<table>
<thead>
<tr>
<th>NAME</th>
<th>OLD NAMES</th>
<th>COUNTY</th>
<th>AREA</th>
<th>ELEVATION</th>
<th>ROAD OR HIGHWAY</th>
<th>DISTANCE TO SHIPPING POINT</th>
</tr>
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<tr>
<td>Lloyd A. Williamson</td>
<td></td>
<td>Deschutes County</td>
<td>Unclassified</td>
<td></td>
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<th>PUBLISHED REFERENCES</th>
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<tr>
<th>PRINCIPAL ORE</th>
<th>MINOR MINERALS</th>
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</thead>
<tbody>
<tr>
<td>Pumice</td>
<td></td>
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<table>
<thead>
<tr>
<th>ADDRESS</th>
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<tbody>
<tr>
<td>114 Oregon Ave., Bend, Oregon</td>
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**Operator**: Lloyd A. Williamson

**Name of claims** | **Area** | **Pat.** | **Unpat.** |
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<td>see report</td>
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**EQUIPMENT ON PROPERTY**: see report
Foreword

This is supplement No. 1 to a report under the same title by N. S. Wagner, February 17, 1947.

Operator:

Lloyd A. Williamson, office 114 Oregon Avenue, Bend, Oregon. Donald Fahey is superintendent of operations.

Location:

Two pits, one just south of Bend and the other at Tumalo as follows:

- T. 18 S., R. 12 E., section 5 (Bend pit of 160-7 acres).
- T. 16 S., R. 11 E., section 36 (Tumalo pit on 640 acre tract).

Note: The present Tumalo pit is located just up the hill from the pit described in the original report, the original pit having been abandoned after overburden became excessive.

General:

This operator was one of the pioneer operators in the pumice business. At the outset he contracted all processing and hauling. Hauling is still done on a contract basis, but Williamson now operates his own processing equipment. The Tumalo pit is the main working pit and the processing plant for this pit is situated on the rail siding at Deschutes. Pumice from the Bend pit is processed on a small portable plant situated in the pit. The Bend pit is operated largely for shipments southward from Bend because of
more favorable conditions for rail shipment from pits situated south of the city. The plant on the Deschutes siding is a fixed installation with bunkers, etc. Crushing and sizing is accomplished by rolls and shaker screens in both units. Sizing practice consists of a preliminary screening of pit-run material, crushing and re-screening as needed to control sizing and segregation. Mining is done by dozers.

Products produced include a blend of controlled mix (3/8 minus) which is sold for $1.62 per yard (cash price); segregated sizes, $1.80; a plaster sand (3/32 minus weighing 1250 pounds per cubic yard), $2.70 per yard (bulk); and a 3/4 or 5/8 minus pit-run product.

Four men are maintained on a payroll basis in connection with operation of the processing plant. Digging and hauling is done on contract with an average of five men so engaged.

* * * * * * *

Report by: N. S. Wagner
Date of visit: July 30 and August 2, 1949
Date of report: August 18, 1949
Informants: Mrs. Williamson and Mr. Fahey
Operator:
Lloyd A. Williamson, Clinic Apts., Bend, Oregon

Owner:
County of Deschutes

Location:
T 17 S; R 12 E; S 6. This is 7 miles by paved highway (U.S. 20 and 97) to the railroad ramp in Bend.

Area:
140 acres deeded land

History:
Some pumice has been excavated here over a period of years for road work from a pit opened up by the county. Williamson, however, has opened up a new pit a short distance from the county pit. Operations were begun in July, 1946.

Geology:
A bed of white pumice fragments has been exposed by the cut. This is of variable thickness, but averages about 15 feet. The top of the pumice bed has been quite level as exposed thus far with the variations in thickness of the bed being due to undulations of the bottom contact. The underlying strata include a mixture of cinder sand and pumice and wash gravel. The overburden consists chiefly of a pink ash. Overburden is 15 feet at the face and thickness increases rapidly to the north to the extent of rendering continued mining in this direction unfeasable. Thus mining is necessarily limited to the proximity of the
outcrop belt of the pumice on the flank of the hill. In this respect pumice is known to extend a distance of several hundred feet to the county pit to the west. It also extends around the flank of the hill to the east and is believed to continue for a considerable distance to the north.

Mining and Equipment:

All excavation and the transportation of pumice from the pit is done by Bull-dozers. The plant consists of a shaker screen and rolls. These are set up on the slope underneath the cut. Thus pit run material is bulldozed into a primary bin which feeds by gravity onto the screen and rolls. A low angle conveyor belt raises the ground product to the storage bunkers. All pit excavation and product trucking to the rail siding is done on a contract basis.

Special effort is made to keep the mined pumice free from ash, and it is the plant practice here to maintain a somewhat finer grind than do other producers in the area. The product is 1/4 inch minus, but with a greater percentage of fines.

General:

Pumice here has been found to weigh 1050 lbs./yd. dry. Shipping experience (railroad) to date during winter-time conditions has shown the wet weight per yard to average 1250 lbs. The maximum weight of a wet shipment was 1314 lbs./yd. In other respects the climate offers no serious obstacle to year-round operation. The truck haul to the railroad is for the most part over a level to moderately rolling road.

Report by:

N. S. Wagner, February 17, 1947

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View across Deschutes River showing County (left) and Williamson (right) pumice pits on ridge in the distance.

Close-up showing Williamson pit and crushing plant.

View of Williamson pit from feed chute of plant. The extremely white area on the lower half of the face in the center of the picture is the pumice in place. When dozed loose it assumes the color of the piles in foreground. Pink ash overburden extends from grass root level down to the top of the pumice.
Lloyd A. Williamson (pumice)

Foreword: This report accompanies supplement No. 1 under the same title as above, Supplement No. 1 by N. S. Wagner, August 18, 49.

Location: T 18 S; R 12 E; Section 5 (south of Bend)
T 16 S; R 11 E; Section 36 (Tumalo)
Plant on rail siding at Deschutes.

General: The Williamson production for the year 1948 was given by Mrs. Williamson as 84,500 cubic yards. This figure is supposedly based on the sales records. It includes some plastic sand, but represents aggregates grades mostly as the plaster sand phase of operation was entered into but recently.

The plaster sand by this company is apparently just a screen product not cried and sized to specifications as is the Sleeper product.

The 1947 production for this company is reported by Mrs. Williamson as between 15 and 50,000 yards.

Williamson owns a deposit of abrasive grade lump pumice at East Lake, near Mercury Crater. From this deposit one car of three to eight inch lump pumice has already been shipped this year and four more carload orders are on hand.

Report by: N. S. Wagner
Date of Report: August 18, 1949
Williamson produces both abrasive and aggregate pumice. His abrasive pumice comes from claims on Newberry Crater, said claims covering 740 acres. These were taken out just a few months before the Park was set aside on a "Recreational" status. Callahan Lead and Zinc Co. is currently negotiating for an operating lease. Some production was made before the war (about 1940) and again in 1946 when 55 tons of lump abrasive pumice was produced and sold at $32.00/ton.

Williamson's aggregate pit at Tumalo has an estimated 20,000 yard reserve—or about a 20 month supply at present production rate. An additional pumice supply exists along the ridge to the east and north of the present pit but this land is under different ownership and not available for leasing on reasonable terms. Williamson, however, does have the other deposits lined up and is not especially concerned about the future as far as reserves go.

Report by:

N. S. Wagner, February 17, 1947

***********************
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Lloyd A. Williamson, Clinic Apts., Bend, Oregon

Owner:

County of Deschutes

Location:

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Special effort is made to keep the mined pumice free from ash, and it is the plant practice here to maintain a somewhat finer grind than do other producers in the area. The product is $\frac{1}{2}$ inch minus, but with a greater percentage of fines.

**General:**

Pumice here has been found to weigh 1050 lbs./yd. dry. Shipping experience (railroad) to date during winter-time conditions has shown the wet weight per yard to average 1250 lbs. The maximum weight of a wet shipment was 1314 lbs./yd. In other respects the climate offers no serious obstacle to year-round operation. The truck haul to the railroad is for the most part over a level to moderately rolling road.

**Report by:**

N. S. Wagner, February 17, 1947

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