702 Woodlark Building Portland, Oregon

(SEE NEWER TERROLT)

VOLCANIC MATERIALS CO. (Pumice & Cinders)

UNCLASSIFIED DISTRICT

DESCHUFES COUNTY

#### Operator:

Walter &. Larsen, 1725 N Alberta St., Portland, Oregon.

#### Foreward:

This company produced both pumics and cinders from two different pits leased from different owners. Material from these pits is trucked to a processing plant situated on a railroad siding at Deschutes. The processing plant is a Barber-Green unit consisting of crushing rolls, shaker screen, and loader.

Operations were commenced by this company on July 1st, 1946. To date emphasis has been on pumice production with 12 to 15 cars a month being shipped during recent months.

#### Pumi ce Pit:

Owner: Deschutes County Municiple Improvement District, Rt. 2, Bend, Oregon.

Location: T 15 S; 2 12 E; S 31. This is near the town of Tumalo and five miles from the processing plant at Deschutes. The trucking road has been rebuilt and is scheduled to be surfaced this Spring.

Geology: The deposit occurs on top of a low ridge. A bank of white pumice has been exposed to a thickness of 10 to 12 feet by the present workings. Over-burden is a mixture of soil and a pink-colored rocky and ashey pumice. This everburden varies in thickness, but averages about 5 feet.

Pit run, the common mesh of the white pumice appears to be between \( \frac{1}{2} \) and \( \frac{1}{2} \) but coarser pieces up to \( \frac{1}{2} \) do occur. The thickness of this deposit has not been established beyond that exposed by the workings. Nor has the lateral extent been clearly established. In this respect however, a more or less continuous belt of pumicetrends throughthe country here with the Williamson pit and that

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of the Deschutes Concrete Products Co. occuring nearby and on opposite sides from this workings.

Equipment & mining: Mining operations are accomplished by bulldozer stripping of overburden on a contract basis, with the pumice being handled by a company owned Lull loader. To date it has been possible to dispose of the soil portion of the overburden for fill purposes, and some buyers prefer to have some of the pink, ashey fraction of the overburden crushed and mixed with the white pumice. Thus there has been no problem connected with disposal of overburden. However, adequate jumping space exists on the preperty.

## Cinder Pit:

Owner: W. Harris, Deschutes, Oregon.

Location: T 16 5; R 12 E; about S 22. This is about 2 miles by road to the plant on the railroad siding.

General: This pit was not visited. It is reportedly mear a large county pit; is overlain by only a foot and one half of overburdes; contains red cinders, the pit run mesh of which varies from sand to 4.

## Processing:

Pumice is crushed and screened to 3/8 or 1/4 inch minus. On railroad delivery it is sold by the ton. A ton equals about 1.8 cu. yards. The weight per yard varies between 1150 and 1200 pounds.

Cinders are produced in 3/4 and 1/4 inch minus meshes and are sold by the yard.

#### Economics:

The bulk of the materials produced by this company are shipped to building block manufacturers in outlying markets such as Walla Walla, Pendleton, and Portland.

Informant:

Report by: N. S. Wagner

Larson Date of exam: February 15, 1947

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702 Woodlark Building Portland 5, Oregon

Volcanic Materials (pumice)

Unclassified District Deschutes County

This report is a supplement # 1 to a report under the same name by N.S.Wagner February 15, 1947.

Owners

C. R. Badger, P.O. Box 302, Bend, Oregon, is the presnet owner and manager of the business operating under the above assumed (and registered) business name. Badger purchased the business and equipment from Walter A. Larson, Portland, in March 1947. Larson was the original owner operating under the above business name.

Location:

Held under lease from the Deschustes Sounty Municipal Improvement District, is the 40 acre tract at Tumalo from which Larson operated. This is in T 16 S; R 12 E; Section 31. A tract of several hundred acres situated in T 17 S; R 12 E; Sections 17 & 20, is also held under lease from Clifford Lewis. The processing plant is on the rail siding at Deschutes. Truck haulage distance is 5 miles from the Tumalo pit and 3 1/2 miles from the Lewis tract.

Mining and Processings

Badgerhas replaced the Larson mining equipment with a portable dragline unit with a 3 yard bucket. This can be readily moved between pits, and in practice drawback cables are usually anchored to a dozer. Overburden is removed by dozing.

The processing plant is a semi-portable unit setup on the rail siding. There are no storage bunkers. Pumice from the pits is fed directly to the plant which in turn discharges its processed product directly into a gondola. The flow sheet is as follows:





Views of the pit Of Volcanics Products Co.

702 Woodlark Building Portland 5, Oregon

Volcanic Materials (pumice)

Unclassified District Deschutes County

This report is supplement No. 2 to Dogami reports under the same title by N. S. Wagner, 2/15/47 and 8/7/49. Reference is made to the foregoing reports for details regarding property location, etc.

General:

The last operator, Mr. C. R. Badger made no production whatsoever during the year 1950 according to reports by various of the other pumice operators in the area. It seems generally understood that he given up the pumice business.

Report, by N. S. Wagner, March 12, 1951. Informants, as per mentioned above, February 12,13,14, 1951

702 Woodlark Building Portland, Oregon

### Volcanic Materials

Unclassified District Deschutes County

Foreword:

This report accompanies green paper supplement #1 under

the same title by N.S.W. 8/7/49.

Owner:

C.R. Badger, Post Office Box 302, Bend, Oregon

Location:

Two pits near Tumalo as follows:

T 16S, R 123, S 31 T 17S, R 12, S 17 & 20

Badger reports that production from this operation amounted to slightly in excess of 12,000 yards for the year 1948. Furthermore, there has been a noticeable drop in demand for the months of June and July of this year (1949) as compared to the demand for the same months of 1948.

Badger's price for clack aggregate, loaded, F.O.B. is \$1.50 per cubic yard with a 10% discount for cash.

A dump truck ramp from which a bucket conveyor lifts the pumice to a rotary screen about 2 feet in diameter and 8 feet long.

Minus 1/8 and plus 5/16 mesh fractions are removed from the pit run material. Both of these fractions are passed through rolls set to deliver a 1/8 minus product of which about 40 percent is 100 mesh or finer. This roll product is remixed with the screen middlings (1/8 to 5/16) by simultaneous discharge into an elevator hopper. The resultant product rates as a block aggregate and the elevator discharges it directly to a gondola for shipment.

Geology:

This subject was covered in the original Volcanic Materials report referred to in the foreword as far as the Tumalo pit is concerned. The new pit (the Lewis pit) was not visited. It is understood to conform to the usual pattern of pumice pits in the Bend area, and in this respect an overall similarity has been noted in the case of other pits. Reference is here made accordingly to the report of the Tumalo (Tum-Pum) Pumice company's operation, (N. S. Wagner, February 1947) as said report contains a description of the occurrence which is situated close by the Lewis property.

General Information:

As is the case with other pumice operations in the Beid area difficulty is encountered in mining during the winter months due to water contained in the pumice occurrences. Freezing not only renders mining difficult, but adversely effects processing in so much as the pumice with an ice content has different crushing and screening characteristics than does the normally moist pumice mined during other seasons of the year.

Report by: N. S. Wagner Date of exam: 8/2/49
Date of report: 8/7/49
Informant: C. R. Badger