

Geology and Mineral Resources Map of the Tumalo Dam Quadrangle, Deschutes County, Oregon

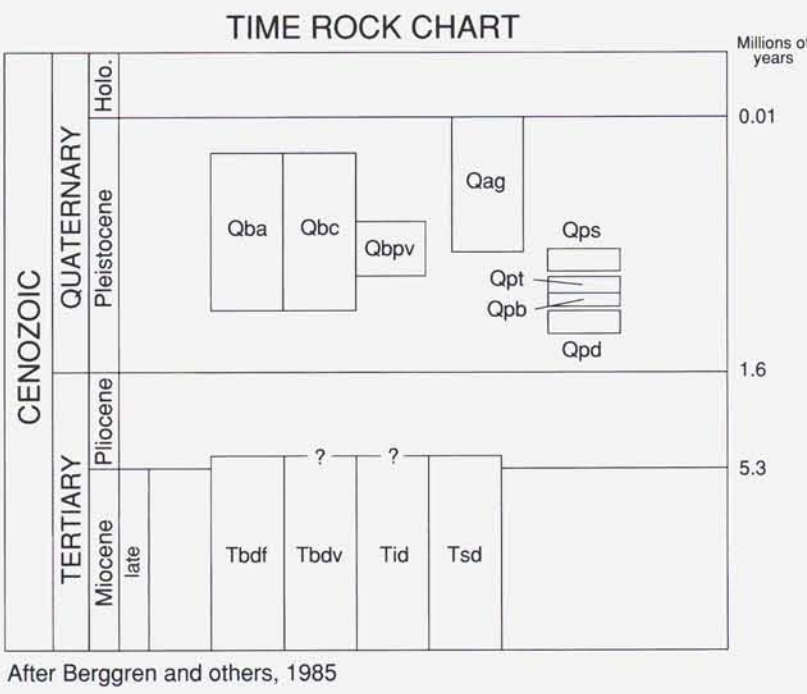
STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
DONALD A. HULL, STATE GEOLOGIST

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GMS-81

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Deschutes County, Oregon
By E.M. Taylor and M.L. Ferns

Plate 1



EXPLANATION

(see accompanying text for complete geologic explanation)

- Qag Glacial outwash and alluvial deposits (middle to upper Pleistocene)
- Qba High Cascade lava flows: Pleistocene basalt and basaltic andesite flows erupted from now buried High Cascade cones to the west. Divided into the following units:
- Qbc Basaltic andesite flows (middle to upper Pleistocene)
- Qbpv Basalt of Plainview (middle to upper Pleistocene)
- Qps Pleistocene pyroclastic deposits of the Tumalo volcanic center (Hill, 1988; Hill and Taylor, 1990); includes four separate units:
- Qpt Shevlin Park tuff of Taylor (1981) (middle Pleistocene)
- Qpb Tumalo tuff of Taylor (1981) (middle Pleistocene)
- Qpd Bend pumice of Taylor (1981) (middle Pleistocene)
- Qpd Desert Spring tuff of Taylor (1981) (middle Pleistocene)
- Tbdf Deschutes Formation of Russell (1905) (upper Miocene and lower Pliocene)
- Tbdv Mafic lava flows (upper Miocene and lower Pliocene)
- Tbdv Mafic cinder cones (upper Miocene and Pliocene?)
- Tid Ignimbrite (upper Miocene and Pliocene?)
- Tsd Volcaniclastic deposits (upper Miocene and Pliocene)

MAP SYMBOLS

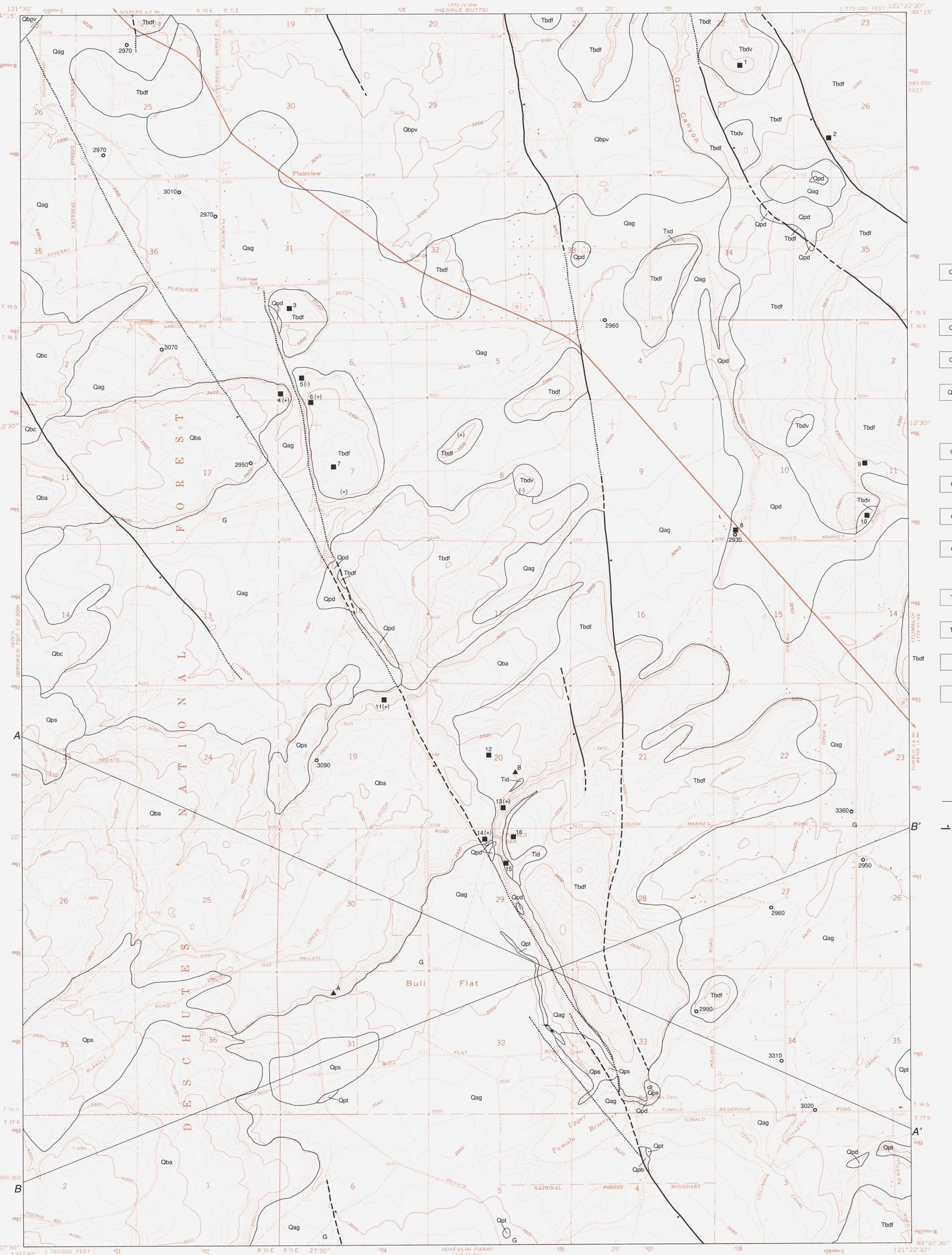
- Contact—approximately located
- Faults—dashed where approximately located; dotted where concealed under younger units; ball and bar on downthrown side
- Strike of vertical joints
- Water well with ground-water elevation at time of drilling (reported to nearest 10 ft)
- G Gravel
- Location of sample analyzed in Table 1
Sample with normal magnetic polarity
Sample with reversed magnetic polarity
- Location of sample analyzed in Table 2

Geology by Edward M. Taylor, Oregon State University,
and Mark L. Ferns, Oregon Department of Geology and
Mineral Industries

Field work: Taylor, 1978-1979, Ferns, 1993

Cartography by Paul E. Staub

The geologic information on this map is available in digital formats



Base map by U.S. Geological Survey
Control by USGS, NOS/NOAA
Polyconic projection, 1927 North American datum
10,000-foot grid based on Oregon coordinate system, south zone
1000-meter Universal Transverse Mercator grid ticks, zone 10 shown

SCALE 1:24 000

5 0 2 KILOMETERS

1000 0 7000 FEET

5 0 1 MILE

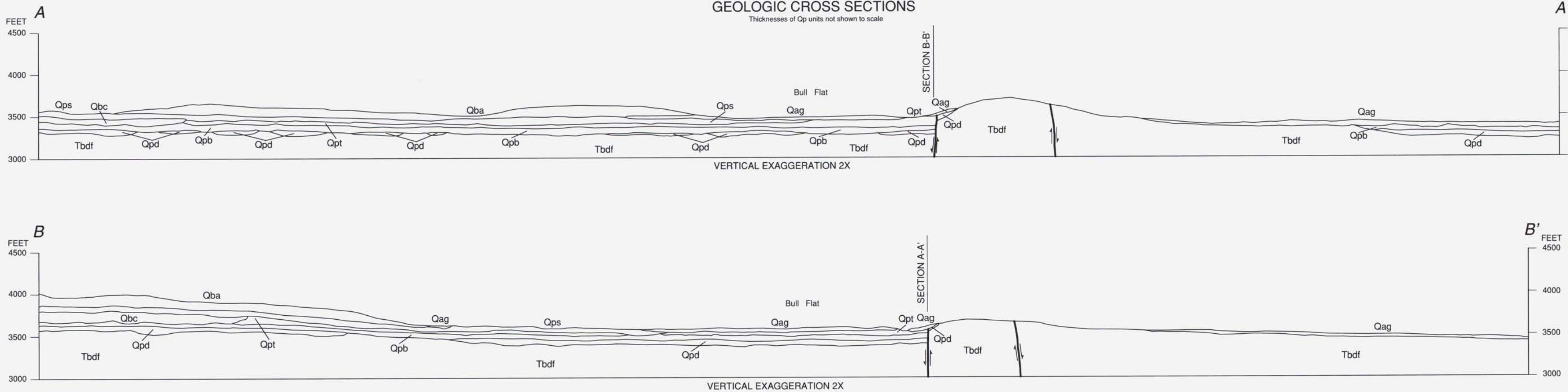
CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
NATIONAL GEOLOGIC VERTICAL DATUM OF 1929



QUADRANGLE LOCATION

GEOLOGIC CROSS SECTIONS

Thicknesses of Op units not shown to scale



Funded in part by the National Geologic Mapping Program (STATEMAP)