

Mud Springs Claims

Bentonitic Clay
PRINCIPAL ORE

MINOR MINERALS

NAME OLD NAMES

12 S 38 E 32 to 33
T R S

PUBLISHED REFERENCES

Baker..... COUNTY

Lower Burnt River..... AREA

1 mile from John Day Baker road..... ELEVATION

MISCELLANEOUS RECORDS

about 37 miles..... ROAD OR HIGHWAY

..... DISTANCE TO
SHIPPING POINT

PRESENT LEGAL OWNER (S) .. Frank Armstrong.....

Address .. 1069 Elm Street Baker, Oregon.....

OPERATOR none.....

Name of claims Area Pat. Unpat.

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Mud Spring (Placer) ✓

Mud Spring Annex 1-7 ✓

EQUIPMENT ON PROPERTY

State Department of Geology and Mineral Industries

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702 Woodlark Building
Portland, Oregon
Report by; N.S. Wagner
Date of exam; Nov. 7, 1945

STATE DEPT OF GEOLOGY
& MINERAL IND.

Mud Spring Claims (Bentonitic Clay) Lower Burnt River District, Baker, Co.

Owner Frank Armstrong, 1069 Elm St., Baker, Oregon

Location T 12 S; R 38 E; Sec 32 and 33. These claims are situated about one mile from the John Day highway and are reached by a county road turning off at the Jefford ranch near Hereford. This road skirts the deposits about one half mile distant therefrom.

Area 8 placer claims called the Mud Spring and Mud Spring annexes 1 to 7. These were taken August to October, 1945.

History From the standpoint of past operations this property has no history. Samples were submitted to this Department by Mr. Armstrong and upon examination these were found to be a good grade of bentonite. Because of this the current examination was made to obtain more information concerning the nature and extent of the occurrence.

Development none.

Geology Bentonitic clay is to be seen in abundant and widespread croppings in an area of some 320 acres with less abundant and more scattered occurrences being known to exist in adjacent areas. A complete lack of prospect trenching and significant natural sections obscures the facts concerning the nature of the occurrences and their extent, but it is evident that the whole region was one of volcanic activity, especially hot springs making siliceous depositions with minor amounts of rhyolitic flows. Seemingly mud flows were predominant however, and the indications are that extensive and thick

Hold for Wagner's revisions
W.D.L.

Wagner
RSN

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occurrences of bentonitic material of variable grades may be found underlying some of the siliceous capped hills. These hills appear to be remnants of early deposition from numerous scattered and individual sources. By and large the deposits as seen today reflects original topography modified by erosion with most of the deposits coalescing so that few clean-cut individual deposits are to be seen. In some instances the deposition is clearly clay, cut at about 3' to 4' intervals by steeply dipping siliceous material a foot or thick. In other instances the indications are that very appreciable thickness of clay may occur free of closely spaced siliceous partings. One "mud spring" exists. This measures about 12' across its crater which can be defined only by proding the mud, the whole surface of which will rock when agitated. This "spring" has built a low cone, and reportedly it fills with mud as fast as the material is dug out. Reportedly also, four 10' rails were joined and sunk in this crater without sounding bottom. This spring remains today as a relic of the sort conditions which apparently prevailed thruout the whole area when it was active.

Economics

The grade of the Bentonitic material obviously varies appreciably in the area. And samples were taken of these variations at places where indications suggested the occurrence of appreciable tonnage. If laboratory examination of these samples (FB 182-186) shows that a promising grade does occur, a program of systematic prospecting to determine the existence mineable quantities of good grade materials appears warranted.