

Tiller-Drew District
Douglas County

Name: Mother Lode Group (Quick Silver)

Owner: Louis Thomason, Drew, Oregon.

Location: This property can be reached two different ways. First, take the Tiller-Trail road and turn west at the Guard Station on the Three Horn Mountain road for a distance of about six miles to the property. The other way is to take the Drew-Cow Creek road to the Thomason Group and ~~for~~ 1/2 mile by trail to property, being on the south side of Cow Creek in the S.W. $\frac{1}{4}$ cor. of Sec. 16 and the N.W. $\frac{1}{4}$ of Sec. 21, T. 32 S., R. 2 W. Workings are at an elevation of 3000 feet. Mountainous topography.

Area: This group consists of 5 full sized unpatented lode mining claims.

Development: See inclosed sketch. All of the development work has been confined to the Mother Lode No. 1 claim.

Production: According to Bull. No. 4 Page 124 it has produced 30 flasks. Mr. Thomason states that the production will come nearer being 100 flasks as a lot of the mercury had been sold to the miners and never reported. 2 flasks were produced last summer by prospective buyers in testing the mine.

Equipment: The property is equipped with a two pipe re-tort (being in poor state of repair), 20 ton ore bin, blacksmith shop and 2 bunk houses.

History: The property was discovered by Mr. Louis Thomason and was worked in a small way until he sold it to the late Dr. Keizer. After Dr. Keizer's death the property was turned back to Mr. Thomason. Nothing has been done with the property since 1936 except for what little work was done last summer in testing the property.

Geology: The ore occurs along the foot and hanging walls of a sheer zone which is about 15 feet wide. Bull. 850 states that the Nivison property being a 1/2 mile to the north and the Red Cloud about 1/4 mile to the east is in a schist. In spite of this I believe that the country rock is a dacitic rock. I checked back on my samples this morning and they don't look like a schist. The cinnabar occurs as veinlets on both the foot and hanging walls. The latter is a little more productive and is said to be as much as 2 feet in width at times. Cinnabar can be traced along the sheer zone for over 3000 feet and strikes from N. 30 to 40° W. and dips about 80° to the northeast. A representative sample from the top of the ore bin, which was full of ore, showed 6 lbs. of mercury per ton. A sample

Mother Lode Group (continued)

Geology:

taken in the ~~stope~~ on No. 2 level across 18" went 2.4 lb. per ton. 40" on the north end of stope on the hanging wall on No. 2 level went 2 lbs. per ton. Mr. Thomason states that what mining he did ~~is~~ the ore averaged (hand picked) better than 6 lbs. per ton.

Conclusion: This appears to have some merit as a small quick silver property. Water and fuel are available on the property and the ground is not ~~too~~ hard and does not require a lot of shooting to mine.

A new furnace will have to be erected on the property.

Informant: J. E. Morrison November 6, 1938.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Report by : H. M. Dole
September 25, 1946

Mother Lode (Mercury)
Red Cloud)

Tiller-Drew Mining Dist.
Douglas and Jackson Counties

Lessee:

J. R. Davies
J. R. Davies, jr.

1409 Fort. St., Boise, Idaho, or
P. O. Box 653, Medford, Oregon

Under bond and lease for 5 years from:

J. A. Jaeckel, C. S. McDowell, A. M. Headrick, Horace White, and B. E. Hansen

Area:

Seven claims in the Mother Lode group.
Three claims in the Red Cloud group.
Five claims in the Thomason group.
All held by location.

Location:

See map.

Principally in the NW $\frac{1}{4}$, Sec. 21, T32S, R2W; and the SE $\frac{1}{4}$ and SW $\frac{1}{4}$, Sec. 16, T32S, R2W; Douglas County.

The property is 22 miles by road northwest of Trail, and is reached by turning west at the Divide Guard Station on the Tiller-Trail Hiway. By the Drew-Cow Creek Forest Service road the property is 30 miles east and north of Azalea, a postoffice on Hiway 99 thirty seven miles north of Grants Pass. The Drew-Cow Creek road is kept open throughout the year.

History:

Wilkinson (1.) reports that the property was first worked in 1906 for gold, and that it wasn't until 1930 that cinnabar was mined. He gives a reported total production of 60 flasks.

Schuette (2.) states that the Thomason group was located in 1931 and the whole property was acquired in 1932 by the Research Mining Company who worked it in 1932 and 1933. He further reports that the property was idle in 1934 and that Dr. Russell Keizer bought it in 1935. Total production is given as 35 to 40 flasks with 30 of the flasks being produced in the period 1932-'33.

Mr. Frank Hobson the present engineer reports that total production up to 1941 will not exceed 75 flasks.

Topography and Climate:

The portals of the prospect are between 4100^e feet and 4300 feet. The topography is rough and mountainous. The climate is mild. Several inches of snow fall in the winter months but does not seriously impede mining.

Development work:

See map.

To date there is approximately 1300 feet of drift in 3 tunnels. An additional

200 feet, which includes a fourth adit, is inaccessible.

There are two raises, both in bad condition; their total height is approximately 45 feet. Some stoping has been done in previous operations but it has never gone above 2 sets in height or 7 sets in length. Their present condition makes them unsafe for investigation.

Geology:

The adits of the Mother Lode are in a fault zone within the May Creek schist (Devonian?) One half mile to the east, Tertiary volcanic flows form the top of a ridge. (3)

Shell out
The trace of the fault zone is marked by a shallow ravine on the side of the hill and a low spot on the ridge. In the upper tunnel (No. 1) the fault zone has a strike from S32E to S35E and a dip to the northeast from 78° to vertical. In the No. 2 tunnel, 36 feet vertically below, the strike is from S25E to S34E with dips to the northeast from 68° to vertical. Sixty three feet below No. 2 tunnel, and in tunnel No. 3, the strike varies from S27E to S35E with dips from 76° to vertical. The width of the gouge and mineralized zone between the walls varies from 3 feet to 12 feet. An average width would probably be around 4 to 5 feet. Fractures within the gouge zone are fairly frequent but their continuity is unknown. Near the face of tunnel No. 2 one such fracture occurs which, according to the company maps, appears to show continuity but due to a cavein closing off the westerly portion of the drift the face and backs could not be examined. However, the back at the cavein showed over 6 feet of gouge while the face at the easterly drift showed four feet, thus indicating that the split may have strength.

The May Creek schist at the Mother Lode was mapped as a quartz-hornblende schist, a quartz-mica schist, and a quartz-mica schist with color banding. The quartz-hornblende schist is a massive, dense, dark-greenish to black rock. The schistosity and foliation is either poorly developed or has been obliterated and the attitudes taken on it are somewhat questionable. The rock is equally quite difficult to drill; when it breaks, it sometimes shows a fairly strong joint pattern with its main axis NE-SW and a slight dip to the SW. The quartz-mica schist is a lighter colored rock, varying from a buff to a light green; it is not as dense as the quartz-hornblende phase and when exposed to the air for a short time becomes quite soft. Lamination of the mineral grains appears to be better developed than in the quartz-hornblende schist. Color-banding within the quartz-mica schist is discernible at times and is accentuated by exposure to the air, the lighter colored bands becoming soft and spalling. The banding is probably due to the seams of high concentrations of feldspars. Whether or not the color-banding has the same attitude as the schistosity was not satisfactorily determined but it is thought that it has.

There was no sharp break noticed between the quartz-hornblende and the quartz mica schist. As far as could be determined they were gradational. Whether they represent a difference in degree of metamorphism or a difference in the mineral content of the original material is not known but it is believed the latter is the case.

Because of the gradational change between the hornblende and mica schist the value of mapping these units within the prospect might be questionable.

* The May Creek Schist is now considered a contact metamorphosed phase of the Triassic Applegate Series.

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It was hoped that it would give some clue to the mineralization, but no satisfactory conclusions were arrived at. *drawn.*

The ore mineral is cinnabar. Gangue minerals are pyrite, calcite, and quartz. The cinnabar is disseminated through the gouge mainly, and in the walls where the rock has been highly altered occasionally. At no place was it found in more than paint-thin streaks in the gouge. ^{So} Mining has been limited so far to this zone. Exploration of the altered rock showing slight dissemination of cinnabar was starting at the time of the examination. The place chosen was in tunnel No. 3 where a fracture within the gouge zone gave indication of solutions penetrating the wall. A sample of the altered rock assayed 0.4 lbs. per ton (GG 181). Pyrite is found scattered through the gouge zone and occasionally in the wall rocks. The latter is undoubtedly original to the rock and in part, at least, owes its formation to metamorphic processes. In a band from several inches to a foot or more wide in the middle of the gouge zone is a concentration of calcite, quartz, and pyrite. The calcite and quartz are found in thin veins and as linings of vugs in this band. Other small veinlets of quartz and calcite are occasionally found in the schist and the altered rock.

Mining and Metallurgy:

See flow sheet on map.

Prospecting only. Any rock broke that shows a few colors is put into the or bin. Most of this is a gouge. So far all rock has been taken out of drifts. Mucking and tramping is by hand methods. Drilling is with a drifter.

Equipment on the property consists of:

- 1 Gardner-Denver stoper
- 1 Gardner-Denver drifter
- 2 Gardner-Denver jackhammers
- 1 285 cubic feet Gardner-Denver air compressor
- 1 105 Atlas compressor on retort
- 600 feet of Flexipipe and a 3 HP fan.
- 1 D 13,000 caterpillar generator
- 1 ~~Atlas~~ Chalmer 60 caterpillar with a 10 foot Baker Dozer blade
- 1 6x6 International truck, 1946
- 1 GMC Army Ambulance Truck (Surplus property)

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MOTHER LODE (MERCURY)

THOMAS DREW - JACKSON
MOTHER LODE

Economics :

Seven samples were cut from the different levels (see map for location). All but one (GG 181) were from the gouge zone. The results were very disappointing: four showing but a trace and the other three running 0.2, 0.4, and 0.6 of a pound per ton. If these samples are at all indicative of the rock, and I believe they are, it is very doubtful if any ore has been developed to date. And from the amount of drift work already done it is questionable in my mind if further work will find sufficient ore to justify a continued prospecting program.

The present operators have been in the mining business for some time (mostly in Idaho) but their development program for this mine is open for criticism in some respects, e.g., they never sampled the property before beginning work; they have no assay furnace, so what ground they go through and what material is put in the ore bins is only checked by an "eye ball" assay; they have not timbered much of their work on number one and two tunnels and as the ground is heavy they stand a good chance of loosing the work they have done. Nevertheless, they seem to be quite enthusiastic about the property and from all indications will continue work. So---good luck!

There is an abundance of good timber on the property. There is also sufficient water if it was utilized properly; however, it is not, so the supply for camp usage is insufficient.

The roads to the mine are good.

References:

- (1) DOGAMI Bull. # 14-C, Vol.1., page 127
- (2) DOGAMI Bull. # 4, page 124-5
- (3) U. S. Geological Survey Bull. 850, page 47

Informants:

Mr. Frank C. Hobson, E. M. Mother Lode mine prospect

Mr. J. R. Davies.