

A Reconnaissance of the  
"Radiolarian Chert Deposits Southwest of Roseburg"

The investigation was made with Mr. Kenneth Hamblen of the Silica Products Oregon, Ltd. in view of determining if the mode of occurrence of the chert deposits and the physical characteristics of the chert. A deposit was desired which <sup>was</sup> accessible in such a manner that it could be readily mined.

The three larger deposits as mapped by Diller north of Brockway and Winston and one of the smaller deposits on Willis Creek were visited.

Only the deposit in Range 8 W., Township 28 S., Section 24 outcropped prominently. Here it was exposed on a crest of a hill. A rib of light buff and gray chert probably ten feet wide stood about ten feet above the adjacent ground for about 50 feet. To the southeast adjacent vertical bands of brownish chert were seen. They were not clearly exposed but probably had a total width of 100 to 200 feet. The bands had a strike of N. 65° E.

The other two larger deposits to the north of Brockway and Winston respectively were found to be in the valleys, the more prominent ridges being meta-gabbros. The presence of chert was only indicated by float, consisting of small boulders up to 6 or 8 inches in diameter. In one instance an outcrop of chert 6 x 4 feet on a gentle slope was exposed. No outcrops were seen at these two occurrences which were exposed so they could be readily mined.

The deposit on Willis Creek was poorly exposed. The chert here is exposed in a road cut on Willis Creek 2.9 miles above the

point where the road leaves the Umpqua River and turns up the creek. The part of the deposit to the south of the road is covered by several feet of overburden and considerable vegetation. The outcrop as exposed in the road cut is about 15 feet by 10 feet with the beds in a horizontal position.

The chert occurs in many colors. The massive outcrops appeared to be composed largely of the gray and white variety. The banded occurrences were largely of the reddish-brown variety, permeated by a number of minute veins of white quartz. The chert readily broke into small angular pieces with sharp thin edges. The chert occurring in the deposit on Willis Creek was of the reddish-brown variety but much softer due probably to a much higher iron content. It had also a tendency to fracture along bedding planes rather than conchoidal as in the other deposits.

\*\*    \*\*    \*\*    \*\*    \*\*    \*\*    \*\*    \*\*    \*\*    \*\*    \*\*