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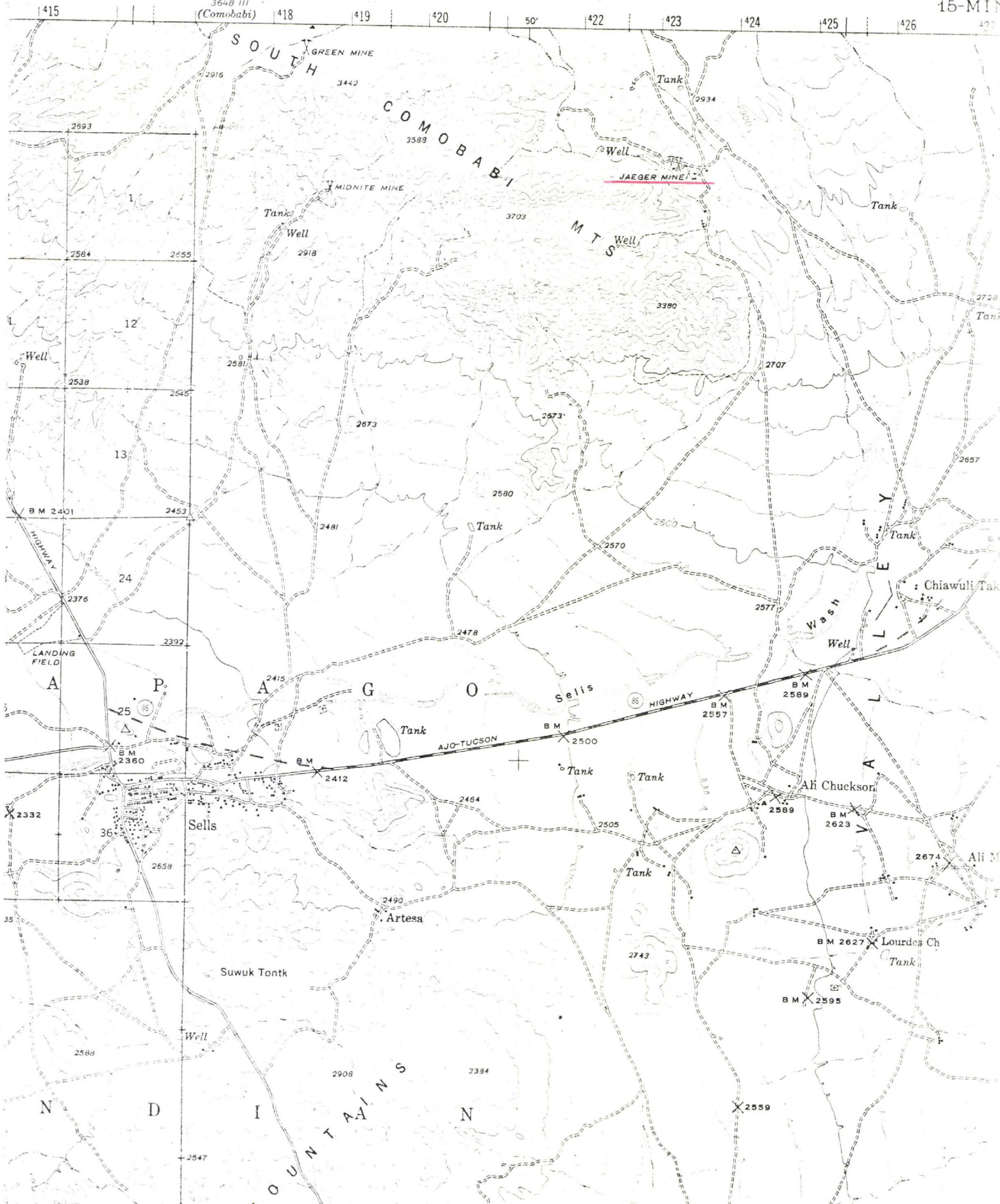
Preliminary Report on the
JAEGER GOLD MINE
Papago Indian Reservation, Pima County, Arizona

Dale F. Kittel
September, 1973.

WAR DEPARTMENT

3648 III
(Comobabi)

(P)
SELLS
15-MIN



415 418 419 420 50' 422 423 424 425 426 427

SOUTH
GREEN MINE
3442
2916
3583
MIDNITE MINE
2918
3703
TANK
WELL
JAEGER MINE
2934
TANK
TANK
2728
TANK
2657
2707
2673
2580
2570
2600
2577
WASH
WELL
CHIAWULI TANK
2589
2557
Sells
B.M. 2500
TANK
TANK
TANK
ALI CHUCKSON
2589
B.M. 2623
2674
ALI M
2743
B.M. 2627
LOURDES CH
TANK
B.M. 2595
2559
ARTESA
2490
SUWUK TONTK
WELL
2588
2547
2908
3384
NORTH MOUNTAINS

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sunk to a depth of 140 feet (probably in the late 1920s), the gold occurs in quartz-filled fractures in a pinkish rhyolite which does not crop out in the mine area. The same report, the exact date of which is not known, further states that the rhyolite was first encountered by the shaft sinking operation at 85 feet of depth, and that the entire shaft was in rhyolite at 115 feet of depth.

In his thesis concerning the geology and mining operations in the Picacho Peak area, about seven miles northwest of the Jaeger mine, J. A. MacKallor notes that "the quartz veins rarely crop out, but often are indicated by fragments of vein quartz at the surface". This is borne out also in the Jaeger mine area, where quartz veins and diorite dikes crop out in several places, but are for the most part evidenced by a rubbly zone of vein or dike material piled on the ground. Several of the veins have been explored by shallow shafts, or in one or two cases, by shafts that are perhaps 40 or 50 feet deep.

Development Work

During the 1920s G. H. Jaeger located a fairly large group of claims in the area of the subject mine, and started shaft sinking operations on the vein, which is reported to have been ten feet wide where the shaft was collared. At about 70 feet he reportedly drifted eastward along the vein, then stoped to surface. The ore shoot which he was following is reported to have been faulted off on that level at 50 feet east of the shaft. According to Arizona Bureau of Mines Bulletin 137 the property was being operated by the Akron Gold Mining Company in 1933, and the shaft had been sunk to 280 feet, and was connected to about 800 feet of workings.

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Production

Each of the reports listed in the bibliography deals to a certain extent with production. The statements made in this regard do not always jibe with one another, so they are repeated herein as they appear in the reports at hand.

According to the newspaper-published Carpenter report, when the shaft had been sunk to 115 feet of depth an undetermined amount of tons were shipped from the subsequent five feet of depth, and they assayed \$37.70 per ton in gold valued at \$21.00 per ounce; 120 to 130 feet of depth produced about 50 tons which assayed \$49.40 per ton, and the ten feet to the bottom of the shaft produced about 45 tons that assayed \$54.50 per ton. At the current price of \$105.00 per ounce for gold, this development ore would average about \$235.00 per ton, allowing for 670 fineness of the gold. It is not known whether this ore was stoped out later, but as earlier stated in this report, by the end of 1933 the shaft had been sunk to a depth of 280 feet, and development work had been done along the vein on the 250-foot level.

Random items of interest concerning production have been reported as follows:

1. The Carpenter report mentions a sample which was said to assay at \$2856.80 per ton in gold values, and also four other samples were said to have averaged over \$600.00 per ton in gold values -- all presumably at about 670 fineness, and at a \$21.00 per ounce price for gold.
2. Bulletin 137 reports that Mr. Jaeger "shipped a few cars of high grade gold ore from the main shaft workings" and that during 1932 and 1933 Akron Gold Mining Company shipped 12 cars of ore from the property.
3. The Burdick report states (a) that Mr. Jaeger mined \$68,000.00 worth of gold from the ore shoot at 70 feet below the collar of the shaft; (b) that Mr. Jaeger reported shipment of a \$40,000.00 carload (50 tons) and a \$60,000.00 carload; (c) that he (Mr. Burdick) averaged the grade of 20 shipments made from the mine and came up with a grade of 1.75 ounces of gold per ton for those shipments. At 670 fineness and \$105.00 per ounce of gold, such ore would be worth about \$124.00 per ton.

In his report Mr. Burdick also states that early in 1971 the present owner, Mr. Hawes, had the shaft dewatered to the 200-foot level, and that he (Mr. Burdick) cut samples of such value that by my calculations they would indicate ore worth about \$100.00 per ton, with due regard for fineness and current prices. It is not known, however, if these samples were representative of an actual ore reserve, or if they were random samples. The report also mentions the occurrence of an unstated amount of low grade material that comprises a 20-foot width of vein, which again by my calculations would constitute \$30.00 per ton rock.

Copies of shipment reports for the period 1932 through 1940 were obtained by Mr. Combs, and were analyzed in the current gold price of \$105.00 per ounce, and an average fineness of 670 which was obtained from the reports. The first year's reports were those made by the San Francisco Mint, and relate to shipments made during that time by the Akron Gold Mining Company. In summary, these reports indicate that a total of 2,034 tons of ore was shipped by Akron during those nine years, and that the ore averaged 0.300 ounces of gold and 0.17 ounces of silver per ton of rock shipped, which also contained about 70% silica.

Surface Plant and Living Accommodations

The surface plant consists of an electrical generating unit; two stationary air compressors with a ^{receiver} ~~repeater~~ tank, the unit having an estimated capability of 300 ~~psi~~ of air pressure; a small mill with an

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estimated capacity of about 20 tpd; and a shaft pump operated by a gasoline engine which in the past has supplied domestic water for the housing. Also on the property are two houses in good condition and ready for immediate occupancy.

Conclusions and Recommendations

There is no doubt but what the Jaeger gold mine was profitably operated for several years; the relatively unconfirmed reports regarding pre-1932 production indicate that the ore first encountered may have been of better grade than that below about 150 feet, however. If this were true, it would be characteristic of gold mines in general, which normally are not noted for their depths.

As early as December, 1933, the shaft was reported to be at 280 feet. After that time about 1800 tons were shipped. At an assumed factor of 12.5 cubic feet of broken rock per ton it can be estimated that about 22,500 cubic feet of rock were mined. This cubage could represent 750 feet of drifting and crosscutting on a 6 x 5 foot cross-section; on the other hand it could represent something like 200 feet of drifting and crosscutting on the same cross-section, and an additional 16,500 cubic feet of stoping (1300 tons).

The Jaeger mine was shut down in 1941 due to lack of diesel fuel and gasoline to operate the surface plant. The fact that it was shut down for reasons beyond the operator's control, and the fact the price of gold is now at an all time high, it would seem reasonable to further investigate the sample assays which Mr. Burdick reports.

However, of considerably more interest would be the satellitic quartz veins noted in the immediate mine area, and an investigation into the reported faulting of the ore body on the 70-foot level.

One approach to investigate these two ore potentials would be to map the surface of the general mine area with the objective of angle drilling core holes to intersect the veins of interest at about 100 feet of depth. Another approach would be to dewater the mine and core drill both from surface and from underground to most effectively test the quartz veins in the vicinity.

In summary, I believe that the Jaeger property would be a geologically sound venture for an individual or other mining entity that is willing to option, lease, or purchase the property, realizing that about \$25,000.00 would be needed to initially test the potential of it, in addition to whatever the costs of acquisition might be. If the property failed to display sufficient potential to justify further work, the investment would be a complete loss. If a reasonably good potential were developed, additional funds would be required to develop the property to the production phase. However, if this became a reality, it is quite possible that development ore could be used to help defray development and operating expenses.


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References

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JAEGER'S PROSPECT

10-3-73

Marvin W. Combs
918 W. Santa Maria
Tucson Arizona 85706

Dear Sirs.

I am sorry that I was unable to get this report to you as promised, but Mr. Kittle was unable to complete it in the time anticipated.

If there is anything more that you need please let me know.

Yours truly
Marvin W. Combs

Phone 294-2890

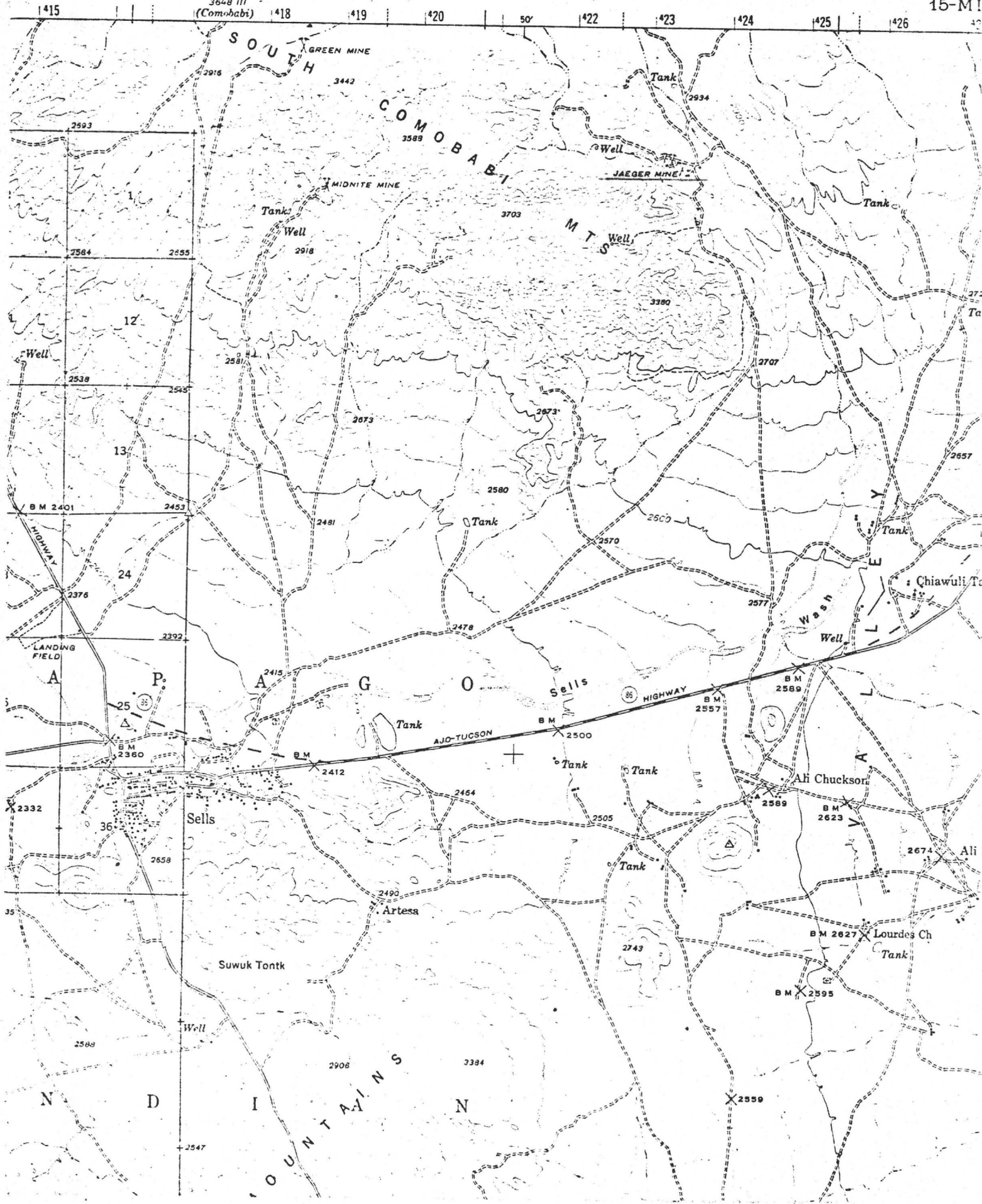
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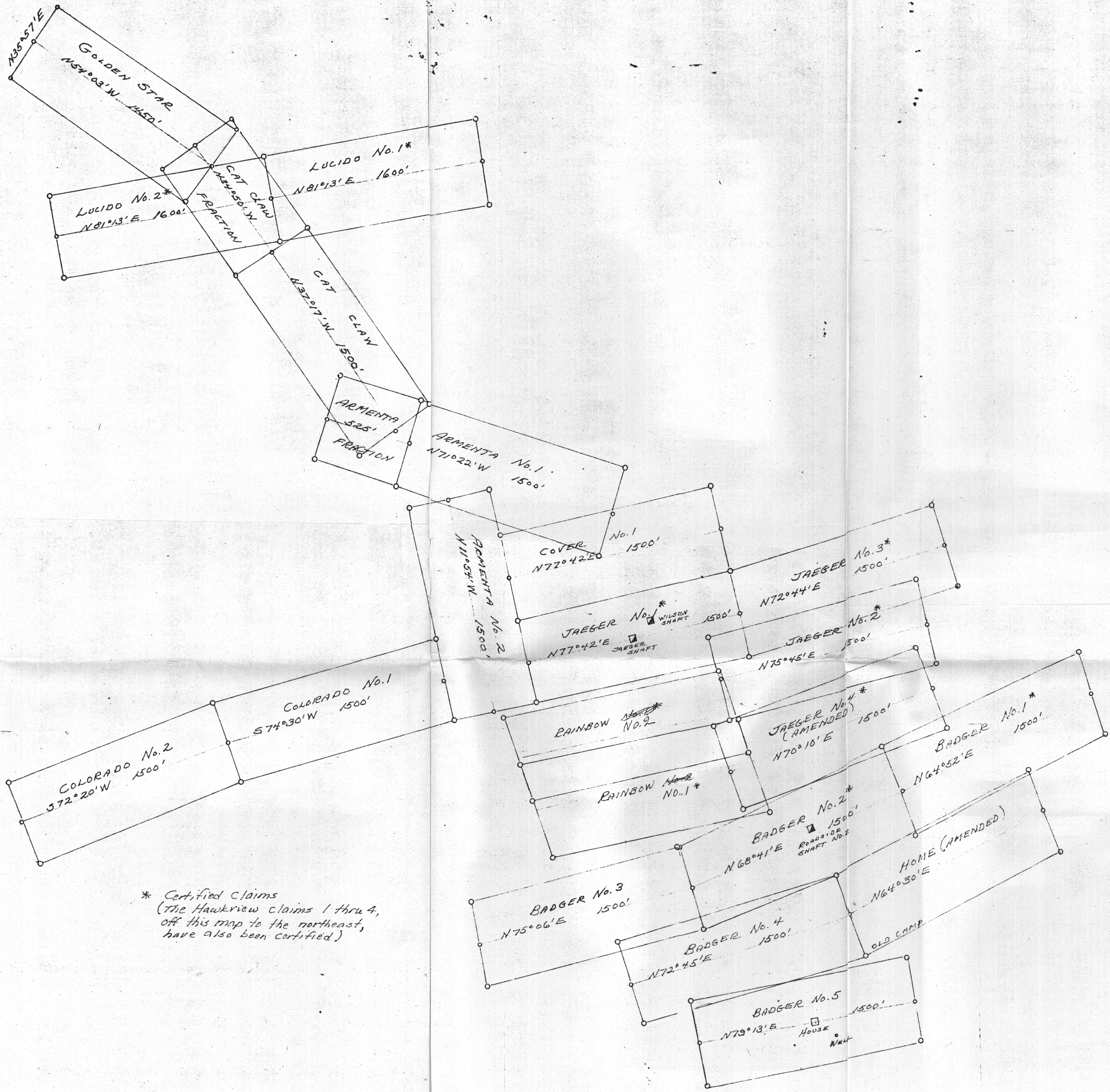
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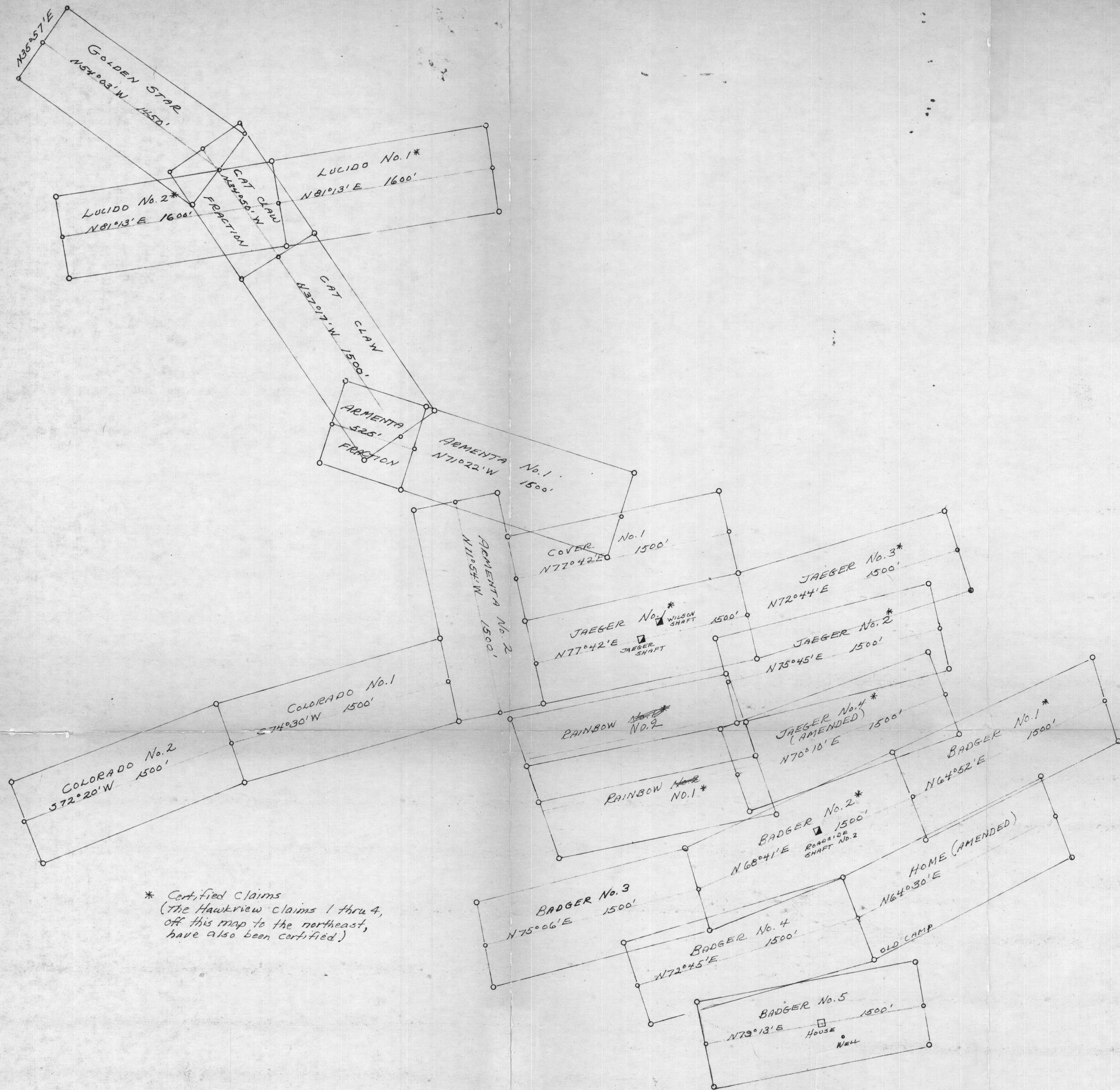
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 SCALE 1 INCH = 500 FEET
 Redrafted Sept 1973 from
 Exhibit G - PA 133
 OFK



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