

MAP OF THE GEOLOGY OF THE COLUMBIA RIVER BASALT GROUP IN THE BULL RUN WATERSHED, OREGON 1981

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EXPLANATION

(All contacts are approximate)

SURFICIAL GEOLOGIC UNIT

LANDSLIDE DEPOSITS: Recent deposits of landslide debris as mapped by Beaulieu (1974) and Schultz (1980)

BEDROCK GEOLOGIC UNITS

TERTIARY AND QUATERNARY VOLCANIC AND SEDIMENTARY ROCKS AND DEPOSITS, UNDIVIDED: Volcanic, volcaniclastic, and sedimentary rock and surficial deposits overlying the Columbia River Basalt Group in the Bull Run watershed, consists of the Multnomah Formation, Pliocene sedimentary rock, Pliocene and Quaternary volcanic rock, Quaternary terrace deposits, Quaternary landslide deposits, and Quaternary alluvium of Beaulieu (1974) and Rhoads (1980). Formation, Troutdale Formation, Pliocene-Quaternary volcanic, and Quaternary deposits of Schultz (1980)

MIOCENE COLUMBIA RIVER BASALT GROUP, YAKIMA BASALT SUBGROUP

unsp. basalt

PIREXIS OGDON MEMBER: Medium-gray to dark-gray, medium- to fine-grained basalt occurring both as intercolumnar flow and as flow unit conformably overlying Columbia River basalt unit below as intercolumnar flow characterized by thick sequence of bedded palagonite at base, thin blocky to columnar jointing in columnar, and thick blocky embayments, belongs to the S_3 paleomagnetic interval and has reversed magnetic polarity

PIREXIS SPRINGS MEMBER: Medium-gray to dark-gray, medium- to fine-grained basalt consisting rare to abundant plagioclase-ophenocrysts characterized by blocky to columnar jointing with platy, siltstone locally, often weathers to a characteristic reddish-brown color, belongs to the S_3 paleomagnetic interval and has normal magnetic polarity

GRANITE RIVER BASALT

HIGH M_0 CHEMICAL TYPE: Dark-gray, fine-grained basalt, often diatexitic, characterized by blocky to columnar jointing with platy, siltstone locally, lower flow commonly has vesicle sheets; belongs to S_3 paleomagnetic interval and has normal magnetic polarity

LOW M_0 CHEMICAL TYPE WITH NORMAL MAGNETIC POLARITY: Dark-gray, very fine-grained basalt with prominent thick blocky embayments and thin columnar, unit belongs to S_3 paleomagnetic interval and has normal magnetic polarity

LOW M_0 CHEMICAL TYPE WITH REVERSED MAGNETIC POLARITY: Dark-gray, fine-grained basalt with prominent thick blocky embayments and thin columnar, unit belongs to S_3 paleomagnetic interval and has reversed magnetic polarity

INTRUSIVE ROCK

TERTIARY INTRUSIVE ROCK: Fine-grained basalt of Boring chemical type cutting Columbia River Basalt Group as dikes

GEOLOGIC SYMBOLS

DEFINITE CONTACT

APPROXIMATE CONTACT

STRIKE AND DIP OF BED

ANTICLINE

SYNCLINE

DEFINITE FAULT

CONCEALED FAULT

CONCEALED THROST FAULT

SAMPLE LOCATION

TECTONIC BECCA

Contour interval 80 feet except west of 122°30' and south of 43°30' where it is 40 feet



Base Map for U. S. Forest Service, Portland, Oregon
by Geological Engineering Methods, 1963
Copyright 1963 U.S. G.S. and Forest Service
Portland, Oregon, 1963 North American Datum
1983 datum used based on state coordinate system.
Map shows only those areas and Oregon, north zone.
Map revised north zone extended by
G. F. Vogt, N. F. Vogt, May 1981

Scale 1:16,000



OREGON

LOCATION MAP