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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: BLUE COPPER

ALTERNATE NAMES:

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PINAL COUNTY MILS NUMBER: 144A

LOCATION: TOWNSHIP 3 S RANGE 13 E SECTION 12 QUARTER S2 LATITUDE: N 33DEG 10MIN 41SEC LONGITUDE: W 110DEG 58MIN 16SEC TOPO MAP NAME: SONORA - 7.5 MIN

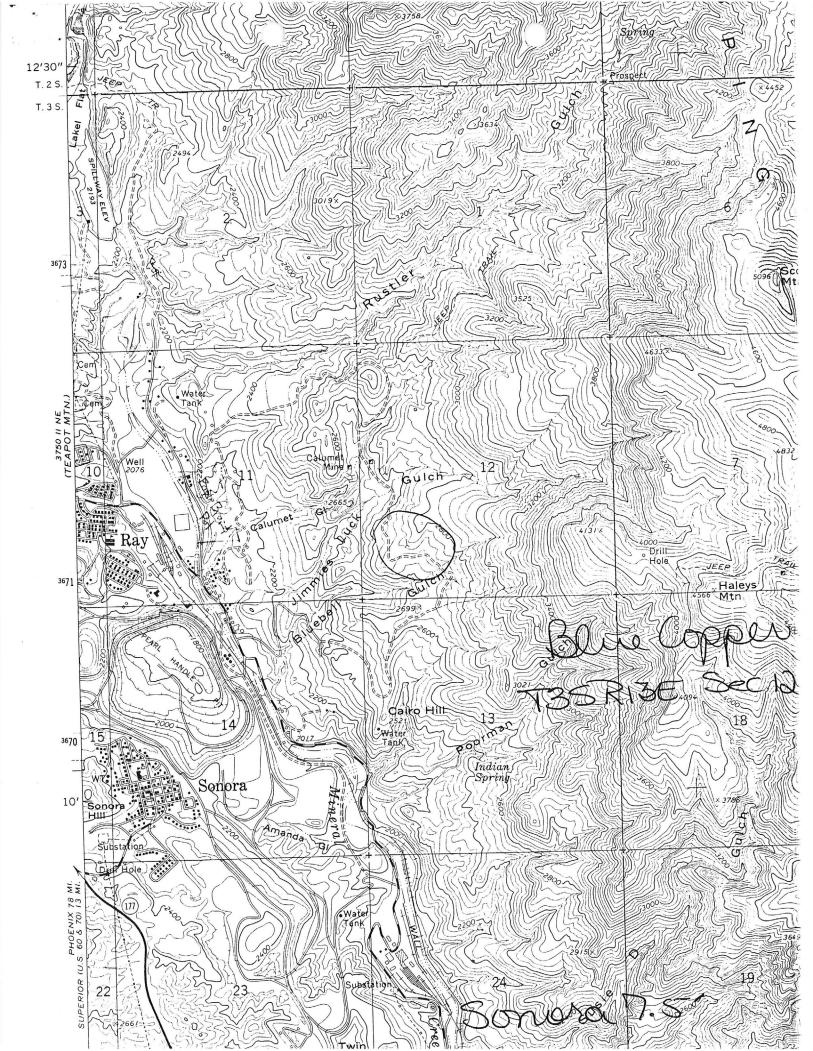
CURRENT STATUS: PAST PRODUCER

COMMODITY:

COPPER

**BIBLIOGRAPHY:** 

ADMMR BLUE COPPER



	DEPARTMENT OF MINERAL RESOURCES STATE OF ARIZONA FIELD ENGINEERS REPORT	L. 1.
Mine ' BLUE COPPER		
District 'MINEPAL, CREEP	$\begin{array}{c c} K & \\ & \\ JUN 15 1943 \\ & \\ ARIZONA \end{array} & Engineer A \cdot Macfarlane \\ \end{array}$	
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application for 3,000 to

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CLAIM LOCATION; In section 12, township 3 south, range 13 east, Gila and Salt River meridian and on the northwest slope of a high hill just above the south bank of a large gulch, and approximately 2 miles northerly from the main open-pits of the Ray Consolidated mine.

<u>ROAD</u>; After clearing the north edge of the town of Ray a fair road terminates near a ranch house, from this point the old road which served the Calumet mine and other prospects situated 2 to 5 miles north of Ray has been long in disuse and now not passable for motor vihicle; walking in an easterly direction for about 1 1/4 miles, the portal of the Blue Copper tunnel is gained, this at an altitude of 3050' an upgrade of nearly 1,000'.

It would cost several thousand dollars to build a good truck trail, from the ore loading ramp, to Blue Copper tunnel and this is not contemplated now.

The smelter grade ores will be transported by pack Eurros to the railroad loading ramp.

MINE WORKINGS; Consist almost wholly of a tunnel driven for nearly 75' diagonally to the main vein, this tunnel on a course of S.75 degrees east cut thru the mineralization at about 30' in from portal and has been terminated in the south casing of the mineralization.

Two small cuts now caved and full of muck just west and down hill from the tunnel portal, are the only additional incisions on the cropping gangue, these cuts do not show ore.

STRUCTUPAL FEATURES; The course of the Cooper mineralization as seen in the tunnel, follows closely along a very visible contact fracture.

The deep gulch is made along this structure, a large portion of the erroded and fragmentary material now strewn along the canyon floor, is composed of Gossan, Magnetite and dyke gangue.

Two such mineralized dykes are noted, closely paralleling the Blue Copper vein along its north wall, and these dykes are broken into fragments as they entered the deep gulch. The erroded material however does not evidence much copper, as neither the dykes or vein proper, 'expose much copper carbonate, at surface.

<u>GEOLOGY</u>; of this district has been exhaustively covered, and it is evident that generally the copper ores are found within the Pinal schists and Granitic Porphyry, in wide bodies, following certain contact fractures, made by the older lime stones and latter Diabase flows.

At the Blue Copper tunnel, the mineralization occurs in the

#### DEPARTMENT OF MINERAL RESOURCES STATE OF ARIZONA FIELD ENGINEERS REPORT

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the Schist contacting with Diabase as a north casing and Monzonite as the south casing rock. The host Schist shows slickensides and much selvage, and notable copper leaching.

Date

Engineer

It is a reasonable expectation that better copper values may be encountered, at some greator depth.

<u>VISIBLE ORE</u>; A paystreak cut thru by the tunnel about 25' east of the portal, seems to be 18" wide, this is part of a 10' copper mineralization. This paystreak assays about 7% Cu. while the rest of the vein matter is from 1/2% to 1 1/2% Cu.

The paystreak should be drifted on along its strike and a winze sunk at least 50' below the floor of the tunnel, as preliminary exploration.

This proposed work should yeild a considerable amount of smelter grade ore, and would determine as to continuity of this grade of ore. Until this additional exploration is made, I can only estimate that one or two carlots of about 7% copper ore will be won from the stoping of the paystreak.

ORE MARKETING; The costs of selling this silicious copper ore say of an assay value of 7% Cu. are as follows;.

Due to the prospect stage of the Blue Copper as now encountered, I would not reccomend any larger plan of development than the one above stated; this will call for the expenditure of nearly \$3,000.00 to cover the labor, explosives and timbers, required to sink 50' and drift and cross-cut approximately 150'.

The vein matter is not hard, hand steel mining will be cheaper and quite fast enough for the limited amount of work herein contemplated.

There are many pack burros in this locality, also small mine miners; the project is feasible and the existing structural conditions are cuite favorable towards the making of a copper lenze, the dimentions of which, being only an approximation at this stage of the prospect development.

> A. Macfarlane Field Engr. Mineral Resource

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