



## 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](mailto:inquiries@azgs.az.gov)

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

## ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

## CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

## QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 03/22/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MORROW

ALTERNATE NAMES:

MOHAVE COUNTY MILS NUMBER: 372A

LOCATION: TOWNSHIP 11 N RANGE 14 W SECTION 3 QUARTER S2  
LATITUDE: N 34DEG 19MIN 26SEC LONGITUDE: W 113DEG 42MIN 26SEC  
TOPO MAP NAME: ARTILLERY PEAK - 15 MIN

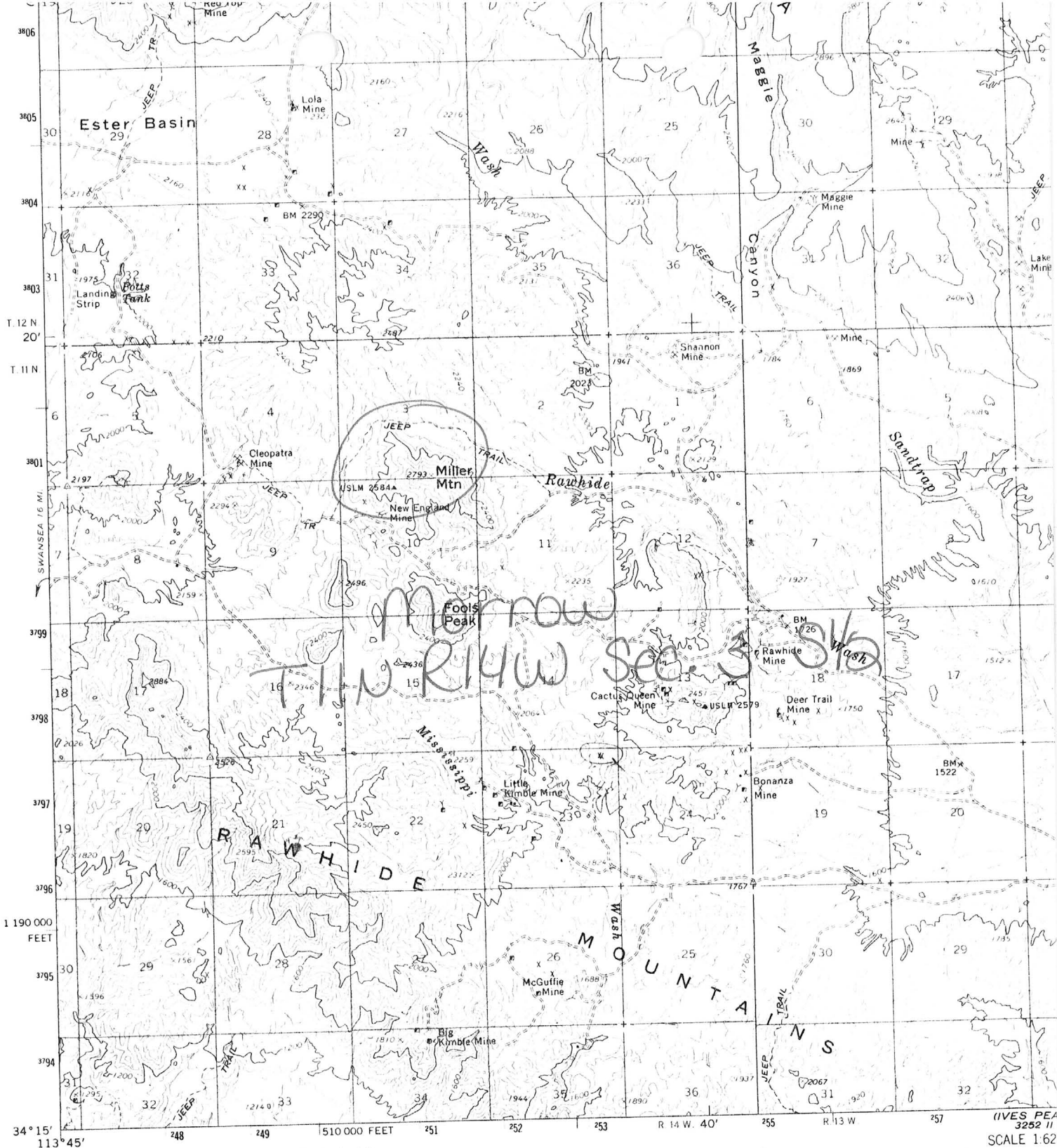
CURRENT STATUS: PAST PRODUCER

COMMODITY:

COPPER OXIDE  
COPPER SULFIDE  
SILVER  
GOLD LODE

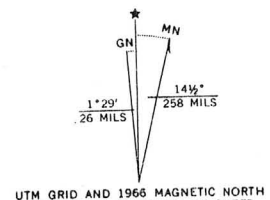
BIBLIOGRAPHY:

ADMMR MORROW MINE FILE  
ADMMR MOHAVE CUSTOM MILL PROJ. CARD FILE

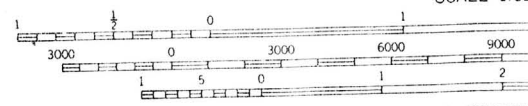


(SWANSEA)  
3252 III

Mapped, edited, and published by the Geological Survey  
Control by USGS and USC&GS  
Topography by photogrammetric methods from aerial  
photographs taken 1964. Field checked 1966  
Polyconic projection. 1927 North American datum  
10,000-foot grid based on Arizona coordinate system, west zone  
1000-meter Universal Transverse Mercator grid ticks,  
zone 12, shown in blue  
Blue hatching indicates areas to be submerged by Alamo Reservoir  
at elevation 1070. Areas covered by dashed light-blue pattern  
are subject to controlled inundation



UTM GRID AND 1968 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET.

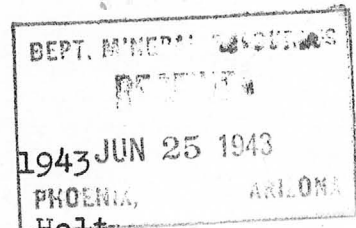


CONTOUR INTERVAL  
DOTTED LINES REPRESENT  
DATUM IS MEAN S

THIS MAP COMPLIES WITH NATIONAL  
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, CO  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND

Artillery Peak 15'

DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA  
FIELD ENGINEERS REPORT



Mine MORROW MINE

Date June 24, 1943

District Owens, Mohave County, Arizona.

Engineer Elgin B. Holt

Subject: BRIEF REPORT

OWNERS: E. E. Rodgers & George Howard, Alamo, Wenden, Arizona.

METALS: Copper, with a little silver and gold.

AREA - LOCATION: Property, consisting of one unpatented mining claim, is located in the Owens Mining District, in Mohave County, Arizona, at a point on the north flank of Miller Hill and around 1.5 miles westerly from Rawhide. This mine, or rather prospect, was formerly owned by Arthur Ryden.

EXAMINATION: I visited this property on June 15, 1943, in company with J. E. Rodgers, and again on June 19th, in company with one of the owners, Mr. E. E. Rodgers; the last time for the purpose of cutting some samples.

This property had been called to the attention of Mr. J. S. Coupal, Director, Department of Mineral Resources, by Billie Graham, and Coupal instructed me to investigate it.

GEOLOGY: The base of Miller Hill, in which property is located, as above set forth, is gneiss, which is capped by a band of quartzite from 20 to 40 feet in thickness. In turn, the quartzite band is capped by red sandstone conglomerate. The band of Quartzite mentioned is impregnated with red oxide of iron and bunches of high grade copper ore, malachite and chalcocite material. Below this mineralized band of quartzite, about 50 feet vertically, is a blanket vein of copper ore in the gneiss formation; the copper ore occurring in small lenses of no great importance. It was the object of my last visit to cut some average samples from the workings in the quartzite band in order to determine if the mine could produce a quantity of low grade, but probably marketable, copper ore.

MINE WORKINGS: A tunnel was driven on the blanket vein mentioned, in the gneiss formation, a distance of 249 feet; but no ore was found in this tunnel except near the portal thereof, where there is a small lens of ore from which Rodgers had mined about 5 tons of ore, still piled on dump, that assays, per Rodgers, about 8.5% copper. Another tunnel, known as the Upper Tunnel, was driven in the mineralized quartzite band for a distance of 75 feet; all in "ore" that looked like it might have commercial values in copper. Slightly above this latter tunnel is a short cross-cut in mineralized ground, showing bunches of copper ore in place.

METHOD OF SAMPLING: Assisted by Mr. E. E. Rodgers, I cut two samples in the said upper tunnel. Sample No. 1 was cut from roof to floor of tunnel, at several points, for a distance of 30 feet from portal of tunnel; and the various "cuts" mixed together, forming said Sample No. 1. Sample No. 2, was taken in like manner for a distance of 45 feet in back end of said tunnel; the various "cuts" being mixed, thus forming the said Sample No. 2. Sample No. 3, was taken up and down, across 4 feet of mineralized ground, in the face of the cross-cut tunnel mentioned.

The results, that is assay results of said samples are given in the following table, to-wit:

No.	Gold Per Ton		Silver Per Ton		Copper %
	Ozs.	Value	Ozs.	Value	
1.	0.02	\$0.70	2.20	\$1.56	0.45
2.	0.02	0.70	1.40	0.99	0.05
3.	0.01	0.35	0.80	0.57	0.25

Assays made by: R. V. McAllister, Kingman, Arizona, June 22, 1943.

REMARKS:

The results of the above sampling and assays show that the band of copper stained mineralized quartzite, which is also highly impregnated with red iron oxide, is not commercial ore; it being entirely too low grade to yield a profit either from shipping or milling operations.

However, it is quite possible that owners of this mine, or others, might make some profit by selectively mining the small lenses and bunches of goodly grade copper ores found in both the lower and upper working above described.

*Elgin B. Holt*

Elgin B. Holt,  
Field Engineer.

SAMPLES NOT KEPT OVER 30  
DAYS EXCEPT BY REQUEST

SAMPLES SENT US BY MAIL WILL  
RECEIVE PROMPT ATTENTION

CERTIFICATE OF ASSAY FROM LABORATORY OF

**R. V. McALLISTER**  
ASSAYERS, CHEMISTS, METALLURGISTS

FRONT STREET  
KINGMAN, ARIZONA

FLOTATION TESTS  
CYANIDE TESTS

PHONE BLUE 252

Elgin B. Holt

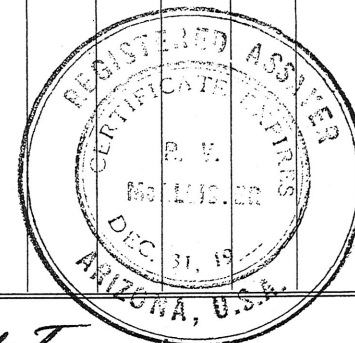
June 22, 1943

194

MOHAVE MINER PRINT

OFFICE NUMBER	OWNER'S MARK	GOLD, PER TON		SILVER, PER TON		TOTAL VALUE GOLD & SILVER	COPPER PER CENT	LEAD PER CENT	ZINC PER CENT	PER CENT
		OUNCES	VALUE	OUNCES	VALUE					
10659	Morrow Mine # 1	0.02	0.70	2.20	1.56	2.26	0.45			
10660	" " 2	0.02	0.70	1.40	0.99	1.69	0.05			
10661	" " 3	0.01	0.55	0.80	0.57	0.92	0.25			

1 OUNCE  
JUL 2 1943  
ARIZONA



GOLD \$35 PER OUNCE  
SILVER 71 CENTS PER OUNCE

*R. V. McAllister*

REGISTERED ASSAYER