

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Marble Creek Limestone

Baker Area

Baker County

- Owner:** Chemical Lime, Inc., an Oregon corporation, Palmer Building, Baker, Oregon. Post office box 401.
- Location:** T. 9 S; R. 38 E; Section 13 and 14., 10.2 miles from railroad at Baker.
- Area:** One patented placer claim, Mineral Survey Number 261, and a 160 acre group of unpatented claims.
- History:** The patented claim was patented in 1893 under the name of Monarch Marble, by Thomas F. Rourke. Rock was quarried here for burning early in the century. Approximately 6000 tons of limestone was quarried and burned from 1892 to 1900 for use in the Baker area. There was no activity after 1900 until exploration work started in the summer of 1948.
- Development:** The owners have prospected the property by diamond drilling. Nine holes were drilled. These vary from 150 to 300 feet in depth and total 1876 feet. Samples were taken for the most part at 10 foot intervals.
- Geology:** The limestone occurs as segregated blocks in the Paleozoic Elkhorn Ridge Argillite. On the MARBLE CREEK PROPERTY there are two such blocks of limestone. The eastern and most accessible block as exposed by surface outcrops is 450 by 350 feet and has a maximum vertical exposure of 250 feet. It was on this block that all exploration including drilling was centered. The western block has a surface exposure of 500 by 600 feet.

It appears that the eastern block has a nearly vertical attitude. A diabase dike 30 feet in width forms the contact of the eastern limestone block on its northwest side. Two small parallel diabase dikes up to three feet in width are found in the limestone itself. They have the same strike as the large dike and dip 67 degrees to the southeast. Most of this limestone block is completely bare of overburden, and stands out in bold relief from the more easily weathered argillite.

The limestone is grey in color, finely crystalline and shows no bedding or banding.

Reserves: Drilling and surface sampling on the eastern block show an available tonnage of 1,900,000. The western block has not been explored. Surface exposures indicate that it represents 3,000,000 tons.

Grade of Limestone: The average of 180 core drill samples gives the following grade of rock on a burnt lime basis: ^P~~B~~, .0129; CaO, 98.2; MgO, .32; SiO₂, .69; Fe₂O₃ & Al₂O₃, .19.

The burning characteristics of the MARBLE CREEK LIMESTONE have been determined to be satisfactory.

General Information: The property is situated on the flank of the Elkhorn mountains at the head of Marble Creek. The elevation varies between 5200 and 5600 feet. From the county road in Baker valley the access road up Marble Creek is 2 miles in length. The average grade is 12 to 15 per cent with a local maximum of 20 per cent. Otherwise the county road in the Baker valley is level. Snowfall at this elevation is heavy. The working season for quarry operation would extend from about May 1st to December 1st.

Report by: N. S. Wagner

Property visited: August 14, 1948

Date of report: January 25, 1949

Informant: Anderson, H. F., Vice-President of company

References: Sumpter Quad Geologic Map.

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Portland 5, Oregon

Marble Creek Limestone

Baker Area
Baker County

- Owner:** Chemical Lime, Inc., Palmer Building, Baker, Oregon. P.O. Box 401. This is an Oregon Corporation as of June 1948. R. N. Spencer, 4th Street, Baker, Oregon, is president.
- Location:** T. 9 S; R. 38 E; Section 13 and 14. Distance from the property to the railroad yards in Baker is 10.2 miles.
- Area:** The land held by this company is held under one patented placer claim and a 160 acre group of unpatented claims. The patented claim was patented in 1893 under the name of Monarch Marble. The Mineral Survey Number is 261.
- History:** Rock was quarried here for burned lime purposes early in the century as was the case on numerous limestone lenses scattered throughout the county at large. Except for this the deposit has no previous history of operation.
- Development:** The owners have prospected the property by diamond drilling. Nine holes were drilled. These vary from 150 to 300 feet individually and total 1876 feet. Samples were taken for the most part at 10 foot intervals.
- Geology:** The limestone occurs as a lens in the Paleozoic Elkhorn Ridge Argillite which is the prevailing country rock in the area.

immediately surrounding the property. As all development work has been concentrated on one significant portion of the deposit, no data regarding the full extent thereof can be given here at this time. It can be stated, however, that a very substantial amount of unprospected limestone does exist and rate as potential reserves.

The portion of the limestone body prospected is a lens which measures 600 feet in length by 300 feet in width at its widest point. Limestone is exposed by natural outcrops for a vertical distance of 250 feet above the old quarry floor situated approximately on the talus crest. A depth of 75 feet below this level has been proven by the drilling. The calculated tonnage involved in this lens is 1,900,000 tons.

This lens is bounded on the northwest (uphill, back of deposit) by one 30 foot diabase dike. It is cut by three parallel dikes, the largest of which is 24 inches in width. In other respects the deposit is notably free of partings and impurities of any type such as shaley or silicified areas, etc.

The average analysis (average of all drill hole analyses, 180 in number) is CaO - 55.6%, MgO - 0.178%, SiO₂ - 0.384%, R₂O₃ - 0.106%, P - 0.0072%. On a burned lime basis this is equivalent to P - 0.0129%, CaO - 98.2%, MgO - 3.2%, SiO₂ - 0.69%, R₂O₃ - 0.19%.

General
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