PLATE I

RECONNAISSANCE GEOLOGIC MAP
OF THE
BUTTE FALLS QUADRANGLE
OREGON

TO ACCOMPANY BULLETIN No. 22
"GEOLOGY OF THE BUTTE FALLS QUADRANGLE"

ISSUED BY THE
STATE OF OREGON
DEPARTMENT OF GEOLOGY AND
MINERAL INDUSTRIES
EARL K. NIXON, DIRECTOR

(Roseburg)

123°00' 43°00' R. 2 W. 50' R. 1 W. R. 1 E. 40' R. 2 E. 122°30' 43°00'

T. 30 S. T. 31 S. T. 32 S. T. 33 S. T. 34 S. T. 35 S.

(Riddle)

42°30' 123°00' R. 2 W. 50' R. 1 W. (Medford) R. 1 E. 40' R. 2 E. 122°30' 42°30'

(Crants Pass)

EXPLANATION

QUATERNARY

- **Qal** — Alluvium (*Stratified gravel, sand, silt and pumice*)

UNCONFORMITY

TERTIARY

Tertiary volcanic rocks

- **Ti** — Intrusive (*Diorite sills and basalt dikes*)

UNCONFORMITY

- **Tic** — Later basalt flow (*Light gray intracanyon olivine basalt flows*)

UNCONFORMITY

- **Tbl** — Basalt flows (*Light gray Abbot Butte basalt flows*)
- **Tob** — Basalt flows (*Gray Olsen Peak basalt flows*)

UNCONFORMITY (?)

- **Trh** — Rhyolite (*White to buff rhyolite flows, tuffs and breccias*)
- **Tba** — Older basalt flows (*Black, coarse textured basalts*)

UNCONFORMITY (?)

- **Tag** — Agglomerate (*Green agglomerates, tuffs and flow breccias*)

UNCONFORMITY (?)

Sedimentary rocks (Eocene)

- **Teu** — Umpqua formation (*Buff sandstones, shales and conglomerates*)

UNCONFORMITY

Intrusive rocks

- **Qd** — Quartz diorite (*Intrusive masses, dikes and related rock*)

UNCONFORMITY

JURASSIC

Metamorphic rocks

- **jd** — Dothan formation (*Hard sandstones, shales and conglomerates*)

UNCONFORMITY (?)

- **jg** — Galice formation (*Slightly metamorphosed shales, some sandstones and conglomerates*)

UNCONFORMITY

- **gs** — Greenstones (*Slightly metamorphosed basalts, gabbros and related rocks*)

UNCONFORMITY

DEVONIAN?

- **Dmc** — May Creek formation (*Mica schists and slates*)

U, *upthrow*
D, *downthrow*
Fault

Strike and dip of sedimentary beds

Strike and dip of schistosity or foliation

Strike of schistosity or foliation

Strike and dip of joint planes

Direction of dip of bed

Mine × Prospect

Base by United States Forest Service
Umpqua National Forest Map—1939

1 ½ 0 1 2 3 4 5 Miles

1 ½ 0 1 2 3 4 5 Kilometers

Geology by W. D. Wilkinson,
John Eliot Allen, Wayne Lowell,
Wallace Lowry, Murl Hutchinson,
Herbert Harper, Robert Littleton,
Richard Meade, Stewart Jones.

TRUE NORTH
MAGNETIC NORTH
21°
APPROXIMATE MEAN DECLINATION 1933

Datum mean sea level

1941