GEOLGY OF THE SPARTA QUADRANGLE, OREGON

by Norval J. Petoe

INTRODUCTION

For several years the State of Oregon Department of Geology and Mineral Industries has been investigating copper

ores along the Skamania-Oregon boundary. As part of this work the writer has especially studied the Sparta Quadrangle, which is

north of Skamania, Washington, and south of Fredricksburg, Oregon. The study has been undertaken for the purpose of de-

termining the possibilities of mineral resources, and for the information of prospectors and mining companies. The

results of this work, therefore, are primarily of general and not of specific economic value.

In this work the data are presented in a form that is most convenient for study and analysis. The geologic map of the

area is designed to show as many as possible of the features that are important in the development of the ore deposits. The

geologic map is prepared for the purpose of making a basis for economic work. The map is constructed on the following

scale: 1 inch = 1 mile (1:62,500). The map is based on special surveys, small scale topographic maps, the writer's field notes,

and the writer's personal knowledge of the topography and geology of the area.

PRELIMINARY GEOLOGY

The older rocks in the quadrangle are gneiss and metavolcanic rocks of the early Paleozoic era. The gneiss, which is the

lower member of the Skamania formation, are intruded by a number of igneous bodies. The most prominent of these

are the Skamania batholith and the Skamania stock. The Skamania batholith has been intruded by a number of younger

intrusions of various ages. The Skamania stock is a large intrusive body that is composed of gneiss and metavolcanic rocks

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