

The Golden Fleece Group

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Area

The Golden Fleece consists of the Golden Fleece patented claim and the Golden Fleece Extension of 7 unpatented claims which surrounds the patented section.

Location

Property is located a short distance above Poeville, an old deserted mining camp on the eastern upper slope of Mt. Peavine - 10 miles from Reno.

General Conditions

Climate conditions are good with some precipitation. No trouble operating 12 months per year. No timber - ample water for milling should be found at shallow depths.

Geology

The mines under consideration are in a pre-Tertiary series of schist and andesites into which dykes of quartz-monzonite have been intruded. All the rocks have been so intensely altered by hot solutions that in the vicinity of the vein the rocks are soft white masses of quartz, gangue and decomposed feldspar with abundant pyrite crystals.

History

Not much is known of early operations of the Golden Fleece mines. It is mentioned in annual reports of the State Mineralogist of Nevada for years 1872 to 1895. However, beyond saying that the tunnel has been driven on an 8 ft. vein for a length of 800 ft. and that a winze had been sunk to a depth of 80 ft. with a heavy flow of water, little technical data are given in the reports.

A statement is also made that high-grade ore was found in the tunnel and that was found to be very refractory. The Reno City directory for 1882 gives the same information but says that the high-grade ore was being stored in an ore house and that the owner was trying to raise money for equipment to handle the water. In his report to the Director of the Mint (1881), H. C. Buckard says that the Golden Fleece had opened an 8 ft. vein by incline and tunnel.

In 1904, Peter Lynch tried to open the mine but died before starting work.

W. E. Shirley, of Verdi who owns a property west of the Golden Fleece had waded thru water and crawled over caves in the Golden Fleece tunnel in 1904 and the tunnel was not badly caved in for 350 ft., but could not get beyond that point and did not get to the winze because of dangerous conditions. He said about 20 tons of good ore was piled up at the mouth of the caved tunnel and samples of this averaged \$125.00 per ton.

He did not remember the metallic content but there was about 1/2 oz. gold and a small amount of copper. Most of the values were in silver. He said Mr. Leon Meyers who was married to one of the owners stated that ^{there was} high grade ore in a ⁵ft. wide vein. Nothing is known of the length of the shoot. From this [^]information I am of the opinion that the ore resembled that at Poeville where all the early day attempts at milling were a failure because of the copper and antimony in the ores.

In 1916 the ^FTravel-Paymaster at Poeville operated a small flotation mill and made a very high grade concentrate.

This was a bad stock promotion and as the mine had been inadequately developed, they were soon out of ore and ceased operations.

Production

I could not find any record of production from the Golden Fleece mine. There was some production at Poeville and it is possible that some lots of Golden Fleece ore were treated there and some may have been shipped to the Comstock plants. The former operators are all dead and the present owners do not have any authentic information on the production from the mine.

The Golden Fleece Extension is a small ^ocrass fissure that has made some production in recent years. It is also probable that at least some of the good ore that remained in the Golden Fleece tunnel dump is contained in the shipments from the Extension. There is no ore whatsoever on the Golden Fleece dump at the present time. There are some piles of ledge matter containing pyrite which is said to assay \$5.00.

Mr. Gus Nordstrom, owner of the Golden Fleece Extension claims, showed us all except some of the smelter returns from small lots that he has shipped. The ones at hand are as follows:

Lot #12549	Date 12/13/23	Au - 0.55 oz.	Ag - 143.70 oz.
Lot # 3546	Date 5/22/23	Au - 1.38 oz.	Ag - 137.40 oz.
Lot #14437	Date 11/30/23	Au - 1.45 oz.	Ag - 166.70 oz.
Lot #16397	Date 5/ 9/24	Au - 1.65 oz.	Ag - 162.50 oz.
		Pb - 2%	Sb - 12.64%
Lot #64932	Date 7/10/23	Au - 0.74 oz.	Ag - 133.50 oz.
Lot # 4930	Date 11/16/23	Au - 0.27 oz.	Ag - 125.3 oz.
		Cu - 8.13%	INS - 42.0%
		S - 21.3%	Fe - 14.1%
Lot # 6668	Date 7/11/29	Au - 1.3 oz.	Ag - 188.00 oz.
		Cu - 12.45%	Zn - 6.4%
		Fe - 13.2%	S - 24.8%
		INS - 25.6%	

The earlier shipments were to sampling works and no detailed analyses were given. The last 2 samples were from the lower levels where the ore now exposed is a massive sulfide - about 55 tons were shipped with a value about \$6000.00.

Golden Fleece Claim - This is a country of high relief and rapid erosion. The rocks being soft, the range has been divided into a series of steep rounded hills covered with deep soil and talus, and as the veins

themselves are soft and crushed, outcrops of veins are entirely absent. The ore deposits were discovered by careful and tedious prospecting and the tracing of small pieces of float. It is reported that the main Golden Fleece vein had an east and west strike and dipped to the north. There is some indication that the vein may strike north-west and south-east and dip to the north-east. It is known that the tunnel is a crosscut to the vein for several hundred feet. It is probable that the entire distance open to Mr. Shirley in 1904 was crosscut and when he reached the vicinity of the soft vein, everything was caved shut. If the vein is anything like the one in the Extension or the ones at Poeville, and it is reasonable to assume it will be like those, then it will be a soft altered mass of wet material requiring heavy timbering until drained.

The airshaft, now caved full, was no doubt a raise above the winze sunk on the orebody found in the tunnel.

Golden Fleece Extension

The vein in this property is from 3 to 5 ft. wide.

The felling consists of soft gouge and crushed quartz with well defined walls. The strike is about S. 10° W. and it dips from 45° to 60° westerly. Both strike and dip vary in places. About 2 ft. above the footwall there is a narrow streak of sulphide ore from which shipments have been made. This varies in width from 2 inches to about 12 inches. It will average about 6 inches. The shoot has a decided pitch to the south and the south faces of the lower levels are now at the end line of the Golden Fleece claim. The shaft is 160 ft. deep on the vein and above the 80 ft. level the vein is oxidized and then abruptly enters the sulphide zone.

A sample of the sulphide ore taken in the south drift of the 80 ft. level was from 3 in. to 6 in. wide. It ran gold 0.56 oz; silver 80.2 oz; copper 3.10%. This ore was partly secondary and showed considerable sooty chalcocite precipitated on the primary chalcopyrite.

A sample of this same ore streak in a short crosscut on the 100 ft. level south was 10 in. to 12 in. wide and ran gold 0.52 oz; silver 72.1 oz; copper 3.4%.

A sample from the same streak in the main 100 ft. level drift south across 6 to 8 inches and ran gold 0.56 oz; silver 69.6 oz; copper 2.5%.

A sample on the 125 ft. level south across the same streak for a width of 3 to 8 inches ran gold 0.32 oz; silver 65.6 oz; copper 3.2 oz.

The soft white ledge matter next to the ore ran gold 0.04 oz; silver 2.4 oz; copper trace and is not ore.

While there is some quartz in the ore, most of it appears to be a massive sulphide and therefore nature has already concentrated it. The secondary chalcocite has already been mentioned. I believe that the silver is found in stephanite, and antimonial silver mineral; a tetrahedrite, an antimonial copper silver mineral, and some is not doubt associated with argentiferous galena of which small quantities have been found. The first two sulphides mentioned no doubt account for much of the antimony but it is quite possible that stibnite, the antimony sulphide, is also present. It has been reported in the old Poeville properties. Zinc sulphide is

indicated by the percentage of zinc in the shipping ore. The gold is probably associated with chalcopyrite, an iron-copper sulphide.

Should bodies of milling ore be found containing these sulphide minerals, it should be possible to make a high grade concentrate and to depress much of the zinc and such iron pyrite as may be valueless.

The ore shoot in the Extension workings is at least 100 ft. long and extends to the south limits of the property.

There is no ore in the north drifts. However, this streak is so small that it is not commercial, and the available tonnage up to the property lines is inconsiderable. The chief value of this work to me was that it indicated the nature of the ore found in the vicinity, and it verifies the description of the ore that had been found in the old Golden Fleece. My samples would indicate an average of one from \$60.00 to \$70.00 per ton. It should net \$50.00 at the smelter. Moreover, as this small vein strikes at an acute angle to the Golden Fleece vein, I should expect to find an ore body where the two intersect which would be perhaps 500 ft. south of the present workings in the Extension shaft.

Conclusion

Many experiences of the mining companies in Nevada in opening up old properties with the expectation of discovering ore bodies left by the early day operators have been disappointing. In fact, that has been the rule, rather than the exception. Often the stories were not deliberately untruthful but the ore was removed after the individual had left the mine. Moreover, we must remember that the Comstock was prosperous in those days and large fortunes were made by operators which were being spent in developing other properties. It seems strange therefore why the Golden Fleece operators could not be financed and proper hoisting and pumping equipment be bought. The fact that the tunnel was 800 ft. long and then a winze was sunk at the 500 ft. point might mean that they did not have any ore in the last 300 feet. It might also be due to the fact that the air shaft above the winze is in the most favorable place on the ridge for surface improvements. No reliance can be placed on the statements about the width of the ore.

The reports that the vein was 8 ft. wide were probably true and were supported by various early day publications as quoted. I shall expect to find such a vein and in this an ore shoot of shipping or milling ore of unknown width and length.

From past experience in similar undertakings I am dubious that large bodies of high grade ore were left by early day operators, but after all very little work was done on the property by them, and the geological conditions of the area are not unfavorable to the possibility that more development work will not make a mine of some consequence. Operating conditions are favorable and if the vein can be proven farther to the west, it would be possible to open it to considerable depths by tunnels from the deep canyons on the west.

As I remember that canyon, a depth of 1000 feet might be obtainable, but as we do not know the exact course of the vein as yet, no prediction of the practical feasibility of such a deep tunnel can be made at this time. If the vein does have a westerly course then it can be opened and much expense for hoisting and pumping can be saved.

Favorable points are that the ore was refractory and with the absence of western smelting works at the time, it could not be treated successfully by the methods then used. Another favorable point is that the ore was high grade in general. There have been enough supporting facts including my own samples in the Extension, to verify the reports made to you. The quantity of such ore is unknown but it would take only a few hundred tons to repay the cost of opening the old tunnel. I should not expect to find this tunnel completely shut by caving until the vein is reached. Beyond that point I expect to find it in bad condition.

In addition to these favorable data, I would add the fact that really very little work was done by the early day operators and that you yourselves might develop a property of consequence entirely disregarding the former ore discoveries.

Nevertheless the undertaking remains a distinct gamble with a number of adverse facts to be considered. The purchase price is so small that it can be disregarded as an important factor, but the fact remains that technical data such as ordinarily are obtained in an examination are so lacking or so vague, that a recommendation for which an engineer could be held responsible, is very difficult to make. However, the amount of money involved may not be great, and there is a possibility that this can be returned from ore shipments even if no mine of consequence is found.

Very truly yours

Signature

E.M.