# State Department of Geology and Mineral Industrie 2811

702 Woodlark Building Portland 5, Oregon

Lucky Boy Mine (Au)

Upper Burnt River District Baker County

Old Name:

Showdown Mine.

This report is supplement No. 1 to a report under the above title by N. S. Wagner, Augsut 20, 1948.

Operator:

The original operational partnership of Ralph Leonhardy and Pat Vinson was terminated July 1, 1947. Present operators, who have obtained the property on a new lease, are Ralph Leonhardy and Kenneth Grabner.

General:

Production under the original Leonhardy-Vinson operation is estimated by Leonhardy at about 6000 dollars. This was recovered by amalgamtion of about 600 tons of ore milled in the mill on the near by Bull Run Mine. The grade of clean ore is believed to have been about 30 dollars, but the ore actually milled included a considerable amount of development rock; hence the low mill heads indicated by the foregoing figures. Recovery by the Bull Run mill was poor.

The present lessees (Leonhardy and Grabner) have installed a small mill of their own on the property. This mill is within a half mile of the main working tunnel. It consists of a ball mill, amalgamation plates, classifier and table. Plans are to install flotation when and if needed. The ball mill is a 3 x 4 foot unit. The present flow sheet is—ore ground to 80 mesh discharges from ball mill to plates to classifier to plates to table. There is a 10 ton bin at the mill and a 60 ton bin at the mine.

Current underground operations have been limited in amount and has consisted primarily of getting the workings in shape. Grabner owns the adjoining Grandview Mine. While present plans call for the development of the Thomason property only, eventual development of the Grandview is also contemplated.

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Report by: N. S. Wagner
Date of visit: Oct..5, 1949
Date of report: Dec. 16, 1949
Informants: Grabner & Leonhardy

Reference: Original Lucky Boy report, by N.S.W. Aug. 20, 1948

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## State Department of Geology and Mineral Industries

702 Woodlark Building Portland 5, Oregon

STATE BEST OF GEOLOGY

Lucky Boy Mine (Au)

Upper Burnt River Baker County

Operator:

Ralph Leonhardy and Pat Vinson, Baker, Oregon

Owner:

William Thomason, Route 2, Baker (Wingville)

Location:

T 14 S, R 37 E, about section 7 & 8. This is 6 miles from the John Day highway at Unity. Distance to the Bull Run Mill is 3.6 miles.

Area:

Two umpatented lode claims known as the Lucky Boy and the Showdown. These are situated side by side.

History:

This property was worked by the owner about 1938. Ore showing visible gold with occasional "picture rock" specimens were reportedly exposed by a 130' \* tunnel, but recovery from a 30 ton mill run is understood to have proved negligible.

Development:

The property was originally opened by a cross cut of approximately 140 feet in length near the face of which a small tonnage of ore was mined from a short drift by raising and under-hand stoping.

The present operators leased the property in 1947. They reopened this cross-cut and have drifted on ore for a distance of about 50 feet to the east. This ore has been stoped by a raise situated near the face of the drift and by a small undercut near the beginning. A winze is being sunk on or in this drift at a point about 25 feet from the cross-cut.

Geology: The workings are situated in the Rastus series i which is a formation composed of schistose limy tuffs, slates, lavas and

1. Geology of the Northeast Quarter of the Ironside Mt. Quadrangle, Baker & Malheur Gounties Oregon Wellage D. Lewer

re-crystallized limestones. This formation is tentatively classified as upper Paleozoic. The crosscut first penetrates a limy tuff portion of the series and then passes through a hard formation which is either a basic lava or a basic intrusive now somewhat serpentinized. This hard basic formation is cut about midway in its exposure by a diorite dike which is vertical and which strikes east-west. The end of the crosscut penetrates limy tuff again and it is in this tuff that the ore has been encountered. The tuff exhibits a development of serpentine on fractures and otherwise is highly altered to limonite. Petrographic examination shows the tuff to contain an abundance of chlorite. It is this chlorite that is altered to limonite. This alteration is particularly intense on the contact between the tuff and the hard basic lava.

Although ore has been encountered and mined from a drift which follows more or less of a shear zone for a distance of nearly 50 feet, no clear cut vein is in evidence. Gold is free and is sometimes found in quite high-grade concentrations. It not only occurs in the more defined shear but is often found in the walls as well. A mining width of 4 feet is reported to occur in the winze. But little quartz is to be seen.

This shear or vein strikes about north 98 west. It pinches to a thin seam on the east wall of the crosscut and is 8 inches thick in the face of the drift to the west. It is essentially vertical in dip.

#### Equipment:

A portable compressor, together with drills and steel, constitutes the chief equipment at the mine. Ore is trucked to the Bull Run Mill where it is ground and treated by amalgamation only. Tails

are impounded in anticipation of eventual retreatment. The Bull Run property is also held by the lesses of this property.

#### Topography:

The workings are situated on a steep hillside which provides ample dump space. While the present access road from Bull Run creek is steep, it is a good dry-season road and adequate for limited scale prospect development operations as now used. Rerouting of this road to a less steep grade could be accompolished without incurrence of any great trouble should development indicate the desirability of constructing a heavier duty road. Snow and spring thaws impose restrictions on access for three and half to four months as far as trucking ore on the present road goes.

### Economics:

Approximately 140 tons of ore has been mined and milled by the present operators. Recovery by amalgamation is reported to have been about \$25./ton in gold (at \$35./oz). Because of a high loss imposed by inadequate milling facilities, tailings have been impounded. No assay of these tailings is available but it is presumed they merit re-milling.

Tests by the Denver Equipment Company reportedly indicate that amalgamation supplemented by classification and flotation is adequate treatment for optimum recovery.

No appreciable tonnage of ore remains blocked out in the mine at the present time because of the past mining operations, but the development work currently underway indicates continuation of values in the winze and the possibility of blocking out additional ore below the level of the present drift. Extention of the drift to the west may also result in the development of additional ore in that direction. Until this or other development is accompalished, however, there is little more that can be said about the ore reserves at this time.

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Report by: N.S. Wagner Date of Exam: August 1, 1948 Date of Report: August 20, 1948 Informant: Ralph Leonhardy Petrographic Study: Hollis Dole Samples taken for this report: IB - 140-141-142-143 References: The Lowry thesis already mentioned and report on Bull Run Mine by N.S.W. April, 1947.

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ALTERED TUFF

HEAVILY LIMONITIC ZONE
IN ABOVE TUFF

ALTERED BASIC LAVAS

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VERT.

LUCKY BOY MINE

T 143 R 37E

UPPER BURNT RIVER DISTRICT, BAKER CO.

BRUNTON SURVEY BY N.S.W., AUG 1 1948

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Owners: W. T. Thomason, 2 claims; and Bill Schraeder, 2 claims.

History: First located in 1918. Two-stamp mill built in the fall of 1938 and operations started in May, 1939.

Development: Three crosscuts and drift tunnels 125, 115, and 65 feet in length; numerous upper cuts and pits along vein for over 2000 feet; elevation at lower tunnel, ameroid 5,770 feet.

Geology: The ore occurs as free gold in granodiorite aplite, some of which is rhyolitic in appearance at the contact, with serpentine which it intrudes. Both formations are much faulted, the slickensides being coated with free gold, green fuchsite (?), and some limonite. In the gouge small pieces of serpentine seem to be penetrated and replaced by fine brown hematite and chrysocolla. Molybdenum is present, associated with the gold. The vein generally strikes N. 60° to N.75° E. and stands nearly vertical; however, it varies in strike considerably, the ungeolations occurring with a crest of about 30 feet. The vein in the lower tunnel is not well defined, and the ore being milled is taken from near the contact.

Mill: Mill consists of two stamps and amalgamation plates run by gasoline engine. It treats only about two tons of ore a day. The ore is shooted from the lower tunnel, a distance of nearly 700 feet downhill. Values are very extremely variable.

John Elict Allen.

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Department of Geology & Mineral Industrials

Portland, Oregon

Sec. NWA 7 T. 145 R 37 E
Date

Date

County

Quadrangle

Notebook Page No.

Scale: 1000 ft. 1 inch

Scale: 1999 ft. in lara

Lucky Boy		Showdown Mine			Gold				
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OPERATOR Ralp	h Leonhard	y and Kem	neth Gr	abner		Unity, Oreg	on		••••••
Name of claims		Area	Pat.	Unpat.		Name of claims		Area Pat.	Unpat.
Lucky Boy				22					
Showdown									<u> </u>
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EQUIPMENT ON PA	ROPERTY								

EQUIPMENT ON PROPERTY