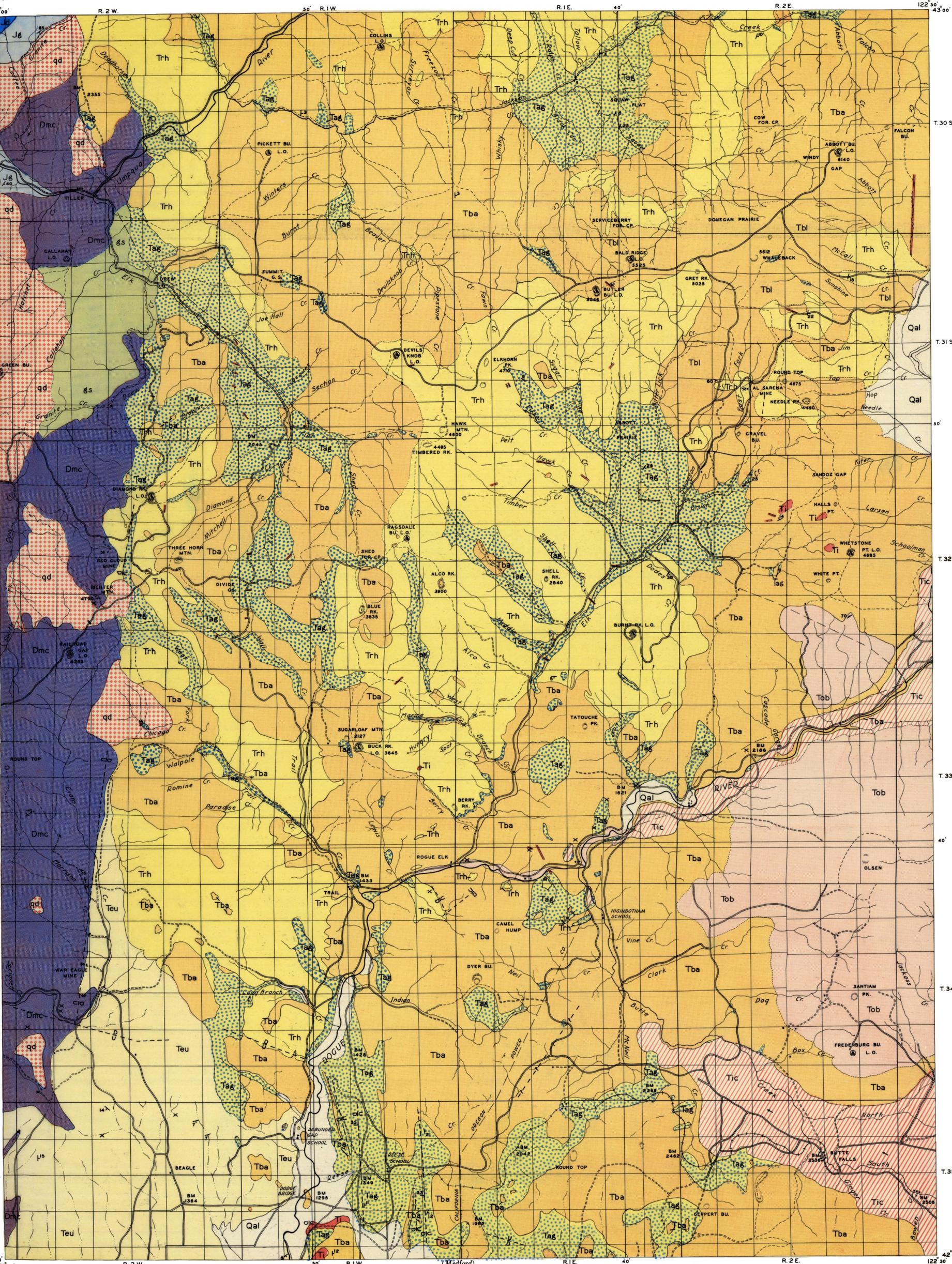


# RECONNAISSANCE GEOLOGIC MAP OF THE BUTTE FALLS QUADRANGLE OREGON

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

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

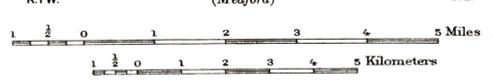


## EXPLANATION

- |                         |   |            |
|-------------------------|---|------------|
| <b>Qal</b>              | Alluvium<br><i>(Stratified gravel, sand, silt and panicles)</i>                               | QUATERNARY |
| <b>UNCONFORMITY</b>     |   |            |
| <b>Ti</b>               | Intrusive<br><i>(Diorite sills and basalt dikes)</i>  | TERTIARY   |
| <b>UNCONFORMITY</b>     |   |            |
| <b>Tic</b>              | Later basalt flow<br><i>(Light gray intracanyon olivine basalt and breccias)</i>              | TERTIARY   |
| <b>UNCONFORMITY</b>     |   |            |
| <b>Tbl</b>              | Basalt flows<br><i>(Light gray Abbot Butte basalt flows)</i>                                  | TERTIARY   |
| <b>UNCONFORMITY (?)</b> |   |            |
| <b>Tob</b>              | Basalt flows<br><i>(Gray Olsen Peak basalt flows)</i>   | TERTIARY   |
| <b>UNCONFORMITY (?)</b> |   |            |
| <b>Trh</b>              | Rhyolite<br><i>(White to buff rhyolite flows, tufts and breccias)</i>                         | TERTIARY   |
| <b>UNCONFORMITY (?)</b> |   |            |
| <b>Tba</b>              | Older basalt flows<br><i>(Black, coarse textured basalts)</i>                                 | TERTIARY   |
| <b>UNCONFORMITY (?)</b> |   |            |
| <b>Tag</b>              | Agglomerate<br><i>(Green agglomerates, tufts and flow breccias)</i>                           | TERTIARY   |
| <b>UNCONFORMITY (?)</b> |   |            |
| <b>Teu</b>              | Umpqua formation<br><i>(Buff sandstones, shales and conglomerates)</i>                        | TERTIARY   |
| <b>UNCONFORMITY</b>     |   |            |
| <b>Qd</b>               | Quartz diorite<br><i>(Intrusive masses, dikes and related rock)</i>                           | TERTIARY   |
| <b>UNCONFORMITY</b>     |   |            |
| <b>jd</b>               | Dothan formation<br><i>(Hard sandstones, shales and conglomerates)</i>                        | JURASSIC   |
| <b>UNCONFORMITY (?)</b> |   |            |
| <b>jg</b>               | Galice formation<br><i>(Slightly metamorphosed shales, some sandstones and conglomerates)</i> | JURASSIC   |
| <b>UNCONFORMITY</b>     |   |            |
| <b>gs</b>               | Greenstones<br><i>(Slightly metamorphosed basalts, gabbros and related rocks)</i>             | JURASSIC   |
| <b>UNCONFORMITY</b>     |   |            |
| <b>Dmc</b>              | May Creek formation<br><i>(Mica schists and slates)</i>                                       | DEVONIAN   |
| <b>UNCONFORMITY</b>     |   |            |

- U, upthrow
- D, downthrow
- 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—1930



Datum mean sea level  
**1941**



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