



CONTACT INFORMATION

Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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05/19/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: AYRA MINE

ALTERNATE NAMES:

MOHAVE COUNTY MILS NUMBER: 566A

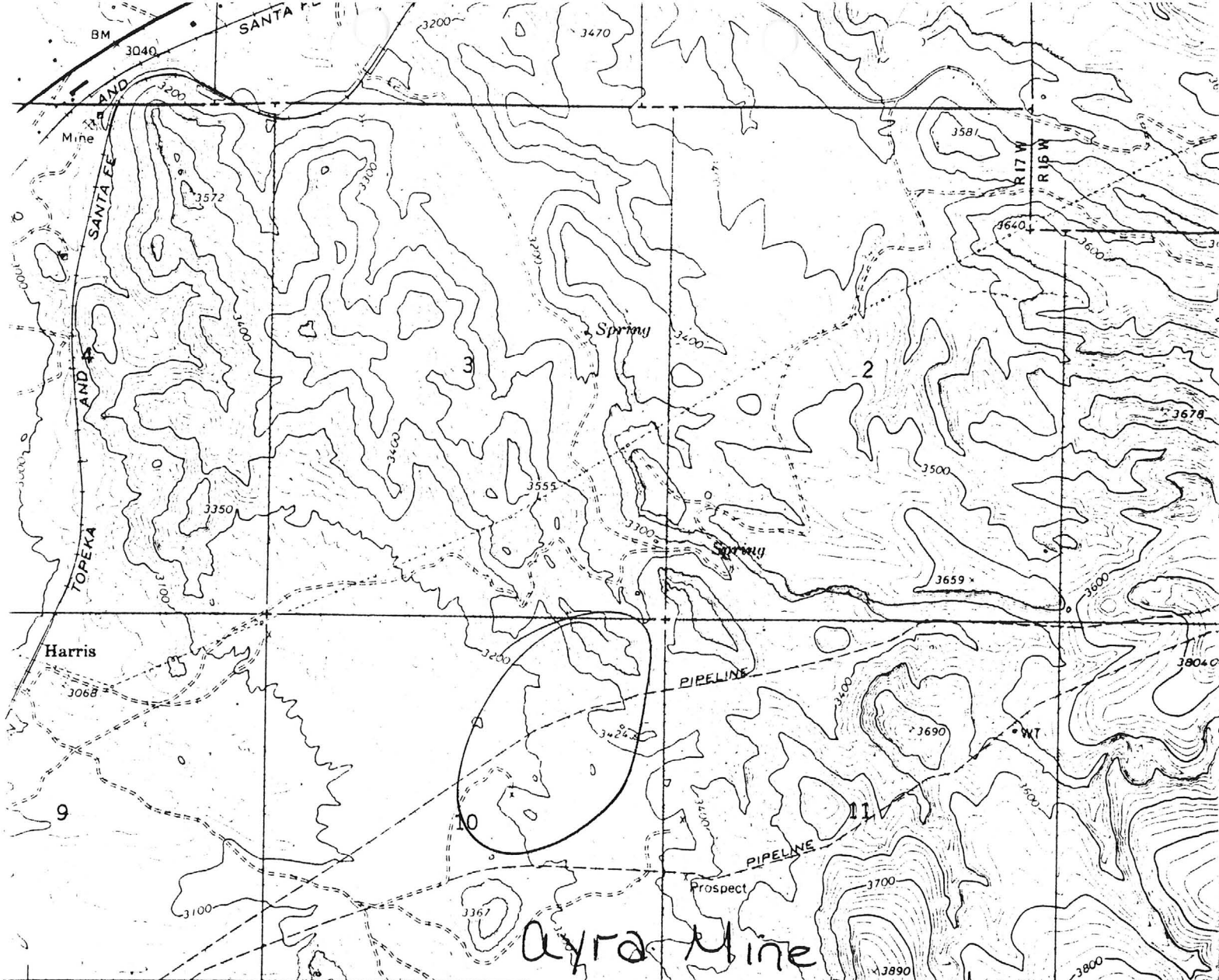
LOCATION: TOWNSHIP 20 N RANGE 17 W SECTION 10 QUARTER NW
LATITUDE: N 35DEG 08MIN 11SEC LONGITUDE: W 114DEG 04MIN 22SEC
TOPO MAP NAME: KINGMAN - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
GOLD LODE

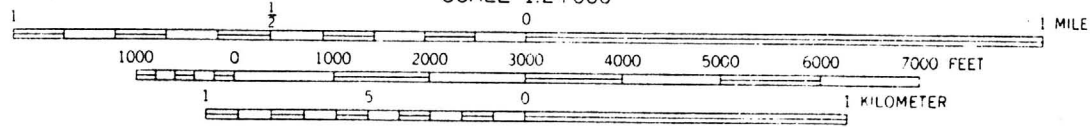
BIBLIOGRAPHY:

ADMMR AYRA MINE FILE
ADMMR MOHAVE CUSTOM MILL PROJECT
ADDITIONAL WORKINGS SEC. 9, T20N-R17W



5' 766 767 (KINGMAN SE) 768 T 20N R 17W Sec. 10 NW

3154 II SE
SCALE 1:24 000



CONTOUR INTERVAL 20 FEET
 DOTTED LINES REPRESENT 10-FOOT CONTOURS
 DATUM IS MEAN SEA LEVEL



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS.
 FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Kingman, Az 7.5'

AYRA MINE

REFERENCES

MOHAVE COUNTY
MCCONNICO DIST.
T20N R17W Sec. 10 NW

Mohave County MILS index #566A

Mohave Custom Mill Project Card file

Kingman, AZ 7.5' Topo (included in file)

Name of Mine or Prospect:
Ayra Mine

Township Range Section Priority

Principal Minerals:
Gold

1:250,000 Quad 7.5' - 15' Quad

Associated Minerals:

District Principal Product

Type of Operation:

Underground: shaft

County State Type of Deposit
Mohave Arizona

Ownership or Controlling Interest:

Access:

5 miles south of Kingman, Arizona; location unknown.

Structural Control or Geological Association:

Age of Mineralization:

Production History

Geochemical Analyses

5 claims

References

1) Malach (1977) p. 33.

1514 - 19th Avenue,
Seattle, Washington.
June 30th., 1940.

Mr. J. S. Coupal, Director,
Department of Mineral Resources,
Capitol Building,
Phoenix, Arizona.

Dear Mr. Coupal:

Pursuant to your recent request, I herewith submit
a brief outline of the Ayra Mine:

The property that I have under lease and option to purchase consists of five claims located approximately five miles in an airline southwest of Kingman, Arizona. It is reached from Kingman four miles west over Highway 66, thence three miles south over fair county road. The Citizens Utilities Power line parallels the highway and a branch could be extended to the property some three miles in a tangent. Supplies and materials can be obtained via the Santa Fe RR., Kingman, or direct from Los Angeles by truck lines over Highway 66. No camp would be necessary as workmen could reside in Kingman. Drilling to not over 200 feet anywhere along the contiguous flat will provide water for a 500 ton or more operation. The Santa Fe has a well in this area from which they pull several hundred thousands of gallons of water daily.

The mineralized zone is comprised of a syenite-aplite vein paralleling or cutting at an acute angle a diabase dike. Surface detrital and overburden obscure the average width or extent of these intrusions. However, two shallow trenches across the formation expose 15-20 feet of width near the main shaft, of the syenite-aplite. Samples from these cuts ran \$3.50 to \$10.50 in gold. The walls and width of the dike are as yet undetermined. Outcrops of both occur at intervals for several thousand feet along the strike. This formation is intruded into a general country rock of gneiss and schist, with granodiorite lacoliths, the probable source of the syenite-aplite vein, occurring nearby.

The present development consists of one 4' x 6' shaft, 50 feet deep, on an incline of 75 degrees, the apparent dip of the diabase dike. This shaft was started near an intersection of the syenite-aplite and the dike, into which had fingered two small (1"-2") stringers of the syenite-aplite. At the collar of the shaft these stringers carried about \$10 in gold. At 17 feet down there were two or three stringers running \$35 to \$40 in gold. A cut sample 30 inches wide including one stringer and enclosing dike ran \$8.40 in gold. At 27 feet of depth the stringers carried \$80 in gold. At the 50 foot level cut samples all around showed the stringers carrying \$300 to \$500 in gold. The gold is fresh appearing, bright yellow, sharp and undoubtedly is of primary origin.

Along the 50 foot horizon a small 4 foot drift was run, about 20 feet to the north and 10 feet to the south from the shaft. This drifting was done within the diabase dike between two strike faults, carrying gouge and a hard casing. However, the drifting and the faults do not determine either wall of the dike, and it's width may be considerable. Within these strike faults are one to three stringers of the syenite-aplite which carry the values. These stringers run at a very slight angle to the strike of the dike and faults and are displaced by the latter. Picking into the walls determines that the stringers continue within a few feet, angling slightly toward footwall and hanging wall of the dike. There may be many additional ore bearing stringers on both foot and hanging wall sides of these strike faults.

From the 30 foot point below the collar of the shaft a small triangular block of ore was slabbed down over and down to the north drift on the 50 foot level. All the resultant muck from this underhand stoping, the lower 20 feet of the shaft, and the north drift was sorted and shipped to the Tom Reed Mill in Catman, Arizona. The first shipment ran \$66. in gold per ton, it being estimated that about 50% was sorted to the dump. By careful bucket count and tonnage calculation the second shipment was sorted 5:1 and ran \$152. in gold per ton. On the third shipment only the larger, more easily sorted chunks of waste were discarded, estimated at 15-20% of all muck broken and hoisted. This shipment returned \$47. in gold per ton.

It resolves itself to this: below the 30 foot horizon, one stringer per four feet of dike, the maximum width mined, returns about \$15 rock as broken; two stringers per four feet, \$30-\$35, and, occasionally, three stringers make a \$40-\$45 product. This development work was carried on thru a small, crooked shaft, windlass, hand drilling, and poor facilities for sorting. As a result, under these slow, primitive methods, the lessees could not make it pay. Trucking to the Tom Reed mill was \$3.50 per ton; milling charge \$3.60; 92% recovery on small lots, and a \$10 sampling charge.

The few places in which the walls had been picked into by hand indicate another foot of width at least on each side of the drift and shaft of dike material and contained ore-bearing stringers - a total of six feet. From the cuts on the surface it is probable that there will be this much additional width of commercial dike and stringers, and possibly even more.

It is recommended that a small gas driven sinking hoist be installed, headframe and dumping facilities improved, a two drill portable compressor be obtained, and with two jackhammers, intensive development be initiated. The shaft should be extended to the 100 foot level, and at the same time several stub cross-cuts should be driven into both walls at the 50 foot level. This

would open up the dike, determine it's width at this point and also give an opportunity to sample up and establish the average grade of commercial ore across it's minable and total width of 6 to 12 or more feet.

On the 100 foot level drifting should be carried along simultaneously in both directions, and again short cross-cuts put in here to expose the full formation. On a two shift basis, the shaft could be advanced to the 100 foot level in 30 days. This sinking would produce 6-8 tons daily of \$15 to \$18 rock. Shipping steadily to the Producers Custom Mill in Chloride, a \$2.50 trucking rate, \$3.25 milling charge, and 95% recovery could be obtained.

Sinking the shaft is estimated at \$40 per foot, or approximately \$2500 to the 100 foot level with sump. However, this sinking would produce some:

150 tons of ore at \$15 per ton - - - - - \$2250.00

Costs: Trucking - \$2.50 per ton
 Milling 3.25 " "
 Mill absor-
 tion - 0.75

Total \$ 6.50

Royalty: 10% of
 95% of \$15. - - \$ 1.43

Total Cost - \$ 7.93 x 150 tons \$1189.50

Net cost of sinking to 100 level: \$2500. minus \$1060.50: \$1439.5
 Net Profit

Following this, 200 feet of drifting, 100 feet north and south, could be completed in 30 days. Drifting costs, including hoisting, general, superintendence, etc., would be about \$16/ft.

As each round (3 feet) will produce 10-12 tons of shipping ore, this would result in 20- tons daily.

20 tons x \$15 - - - - - \$300.00

Realization Costs:

Trucking, mulling, mill absorption and royalty-
 \$7.93 x 20 tons - \$158.60

Cost of Drifting: 6' x \$16 per foot - 96.00

Total Cost \$254.60

Net operating profit per day - - - \$ 45.40

Following this development program, about three months including 30 days for prepping up for stoping and mining, the operation can be stepped up to a 50 ton per day basis, with realization as follows:

Gross value of ore	-	-	-	\$15.00 per ton
Costs:				
Trucking	-	Per ton	\$2.50	
Milling	-	" "	3.25	
Mill absorption	-	" "	0.75	
General & Superintendence	-	" "	0.50	
Mining	-	" "	2.00	
Development	-	" "	1.00	
Royalty	-	" "	1.43	
		Total		11.43 " "
		Net profit	-	\$ 3.47 " "

50 tons per day x \$3.47 = \$173.50 per day or \$5205. per month.

Capital Expenditures:

2 drifters with columns & arms	-	\$700.
" parts, hoses, drill steel,	-	350.
Miscellaneous small tools	-	300.
Two mine cars	-	150.
Bucket and cable	-	75.
Compressor rent 1 month @	-	125.
" " 2 " @ \$250	-	500.
Hoist rent 3 months @ \$25	-	75.
Pick-up truck	-	825.
Headframe and bins	-	450.
Operating funds for 90 days		\$3550.00
Sinking	-	\$2250.00
Drifting 200x16	-	3200.00
Prepping & initiating mining		
\$3.50 x 50 tons = \$165. x 30days	-	5000.00
		10450.00
Total	-	\$14000.00

Returns from, and in circuit, during this program will net approximately \$2500. from the development ore shipped, and will provide further funds for the purchase of stoper drills and miscellaneous equipment that will be required for a steady mining operation.

It is anticipated that in view of the potential widths indicated by the preliminary work, following a 6 to 12 months operation accompanied by proper development, the scale of operations can be increased to 150 tons a day. This would justify the installation

of a mill and a resultant saving of approximately \$3.50 a ton in trucking and lower mill costs. Operating it's own mill, the enterprise should obtain a total of \$9.50 per ton cost, including royalty, or a net of \$5.50 per ton. On 150 tons per day this would amount to a net operating profit of \$825.00 per day or \$24,750.00 per month.

In conclusion: It is felt that an estimate of \$15 per ton on grade of ore is conservative, and that the mine run will more nearly approach \$18 to \$20 in gold per ton, with the resultant margin of safety and increased profit of \$9,000 to \$10,000 per month, and that the initial investment of approximately \$15,000 is fully justified.

This is just an informal, descriptive report endeavoring to give you the pertinent information and data as soon as possible.

Yours very truly,

✓ *Rae L. Johnston*

Rae L. Johnston.

RLJ/M