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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: COMER GROUP

ALTERNATE NAMES:

FOUR SHOULDERS

YAVAPAI COUNTY MILS NUMBER: 1076A

LOCATION: TOWNSHIP 12.5N RANGE 1 W SECTION 20 QUARTER N2
LATITUDE: N 34DEG 27MIN 23SEC LONGITUDE: W 112DEG 23MIN 12SEC
TOPO MAP NAME: GROOM CREEK - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

SILVER
LEAD
GOLD
COPPER
ZINC

BIBLIOGRAPHY:

ADMMR COMER GROUP FILE

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine

Four Shoulders 13N, 1W (?)

Date June 12th 1947.

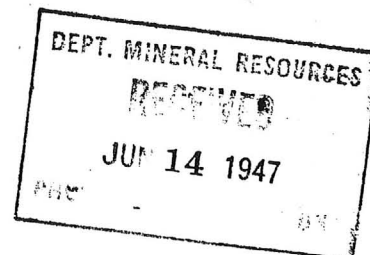
District

Engineer

Subject:

To C.H. Dunning

From A.C. Nebeker



I went up to Walker Yesterday and took Avelock along to show me the Morgan property and the adjoining ground.

Avelock said we could get into the tunnel and see that lead ore, that we have been talking about, but after we got over the cave at the portal of tunnel, we found the tunnel caved full so could not see a thing.

Avelock drove this drift tunnel himself and timbered it. He think now that all the timber has given away for over 100 feet. He tells me that on tunnel level the ore was 8 feet thick and 75 feet above the width was 15 feet.

He showed me samples from some of the ore he shipped, and I see from them that there is a good per centage of zinc as well as lead.

He calls the ground the Four Shoulders and it consists of one and fraction claims. What is left of the Sam Dreyer property joins on the south.

The Sheldon Company has patented claims which cut into the vein system of these claims, so it is questionable if one could make a good mining proposition out of what is left.

FOUR SHOULDERS

Pb, Zn

Yavapai

13-4

El Avelock

Walker, Arizona

ABM-180 R

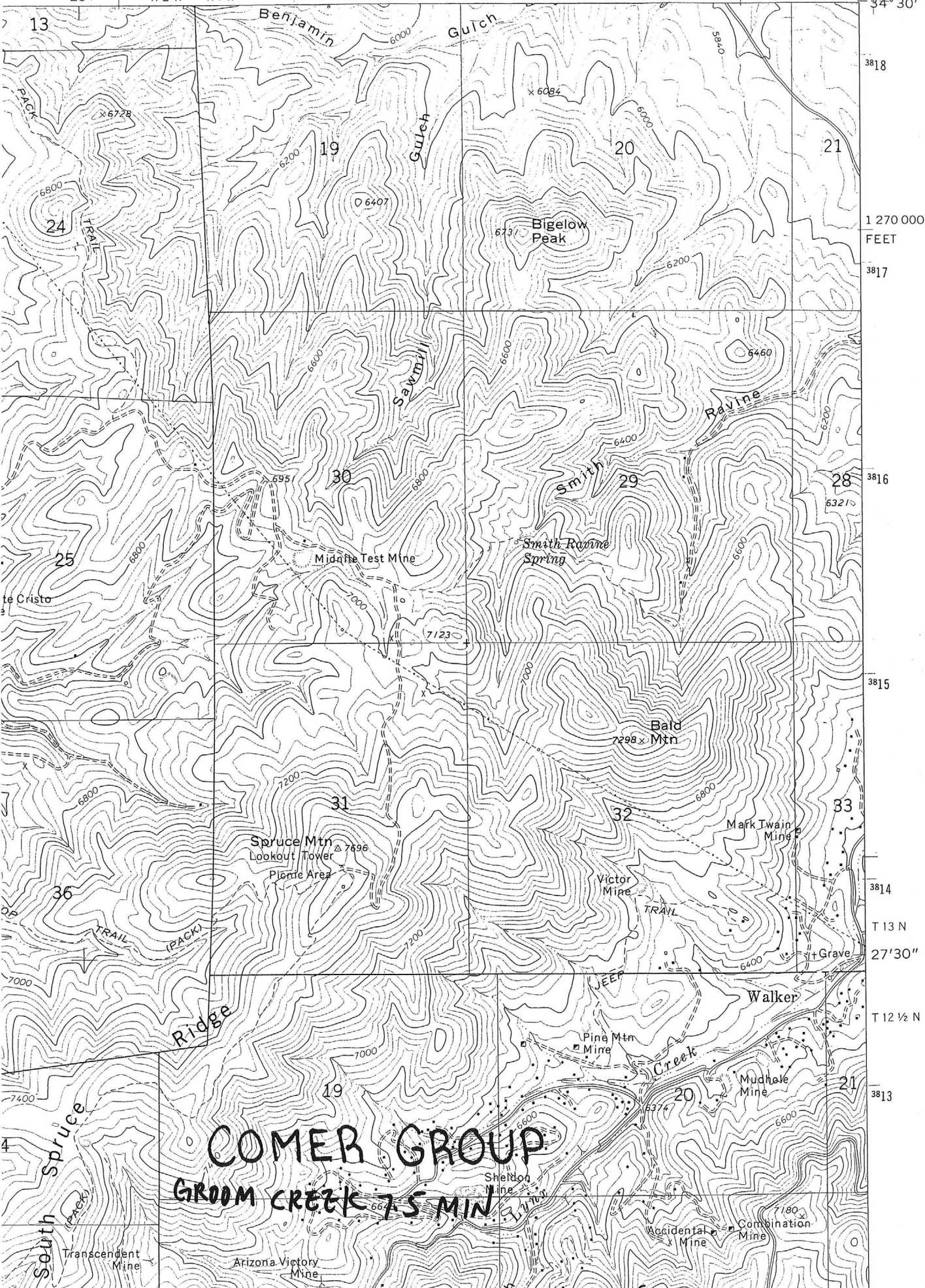
GROOM CREEK-

7.5 MINUTE SECTION (TOPOGRAPHIC)

NW/4 MT. UN 15' QUADRANGLE

30' (PRY VALLEY

25' R 2 W R 1 W 371 372 360 50 FEET 112°22'30" 34°30'



COMER GROUP

YAVAPAI COUNTY

11-23-77 - A map of Black Rock District, and a map of Wickenburg showing points of interest, are filed in the Wickenburg general file. 11-23-77 bh

A PRELIMINARY REPORT

THE COMER GROUP OF MINERAL CLAIMS

WALKER MINING DISTRICT

YAVAPAI COUNTY, ARIZONA

FRANK R. WICKS

LOS ANGELES

1925

Frank R. Wicks
Consulting Mining and Industrial Engineer
Los Angeles,

THE COMER GROUP OF MINING CLAIMS.

Location:

Walker Mining District, Yavapai County, Arizona, about 14--miles southeasterly from Prescott in the Bradshaw Mountains.

Area:

Five mineral claims, one of which is a small fraction. Total area approximately 80 acres. Claims are contiguous and so placed as to give a total length of about 3000 feet along strike of veins.

Title:

U. S. Mineral locations held by members of the Comer family for many years. Assessment work and other legal requirements satisfactorily performed. Title investigated by attorneys of Prescott. Sufficient work has been done upon claims to permit fee title being taken if desired.

Names of Claims:

Eldorado, Grub Stake, Vindicator, Lambertine and Lambertine No-2.

Elevation:

About 6300 feet about level at lower end of property.

Communication, Etc.:

Post Office, Walker, Arizona, about one half mile from property. Telephone at Walker, and can be had upon property when needed. Express shipping point Prescott, Freight shipping point Poland, Arizona, about 1½ miles distant through Poland tunnel.

Power:

The power line of the Arizona Power Company crosses the property. from which electric power may be had at rates determined by the State Corporation Commission.

Water:

Sufficient supply now on property for domestic uses. Water for milling ores can probably be obtained in the mine workings when needed. More can be developed on near-by properties should a greater supply be needed.

Climatic Conditions:

Favorable for all year operations. Moderate summer and winter conditions. Precipitation said to be about 14-inches per year. Very little snow.

Timber:

Considerable growth of small pine, etc., on the property which would be suitable for light mining purposes and for domestic fuel, etc. A limited amount of heavy mine timber can be had in the District. While dimension and special timber can be purchased from Arizona mills at prices averaging about \$30.00 per thousand feet, delivered at or near Poland or at the Property.

Improvements:

The property has never been equipped for operation. There are no buildings or substantial improvements on the property except old shafts and tunnels used in mining of surface ores and old bins used in the handling of these ores. An old two story hotel building with an additional ten acres of land which is probably non-mineral can be had at a small added price if desired, but is not likely to be needed.

Operating Conditions:

Generally favorable. Experienced labor can be had at prices prevailing in other Arizona districts. Living conditions good. Roads good most of the year.

Adjoining Mines and Properties:

The Comer Group is situated in the approximate center of an extensive mineralized zone. Southerly and adjoining the Comer Group is the Sheldon Mining Company group, now producing on a substantial scale. This company has recently purchased the Mud Hole and the Golden Fleece mines adjoining the Comer property on the easterly side; these were producers of considerable ore, and are believed to contain much ore that can now be handled at a profit. The adjoining property on the westerly side is known as the Pine Mountain Group which has a good record of production of gold ores, while on the north and north-easterly end the Black Diamond Group takes up the extension of the Sheldon-Comer vein system to the north.

Ores of the District:

The ore production of the District at the present time is principally silver-lead, at least the greatest value is said to lie in these ores. The adjoining Sheldon property is also producing considerable copper ore of milling grade. The general situation is that the vein system carries gold as the principal valuable mineral at and near the surfaces, while at very moderate depths the silver and silver-lead ores become important. With increasing depth these gradually grade off into copper ores carrying relatively less lead and silver but a fairly regular amount of gold, averaging probably about one-half ounce per ton.

Geological Conditions:

The above described mineralization will be noted as being more or less similar to that of the Butte, Montana, District. The same may be said of the general geological conditions, speaking of the District as a whole. The mineralized area consists of a series of well defined fissure veins extending for long distances in a north-east-south-westerly direction through granite country rock. At the surface the veins are largely quartz and quartz-monzonite, the latter predominating, but with increased depth the vein filling becomes more truly porphyritic and at the depth of the present workings of the Sheldon the gangue of the ore is essentially porphyry. The principal productive vein of the District, which I understand is called the Sheldon Vein extends through the Sheldon Group for several thousand feet and through adjoining properties on both end of their ground. On the Comer Group the Sheldon Vein to be quite well defined as it has been opened in a number of places by small shafts, open-cuts and tunnels. On the Comer Ground there is also much evidence of cross veins of considerable strength having more or less the same characteristics of the Pine Mountain Veins where the mineralization was largely in cross veins and where the principal production was in gold ore. One of these cross veins is of considerable

strength and has been called the Pine Mountain Vein. Near the intersection of this vein with the Sheldon Vein there has been a large amount of surface work done at different times and it is said that something over one hundred thousand dollars worth of ore was mined and shipped from this area.

The Sheldon Vein and the smaller veins near it dip 80 to 85% south as an average and seem to be quite free from serious faulting or deflections.

Discussions:

The above general data is given briefly to show the principal operating conditions of the District. More specific discussion of the Comer Group follows:

The five claims comprising the Comer Group are situated about one quarter mile from the little town of Walker, and very favorable located as to elevation, surface-contour and mineralization. The group comprises a compact and well shaped area covering a section that appears to be live and well mineralized and it seems to have the apex of the Sheldon Vein extension and possible two or three other smaller veins which extend the greater part of the length of the property or something near three thousand feet.

These claims have been held by one family for many years, and have produced small amounts of ore from time to time, being operated by hand methods and intermittent work. The ores which have been extracted have been largely gold bearing, and whenever the base or lead ores were encountered the mining was discontinued in that spot as such ore had no market value at that time and under the conditions which then obtained as to transportation.

The present situation therefore presents an unusual combination of favorable circumstances for profitable mining operations.

The present operations of the adjoining property whose workings are now over eight hundred feet in depth and only a few hundred feet from the end lines of the Comer property are said to be in very good ores in a vein nearly eight feet wide. I did not see the Sheldon workings but have the information from sources which I consider fully reliable. There is no serious faulting known in the veins up to date and the surface openings on the vein on the Comer Ground seem to prove the presence of the vein system without question. The vein upon the Sheldon property has been said to have been of workable grade almost continuously and quite uniformly. These conditions would seem to prove the existence of profitable ores in the ground under discussion.

Judging by the experience of the three nearest mines it would appear that the ores to be encountered in the zone lying between 150-feet and 400-feet, below the surface should be of sufficient grade to permit shipment as a crude ore. With considerable possibility that ores nearer the surface may also be of such grade and character that it could be shipped to the local smelter with sufficient profit to very materially aid in the development work until the zone of silver-lead ores can be reached.

Because of the wadded condition of the old shafts and stopes on the property it was not possible for me to sample any definite section now estimate tonnage such as might be desired, but three samples which were taken contained total values at present market prices of \$23.20, \$18.46 and \$29.60 per ton. These represent workable widths of ore, the first being on the principal cross vein, while the other two are

taken from the Sheldon-Comer vein. The quality of such ore now available could not be determined, but the samples serve to substantiate the claims made by the owners as to the value of the ores near the surface.

The transportation of ore and concentrated products from the property to the smelters is somewhat unusual. The District is served by the Poland Tunnel which extends from the Walker Gulch through the mountain a distance of nearly 9000 feet to the opposite side of the mountain at the station of the standard gauge railroad at Poland. At this point the ore can be dumped direct into railroad cars or into bins for storage as may be desired.

The Poland tunnel, or the control of same, is in the hands of the Sheldon Mining Company, but it is understood that the operation of the tunnel service is extended to the entire district as a public utility by stipulation of company from who it is purchased. For the transportation through the tunnel an average cost of about one dollar per ton is estimated, but on fairly large tonnages a somewhat lower cost may be expected. The manager of the tunnel property has advised me that ore from the Comer property would be transported under contract when offered.

The elevation of the tunnel track is such that it may be extended directly on to the Comer Group a distance of only a few hundred feet and at such a point as to be directly in line with the dumping bins at a suitable location for a main shaft. This fact will materially aid in economic handling of ores for shipments.

Ore containing principal value in gold, silver or copper should be shipped to the Humboldt Smelter, as the freight rate from Poland to the smelter is only eighty cents per ton and the smelting rates now prevailing are fairly reasonable, ranging from \$3.50 to \$5.00 per ton for average grade ores and allowance is also made for iron contained which in some cases is important. The Humboldt Smelter has been a steady buyer of ores from that vicinity for many years. Ore of similar character could also be shipped to the Verde Smelter at slightly higher rates should it happen that the Humboldt Smelter is not available at any time.

Ore having substantial value in lead or in both silver and lead will probably be shipped to the El Paso smelter at freight rates ranging from seven to ten dollars per ton from Poland to the El Paso plant, and such shipments are now being made from the District.

It is now understood that the Humboldt smelter is preparing to handle and to buy lead ores and to concentrate low grade complex ore for properties which are not equipped with individual milling plants. This information is believed to be reliable as it comes from disinterested parties but has not been received from smelter officials. If such is the case it would very materially aid in handling the lower grade ore from the Comer Group during the development period until such time as sufficient ore is available as to justify a mill upon the ground.

The metallurgy or treatment problem for handling and concentration ore from the Comer Group should not be difficult as the ore is not seriously complexed. The lead occurs entirely as galena, even in ore now exposed at the surface, and this galena is found in quite large crystals and segregations which result in easy concentration on tables or in jigs of suitable type. The galena is believed to carry a substantial portion of the silver as an attached or absorbed mineral.

In the adjoining property the ore is tabled and then subjected to oil flotation treatment. The tables take out some of the gold and the major part of the lead and silver minerals, while the flotation plant produces a copper concentrate containing nearly all the remaining gold and some silver-lead as well as some iron pyrite. The crude ore contains very little zinc which serves to simplify the problem considerably. On the Comer Group operations it is probably that the question of the erection of a milling plant can be deferred for some months and meanwhile the shipment of crude ores can be made as the development work progresses. By the time that a reasonable tonnage of milling grade ore is developed the policy of the smelting plant as to the handling of such ore will be made as to avoid the erection of a plant upon the property.

For starting of operations upon the Comer Group it would seem best to start a new shaft of a least sufficient size for two compartments and a man-way. Placing this shaft about 700 feet from the westerly end lines of the claims and on or near the veins. The point selected has the advantage of being best reached by the tunnel railroad and also near the intersection of veins where mineralization should be sufficient to produce shipping grade ore with the least amount of development. At least the surface indications lead to this conclusion.

It is believed that not more than two hundred feet of shaft work and a little amount of horizontal work on two levels will open and make available enough ore to cover the cost of the property, this estimate being made from best available information at this time. Operations beyond that should soon repay the cost of development and return a substantial profit from the work with but little delay in its accomplishment.

Taking the proposition as a whole the Comer Group seems to offer the basis for a substantial and attractive mining enterprise on a small scale, with excellent possibility of profitable expansion at a later date. The elements of chance usually entering into a mining development are very largely eliminated by the developments of neighboring properties and the favorable operating conditions as to transportation, timber water and power, and living conditions make it possible to undertake the work with less initial capital and less delay than is usually necessary. These conditions and the favorable terms upon which the property is offered by the owners justify recommendations for placing the property under active operation as quickly as possible.

(Signed) Respectfully submitted.
Frank R. Wicks