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PRINTED: 01/31/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MAMMOTH MINE

ALTERNATE NAMES:
HUBBARD

YAVAPAI COUNTY MILS NUMBER: 314

LOCATION: TOWNSHIP 13 N RANGE 6 W SECTION 6 QUARTER S2
LATITUDE: N 34DEG 29MIN 20SEC LONGITUDE: W 112DEG 56MIN 00SEC
TOPO MAP NAME: HILLSIDE - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:
GOLD
SILVER
COPPER SULFIDE
FLUORITE
LEAD WULFENITE
VANADIUM WULFENITE

BIBLIOGRAPHY:
ADMMR MAMMOTH MINE FILE
WILSON, E.D. ETAL. AZ LODGE GOLD MINES AZBM
BULL 137 1967 P 27

MAMMOTH MINE

YAVAPAI COUNTY
T13N R6W Sec 6 S $\frac{1}{2}$

AKA: Hubbard Mine

ABM Bull. #137, p. 27

MILS Yavapai Index # 314

Colvo. file (copy included in file)

MAMMOTH MINE

YAVAPAI COUNTY

NJN WR 3/30/84: Frank Bain, Geologist for Nicor Mineral Ventures, (card) visited. He reported Nicor has recently dewatered and sampled the underground workings of the Mammoth Mine in the Hillside area of Yavapai County. The shaft was retimbered where necessary to the 450' level. Results of their sampling indicated a vein deposit averaging 4 feet in width with an estimated 60-70,000 tons of .12 oz Au/ton. This seems only marginal economically and Nicor is not sure they will develop the reserves found. It appeared that the old timers produced approximately 50,000 tons of supposedly higher grade material. The mine is not shown on the Hillside Quadrangle but is situated on State Land in T13N R6W Sec 6 S $\frac{1}{2}$.

Name - HUBBARD MINE

Location - Kirkland

Date - December 1935 - by G. M. Colvocoresses

Notes:- A man by the name of _____ is operating a little gold mine one mile from the road between Kirkland and Hillside. He has a strong wide vein in granite and gets an average of \$10.00 per ton but needs money to put in a flotation mill.

Might pay to visit.

Kirkland Park
4 mi. N of Hillside
8 mi North of Hillside by Road.

Hillside Quad
No 5 shown on

MAMMOTH MINE.

This property is located about two miles from Yava, Yavapai county, Arizona, about three miles from a good highway very convenient for economical operation. It is located on State school lands and under lease from the State Land Board. The present lease will expire on December 9th, 1942. However, the lease is renewable at expiration date if all conditions are fulfilled. Moreover the last legislature passed a law that all future leases would be for 20 years instead of five, and the present lease may be extended for 20 years if desired.

Gold

There are eight claims ⁱⁿ all and contiguous. They cover about 5000' on the strike of the lode and are of full regulation size, 1500' x 600'.

GEOLOGY: The lode proper consists of a monzonitic intrusion, about 60' wide. The country rock is a coarse feldspathic granite. In addition to the above intrusion there has also been intruded a rhyolite along the same zone.

The mineralization, where oxidized, consists of quartz, hematite, wulfenite, fluorite and free gold. The sulphide or primary ore consists of quartz, iron pyrite, minor chalcopyrite, galena and flourspar. The gold values are high and flourspar is always present with all ores.

DEVELOPMENT: Number one inclined shaft is down 400'. There is a short drift to the east on the 150' level. On the 300' level there is a drift 60' to the east and one 80' to the west. The shaft and all drifts are in ore from 3' to 12' in width. The #2 inclined shaft, 200' deep, is 600' west from #1 and also in ore. Only a short drift east from this shaft. In addition to the above there are several shallow shafts in ore.

The larger shafts are adjacent to the hanging wall, where the mineralization is greater. This condition exists for the entire length of the lode. However, there are two other lines of enrichment paralleling the hanging wall zone, though nearer the foot wall of main intrusion. These have not been at all developed.

ORE BODIES: As stated above all openings are in ore. Down to the 300' level of shaft #1 the ore will average about \$6.00 per ton in gold. This is the oxidized ore. However, in the west drift on 300' level, the vein is 12' wide and carried \$9.00 per ton. The east drift will average 5' wide and of about \$6.00 value. Occasional lenses of sulphide ore were encountered from the 60' level down to the 300' level. These sulphides carried from \$30.00 to four ounces in gold, and were shipped when extracted.

Just below the 300' level disseminated sulphides in quartz were encountered. This enrichment had a greater dip than the shaft above and was followed. At the 400' level or bottom, there is 4' of this ore carrying \$6.00 values in gold. This sulphide is not nearly so concentrated as that found above the 300' level and seems to be a spur from the main ore body.

A crosscut should be driven to the hanging wall body from the 400' level about 40'. I would anticipate a large body of sulphide ore at this point, as oxidized zone should be bottomed.

The # 2 shaft shows similar mineralization to that in #1 but I anticipate sulphide ore in quantity at less depth.

FUTURE DEVELOPMENT: The west drift from 300' level of #1 shaft should be continued to shaft #2. This would develop about 60,000 tons of ore up to the surface, with a minimum value of \$6.00 and I think a fair tonnage of sulphides

See A. B. M., Bull. #137, p. 27

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of sulphides would be extracted during this operation. A crosscut to hanging wall ore body should be driven from bottom of shaft, and drifting on the main ore body from that point. This would develop a large tonnage in addition to the above. Also crosscutting should be done occasionally to the foot wall of the main intrusion. This would expose more ore, I feel sure, as a more general mineralization seems to be occurring at greater depth. Additional development could be added as conditions justified, as the sulphide occurrence will be more generally distributed, as at present shown at bottom of shaft.

It would be a matter of judgement whether #2 or #1 shaft should be the main opening. The main working shaft ultimately, should be on the foot wall side of the intrusion, thus allowing for better mining conditions.

EQUIPMENT: There is no equipment on the property at present that is a part of the holdings. General equipment would be necessary. This would not be a severe cost for the early operation.

METALLURGY: All oxidized ores yield readily to cyanide treatment. Flotation for lower grade, disseminated sulphides. Higher grades may be shipped directly to the smelter.

CONDITIONS OF LEASE: The present lease calls for an \$80.00 annual fee, plus a 5% royalty on all production. Renewal at end of five years period. However, future leases will be for 20 years as per act of last state legislature.

CONDITION OF OPENINGS: The #1 shaft should be in good condition as all work has been done in the last few years. The timbering should be good. Some ground around the 300' level is rather heavy, but this is due to oxidation and should not continue at depth. The water is at present up to the 60' level. However, this is mostly surface seepage and the property makes but little water. A small pump should dewater in about ten days, and thereafter would be easily held. This would be a necessity in order to allow for examination. The #2 shaft has but very little water and would drain when other is pumped out.

CONCLUSION: This property is controlled by Mr. H. M. Nay and myself. I state this that there may be no misunderstanding as to the status of the above assertions. We have both spent a lot of time and money on this property, and willing that the above statements may be verified by detailed examination. The facts will be as I have stated and I invite the proof thereof.

* This property shows every indication, both geologically and mineralogically of becoming a big mine. The intrusion, which is the mineral zone, is large and it is my contention, based upon showings at present opened, that the mineral extension will be more general as depth is attained. The mineral seems to be more generally distributed and the main ore so far developed is becoming larger. The sulphide zone should be near the present depth, and I anticipate large bodies of rich ore occurring as sulphides. All ore, as formerly stated, is associated with fluorite. The fluorite is disseminated throughout all oxidized and sulphide ore, and is an indication that values will extend to satisfactory depth.

This is not a property for small capital investment. Surface equipment is necessary, and a mill may be installed to treat the oxidized ore as soon as drifts are extended on the 300' level. The mine will not make enough water for mill purposes unless countercurrent cyanide plus filters is used. However, greater shaft depth or wells would solve the problem. In addition there is a large stream, the Santa Maria river, within one mile of the property. Power should be supplied by Diesel generators, at least for a time. The climate is such that full year operations may be carried on.

The above description of the Mammoth mine is given from a clear conviction that the facts will be found as stated, We invite investigation.

Very truly,

(Signed) D.R.Finlayson,
Mining Engineer.

November 1941.

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