

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Roba-Westfall Mine (Hg.)

T. 16 S., R. 29 E., Sec. 6
Unclassified District
Grant County

Foreword: This accompanies the initial Green paper file report under the above name by N. S. Wagner, July 7, 1952.

From the standpoint of mechanical neatness Roba is a first class gypco mechanic as Lewis described him and he is also possessed of a marked amount of initiative and ingenuity. The mill set-up as described in the Green paper report is fundamentally sour, however, in that the cinnabar does not break and wash off the rock surfaces as thoroughly as had been hoped for. This was readily evident upon close visual inspection of the tailings and is also indicated by a grab sample, MB-66, which assayed 5.4 #/ton.

Whether this loss can be overcome by fines crushing and more refined concentrating is problematical but Roba was working on a Humphrey Spiral adaptation made from automobile tires with the hope that higher recovery can be realized.

Unless higher grade ore is found, effective concentration will be an important factor in successful small scale operation. This concentration aspect is only one of two problems facing the operators however, as the development of ore reserves still remains to be proved. On this score they are obviously working under the limitations of very scant finance.

Report by: N. S. Wagner
Date of Report: July 7, 1952.

S. P.

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Portland 5, Oregon

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Foreword: This is a newly discovered mercury prospect and the following represents the initial file report on development and operations.

Owners and Operators: L. H. Roba, P. O. Box 186, Canyon City, Oregon
Victor M. Westfall, Canyon City, Oregon.

Location: T. 16 S., R. 29 E., Section 6, SW $\frac{1}{4}$. Access in by the Isee road which takes off from the Canyon City-Seneca highway at a point about 9 miles north of Seneca, and by the Deer Creek road. Distance to the Deer Creek road turn-off is 13 miles, and the distance in a northwest direction on the Deer Creek road is about 8 miles. Both roads are good, graded and graveled woods roads.

Area: Four unpatented lode claims taken June 1951 and called the Purple Ridge No. 1 and 2, the Purple Ridge, Extension and the Beaver Dam.

History and Development and Geology: This prospect was first discovered by Roba in 1947. Little or no work was done until 1951 at which time the present claims were staked. The initial prospecting consisted of a considerable amount of panning followed by surface trenching over a wide area. A vertical shaft was sunk to a depth of 35 feet at one of the more promising sites and a 4 flask production was obtained from the development rock before work was suspended for the season.

The country rock is everywhere a rather highly fractured, fine-grained shale with mercury occurring in the form of a powdery cinnabar on the

fracture surfaces. According to Roba, cinnabar indications can be found by panning more or less consistently over a large area along the ridge with localized areas giving stronger showings, but at the present stage of development the pattern of mineralization is obscure. No apparent walls or vein structure or other criteria for visual recognition of orebodies has as yet been revealed in any of the development pits in a sufficiently conclusive manner to permit the working out of an interpretation of the structural nature of the occurrence.

Equipment: The present plant set-up is such that ore is hoisted from the shaft and let down a steep surface incline to a 35 ton bin. It is then crushed and washed through 2 x 6 foot trommel with 3/16 inch perforations. The screenings are diverted to settling vats. Retorting is accomplished in a 1/2 ton Champion-style batch retort. Whereas a substantial concentration is effected by the washing and screening process, examination of the tailings indicate that there is also a substantial tailings loss and the operators are planning experiments with the intent of altering the concentrating technique for the 1952 season.

Economics: This is an interesting prospect that appears to be worthy of continued prospect-development but much more work will have to be done before the potentialities of the occurrence can be properly evaluated.

Report by: N. S. Wagner
Date of Exam: May 19, 1952
Date of report: July 7, 1952
Informant: L. H. Roba.