State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

BEND PUMICE DESCHUTES COUNTY

Owner: Not known. Attention called to deposit by Don H. Peoples, Chamber of Commerce, Bend, Oregon.

Location: In the center of the NE¼ of Sec. 7, T. 17 S., R. 12 E., about 2 miles south of Bend on the east side of the river, at the head of a small gulch just below irrigation ditch.

Area: Ownership of land not known.

Geology: The deposit appears to be a portion of the Deschutes Formation (described in greater detail by Moore '37 and others) rather than a part of the Crater Lake or Paulina Buttes pumice falls; and thus may be of different grade than most of the pumice derived from this part of the state.

The section as exposed in the tulch is as follows:

| | | |
|---|---|---|
| Deschutes lava flow (level of irrigation ditch) | | 20' |
| Fine-grained yellow tuff (overburden) | | 10' |
| Welded pumice-tuff, grey | | 3' |
| Wash boulder beds | | 0-3' |
| Unwashed pumice bed | | 15' |
| Fine unconsolidated grey ash | | 3' |
| Deschutes lava (river level) | about | 40' |

All of these layers, expecially the wash and welded tuff, are lenticular, and disappear or thicken within short distances. The pumice is entirely unsorted, and in size varies up to 3 inches in diameter. Probably 40% would go through a ½ inch screen, and 55% would go through a 1/16 inch screen. In color it is very light grey and buff to white. It is rather fine textured and tough.

Over an area about 200 x 250 feet the overburden was only slight, and has been scraped off with a bulldozer. Possibly several acres are underlain by tuff without much overburden.

April 15, 1941
John Eliot Allen
Geologist

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland 5, Oregon

Central Oregon Pumice Company (pumice)

Unclassified District
Deschutes County

Old Name: Central Oregon Pumice Company Inc.

Owner and Operator: William E. Miller address c/o Miller Lumber Company, Bend Oregon.

Location: Two pits, a county pit near Tumalo and another just south of Bend, as follows:

T 17 S; R 12 E; Section 7 (Tumalo)

T 18 S; R 12 E; Section 7 (Bend)

History: The original Central Oregon Pumice Co., Inc. was organized and in active operation in 1947 under the direction of a Mr. Albertus. Miller purchased this operation in July 1948, retained the old business name, dropping only the "Inc. portion.

General: Production is made from both pits simultaneously with mining being done by means of dozers in each pit. The pumice occurrences are similar in all respects to those found in the Bend-Tumalo area at large. Most noteworthy difference between pits is that overburden at the Tumalo pit varies between 2 to 6 feet as compared to a thickness of 10 to 20 feet at the Bend pit. All processing is done at the plant which is situated in the Industrial District, East Railroad Street, Bend, Oregon.

Processing at this operation consists of crushing and screening (30 x 18 Universal rolls and vibrating screens). The rock is given a preliminary screening, then over-size is crushed and

screened again. The finished product is stored in four bunkers with a total capacity of one thousand yards. These bunkers are equipped with a conveyor from the bottom for loading-out purposes.

Attention is now being given to the production of sized and segregated pumice products and to a blended aggregate of controlled proportions as compared to the former practice of just screening pit run material without regard to the proportion of various sub-sizes, particularly fines, contained in the finished product. A Ready-mix aggregate of 3/4 mesh down is also produced.

This company does its own trucking instead of contracting for same as do most of the other producers. Five to six men are therefore required for normal operation.

* * * * * * * * * * * * * * * * *

Report by: N.S. Wagner
Date of exam: August 1, 1949
Date of report: August 17, 1949
Informant: William E. Miller

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

DESCHUTES CONCRETE PRODUCTS CO. UNCLASSIFIED DISTRICT DESCHUTES COUNTY
(Pumice aggregate and blocks)

**Owner-Operator:**

Chester T. Lackey, Redmond, Oregon

Plant Manager is Keith Parkinson

**Foreword:**

This company is in the building block business and produces both cinder and pumice aggregates for their own use. The block plant is located in Redmond. Pumice originates in a company leased pit near Tumalo. Cinders come from a pit owned by the city of Redmond and situated nearby.

**Pumice Pit:**

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

Location: T 16 S; R 12 E; S 30. This is about 1 mile north of Tumalo, and 14 miles via the old Bend Redmond road to the companys plant at Redmond.

Area: Leased area consists of a 40 acre tract.

Geology: Operations were commenced here February 28, 1946. Good grade pumice has been found to average 12' in thickness. This pumice like other occurrences in the vicinity, is an unsorted accumulation of fragments ranging from 0 to possibly 1½" in diameter. The overburden is largely soil about 2' in thickness at the pit, but thicker over other portions of the occurrence. The lower portion of the section was obscured at the time of this visit, but repertedly the minsable pumice rests on pumice of an inferior grade, and with an uneven contact. An estimated three years reserves at the rate of 3500 cu. yds. a year remain as the good grade pumice feathers out to the south in a distance of 20 feet from the pit, changes to an inferior grade to the north, and is overlain by an excess of overburden to the west.

Mining and equipment: Pumice is dug and transported to a loading station by a small dozer. As all pumice produced here is used exclusively in the company's block plant, the crushing and sizing unit is situated at said plant. This pit run material is loaded out directly here. The loading station consists of a chute constructed over a truck pit sunk below the level of the bottom of the main pit.

Cinder Pit:

Owner: City of Redmond

Location: T 14 S; R 13 E; S 33.

General: This pit was not visited. On a royality basis cinders are obtained here, excavated by company equipment.

Block Plant:

Location: Redmond, Deschutes County.

Foreword: This plant has been in production for over a year. It is well mechanized and housed in a large building made of pumice blocks. Both equipment and operating practice differs in many respects that is usage in other plants in Central Oregon.

Plant equipment and practice: Large stockpiles of pit run aggregate are maintained in the yards. This is processed as used, and for crushing a Symons horizontal disc is employed. The disc is situated in the yard outside of the building. Disc discharge is 3/8" maximum. This discharge is conveyed to a trommel situated in the building and above a 25 yard capacity, two partition bunker. Trommel products are sized — 3/16 and + 3/16 — 3/8". A controlled charge of 60 parts of the fines to 40 parts of the coarse is mixed with standard cement in a 6½ to 1 ratio. The mixer is set in the floor under the bunkers.

The block machine is a Stearns tamping machine which produces three-hole full standard, or 8 x 8 x 16" blocks.

Curing includes a 48 hour period of steaming at 125 degrees F. under no pressure plus 27 days of air drying in the stockyard.

Plant capacity is reported as 2000 8x 8 x 16" units per 8 hours with 7 men.

General: Specifications and prices of blocks produced here are:

| Item | Weight(pumice) | Price at plant |
|---|---|---|
| 8 x 8 x 16 | 23½ lbs. | $ 0.25 |
| 4 x 8 x 16 | 14½ lbs. | $ 0.15 |

Accessory and half size blocks are also made.

Informant:

Keith Parkinson

Report by:

N. S. Wagner

Date of Exam:

February 17, 1947

**********

Pumice Pit

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

DESCHUTES BLACK SAND AND PUMICE DESCHUTES COUNTY

Owner: At the request of Mr. H. H. Abbott, Rt. 1, Box 74, Redmond,, a visit was made to the localities given below. Mr. Abbott was not at home and therefore the information as to owners, area, etc. were not available.

Location: Two localities on the banks of the Deschutes River were visited. The first lies in Deschutes County at an elevation of 2,625 feet in the center of the N½ of sec. 23, T. 14 S., R. 12 E.; the second lies in Jefferson County about 10 miles north of the first (8 miles air line) at an elevation of 2345 feet in the center of the N½ of sec. 33, T. 13 S., R. 12 E.

History: For a number of years there have been attempts by various people and concerns to exploit reported values in the "black sands" occuring in lenses in the cliffs cut by the Deschutes and Metolius rivers north and west of Redmond and Terrebonne. Numerous assays running from $2.00 to $8.00 have been reported from the sands and interbedded conglomerates. Mr. F. W. Peck has been interested in the property for many years, and Henry Smith is said to have a process for recovering the values from the sand by cyanidation and electrolysis. A plant was built during 1940 to operate on this principle, but from evidence seen on the ground, no ore passed completely through it. The tanks were filled, and the electrolytic plant operated, but the tanks were never emptied. Operations ceased November 3, 1940.

Equipment: At the north locality the plant on the west bank of the river consists of a building 40 x 200 feet, with the following means of processing the sand from the cliffs above:

150 foot tram with dump bucket (all jerry built) to bring sand from cliff above.
Loading into two 10 foot cyanide tanks by wheelbarrow. Water from another tank.
Leached solution goes to 6 x 12 foot electrolytic tank, equipped with 20 copper plates, connected with automobile generator (?) run by auto motor.
Solution goes to final tank. The complete process could not be deduced from the equipment left in the plant.

At the south locality the equipment consisted of a small building with shaker screen, 2 cyanide tanks, engine and car generator. Zinc shavings also in evidence.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Geology: The cliffs consist in both localities of the Deschutes formation, amply described by Stearns (30) and Moore (37). The material to be mined consists of a "black sand" made up of basaltic fragment, sometimes scoriaceous, with minor amounts of pumice. No sulphides were seen. The sand occurred in horizontal lenses up to 20 feet thick, with overburdens of tuff, gravel and lava ranging from 50 feet up. Underground mining would be necessary after the removal of a few thousand tons of outcrop and talus.

Economics: No remarks required.

April 14, 1941
John Eliot Allen

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland 5, Oregon

DEVILS HILL OBSIDIAN — Deschutes

Howel Williams describes an occurrence of obsidian at Devils Hill in "Volcanoes of the Three Sisters Region, Oregon Cascades" University of California Geological Science Bull. vol. 27, no. 3, p. 58.

Devils Hill is located in sec. 3, T. 18 S., R. 8 E., Deschutes County.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland 5, Oregon

FINLEY BUTTE CINDERS — Deschutes County

Cinders from Finley Butte have been used for road ballast by the State Highway Department. The butte is located about 4 miles east of Lapine in southern Deschutes County. Legal description is secs. 20, 21, T. 22 S., R. 11 E.

Informant: Don C. Birch

Report by: R. S. Mason
2-11-52

Deschutes Concrete Products Co.

NAME

OLD NAMES

Pumice, cinder aggregate and building blocks

PRINCIPAL ORE

MINOR MINERALS

| | T | R | S |
|---|---|---|---|
| Pumice | 16 S | 12 E | 30 |
| Cinders | 14 S | 13 E | 33 |

PUBLISHED REFERENCES

Deschutes ..... COUNTY

Unclassified ..... AREA

..... ELEVATION

..... ROAD OR HIGHWAY

..... DISTANCE TO SHIPPING POINT

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S) Pumice--Deschutes Co. Municiple Improvement District ..... Address Rt. 2, Bend, Oregon

Cinders--City of Redmond ..... Redmond, Oregon

..... .....

OPERATOR Deschutes Concrete Products Co.--Chester T. Lackey ..... Redmond, Oregon

| Name of claims | Area | Pat. | Unpat. |
|---|---|---|---|
| | | | |
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| Name of claims | Area | Pat. | Unpat. |
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EQUIPMENT ON PROPERTY

MI-21

| DEPARTMENTAL RECORDS on file in | P'land | G.P. | Baker |
|---|---|---|---|
| REPORTS (Including conf.<br>Deschutes Concrete Products Co. Supplement) N.S.W. 2/18/47 | x | x | x |
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| SHIPMENT AND ASSAY RECORDS<br>Statement covering cinder and pumice productions for 1946 | x | | x |
| Statement covering 1948 production in Confidential report NSW 8/7/49 | x | x | x |
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| MAPS | | | |
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Central Oregon Pumice Co

NAME | OLD NAMES | PRINCIPAL ORE: Pumice | MINOR MINERALS

| T | R | S | |
|---|---|---|---|
| 17S | 12E | ¢ | (Tumalo ) |
| 18S | 12E | 7 | ( Bend ) |

PUBLISHED REFERENCES

..Deschutes..... COUNTY

..unclassified..... AREA

..... ELEVATION

MISCELLANEOUS RECORDS

..... ROAD OR HIGHWAY

..... DISTANCE TO SHIPPING POINT

PRESENT LEGAL OWNER (S) ...Wm E.. Miller..... Address ...%..Miller Lumber Company, Bend.....

OPERATOR ..... Wm E. Miller .....

| Name of claims | Area | Pat. | Unpat. |
|---|---|---|---|
| see report | | | |

| Name of claims | Area | Pat. | Unpat. |
|---|---|---|---|
| | | | |

EQUIPMENT ON PROPERTY see report

Deschutes Black Sand + Pumice | | Sd | |
NAME | OLD NAMES | PRINCIPAL ORE | MINOR MINERALS

| 14S | 12E | N½ 23 |
|---|---|---|
| T | R | S |

PUBLISHED REFERENCES

Deschutes ..... COUNTY

..... AREA

2625' ..... ELEVATION

MISCELLANEOUS RECORDS

..... ROAD OR HIGHWAY

..... DISTANCE TO SHIPPING POINT

PRESENT LEGAL OWNER (S) ..... Address .....

..... .....

..... .....

..... .....

OPERATOR ..... .....

| Name of claims | Area | Pat. | Unpat. |
|---|---|---|---|
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| Name of claims | Area | Pat. | Unpat. |
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EQUIPMENT ON PROPERTY

MI-21

Pumice.

3 m. S. Bend. DH Peoples

Claybough, Prineville Fair grade.

Tom Fitch, Bend.

H.H. Abbott. Rt 1 Box 74. Not at Spokesman.

Riley Ranch fairly good.

SUPPLIMENT

Bend Pumice — Deschutes County

Owner: Not known. Attention called to deposit by Don H. Poeples, Chamber of Commerce, Bend, Oregon.

Location: In the center of the NE ¼ of section 7, T. 18 S., R. 12 E., about 2 miles south of Bend on the east side of the river, at the head of a small gulch just below irrigation ditch.

Area: Ownership of land not known.

Geology: The deposit appears to be a portion of the Deschutes Formation (described in greater detail by Moore '37 and others) rather than a part of the Crater Lake or Paulina Buttes pumice falls; and thus may be of different grade than most of the pumice derived from this part of the state.

The section as exposed in the gulch is as follows:

| | | |
|---|---|---|
| Deschutes | lava flow | 30' |
| | (level of irrigation ditch) | |
| | Fine grained yellow tuff (overburden) | 10' |
| Wash boulder beds | Welded pumice-tuff, grey (6-3') | 3' |
| | Unwashed pumice bed | 15' |
| | Fine unconsolidated grey ash | 3' |
| | Deschutes lava about | 40' |
| | (river level) | |

especially the wash and welded tuff

All of these layers are lenticular, and disappear or thicken within short distances. The pumice is entirely unsorted, and in size varies up to 3 inches in diameter. Probably 40% would go through a ½ inch screen, and 55% would go through a 1/16 inch screen. In color it is very light gray to white. It is rather fine textured and tough. and buff

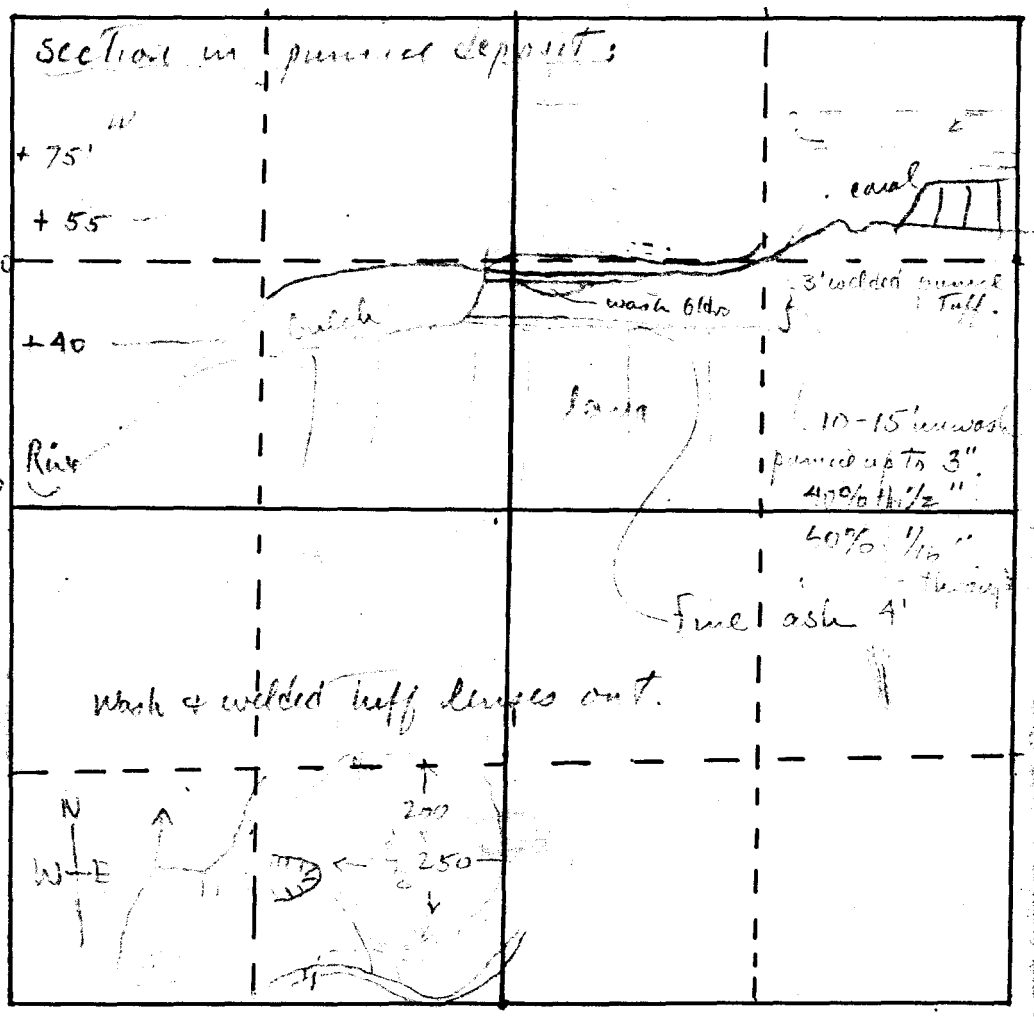
Over an area of about 200 by 250 feet the over-burden was only slight, and has been scraped off with a bulldozer. Possibly several acres are underlain by tuff without much overburden.

April 15, 1941
John Eliot Allen
geologist

State of Oregon
Department of Geology & Mineral Industries
Portland, Oregon
Earl K. Nixon, Director

Cent NE¼ Sec. 7 T. 18S R. 12E
Date April 15, 1941
Name of Survey POEPLES POMICE
County Deschutes
Quadrangle Bend ?
Notebook Page No.

Scale: 1000 ft. 1 inch




Deschutes County

by Don H. Poeples,

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| overburden) | 10' |
| 0-3' → | 3' |
| | 15' |
| sh | 3' |
| about | 40' |

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