Hill. Assay work is being performed by American Analytics, Osburn, Idaho.

Summary:

The NVH Project consists of 27 claims of unpatented land. The plot has been carefully scoped so that the claims encompass the best mineralization in the area. It is not the size of the area that dictates the value but rather it's the mineralization that we have focused on. And our feeling based on solid evidence is that the NVH systems host mineralization that is polymetallic in nature. It is anomalous in Silver-gold, base metal narrow veins (some quartz veins are, however, rather large), base metal carbonate replacement mineralization (copper-tungsten-silver-gold) within a granodiorite with disseminated porphyry style mineralization (molybdenum-copper-silver-gold). "A contact of the Gold Creek Quartzite with the granodiorite is exposed 1500 ft. east of the (orginal) Vulcan Mine...The quartzite is...abundant (with) magnetite and ilmenite, altering to ilmenite, altering limonite." Geographically, the majority of the prospects in the project area lies within the Cambrian aged "Lakeview Limestone" (east portion of limestone goes to 2,000 feet in depth) and cretaceous granodiorite intrusive stock. "The top of the Lakeview Limestone is missing because of erosion, but the thickness of the formation is reported (Griggs, 1968) to be over 2,000 feet near Lakeview." The igneous intrusive is "highly" mineralized and is seen exposed on road cuts and is very obvious in tunnel #3. The whole area shows a system of high sulphidation. A large portion of the pyrite which is found throughout claims, shows significant chalcopyrite. It is actually hard to find an area that is not mineralized.

The "black rock" (magnetite) found in abundance (and noted in the geophysics reports) is significant. The value of magnetite can vary greatly. What we have seen and assayed however, shows high value potential and fits into the overall formations. All indications show that the magnetite carries high levels of copper, chalcopyrite, bornite, silver, gold, tungsten and other elements of value. The magnetite shows high sulphidation with not uncommon values in the 30-40% range. High/low values of S can be found throughout the entire system. In connection with the sulfur, it must be noted that due to buffering factors of the surrounding formations, the potential acidic effect has been greatly neutralized. Water samples from the tunnels have shown values at 7.6Ph, confirming the structural effects.

To be noted, the whole NVH Project shows an abundance of metamorphism. "The high anomaly just northeast of Lakeview is in the vicinity of the Vulcan mine. The area about this mine has been described as a zone of intense metamorphism by Gillson (1929, p. 117)). His description suggests that this might be a promising area for further detailed geologic mapping and prospecting."

Reference map:

Assayed values taken from outcrops, dump picks and tunnel ribs (see map figure 2 below showing tunnels 1-3, previous trenching, dumps and previous exploration adits/tunnels) show us values in disseminated gold from just above detection level to 2.97ppm, copper to 49%, silver to 1000ppm (these specific values were taken from the magnetite samples). Cutoff grades are relative to many factors however, NVH shows a high confidence level for grades that definitely would be considered profitable for underground mining. These values include Au/Ag/MoS2/W/Zn/Pb/Cu.



Figure 1. Historical and current exploration areas of note. Areas highlighted with orange outline are areas noted in this report and areas of prioritized exploration due to outcrops and tunnel accessibility. These areas are also significant and detailed in the Geophysics reports.

Assayed samples, indicators and pathfinder elements:

Having an exploration project with samples from surface outcrops and tunnel access has given us an excellent look at the potential for a highly profitable deposit. There is a high confidence level that the NVH Project is a complex porphyry system in concert with a singular or multiple skarn system. Porphyry and skarns have many different implications and sometimes the terms are defined loosely. There are different types of porphyry and skarn deposits. Some hold not a lot of potential and then there are others like NVH that show great potential for being profitable. Here are some pictures with assayed values that show that the system we are exploring, holds both "base metals" and "precious metals". The previous page shows the approximate areas where these samples were attained (and are indicated).

Magnetite

The initial exploration/focus for prospecting and geophysics studies were focused at the area of the number 1 adit adjacent to #278 Forest Service road. The smell of sulfur was very high. About 20 yards to the northeast, a surface outcrop was investigated and found to be a large outcrop of magnetite.



*See separate geophysics report for overall interpretation. This graphic shows the first area of exploration.

Figure 2.



Shows surface and near surface of outcrop of magnetite. The white materi-

al shows how the darker material oxides. Note how close to the surface.



These sliced samples show sulfides distributed throughout the magnetite.



Magnetic properties of magnetite sample

Magnetite continued-

Not only do these samples show high sulphidation (from double digit to 50% S) they also show a large percentage of Fe which figures well into magnetite. The magnetite also shows excellent base metal and precious metal numbers. All of these details fit into a focus that points to a highly mineralized skarn system: A system that holds valued numbers of Cu/Ag/W/Au/Zn/Pb/Mo and other elements and minerals that show the high potential for a large deposit.

Within this magnetite, there are numerous sulfides and some high grade elements found.

Copper/Silver



The above sample taken near tunnel # 1 VH14-16-19, assayed Cu @ 49.9%. Ag assayed out @ 1000ppm.

Fe showed 8.53% and S

These sample show chalcopyrite, pyrite, bornite and other Cu indicators



Gold sample present in magnetite

The gold that has been shown in assay samples seems to be disseminated throughout the whole NVH Prospect. This an example that was assayed and showed a value of 2.97 g/t. Assays have reported nearly 30 samples that show Au above the detection limit of .002-.005. Many are close to or above 1 gram/t. Our proposed drill sites will help us in determining how distal the Au is.



Sample # 10/19/15 VH-2 Au @ 2.97 ppm FA-ICP Finish

Molybdenum (Why the importance of finding Mo at NVH)

Though we have found Mo disseminated throughout the system, the highest concentrations have been found in the lower tunnel #3. Also, we have found and assayed elements which include: Cu/Au/Zn/Pb/Ag. The tunnel ribs clearly show an igneous intrusive system that is highly mineralized. There is a large quantity of sulfides present...including pyrite/chalcopyrite. The ribs are granitic with large quartz veins present as well as observable faults including slickensides.

Why all of the excitement about Molybdenum at NVH? The Mo plus Cu and other indicators point to the probability of a large, economically viable Porphyry system. "These deposits provide over 60% of the world's copper and include other important metals such as molybdenum, gold and silver...If alteration occurs in carbonate rich rocks," (which NVH has) "then skarn mineralization may also develop." (Geology for Investors...date unknown) **Which NVH has.**



Molybdenite MoS2

Zinc Zn



Mo crystals

Chalcopyrite



Mo is not painted but rather impregnated into quartz.





High grade Mo. Assaying with XRF 3.5% (not including gangue)

These are views from inside tunnel #3 showing Mo on the ribs and in the lower right, Mo exposed on the face. With the combinations of Mo, Cu and other elements along with visual highly mineralized igneous intrusive blocks and granitic observations, this helps us define the existence of a Cu/Mo Porphyry.





This vertical vein extends to the roof.



The veinlets on the face have had 6" of material removed. The veins of Mo are extensive. Tunnel #3

Further evidence (Showing variety of massive mineralization)

Further samples showing the evidence of massive hydrothermal activity, metamorphism, high sulphidation and numerous geological events at NVH. These photos enhance our views of the structural aspects and dynamics of the system. Again, this is just a brief summary. More material is available in detailed reports.



Garnets found at NVH



Realgar evidence of low temp hydrothermal event. Arsenic sulfide



Cobalt?



Biotite?



Magnified Mineralized Magnetite



Evidence of massive sulfide skarn (Craig 2017). Dark bands contain Zn



Granodiorite



Lakeview Limestone cooked as marble



Quartz monzonite granite

Further evidence of NVH's dynamic system continued:



Biotite



Hydrothermal banding in quartz vein



Cooked limestone/skarn contact with gray pyrite sulfides



Slickensides—limestone/marble.



Bornite Cu5FeS4 (important copper ore material)

Noted assay samples (this is not a complete list and not necessarily the highest values)

Tungsten W

VH1642 DUP 0.558%

VH1648 0.334%

VH1674 0.428%

Silver Ag

VH14-16-19 1000ppm VH14-16-7 426ppm VH14-16-8 878ppm VH-3-14 660ppm

Zinc Zn

VH-3-14 21.96% VH14-16-8 4.86% NVH—10-6316-1 1.52% 1-VHd-9-16 3.82% 2-VHd-9-16 2.36% VH-9-14 23.67%

Lead Pb

VH-3-14 6.79% VH14-16-7 4.29% VH4-16-8 9.45% 1-VHd-9-16 1.72% 2-VHd-9-16 5.07%

Gold Au

NVH-10-6316-1 .026ppm 10-19-15 VH-2 2.97ppm 11-11-VH2 1.02ppm 11-11-VH4 .299ppm VH-3-14 2.03PPM VH-4-14 1.67PPM VH-9-14 1.93PPM

Copper Cu
VH14-16-19 49.9%
VH-3-14 1.25%
VH-6-14 1.47%
VH-9-14 1.28%
1019012 1.09%
Molybdenum

NVH-0-20-17-1-3 2.47% NVH-3-8-21-17-1 .837% NVH-T3-1-7-7-17 1.21%

Assay methods:

All of the assay results seen on this page were from American Analytical Services in Osburn, Idaho, along with a few sent to American Assay in Sparks, Nevada (where some of the samples were studied using SEM). All samples are from exposed rock and from inside tunnels 1-3. An XRF was used as a pathfinder tool in order submit samples for assay thus keeping costs down and focusing on important representations at NVH.

We have also mapped and sampled hundreds of soil samples and are currently going through that data. Due to the ground cover erosion and weathering over the years, we believe that the best results are being seen from the tunnels, surface and near surface rock material.

In conclusion:

Vulcan Hill has been a focus of exploration since the late 1800's. Much mining has taken place in the past throughout Bonner County in the Northern Idaho panhandle. Lakeview, which sits just beneath the New Vulcan Hill Project has seen at one time a population of over 2,000 people, with hotels and all of the expected resources a mining community required from between the turn of the century to the early 1920s. Many stayed in the area and many were just traveling through on their way to Montana and north. Even though Vulcan Hill has had numerous prospectors and studies done, it is our conclusion to date that what is there and the high potential for a major deposit was missed. The geological formations surrounding NVH (limestone was mined) show us the perfect setting for a highly mineralized and potentially high valued deposit.

The area can almost be described as the "perfect storm." Massive limestone plays right into the scenario of a well defined polymetallic skarn (carbonate replacement). We have on the hill a tremendous ability to see and test ores that are at the surface and within 3 of the multiple tunnels newly reopened, we have the luxury of sampling what they may have been looking for and what they found. It is a mystery as to why the exploration tunnels went only so far. We have however, through our several years of focused exploration taking hundreds of mapped soil samples (which we are still studying), exposed rock samples, tunnel samples and geophysics (mag studies, IP studies and VLF) studies, come to strongly believe that there is at the NVH Project a highly mineralized intrusive system that smacks of a Cu/W/Mo porphyry (including strong base and precious metals). Likewise all indicators are pointing to a very rich sulphidation system with numerous events that through thousands of years accumulated rather then dispersed its valuable ores. There are many types of skarns, some of which are not valuable. However, current data is showing us that this system has all the indicators of a high valued, highly profitable skarn and porphyry deposit.

Other aspects and positives for the continued development of this system are numerous and are to be found in other material we are putting together. At the end of this report is an addendum which shows the 3 mapped newly reopened tunnels, a page from one of our geophysics reports which is an inverse IP graphic that shows an impressive anomaly indicator of a possible Au indicator. Also included is a page which shows the geologist and geophysics contractors who have been working on this project.

Going forward:

For the 2018 season, we plan on continuing surface and tunnel sampling along with additional geophysics work in order to fill-in gaps yet to be explored. The number one priority is to advance to core drilling. We have a mapped a drill plan which has gone through the USFS with approval. Due to all of the data we have acquired so far and the visual evidence, we strongly feel that the drill targets that we have mapped, will greatly advance and confirm our strong objective feelings about the importance of this project. To date, financing has been through private funding. Hence, the New Vulcan Hill Project LLC is looking for an outside partnership to join in on helping advance this project forward. We have a very high confidence level that this system we are exploring holds a wealth of mineralization that has yet to be tapped.

<u>Addendum</u>

<u>Tunnel 1</u>

The tunnel, shown on figure is located on the main FR278 road and was reopened in 2016 with a new portal gate door for entry. The 76 foot long, hand steel driven tunnel is predominantly in an oxidized intrusive with minor metamorphosed Lakeview Limestone. In the right rib, massive sulfides (pyrite, pyrrhotite, chalcopyrite, magnetite and unknown gray sulfides) are encountered as well as throughout its length as shown in figure 1a. In summary the tunnel was originally driven as an exploratory drift looking at the massive sulfides.



Figure 1a . Map of tunnel 1 along the upper main FR278 road.

<u>Tunnel 2</u>

The tunnel, shown on figure 2a is located approximately 100 feet above the main FR278 road and was reopened in 2016 with a new portal gate door for entry. The 240 foot long, conventional 5x8 foot tunnel with rail was predominantly in oxidized, metamorphosed Lakeview Limestone with massive sulfides (pyrite, pyrrhotite, chalcopyrite, galena, sphalerite, arsenopyrite and possible silver sulpha-salts) encountered throughout its length as shown figure 2a. Also noted was a north-east trending vein-fault system containing arsenopyrite, galena, pyrite, and sphalerite. Chips sampled show very positive results. In summary the tunnel was driven as an exploratory drift looking at the massive sulfides, the north-east trending vein system, and a possible granodiorite-lakeview limestone contact in the mid-20th century.



Figure 2a. Map of tunnel 2 above the main FR278 road.



Figure 3a. Highly mineralized with Mo throughout





Hugh Smith - Consulting Geologist

At New Vulcan Hill Project



Garry Carlson of Gradient Geophysics

Geology and Geophysics

The NVH Project would not be, without good people involved. Hugh Smith of Hayden, Idaho is the geologist that first introduced me to

Vulcan Hill. Hugh has spent a tremendous amount of time and effort in helping explore, map, sample and define this most unusual prospect that continues to show us enormous potential. Hugh is currently working for AngloGold Ashanti in



Tanzania. Hugh has a terrific resume and as a geologist. He has a huge and extremely extensive background. Review Hugh's link here at LinkedIn and learn more about why we are so pleased with his participation and why we have a high confidence level in our Project.



Garry Carlson is President and owner of **Gradient Geophysics** out of Missoula, Montana. Hugh Smith having worked with Garry over the years, introduced us to Garry and are very pleased with our association and the impressive work Garry has provided to the NVH Project.

Geophysics is a scientific art form which can only be excelled at through 1000 of hrs and many years of boots on the ground as well as hours in the office with highly sophisticated software. Garry has accomplished and excelled in the area of geophysics for over 30 years having had offices in North and South America. Because of Garry's expertise in this field, we are seeing at the NVH Project extremely high potential. We are looking forward to further Gephysical field work with Garry this season and are very pleased with his association with us. Check out his profile here on LinkedIn.

Figure 4a. Geologists and geology participants

B) Chargeability results - based on computer inversion modeling:

The Southwest target area shows exhibits an extremely high chargeablity anomaly surrounded by a broad zone of high values (in red). This extreme high is located approximately 100 meters below the surface and centered approximately 75 to 100 meters west of the adit. This chargeability anomaly is one of the highest I've ever recorded (see figure below).



CROSS SECTION OF MODELED CHARGEABILTITY (SULFIDES)

Figure 5a. Each year we have updated our geophysics reports after gathering new data. This is an example of an important update. Several geophysics reports are available for study.



NVH Project claim area.

Figure 5) displays modeled chargeability. Red outlines the high values. Note extremely high values around -100 meters.