

Exploration Rush at Tonopah, Nevada

November 2020 by **Chris Ralph**

Back in 1900, a central Nevada rancher named Jim Butler made a find that changed Nevada mining forever. Most miners thought back then that Nevada had been completely explored and everything of importance had already been discovered. In 1900, it had been 40 years since the Comstock lode was discovered and prospectors had spread out over the state and made a huge number of amazing finds in the hills of Nevada. Nothing big had been found recently, so it was pretty much assumed that everything worth finding in Nevada had been found.

But while traveling from his ranch to a nearby town, Jim picked up some quartz he thought looked good from an outcrop. He took it to an assayer who assured him it was junk and not worth testing. A few months later, a young, greenhorn lawyer agreed to pay to have it assayed, and the quartz turned out to be rich in both gold and silver. There was lots of that rich rock to be found there, and the mines of Tonopah were soon turning out enormous quantities of precious metal, eventually totaling two million ounces of gold and about 175 million ounces of silver. Production continued for decades, but began to slow in the 1930s, finally ending around 1950, with only very small amounts of ore being produced after that.

Many new discoveries were made in the early 1900s by prospectors who were encouraged by Jim's discovery. It's interesting that history has sort of repeated itself in that a lot of geologists and mining companies have come again to believe that Nevada was fully explored and everything of importance has already been found. Well, it may prove that the mines of Tonopah will again lead the way to disproving that idea as there is an exploration boom going on in and around the old town, with some amazing finds starting to be made.



This is the kind of surface quartz that Jim Butler found. He thought the black mineral was silver sulfide, but it's actually manganese oxide. However, there is also a lot of silver chloride in this ore that he did not see.

It's a very sudden change caused by the improvements in the prices of gold and silver over recent months. When I had my camping trailer in Tonopah for a few months in the spring of 2019, there was nothing going on, and no serious exploration had been conducted there since the mines shut down. A few holes were drilled in the decades after their closure, but no serious exploration programs had been conducted. That has all changed and some important new discoveries are now being made.

The two companies making a big splash at Tonopah and releasing some very high-grade drill intercepts are Blackrock Gold and Summa Silver. Combined, there are at least 5 drill rigs that are currently operating in the Tonopah district and there are a good number of additional drills operating in the surrounding region. My opinion is that we will see a day where active large-scale underground mining is again going on in Tonopah, though there may still be years of exploration to come before we see those operations. Let's take a look at two of the recent discoveries.

The many different silver and gold veins of Tonopah comprise a very complex system of veins that intersect and split, change their dip, are faulted off and disappear, etc. The old-timers had a difficult time tracing them through the ground or predicting where they might be found. The art of figuring out where veins are in the ground has advanced considerably in recent decades, and geologists now digitize old mining maps and use special computer programs to model in three dimensions where the extensions of the veins might be located. This is a great benefit for the companies now exploring the area as they can integrate the old underground data and what drilling has been done with the known geology and then project where the veins should be. So far this has been very successful for them.

The average grade of all the past ore mined at Tonopah worked out to an equivalent of almost 70 ounces of silver per ton (converting the gold in the ore to silver equivalent). The explorers are making similar grades of discoveries with their current drill intercepts.

The other great accomplishment of these companies is in putting together a very divided property package. Right from its very earliest days, Tonopah has always had a problem with fractured ownership. The Tonopah district covers a large area, and in the old days, many smaller companies owned a few claims and there were conflicts between the companies as their veins passed from one property into another. Blackrock and Summa Silver have been able to consolidate a number of the claim groups and put together a good block of claims such that they both have a large area to explore. Effectively, Blackrock has consolidated the western part of Tonopah, and Summa Silver the eastern part.

There are also a number of explorers working in the greater Tonopah region who are not working right in town but also making some nice discoveries, and there are a couple of companies preparing to start mining and producing gold and silver from open pit operations. We will take a closer look at all of these. Together, there is quite a rush of companies exploring, making really nice finds, and getting prepared to mine ores in the Tonopah area.



A core drilling rig working in west Tonopah on the Blackrock gold property. Core drilling is more expensive than percussion, but it yields a complete slice of the vein.

Let's take a look first at Blackrock Gold.

They are a new entry to Tonopah, having acquired the west Tonopah property only in February of this year. However, they have launched quickly into a serious exploration of the ground and made real progress in only a matter of months. The company is targeting four areas with the conceptual potential

of roughly 6.5 million tons with an average grade of around 40 ounces of silver equivalent per ton. Their very first drill hole in Tonopah struck a new vein 10 feet wide grading 70 ounces of silver equivalent per ton, and continuing down they hit the Victor vein (a vein known from previous mining) that was 90 feet wide and grading 31 ounces across the entire 90 feet! Not bad for a first hole in a district new to them.

They currently have three drill rigs working on their property and are continuing to hit some excellent intercepts of rich silver-gold ore in grade ranges typical of the early day ores. With the success of their drilling program, originally slated to consist of a total of 21,000 feet of drilling in a number of holes, they have contracted for more work and expanded the exploration program to 62,000 feet of drill exploration. Their share price has ranged from around \$0.70 to a \$1.10 in recent months.

Likewise, Summa Silver has only acquired its Belmont property that consolidates the eastern end of the Tonopah district in April of 2020. Like Blackrock, they have hit the ground running and now have two drill rigs working. It is interesting that both companies, while fully separate, have been partly financed by significant seed money from famed precious metals investor Eric Sprott. It seems that Sprott must think highly of the Tonopah district's potential. In June, Summa announced a 23,000-foot, 15-hole summer drilling program to start exploration at the Hughes Property in Tonopah, Nevada. They selected a number of targets based on extensive three-dimensional modeling of the geology, faults, veins and underground workings of the historic mines on their property. The stacked nature of some of the veins in the Belmont Mine area means that many of the planned drill holes will be testing multiple vein systems as they penetrate downward. They have also hit some nice high-grade intercepts and are continuing to drill while awaiting more results from the assay labs. Their stock has ranged from about 50 cents to \$2.50 per share in recent months.



Here is a reverse circulation percussion drilling rig set up and drilling in west Tonopah. This type of drilling yields small chips and sands for assay testing and is fast and lower cost.

Viva Gold continues to drill on their Tonopah

project located along the San Antonio range front in Ralston Valley about 12 miles north-northeast of Tonopah. Once known as the “Midway” project, their deposit is a low-sulfidation epithermal gold system with near vertical quartz-adularia-gold veins hosted by the Palmetto Formation and bulk minable lower grade ores in the overlying rhyolitic Tertiary volcanic rocks. With the exception of a single outcrop, the gold-bearing mineralized zones are covered over by gravels and younger volcanic rocks. The area has been explored off and on for about 20 years and Viva acquired it several years ago when Midway Gold went bankrupt. They have been drilling for several years themselves now, and are able to estimate a measured and indicated open pit resource of 326,000 ounces of gold at roughly 0.9 grams per ton. Viva targeted an additional 19-hole drilling program this summer to further delineate its resources. Results of this drilling are just now being reported as the assays come in.

West Vault is gearing up for its Tonopah area project, which incorporates resources at both Three Hills and Hasbrouck Mountain. The two deposits are about six miles apart but are of a similar nature with a low stripping ratio for an open pit operation. Both properties have long been recognized as known gold resources with a combined total gold endowment of nearly one million ounces. Hasbrouck also has some silver. Grades are not high, and the increased price of gold is very helpful to the economics of the project.



Tonopah was always a camp with too many different property owners (each color is a different company). This map shows how there were many different blocks of just a few claims that were trying to work in the district. This is why it's such a big deal that a couple of companies have finally consolidated the many mining claims located here.

There is not a lot of exploration here as West Vault is focused on advancing the project into production. The first pit and heap leach operations will be at the Three Hills location, which already has all its federal and state permits. Three Hills lies just on the outskirts of Tonopah, adjoining the property of Blackrock Gold. The company is working towards completing full federal permitting for the Hasbrouck Mine to the south as that will become the second phase of the operation. No start for construction of the mine and related facilities has been announced.

Just to the south at Goldfield, Gemfield Resources, a private company managed by Waterton Global Resource Management, is under construction to operate its new open pit mine at Goldfield. The gold resource was found to pitch westward underneath Highway 95, and the Nevada roads department has now re-aligned the highway to allow for the pit to be placed where the highway used to be. (The company paid for the changes.) The open pit mine will ultimately be 3,500 feet long and 3,300 feet wide at its longest and widest sections, covering an area of approximately 160 acres. It will not, however, disturb the old town of Goldfield. The mine will have 20-foot benches and extend to a maximum depth of 525 feet below the current surface. The operation will employ about 90 people and produce an average of about 125,000 ounces per year for an estimated 12 years, operating a heap leach system for recovery. This will bring a big economic boost to Goldfield, a community that has struggled for years.



The deeper ores now being drilled by the companies exploring Tonopah have unoxidized sulfide minerals. The dark spots in this ore are the silver sulfide minerals that Jim Butler thought he saw on the surface.

Even farther south at Beatty, exploration has also been roaring forward. Corvus Gold has made a number of new discoveries, Anglo Gold has been pushing forward with heavy exploration drilling at its Silicon project, and Coeur is very active at its Sterling project. The Beatty area was a very large gold producer in the 1980s and 1990s, but the current discoveries have the potential to eclipse both the production of the early days and the production of recent decades combined.

The moral of this story is to never count Nevada out. It's a rich gold and silver producer, and it seems like there is always something more waiting to be found. Perhaps the most obvious stuff has been recognized, but the things a little below the surface, like the veins now being found in Tonopah, always hold some potential. Additionally, over time, geologists and prospectors learn more and figure out how the deposits form and where they ought to be located.

One hundred and twenty years ago, Jim Butler showed the world there was more ore to be found in Nevada and it seems like miners and prospectors are doing the very same thing today.

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