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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: HUMBOLDT TAILINGS

ALTERNATE NAMES:

VAL VERDE MILL TAILINGS

YAVAPAI COUNTY MILS NUMBER: 994A

LOCATION: TOWNSHIP 13 N RANGE 1 E SECTION 23 QUARTER NW

LATITUDE: N 34DEG 29MIN 54SEC LONGITUDE: W 112DEG 13MIN 51SEC

TOPO MAP NAME: MAYER - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

COPPER

SILVER

BIBLIOGRAPHY:

USGS MAYERQUAD

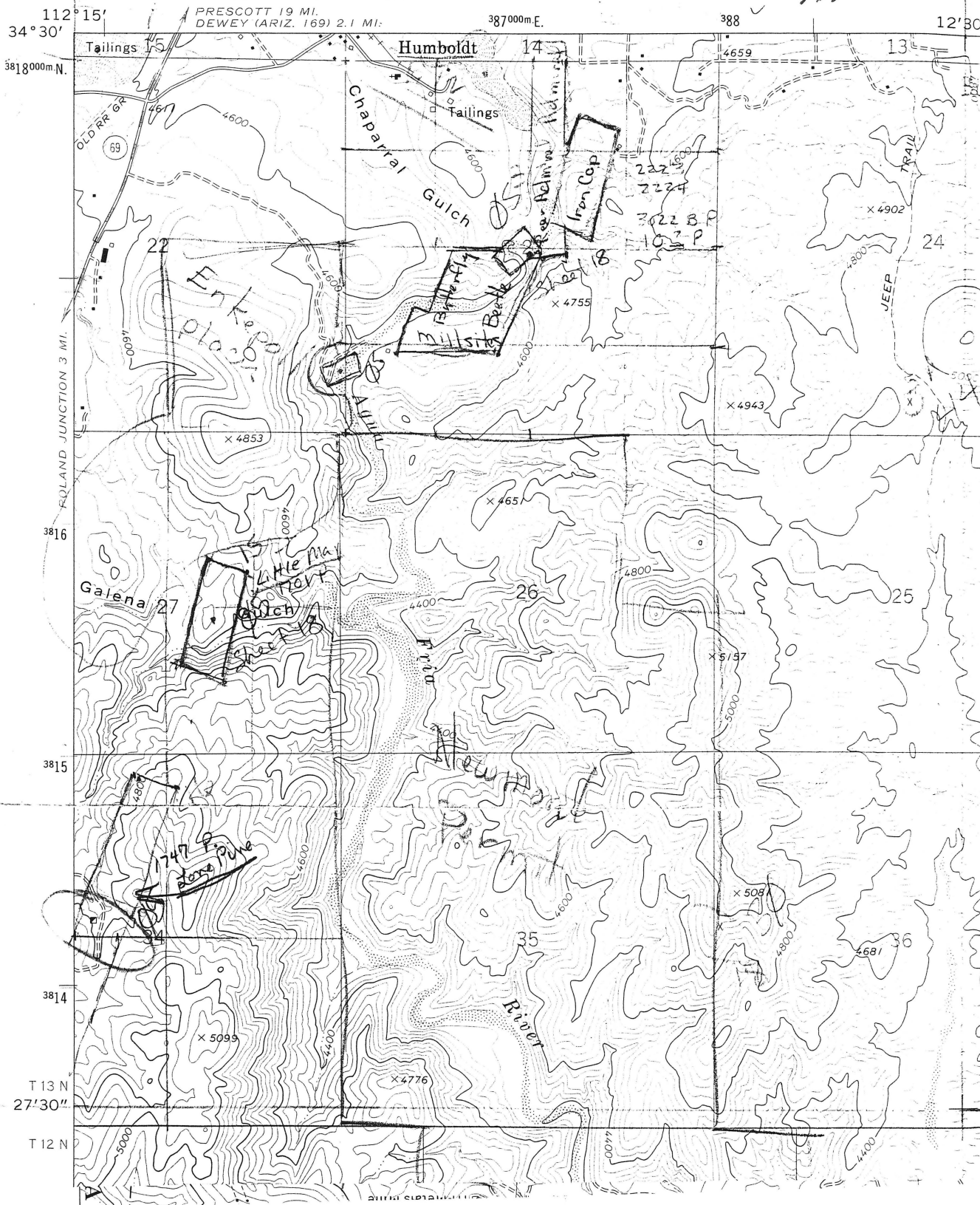
ADMMR HUMBOLDT TAILINGS FILE

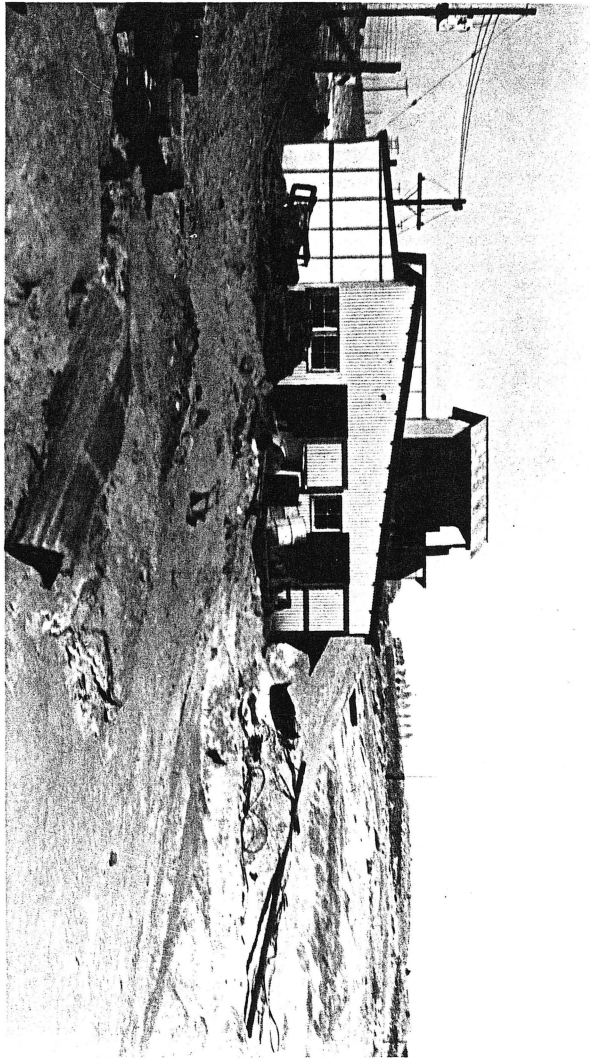
1073

3553 III SE
PRESCOTT VALLEY
(PRESCOTT SOUTH)

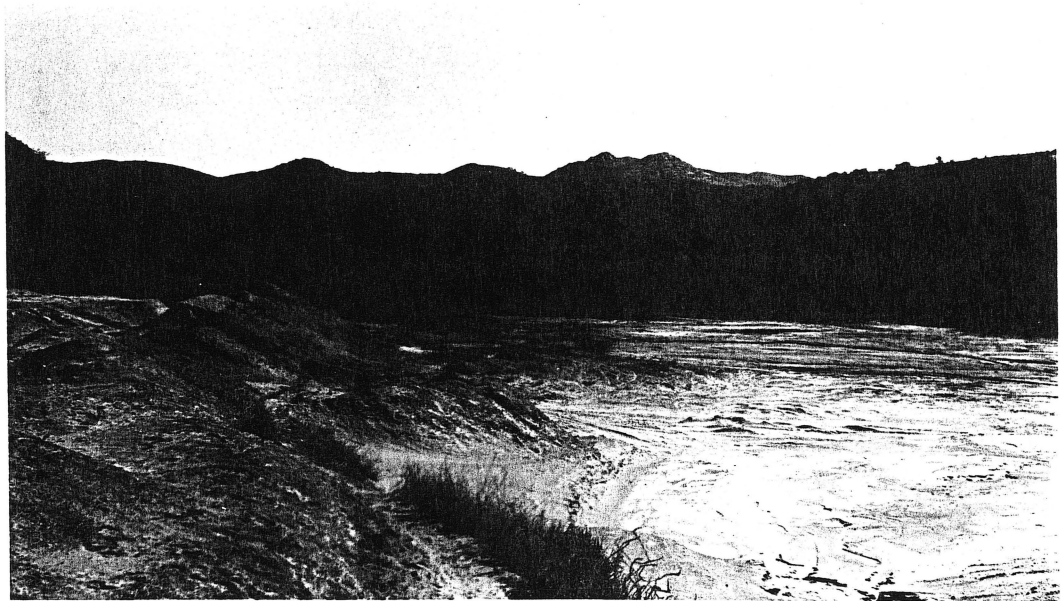
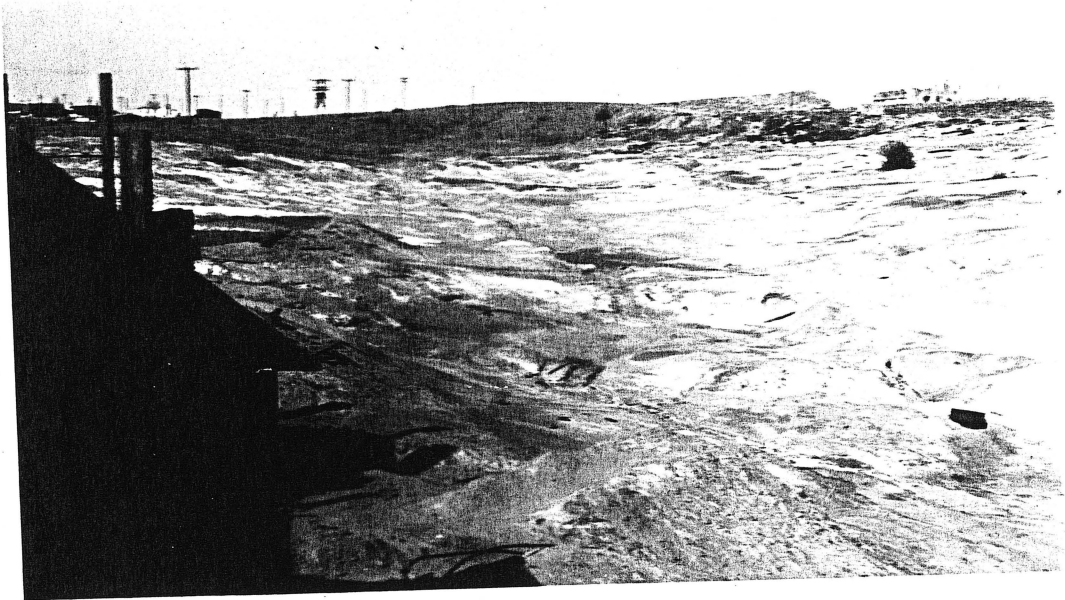
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

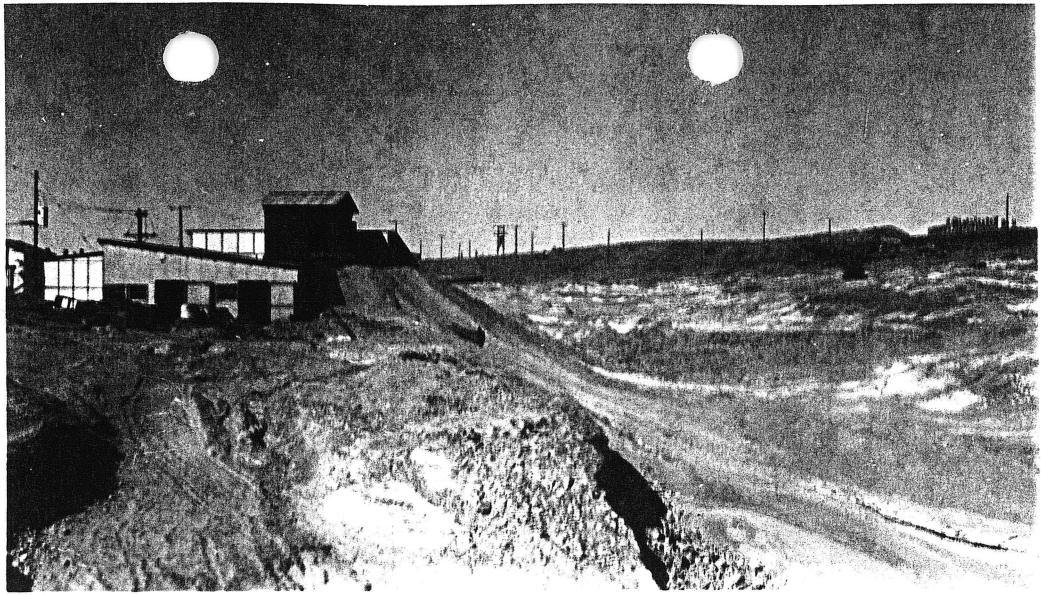
Mayer Quad
7.5'













DUNNING, C. H.
Rte. ~~7~~, Box ~~1134~~ 1635 W. Earl Drive
Phoenix, Ariz.

9-23-1942

Re- RFC loan -- See HUMBOLDT TAILINGS

See HUMBOLDT TAILINGS - Re "A" loan 11-12-42

See HUMBOLDT TAILINGS - Re methods for production 6-12-43

See HUMBOLDT TAILINGS - Re special quota on copper 8-21-43

HUMBOLDT TAILINGS

Cu

Yavapai 13 - 5 T 13 N, R 1 E

C. H. Dunning, 304 Ariz. Title Bldg., Phoenix '44

NAME OF MINE: HUMBOLDT DUMP

COUNTY: YAVAPAI

DISTRICT:

METALS: CU

OPERATOR AND ADDRESS:

MINE STATUS

DATE:

DATE:

5/1/44

C. H. Dunning, Humholdt

5/1/44
1/46

Shipping, milling
Idle

May 27, 1957

HUMBOLDT TAILINGS

YAVAPAI COUNTY

This property "finished".

MARK GEMMILL

WILL REOPEN BIG SMELTER

Some Interesting Facts Re- counted Concerning Inno- vations Introduced by C. E. Finney During Regime of Humboldt Smelter.

Mr. Frank M. Murphy, president of the A. & C. and the Santa Fe, Prescott & Phoenix railroads, has returned to Prescott from New York and other Eastern points. Mr. Murphy was interviewed by representatives of the Journal-Miner and Courier of Prescott, to whom he said that the Humboldt smelter would undoubtedly open within a short time, that the meeting to elect directors was held last Thursday and that immediate plans would be outlined to put the smelter in commission. Also that the management would issue a statement to the public outlining the policy to be pursued. The starting of this plant will mean much to Yavapai county and the Bill Williams country. It will enable many splendid properties to be developed by providing market for their ores, and will exert a large influence on the copper production of Arizona, as there are many copper properties that can be operated with the Humboldt smelter receiving their ores, whereas they would be unable to stand the expense of shipping to El Paso. Another thing, the ores of the Bouse country will be of great benefit to the smelter, as heretofore the proper fluxing ores have been very scarce. This fact made it extremely difficult for the smelter to give proper service in the past. That this section of Arizona is to be the scene of great activity this fall is an assured fact. The completion of the A. & C. railroad is absolutely assured by Mr. Murphy as soon as the heated spell is over. This road will open up much new territory and will aid greatly in solving the transportation question. It seems that the Bill Williams country is to be especially favored and a great deal of work will be accomplished in developing this large and promising section of the country, which is, in itself, a commonwealth in extent and riches.

The re-opening of the smelter calls attention to a bit of interesting history and also to some important innovations in copper smelting that were inaugurated by Mr. C. E. Finney. Four very important metallurgical improvements were first used at Humboldt and each one meant a wonderful advance in the copper smelting industry.

HUMBOLDT SMELTER HISTORY.
The Santa Fe railroad people, recognizing the necessity of smelting facilities for that section of Arizona, and that the erection of such a plant would bring about a much needed development, undertook the erection of the Humboldt and secured Mr. Finney to build and manage it. Under the first plans the smelter was to be owned and operated by Mr. Murphy and his railroad associates. However these plans were not entirely carried out. John Elliott, who owned the DeSoto and Blue Bell mines, induced those interested to let him build the plant, the Santa Fe taking bonds on the plant for the money they had expended and for some additional funds which they put in. So Elliott hitched up the smelter with his two mines and began the promotion of the enterprise under this consolidated arrangement, in association with Charles W. Morse, the New York banker and promoter.

The Santa Fe people agreed to this arrangement, having only the interest of the mining section in view and not caring to engage in the smelting business if they could avoid it, with the understanding that Mr. Finney was to be retained to complete the plant and manage it. Mr. Finney accepted the commission with the understanding that Mr. Elliott would provide the necessary capital to make the Humboldt a large and successful smelting enterprise. This, however, the new owners were unable to do, for the plant was never provided with the necessary money nor was the machinery in-

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While the plant was in operation an option was given to the Guggenheims on forty per cent of the stock. This was a six months' option and Elliott, thinking the option would be exercised and that the new owners would install the machinery required to complete the plant, made no effort to equip it himself, and when the option was allowed to expire the financial panic had hit the country and it was impossible to provide new capital for the plant or even sufficient money to meet the daily running expenses. During this time when the promises for equipment that had been made to him were not fulfilled and the needed machinery was not forthcoming, Mr. Finney resigned and a new manager was secured, who remained as such until the enterprise was forced into the hands of a receiver.

MANY NEW FEATURES.

The metallurgical improvements may not be entirely understood by the layman, but are of great interest to the copper and metallurgical industry. The Humboldt was the first smelter to successfully use crude oil as fuel in a reverberatory furnace. This was accomplished by introducing the oil in the firebox through a jet burner, using four in number. These jets were steam jacketed, the oil was under pressure and the steam being used at the point of introduction of the oil in the firebox assisted in combustion and spreading the flame. This oil burner was most successful in its operation and