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NEW JERSEY LODGE

DAISY LODGE

Savoy

Bella

Schiff to Ono

Savoy

Path

W. Lida
Patd
462'

800'
Eclypse
Patd
200'

1st N.E. Eclipse
Patd
600'

311'
Cougar
Patd
652'

1400'
Cougar Lodge
LORENA LODGE

#1-Original Shaft
54' Drift 50' n-60'S
Stopped back (abandoned)
more than 50000' from this

#2-Hayden Shaft
90' Con. at 54 with
old Wks - Vein is 40'
E of bottom est. 1 down
300' from top at 33'

#3-Baker Shaft - 70'-20'
lower than #2 - Bottoms
level - 135' S of #2 -
about 23000' from
this shaft

M. & M. VEIN

Another vein belonging to the same system but farther east is exposed by a short tunnel on the M. & M. claim, operated in 1922 by J. J. McNeil and Mrs. Reid. This tunnel is on the Poland Creek slope at the foot of Wasson Peak. The vein strikes N. 18° E. and dips steeply west. It is a small fissure from 2 to 3 feet wide, with a pay streak about 6 inches wide. The ore, which is partly oxidized, carries mainly silver, though the thoroughly oxidized material pans free gold. The "black ore" consists of quartz and ankerite with calcite and more or less pyrite, galena, sphalerite, and tetrahedrite. Much of it shows native silver, and it contains at best \$18 in gold and 180 ounces in silver to the ton.

ORO BELLE AND GRAY EAGLE MINE

A winding road along the hillside leads from the Tiger mine to the Oro Belle and Gray Eagle. The Oro Belle mill and mine are in a canyon on the brushy south slopes of Wasson Peak, at an altitude of 5,400 feet. An old wagon road in bad condition reaches the Oro Belle mine from Minnehaha Flat and Walnut Grove. From the Oro Belle a trail leads up from the hot brushy slopes to the cool forests of Wasson Peak and to Crown King.

The Oro Belle and Gray Eagle was worked by F. E. Harrington between 1900 and 1912, but its early history goes even farther back than this date. The total production is estimated at \$700,000. Weed, in the Mines Handbook, gives the following partial figures of production:

Gold, silver, and copper produced at the Oro Belle and Gray Eagle mine, 1907-1909

	1907	1908	1909
Gold.....fine ounces.....	4,313	123	1,226
Silver.....do.....	9,937	3,639	2,735
Copper.....pounds.....	19,010		4,820

Some work was done, it is said, in 1915 and 1916. At the present time the property is owned by Mrs. Hattie Barnes, of New York. In 1922 the property was in a sad condition. The 20-stamp mill and the office buildings were dilapidated and wide open, serving as a stable for cattle. No caretaker was present to look after valuable surface equipment.

The Oro Belle veins are developed by eight tunnels, of which the longest extends 1,000 feet. The Gray Eagle vein is opened by a shaft 600 feet deep.

The road from the Tiger mine to the Oro Belle soon enters highly metamorphosed, in large part sedimentary schist, which continues to the mine. In several places the schist is intruded by fine-grained granite dikes. The Oro Belle vein is said to be small and was mainly worked by lessees through the several tunnels. The Gray Eagle shaft is about a quarter of a mile north of the mill; this is close to the contact of schist and Bradshaw granite, and pegmatite dikes are very abundant—in fact, the footwall of the inclined shaft is in pegmatite and the hanging wall in schist. The Gray Eagle vein is said to be from 2 to 15 feet wide, and the ore is reported to have contained \$20 in gold and 2 ounces of silver to the ton, with 1 per cent of copper.

The Big Belle is a parallel vein striking north-northeast a quarter of a mile east of the Gray Eagle. It was not visited.

NORTHWARD EXTENSIONS OF GRAY EAGLE LODE

The strong vein of the Gray Eagle continues northward across the pass and down for some distance on the slope toward Crown King, passing through the Savoy group, the Cougar, and the Bradbury group. Near the pass on the south side C. V. Carlson had recently shipped high-grade ore from a vein regarded as a spur of the Gray Eagle. At the summit Mr. Andree was taking out high-grade silver ore from a 75-foot shaft on the Cougar vein. Both these veins contain honeycombed quartz, drusy in places and oxidized in part. The ore evidently once contained ankeritic carbonates, which are now dissolved. The sparse primary sulphides are sphalerite, galena, and a little pyrite. (See pl. 14, B.) Some of this ore is of very high grade. It is said that 20 tons was shipped by Mr. Andree in 1922 and netted about \$5,000. One lot of 2 tons shipped contained 454 ounces of silver and \$2 in gold to the ton and 15 per cent of lead. The secondary silver ores appear to be cerargyrite, argentite, and native silver. A quarter of a mile north of the Cougar is the Bradbury group (Lukes mine), which in 1922 was leased by Mr. Barnequino. Some high-grade ore of similar character to that from the Cougar was shipped in 1923. The Lukes mine is developed by a tunnel, and in recent years ore worth \$200,000 is reported to have been shipped from it.

On the west side of the Gray Eagle, on the south slope, is the Fourth of July and New Jersey vein, on which considerable work has been done and from which ore has been shipped.

These veins are contained in highly metamorphosed schist, mostly of sedimentary origin; the contact with the Bradshaw granite is close by on the west, and the schist contains many pegmatite veins.

Cougar

The attached sketch shows the Cougar mine a fractional claim of 4.65 acres in area. Note the Eclipse lying to west, also fractional located under Old Law. The Lida also fractional. These two are locations on the Eclipse Lode. Farther South is Savoy regarded as valuable Silver. Deep workings is entering the "Gold Zone." Farther South is Ora Bella Group - having production record of approximately \$750,000 Gold, Silver and Copper.

Economic Geologists believe that at 400' the Eclipse will be Gold. It has been regarded as silver but many shallow openings have not paid. These fractions can be grouped with the Cougar now at price within reason.

Mrs. Nellie E. Bales
402 N. 17th Avenue
Phoenix, Arizona

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

MO-48

Date **October 21, 1940**

1. Mine **Cougar Mine**
2. Mining District & County **Tiger Mining District
Yavapai County**
3. Former name **Formerly locally referred to as
Bond Mine**
4. Location **2 Mi. SE of Crown King
Sec. 26-Tps. 10N.-R.I.W.G.&S.R., B & M**
5. Owner **Mrs. Nellie E. Bales**
6. Address (Owner) **402 N. 17th Ave.,
Phoenix, Arizona**
7. Operator **Not operating since 1923**
8. Address (Operator) **Not operating**
9. President **Individually owned**
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals **Silver, lead, gold, copper**
14. Men Employed **None**
15. Production Rate **Not producing**
16. Mill: Type & Cap. **No mill**
17. Power: Amt. & Type **Elec. power is available.
The line to Horse Thief Recreation Area crosses premises**
18. Operations: Present **No present operations whatever.**
19. Operations Planned **Either the "Hayden" shaft or the Baker shaft should be retimbered
and sunk 50 ft. before cross-cutting the vein.**
20. Number Claims, Title, etc. **One fractional claim - patented.**
21. Description: Topography & Geography **Elevation 6500 Ft. - covers the head of Cougar
Gulch which flows to Humbug creek. Rugged but not
exceedingly steep.**
22. Mine Workings: Amt. & Condition **There are three (3) shafts - one abandoned. Two
require retimbering; ground does not require heavy timber.**

23. Geology & Mineralization

24. Ore: Positive & Probable, Ore Dumps, Tailings

24-A Vein Width, Length, Value, etc.

25. Mine, Mill Equipment & Flow Sheet

26. Road Conditions, Route

27. Water Supply

28. Brief History

29. Special Problems, Reports Filed

30. Remarks

31. If property for sale: Price, terms and address to negotiate.

32. Signed.....

33. Use additional sheets if necessary.

23. **Geology & Mineralization:** Pre-Cambrian (Yavapai) Schist - Amphibolitic, believed to be of Sedimentary origin, replaced in great areas by Pegmatitic Granite. In the workings of the Cougar Mine there has been disclosed numerous broken sections of "Phillite" thought to be Syenite Porphyry. However, it is accepted as Geological fact that intrusions of Rhyolite Porphyry is genesis of the ores of the Bradshaw mountain, particularly in the vicinity of Crown King. All veins are fissure in this dist. The usual strike is N.20° E - Dip 60° Westerly. The Cougar, or Lorena Lode diverges from the usual strike and cuts the Schist Strata by striking N.40° E - Dip 75° to vertical. Value are mixed Sulphides in Oxide from surface. Lead and zinc oxides predominate for shallow depth - steel galena is principal sulphide.
24. **Ore - Positive & Probable, Ore Dumps, Tailings:** In former years Silver mills operated and all lower grade ores were milled. Due to reverse faulting in sections of the vein between cross faults it would not be possible or reasonable to attempt an estimate of probable ore. However since on the property N the Galena containing 300 oz. silver was mined to depth of 300 ft. on incline, that corresponds to depth of 250 ft. on the Cougar.
- 24A. **Vein Width, Length, Value, Etc.:** The Lorena Lode has shown where opened on commercial ore - from 4 in. assaying 3128 oz. to 7 ft. assaying 65 oz. as broken. It is fair to assume that an average width for all openings is 2 ft. The longest stope in old workings was 140 ft. in the Baker shaft at 60 ft. level ore of high grade extended 65 ft. S. and in N. drift average of 18 in. extends 50 ft. and shows 20 in. in breast of drift of character different from any other workings. Samples have assayed 600 to 700 oz. silver. Much higher gold than where stoped. Less lead more copper.
25. **Mine, Mill Equipment & Flow Sheet:** There is good 20x25 ft. galvanized iron building and old frame house on premises. Tools and mining equipment have been removed except for a good friction hoist which can be connected to motor or belted.
26. **Road Conditions, Route:** Crown King is 20 mi. off the Black Canyon Highway. From Crown King it is 2 mi. to Cougar Mine all upgrade, but very good road. In winter there is occasionally 12 in. of snow that may lie in shaded turns on the road. Anyone in Crown King can give desired information. Crown King store is suggested.
27. **Water Supply:** There is no water on premises in summer season except from the Baker shaft which makes very little; over the "Saddle" to North is permanent water for domestic use. Water comes from the Cross Faults and doubtless will be encountered when the drifting on Lorena Lode enters one of the two which intersect the vein. However since the 400 ft. shaft on the "saddle" made very little water we do not expect a quantity of any consequence.
28. **Brief History:** This property located in yr. 1871 by Robt. M. Dougherty, who obtained \$8,000.00 from 12 ft. shaft and 20 ft. drift. While out of territory his title lapsed and June 20, 1879 it was located by R.M. Bond. In 1917 deed conveyed title to John H. Baker. Prior to Baker the former owners claimed production record of \$40,000. Subsequent to 1917 we know the record to approximate \$35,000 from tonnage estimated at 225 tons. This record may be ascertained correctly from Bureau of Statistics, U.S.G.S. Salt Lake, Utah. (various shipments ranged from 42 oz. to 454 oz. silver).
29. **Special Problems, Reports Filed:** There is no special problem aside from lack of capital.

30. Remarks: This property has always paid when operated as a small mine. Does not warrant an extensive development program. But if operated in small way with small force it should pay well. We estimate a sum of \$5,000 to be ample capital to timber both shafts, install necessary machinery and begin shipping. We have no doubt of the existence of good ore bodies being encountered at deeper levels.
31. If property for sale - Price, terms and address to negotiate: Property is for sale. Present asking price and terms: \$8,000. \$200 initial payment and thereafter \$200 each month, royalty 10% to apply on succeeding payments. We would consider lease.

mines handbook - 1926,