

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Douglas County
Umpqua Area
December 17, 1945
by: Elton A. Youngberg

Name:

Sams Ranch chert deposit

Lessee:

L. C. Bufton, Silica Products, Oreg., Ltd., Portland, Oregon.

Owner:

Mr. Sams, Dillard, Oregon.

Location:

The chert deposit is located in the NE $\frac{1}{4}$ sec. 24, T. 28 S., R. 7 W. in Douglas County. The deposit may be reached by turning north from Brockway, which is on the Coos Bay highway, on a graveled county road up Lookingglass Creek for a distance of three miles. The deposit outcrops on the crest of a ridge due south of the second bridge across Lookingglass Creek from Brockway.

Area:

The deposit is on deeded land belonging to Sams Ranch.

History:

This deposit was mapped by J. S. Diller along with other radiolarian chert outcrops when he mapped the geology of the Roseburg quadrangle. The geologic maps were published by the U. S. Geological Survey in 1898. A preliminary survey was made of the deposit in the spring of 1945 by the Silica

Products, Oreg., Ltd. accompanied by the field engineer of the Oregon Department of Geology. The deposit was mapped by the Department in December 1945. No chert has been mined from the deposit, except about 1000 pounds by Silica Products, Oreg., Ltd. for test purposes.

Geology:

The radiolarian chert deposits in the Roseburg quadrangle are believed to be of Jurassic age. They are the oldest sedimentary rocks recognized in this area. The Sans Ranch chert outcrops prominently where it crosses a ridge on S.W. of Lookingglass Creek. An outcrop of massive blue-gray chert about 10 feet wide having a strike of N. 80° E. and a dip of 75° to the south is exposed for a distance of 60 feet. On the south slope from this outcrop banded reddish-brown chert outcrops intermittently for a distance of 180 feet. Beyond this point the outcrop is obscured by soil containing numerous chert boulders. To the north the chert body extends probably for 50 to 60 feet beyond which it cannot be recognized because of soil and talus. The extensions of the deposit to the east and west are also obscure because of talus and soil. Outcrops indicate it may have a length of 230 feet on the strike. It is likely that the chert bed extends beyond the area observed as these beds underlie adjacent overlapping younger Cretaceous beds of the Myrtle Creek formation which were noted on all sides of the deposit. The Myrtle Creek formation locally was largely sandstone. The chert deposits outcrop stands in relief as a body with an elliptical base about 50 to 75 feet above adjacent surfaces as shown on the attached contour map and section.

The bluish-gray cherts are usually massive and outcrop prominently. The banded cherts are a brown or red jaspery rock. They do not readily outcrop.

In the Sams Ranch deposit the outcrops of the banded cherts were very poor with only an occasional rib exposed. It appears that part of the area containing banded chert may have some layers of siliceous shales.

General Information:

The deposit is at an elevation of approximately 1000 feet which is 450 feet above the adjacent valleys. The climate is characterized by long, dry summers and wet winters. Snowfall is light and usually remains only for a few days. Rainfall is from 30 to 40 inches annually.

The nearest shipping point is Dillard, six miles away through which passes the Southern Pacific railway. A good graveled road leads north from Dillard to Brockway and up Lookingglass Creek to the deposit over easy grades.

Informant: E. A. Youngberg