

April 7, 1930.

Mr. Geo. H. Moore,
and Associates,
Joplin, Missouri.

Dear Sirs:

Herewith report on the Talmadge Gold Mining Company.

PROPERTY.

The property formerly owned by the Talmadge Gold Mining Co. has been taken over by the Tulsa Goldfields Mines Co., under a tax payment of the 1928 taxes, and a purchase of the stock holdings of Mrs. Anna Hayes. The original title to thirteen claims is held by United States Patent.

Under the original Talmadge Company, these claims were the Senator, Duckwater Dam, Alhambra, Atlanta, April, Apex, Annie Fraction, Lost Canteen, Long Shot, Economist, Tom Henry, Gold Bell and Friday, approximating 270 acres.

To this under the Tulsa-Goldfields Company, have been added three claims, Overlook, Overlook Fraction and Duckwater Dam north $\frac{1}{2}$, which were obtained from Mrs. Anna Hayes by a quit claim deed.

The total claims approximate 320 acres.

LOCATION.

The location of the property is within the inner circle of the Goldfield Mining District, Esmeralda County, Nevada. All the claims with the exception of the April, Gold Bell, and Apex lay in the SW quarter of Sec. 30 and NW quarter of Sec 31, T 25, R 42 E, one mile east and one mile north of the town of Goldfield. The April, Gold Bell and Apex lay in Sec 11 and Sec. 12, T 3S, R 42 E, one mile south and one mile east of the town. These last claims lay south and slightly west of the property of the Goldfield Deep Mines Company, while the others are due north of the Deep Mines Company. Both set of claims are adjacent to town and the Tonapath & Tidewater RR, and have passable auto roads leading to them.

The north set of claims lie along the northeastern slope and upon the apex of Vindicator Mountain; the three south claims are upon Myers Mountain.

GEOLOGY.

The Goldfields District has been the center of a series of volcanic upheavals, through lake bed sediments, most of which sediments were tertiary lavas. After the upheaval, partial erosion, and

Laying down of these successive lava beds, an extensive lake of fresh water covered the region in which some 1000 feet of conglomerates, tuffs, sands, pumiceous ash and diatomaceous earth were deposited. Volcanoes continued active during the age of this lake and it was eventually swept away by disturbances, and the lake leveled by erosion. Following this, volcanic upheavals and disturbances, with flowings of rhyolite lavas and basalts, continued, until these, due to erosions and weathering, brought about the present surface. The district is essentially a low, domical uplift of Tertiary lavas and lake sediments resting upon a foundation of ancient granitic and metamorphic rocks. These oldest rocks are exposed in the center of the district on Vindicator and Columbia Mts, and here this Cambrian formation of shales and limestones have been changed to quartzes and quartzite due to intrusions of granitic rock. To this metamorphosed rock the name Alaskite has been given, and is together with some unaltered Cambrian shales, the oldest formation of the district. On these in turn rest Vindicator rhyolite, latite and various other rhyolites and basalts in the order of their occurrences.

ORE DEPOSITS.

The ore deposits have been remarkable for their richness and also for their irregularity. The deposits have formed along zones of fissuring, which are very irregular in trend and are not planes of notable faulting. Up to the present, most of these deposits have been of high richness, usually occurring in fissures or ledges in the formations from the Alaskite upward. At the present time deep mining is going forward to ascertain the possibilities of ore deposits in the Alaskite and Cambrian granites. Previous to this most of them have been in fissures above the Cambrian and Cambrian shales. Most of the ores contain some free native gold, but most of it is sulphide of gold, containing copper, silver, antimony, tellurium and other elements. Much of this is oxidized, so that the high grade ores have been free gold carrying ferric telluride and sulphides. Much of the ore is rusty due to the presence of limonite.

ROCKS of the TALMADGE CLAIMS.

The claims of the Talmadge group laying on Vindicator Mt. consist primarily of a center core or dome of granite and intruded Alaskite making up the center of the mountain, with Vindicator rhyolite and latite forming the eastern and southeastern slopes. The line of demarcation of these formations can and were easily traced

upon the surface, showing a contact plane between the underlying granite and shale and the thiolite and latite. A ledge or vein outcropping occurs on the Alhamgra claim bearing NE-SW and seeming-continues NEE to the Moroney claim across the valley.

PRESENT DEVELOPMENT.

Upon each of the 13 claims on Vindicator Mt., there are shaft open cuts and trenches. The principal shaft is 265 feet deep on the Alhamgra claim, and is sunk on the ledge or vein, here about six feet wide. This shaft formerly was fully equipped with head frame and hoisting equipment, but is not now. An engine room containing a 20 HP motor and a hoister which will require overhauling, and a three bank transformer is all that is left. The timbers of the shaft are also dry rotted, so that it was impossible to go down it. It is from this shaft that \$14280.00 of gold was taken from the vein on the 150 foot level. The other shafts and crosscuts on the claims are mostly assessment work on the original claims and were also impossible to enter.

LEGAL TITLE.

The title to the 13 original claims of the Talmadge Company are United States Patents listed in 1918-19 and 1920 as owned by the Company; in 1921 taxes were paid by O.P. Grimes and they were assessed to him; in 1922 to 1927 they were listed and taxes paid by Talmadge Company; the 1928 taxes of \$280.55 were paid by M.E. Cline, and the stock held by Anna B. Hays was signed over by her to Mr. Cline. The 3 claims, Overlook, Overlook Fraction and N $\frac{1}{2}$ of Duckwater Dam, were listed in 1918-1919 as belonging to Gold Button Co.; in 1920-21-22-23 they were listed as Talmadge Co.; in 1924-25-26-27-28-29 they were listed to Anna B. Hays. These three were deeded by her to M.E. Cline in 1929. Hence it would appear that the old stockholders of the Talmadge Co. have an equity claim in the 13 claims, subject to the taxes paid in 1929 by M.E. Cline. The Talmadge is defunct due to losing Charter papers because yearly reports were not made to State, but it would appear that their proportionate title to the claims would still hold subject to the tax payments above. If this is past redemption, the title would hold in M.E. Cline or Tulsa-Goldfield Co. as on a tax sale.

MORENY CLAIM.

The Moreny claim lays Northeast of the Talmadge on the west

edge of the mountain. Here Mr. Moreny discovered a rich ledge or vein, which assayed \$198.00 a ton gold, occurring as red honeycomb ore. He has sunk some 40 feet on the ledge and the ore value are approximately \$40.00 on a 6 foot vein. The vein or ledge runs NE-SW and appears to be continuous with the ledge on the Alhambra, with the Overlook, Overlook Fraction and Duckwater Dam claims laying in the bearing direction.

VALUES ON TALMADGE.

Because of the oldness of the workings on the Talmadge, no new ore samples were taken for assay purposes. However as complete a check was made as possible of the assays which have been previously made.

Mr. C.P. Carlson in 1925 entered the shaft of the Alhambra and gave me the following information. The ore level is at the 150 foot level instead of 50 foot, and water stands about 70 feet below this; hence there is only 45 feet of water in the shaft. The lower lever at 265 feet is impossible of entry without pumping, but he entered the 150 level and took 5 assays on the face which ran from the lowest-\$8.80- to the highest-\$22.80- per ton gold. This is along the slope from which \$14280.00 was taken in ore running \$81.00 per ton. At the apex of the vein on the surface Mr. Carlson found values of .80 cents per ton. See sketch of shaft and vein showing dip SE along the sides of the granitic dome, hence probably sloping underneath the Duckwater Dam and Overlook to SE.

On the loading dump of the shaft are the remnants of the ore taken from the 150 level. These Mr. McConnell assayed in lump as follows:- lowest \$8.00-highest-\$28.00-per ton. This checks very closely with Mr. Carlson's assay. The other shafts and trenches on the claims contain gold showings and assays here would only tend to the same end, -namely, would show the undoubted presence of gold ore ranging up to \$20.00 per ton. This is none of it HIGH GRADE, but high-grade was taken from the shaft in the original work. Mr. Maroneys claim also contains High Grade-\$198.00- and would seem to be the same ledge as the Alhambra. See sketch attached showing surface and trend between Talmadge and MaBoney.

POSSIBILITIES.

The geology of the Vindicator Mountain claims shows the right formation present for the occurrence of gold; the presence of \$81.00 a ton ore at the 150 level, and the present assays of \$8.80 to \$22.80 in this level, show that gold ore is actually present. The strike on the Maroney claim to the NE of \$198.00 on the surface and \$40.00 at 40 foot depth, also shows this. As to whether these continue with the vein and will prove High-Grade-or commercial lowgrade, it is impossible to definitely state. If development work could be carried on at a minimum cost, it would seem worth while doing so. Only a

certain amount of development work, would prove the value of the claim. Without this work, it is certain that the claim has merit, but how much, only development will show.

POSSIBLE DEVELOPMENT.

If development work were started on the Talmadge, there are two methods open for procedure; one, to repair the shaft and crosscut from it to encounter and open up the ledge; two, to drive an open cut and tunnel in from the Overlook claim and out to the shaft. The later is the cheapest and easiest. Mr. Alyard of the Alyard Mchy. Co. advises it will cost \$2250.00 to reequip the shaft in machinery, and then some \$10.00 per foot for drifting and crosscutting, which would require some 700 feet. To drive and incline tunnel through the Overlook, would require \$1000.00 for machinery, and \$10.00 to \$12.00 per foot, for drifting, with the advantage that no hoisting would be required if commercial ore be encountered. Probably 700 to 1000 feet of crosscutting would be required. ✓

If work is undertaken, it should be borne in mind that the greatest drawback that Goldfield District has had, has been the lack of mills and the consequence that only highgrade ore was handled, and shipped away for treatment. If proper milling equipment be installed it would be possible to treat the \$8.00 to \$22.80 ore at a profit. Mr. Alyard is sending figures and prices on machinery, and later a fairly definite price could be placed on the cost of a small tonnage mill. A breaker type mill, with Ball mills, flotation and possibly cyanide, could however be installed for a probable cost of \$75000.00. The only drawback to milling on the ground is lack of water, but I believe if conserved as here by dams and pumps, there would be ample for a small mill. There is now available 60 gallon a minute from a shallow mine under the hotel and town, and the Deep Mines Co. at the 1850 foot level, are pumping as much more. City water, which comes from Lida, 30 miles away, is available at 65 cents 1000 gallons. Electric power is available at an average cost of .014 cent per HP hour. This is the average cost at the Bradshaw Cyanide plant which is now handling 1000 tons of slimes daily.

CONCLUSION.

The Talmadge group of claims on Vindicator Mountain are not a proven commercial gold mine. Gold is present in almost commercial values, and considering the geology and lay of the claims, if plans can be worked out for a reasonable amount of development, at reasonable expense, a few thousands expended, should prove ~~the~~ the value of the claims.

Respectfully submitted,

Robt. W. Johnson.

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