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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: GOLD ROAD ANNEX

ALTERNATE NAMES:

MOHAVE COUNTY MILS NUMBER: 24B

LOCATION: TOWNSHIP 19 N RANGE 20 W SECTION 13 QUARTER C  
LATITUDE: N 35DEG 01MIN 56SEC LONGITUDE: W 114DEG 21MIN 28SEC  
TOPO MAP NAME: MOUNT NUTT - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:  
GOLD LODE

BIBLIOGRAPHY:

ADMMR GOLD ROAD ANNEX FILE  
ADMMR MOHAVE CUSTOM MILL PROJECT  
SCHRADER, F.C. "MIN. DPSTS OF CRBT RNGE, BLCK  
MTNS, GRND WSH CLFS, AZ" USGS BUL 397, P 165

08/04/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: GOLDROAD ANNEX GROUP

ALTERNATE NAMES:

MOHAVE COUNTY MILS NUMBER: 24B

LOCATION: TOWNSHIP 19 N RANGE 20 W SECTION 13 QUARTER C  
LATITUDE: N 35DEG 01MIN 56SEC LONGITUDE: W 114DEG 21MIN 28SEC  
TOPO MAP NAME: MOUNT NUTT - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:  
GOLD LODE

BIBLIOGRAPHY:

ADMMR GOLD ROAD ANNEX MINES CO. MINE FILE  
ADMMR MOHAVE CUSTOM MILL PROJECT  
SCHRADER, F.C. "MIN. DPSTS OF CRBT RNGE, BLCK  
MTNS, GRND WSH CLFS, AZ" USGS BUL 397, P 165

NUMBER	FILE	CONT	CONT1	PRINAME					
24B	F	0	N	GOLD ROAD ANNEX					
ALTNAME1					ALTNAME2				
ALTNAME3					ALTNAME4				
ALTNAME5					ALTNAME6				
CURSTAT	MNAME			NLATDEG	NLATMIN				
EXP PROSPECT	MOUNT NUTT - 7.5 MIN			35	01				
NLATSEC	WLONGDEG	WLONGMIN	WLONGSEC	TOWN	RANGE	SECTION	QUARTER	COM1	
56	114	21	28	19 N	20 W	13	C	AU	
MOD11	COM2	MODI2	COM3	MODI3	COM4	MODI4			
LODE									
COM5	MODI5	COM6	MODI6	COM7	MODI7				
BIB1									
ADMMR GOLD ROAD ANNEX FILE									
BIB2									
ADMMR MOHAVE CUSTOM MILL PROJECT									
BIB3									
SCHRADER, F.C. "MIN. DPSTS OF CRBT RNGE, BLCK									
BIB4									
MTNS, GRND WSH CLFS, AZ" USGS BUL 397, P 165									



# REPORT

on Properties of the  
**Gold Road Annex Mines Co.,**  
at Goldroad, "Arizona"

Exhibit "A"

Cananea, Sonora, Mexico.  
January 15, 1916.

Gold Road Annex Mines Co.,  
Goldroad, Arizona.

Gentlemen:—I respectfully submit the following report, which in view of the time I spent in field work on your property, is not as comprehensive and lucid as I could have made, were it not for the fact of the urgent and extreme demands unexpectedly made upon me at this time.

I will preserve all detail notes and data and at some future date, if required, I will render you a report, complete with detail maps and presentation of facts such as will carry conviction to the most skeptical. In the meantime I trust the following will be of use to you, and in furtherance of this end, I will gladly answer by mail any inquiry, if concise, that may be made by anyone desiring information further than that contained herein.

The time spent was little more than a month, over three weeks of which I, together with an assistant, put in on the ground. The work consisted of surveying and mapping and in working out and making deductions from important geological features and relations, and from facts characteristic of the district.

The property consists of six claims and three fractions, viz: the Mohawk, Sunlight, Mojave, Oversight, Gold Coin, Daylight and the fractions: Red Bluff, Triangle and Wedge, containing in all an area of approximately 146 acres.

## LOCATION

The property of the Gold Road Annex Mines Company is situated in what is referred to by Schrader, in U. S. G. S. Bulletin No. 397, as the most important district in the Black Mountains, same being the area around which is located the now famous Gold Road-Tom Reed District, Mohave County, Arizona. The largest producer and pioneer mine of this district, is the Gold Road Mine, which adjoins the property of the Gold Road Annex Mines Com-

pany, the latter forming an extension of the same. The Mohawk, which is the most westerly claim of the group, is one-quarter of a mile in an easterly direction from the town of Goldroad and about one and one-quarter miles in an air-line from the town of Oatman. Kingman, which is the County Seat of Mohave County, and the principal supply point for this district, lies twenty-four miles to the northeast, by county road, which road crosses the property of the Gold Road Annex Mines Company, and also connects with the town of Needles, California, about the same distance to the southwest. The main line of the Santa Fe Railroad reaches both of these places.

### TOPOGRAPHY

The property lies on the slope of the rugged Black Mountain, the surface features are rough, characterized by great volcanic flows, highly weathered and considerably eroded. The average altitude is about 3100 feet above sea-level.

### GEOLOGY

Seated in a highly mineralized zone, bordered on the one side and end by the famous Gold Road Mine, and close by on the other side by the property of the Gold Ore Mining Company, a proven mine, the prospects of mineralization, both from geological deductions and from the present surface developments assume an aspect of much portent.

Running in a north-westerly south-easterly direction, a rhyolite dyke dipping at a steep angle of seventy degrees to the northeast, closely paralleling the Gold Road vein, and undoubtedly affecting it by a lateral throw, at a point close to the south side line of the Gold Road Mines Company's Billy Bryan claim and on which dyke the Gold Road Bonanza Mining Company has done its development work, the throw above referred to having proven a true indication of ore.

This same dyke is again laterally faulted by a throw to the north of about 650 feet, thus causing it to appear on your Sunlight claim, the fault line being close to the westerly end of said claim. It is here on this Sunlight claim that the earlier development work, consisting mainly of a shaft 157 feet in depth, has been done; values characteristic of the district prevail at the surface and the running of a cross-cut at the bottom of the present shaft, which is in good condition, will probably expose a considerable body of commercial ore, as more than five feet width of ore is exposed near the shaft at surface. This area has been given a great deal of attention and I would advise the future development in this vicinity, although there are other numerous showings on your ground worthy of consideration and development.

The country rock consists of a complicated volcanic series comprising andesite, latite, trachyte and rhyolite, and has been aptly termed the "undifferentiated flows." Later intrusions of rhyolite and reddish brown andesite occur in places, and at the upper part of the property, principally on the Gold Coin and Oversight claims, areas of other mineralization are prominently exposed by the many water courses, cutting the numerous silicified cappings. To the southeast, covering large portions of the Mojave and Daylight claims, the undifferentiated volcanics composed largely of andesite, are overlaid by a sheet of light colored rhyolite tuff, which is in turn capped in a few places by a more recent flow of basalt. This basalt is of a reddish brown color, amygdaloidal in places and it marks the steep rugged portions of the ridge which passes over the property.

The mineralization of the whole district has undoubtedly been brought about by upwardly percolating waters, fed through definite underground courses, the direction of which, established more or less accurately in the workings of the Gold Road Mine, point at an angle toward the "summit fault", which F. C. Schrader speaks of in his report of the district. This fault traced for miles across the country, bearing about N. 7 degrees W. and dipping 70 degrees to the east, passes over the Sunlight claim, cutting the center line about 500 feet from the northwest end line. The shearing action in the upper sheets resulting in the lateral faulting of the rhyolite dyke, hap-

pened at a period subsequent to the formation of the summit fault, as it appears to cut the latter, changed and is lost at the contact with rhyolite tuff. Furthermore, about 100 feet to the north another large dyke composed principally of rhyolite and carrying good values in places, at the contact with andesite, appears to cut the summit fault and pass over onto your property on the Red Bluff claim, and is apparently lost under the tuffaceous rhyolite.

Now, although the Gold Road vein seems to have been affected at another point by a later lateral throw of the dyke, (already referred to) it is quite evident that the displacement in discussion took place before the formation of the vein, since at the place of faulting the re-appearance of the dyke is on the opposite side, over the Sunlight claim, leaving it continuing along its same course. Also there must be a relationship between this Gold Road vein and the summit fault, because at the point where the junction would occur, following natural courses, the former apparently veers off to the south, joining with the line of faulting at a sharp angle, where it seems to pinch. Since the mineralizing waters came from a region below, it is my opinion, based on the position of the veins that they were fed up along this summit fault plane, resulting in the enrichment of other water courses, one of the proven ones being the Gold Road lode.

Therefore, following up a natural conclusion, the dyke on your property would be mineralized and should be accompanied at depth with extensive ore bodies. It is composed essentially of rhyolite, of a light color, with small pheno crystals of quartz, feldspar and biotite. At the surface croppings calcite is abundant in the felsitic ground mass. At several points developed in the district it has been proven that calcareous material becomes silicified with depth, and is often replaced by quartz.

Another of these courses of much importance is represented by the large lode called the Patterson vein, which outcrops in strongly defined silicious ledges, and is easily traceable for a distance of over 2500 feet on the Red Bluff and Daylight claims, before it is covered by the surface flow of basalt on the Gold Coin claim. Surface openings have been made on this vein at several places, showing the usual low grade surface ore of the district and I would strongly recommend systematic development of this vein as soon as work is well in hand on the Sunlight claim, as there is every reason to believe it will be productive of large bodies of ore.

### CONCLUSION

Future development work may indicate a better position for the main working shaft, but for the present, I would advise sinking the existing shaft and crosscutting to the ledge at the 150 foot level, both of which operations can be carried on simultaneously. As sinking of the shaft progresses, I would recommend that another cross-cut be driven at a vertical depth of 300 feet, other development to depend upon the information obtained in carrying on the above work. On at least one of the cross-cuts I would continue same until well into the main body of the rhyolite dyke, and would also run a drift on the vein, both north-westerly and south-easterly, connecting with the big fault in the dyke on the one side, and with the Summit Fault on the other, all of which work should produce an appreciable tonnage of good ore.

The old shaft being vertical cuts through the lead for 30 feet, where it passes out into the country rock for the remaining distance. It was through this first 30 feet that the values were found, and where a reddish dioritic conglomerate was encountered in the hanging wall similarly to that in the Gold Road Mine.

Another point to be considered is the fact that there is evidence of a split in the Gold Road vein near the south east end line of the "Billy Bryan" and referred to by Schrader. To quote the eminent geologist, (U. S. G. S. Bulletin No. 397 P. 165) he says: "The croppings of the Gold Road vein at the Billy Bryan mine are prominent and wall like but they probably do not represent the whole of the deposit. It is believed that the vein is split throughout the Line Road claim, and the beginning of the split being at the

mouth of the main drift. A stringer diverges here to the left, or north, and within a short distance enlarges to a side vein of fairly well-banded good looking quartz, three or four feet in width and carrying moderate values. After nearly paralleling the vein for 1200 feet at a distance of about 100 feet, this stringer re-unites with the vein near the east end of the deep works on the Billy Bryan claim, where good ore occurs at the junction and beyond. The area contained between the two veins is traversed by numerous parallel quartz stringers and veinlets. Just beyond the point of junction a similar side vein not shown on the surface, is said to have been encountered by a deep cross-cut 80 feet north of the vein."

This quotation is given in its entirety on account of its bearing on future developments in the Sunlight claim. The horizontal throw of the fault on the east end of the Billy Bryan claim and the west end of the Sunlight claim, which sifted the rhyolite dyke a distance of about 650 feet, was evidently accompanied by a tearing action between the blocks of ground on the opposite sides of the fault, tending to open a series of parallel fissures at right angles to the fault and accounting for the "side vein" on the Billy Bryan, and making it probable that other parallel veins to the one now opened on the Sunlight claim will be found in systematic underground development.

This "similar side vein" referred to is only a short distance from the end line of the "Sunlight", and in your development work, cross-cuts will probably disclose an identical condition. It is not probable that water will be encountered in any appreciable amount, until a depth of several hundred feet is obtained, and should you desire to conduct milling operations at an earlier time, you will have to obtain water from the water system that supplies the town of Goldroad, which system as already installed, passes directly over your property. Just at this time I would suggest the elimination of the expenditure necessary for the building of permanent roads, and would use the existing trails, which are fairly good, and can readily be made to serve your purposes for some time to come. In the advent of a road being built, the distance necessary, if a low grade is to be maintained, is in the neighborhood of one mile. The above suggestion could be facilitated by the use of electric power, which is now on your ground, for hoisting and lighting purposes, also for a compressor plant, if of small size. This would eliminate a great deal of heavy freighting and the incessant haulage of fuel.

The freight rate from Kingman is \$11.50 per ton. Outside of the shaft, timbers will not be required to any considerable extent, as the ground holds exceptionally well.

After having considered your property from every phase, I find that you have more evidences of good ore than ordinarily found on the surface in this district. The large area, the double vein system, the system of faults, your proximity to two proven mines, the existence of power and water supply and the development work already done, makes your property in my opinion, one of great value.

Respectfully submitted,

L. J. CARRELL, E. M.

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