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10/28/94

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: ALMA GROUP

ALTERNATE NAMES:

COPPER KING MS 2881, PAT.
ALMA MS 2881, PATENTED

PINAL COUNTY MILS NUMBER: 149F

LOCATION: TOWNSHIP 3 S RANGE 13 E SECTION 24 QUARTER NW
LATITUDE: N 33DEG 09MIN 29SEC LONGITUDE: W 110DEG 58MIN 41SEC
TOPO MAP NAME: HOT TAMAPE PEAK - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:

COPPER OXIDE
SILVER
GOLD LOPE

BIBLIOGRAPHY:

ADMMR A OLD MINE FILE
ADMMR MONITOR GROUP FILE - SKETCH
BLM MINING DISTRICT SHEET 637
ADMMR ALMA GROUP FILE

ALMA GROUP

PINAL COUNTY
MINERAL CREEK DIST.
T3S R13E Sec. 24

Pinal County MILS Index #149F

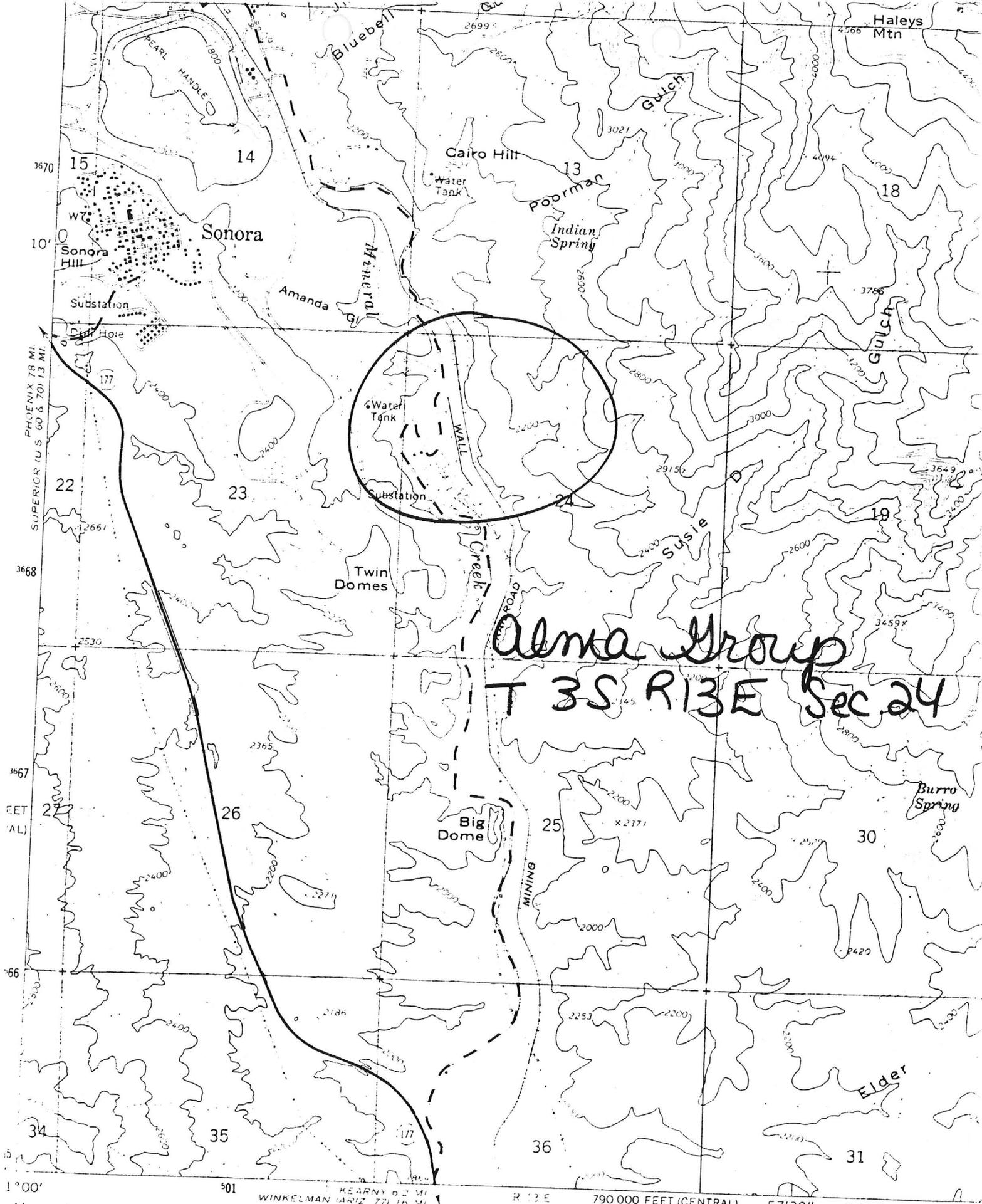
AKA: Copper King M S 2881, patented; Alma M S 2881, patented

ADMR A Old mInes File

Montior Group file - Sketch

BLM Mining District Sheet 637

Sonora 7.5' Topo (included in file)



Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS

Topography by photogrammetric methods from aerial
 photographs taken 1962. Field checked 1964

Polyconic projection. 1927 North American datum

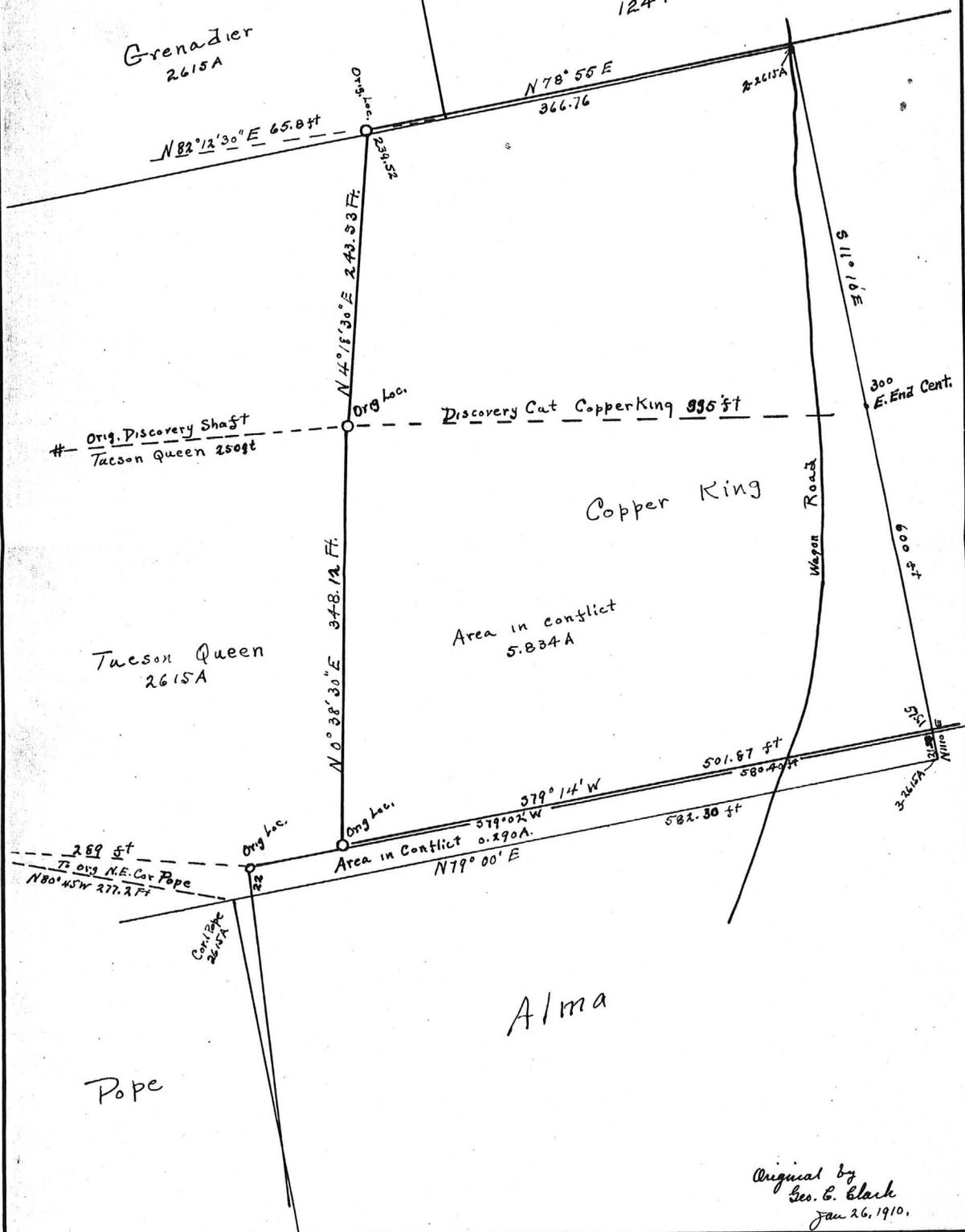
Sonora T.S.



2881
Conflicts

Canton
1244

Grenadier
2615A



Orig. Discovery Shaft
Tucson Queen 250 ft

Discovery Cut Copper King 935 ft

Tucson Queen
2615A

Copper King

Area in conflict
5.834 A

Alma

Pope

Original by
Geo. C. Clark
Jan 26, 1910.

REPORT
ON
ALMA GROUP RAY ARIZONA.

Pinal County

The Alma Group, consisting of six full lode claims and two fractions, is situated in the Mineral Creek Mining District, Pinal county, State of Arizona about a mile south of the town of Ray and but a short distance from the general offices and shops of the Ray Consolidated Copper Company. The Ray & Gila Valley Railroad crosses the Alma and Copper King claims, both of which are patented. The other claims are unpatented. The group is bounded on the north, west and south by property of the Ray Consolidated Copper Company. On the north-east and east are the extensive holdings of the Ray Broken Hills Mining Company now under development.

That part of the property lying on the west side on Mineral Creek covers a small flat and some low hills. East of the creek, bordering the Ray & Gila Valley Railroad is a high bluff above which the country is rather rough. The principal rocks of the western area are a highly crushed and altered, greenish grey rock, probably an altered diabase, some schist and porphyry. East of the creek occur diabase and heavily bedded quartzite, the latter overlain conformably by limestone at the extreme eastern end of the property. The extent of the diabase is unknown; it may occur as a sheet intruded between the beds of red quartzite. On the eastern end of the property the discoveries of copper ore have almost all been made wholly in or adjacent to diabase masses. There is some indication that the quartzite on the east may be underlain by schist.

West of Mineral Creek, on the Alma claim, the low hills mentioned above seem to be extensively impregnated with copper carbonates and silicates occurring along the innumerable fractures of this crushed and altered rock. The oxides of copper occur as a cementing material varying in thickness from mere films up to an eighth or a quarter of an inch. In some cases crushed zones up to three or four feet in width for a considerable distance horizontally contain enough copper minerals as cementing material to enable such ore to be mined and shipped to the smelter at Hayden to profit. At this time leasers are driving a drift along such a zone which for a width of a little more than three feet assays 4.2% copper besides a little silver.

On the east side and some distance back from the creek the Poorman lode is supposed to cut through the property, crossing it from the north-west to the south-east. The Poorman lode, which is the property of the Ray Consolidated Copper Company, has produced much high grade copper-silver ore in recent years. The extension of the Poorman lode, southeast of the Poorman shaft can be seen in the road recently constructed by the Ray Broken Hills Mining Company at a point where the lode passes into the Samantha claim through the side lines. The development of commercial ore on the Poorman lode at depth is one of the interesting possibilities in connection with this group.

The development work on the Alma group is of no present value nor is it extensive. Much of the work that has been done was obliterated in the course of construction of the Ray & Gila Valley Railroad which destroyed or at least made inaccessible several tunnels driven in a general easterly direction from the creek into the bluff above the railroad. In at least two of these tunnels moderate amounts of copper sulphide were found and the prospects were encouraging. Higher up on this same side of the Creek there are numerous shallow shafts, open cuts and tunnels some of which show oxidized ores similar to those on the west side of the Creek. On the west side the work consists of shallow pits, open cuts and tunnels sunk in the crushed and decomposed ground. All of these workings show oxidized copper ores ranging in copper content from two to six percent. These ores also carry silver regularly and in some instances small amounts of gold. From the Ray Consolidated Copper Company ground adjoining on the north and west a large tonnage of similar ores have been mined and shipped to the smelter.

The commercial possibilities of the area west of Mineral Creek consist chiefly in the possibility of developing a sufficient tonnage of oxidized ores susceptible to open pit or other low-cost mining methods to justify the construction of a leaching plant to treat them. The value and extent of the ores in this area susceptible to such treatment can be quickly and cheaply determined by churn drilling. In addition there is also the possibility of developing deeper ore bodies in the schist or granite-porphry. In the opinion of the writer there are abundant reasons for the prospecting of horizons below those zones of concentration yielding the so called ores of "secondary enrichment" of which now several thousand tons are being mined in the Ray camp.

On the east side of Mineral Creek there are good reasons to look for deep seated ore deposits (1) in the extension of the Poorman lode (2) in the underlying schist and granite or (3) in or along contacts of diabase masses.

By reason of its excellent location and the numerous other very advantageous circumstances the development of the Alma Group can be carried out at a minimum expense and greatest speed. There is enough evidence to justify the belief that on the western half of the group a sufficient tonnage of oxidized ores can be proven by churn drilling to warrant the construction of a simple leaching plant. On the eastern part of the property there are also good prospects though perhaps the evidence is not as positive. It is believed that the possibilities on the western part of the property alone are sufficient to justify the enlistment of capital in a mining venture of a moderate scale which will prove a very profitable investment.

Kelvin, Arizona.
July 24, 1918.

A. H. Hagg

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