STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
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Geologic Map of the Tucker Flat Quadrangle, Union and Baker Counties, Oregon

1997

GMS-110

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By Ian P. Madin

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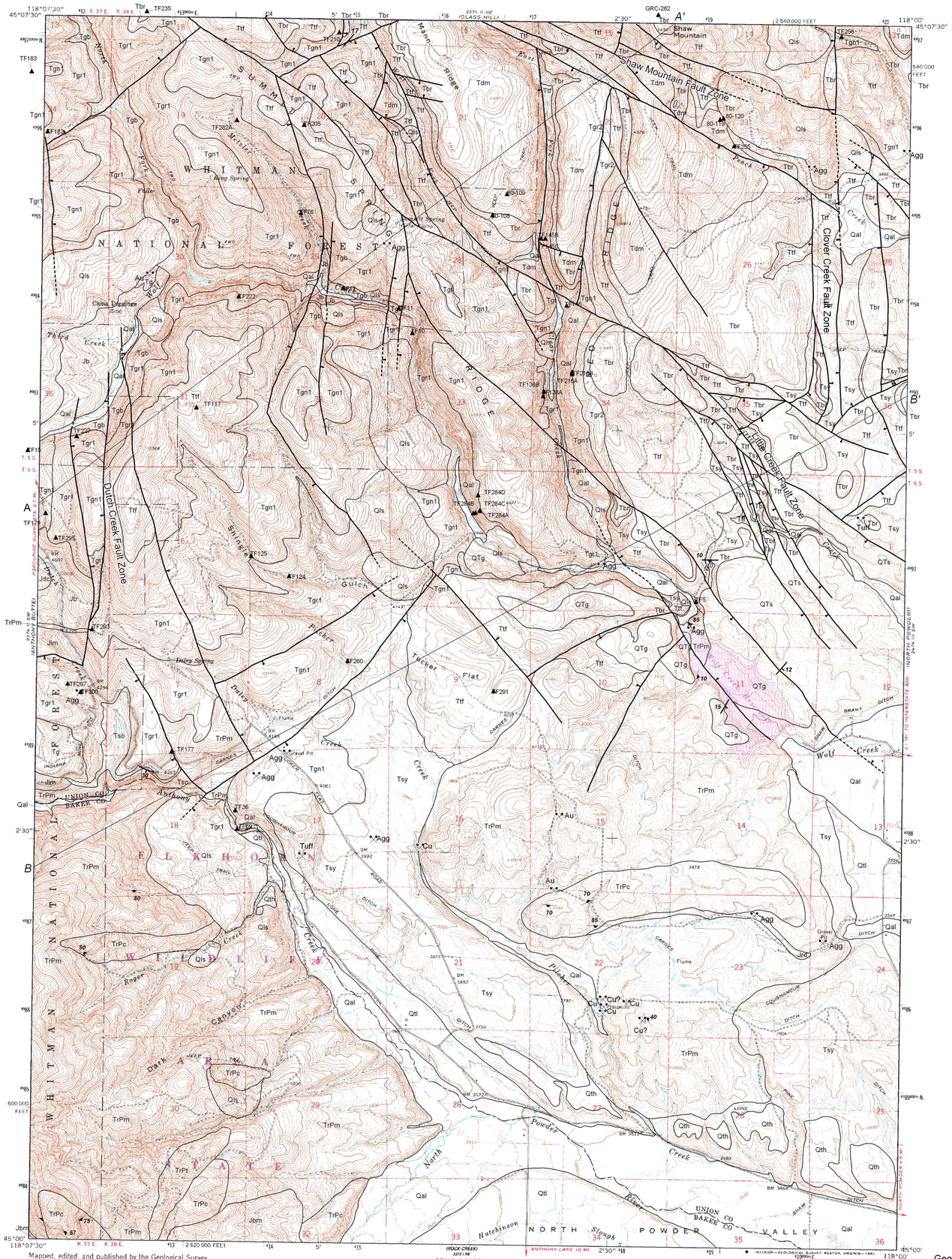


EXPLANATION OF MAP UNITS

(See accompanying text for complete geologic explanation)

Surficial Deposits

- Qal — Alluvium (Holocene)
- Qls — Landslides (Quaternary)
- Qtl — Lower terrace deposits (Pleistocene)
- Qth — Higher terrace deposits (Pleistocene)
- QTg — Conglomerate (Pleistocene to Miocene?)
- QTs — Sandstone (Pleistocene to Miocene?)

Calc-Alkaline Volcanic Rocks and Associated Sediments

- Tdm — Dacite of Mann Ridge (middle Miocene)
- Tbr — Basalt of Red Ridge (middle Miocene)
- Tsy — Younger sandstone and siltstone (middle Miocene)

Unassigned Volcanic Rocks

Multiple flows of high-iron basaltic andesite and andesite (middle Miocene)

- Ttf — Ferroandesite of Tucker Flat (middle Miocene)

Columbia River Basalt Group

Columbia River Basalt Group (middle Miocene)
Grande Ronde Basalt

- Tgr2 — R2 magnetostratigraphic unit, undifferentiated (middle Miocene)
- Tgn1 — N1 magnetostratigraphic unit, undifferentiated (middle Miocene)
- Tgr1 — R1 magnetostratigraphic unit, undifferentiated (middle Miocene)
- Tgb — Basalt of Buckhorn Springs (middle Miocene)

Older Sedimentary Rocks

- Tso — Older sandstone and siltstone (middle Miocene to lower Cretaceous?)
- Tg — Older conglomerate (lower Miocene to lower Cretaceous?)

Bald Mountain Batholith

Bald Mountain Batholith (upper Jurassic)

- Jrd — Rhyolite porphyry dike (upper Jurassic?)
- Jdc — Leucogranite of Dutch Creek (upper Jurassic)
- Jim — Granodiorite of Indiana Mine Road (upper Jurassic)
- Jb — Boundary quartz diorite (upper Jurassic)
- Jbm — Tonalite of Bald Mountain (upper Jurassic)

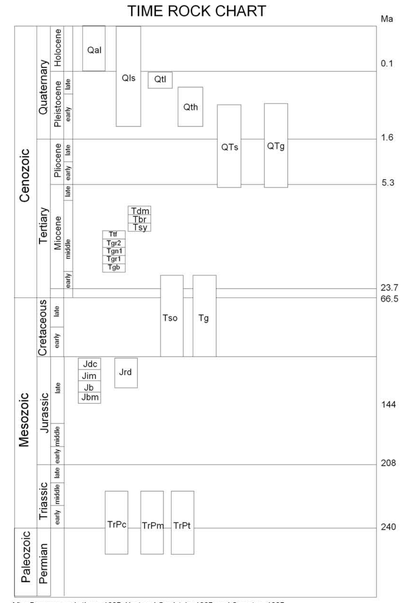
Paleozoic Igneous and Metamorphic Rocks

- TrPm — Mafic intrusive and metamorphic rocks (Triassic or Permian?)
- TrPc — Metamorphosed ribbon chert and associated metasediments (Triassic or Permian?)
- TrPt — Trondjhemite quartz diorite (Triassic or Permian?)

MAP SYMBOLS

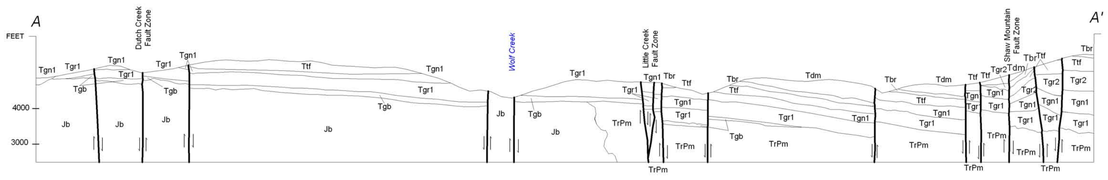
- Contact--approximately located
- Fault--dotted where concealed; dashed where approximately located, bar and ball on downthrown side
- 5 — Strike and dip of beds
- 5 — Strike and dip of foliation
- TF297 — Geochemical sample location: map numbers are keyed to Table 1 in text
- Agg — Prospect, quarry, or mine: with commodity type indicated
  - Agg - stone and aggregate
  - Au - gold
  - Cu - copper
  - Tuff - building stone

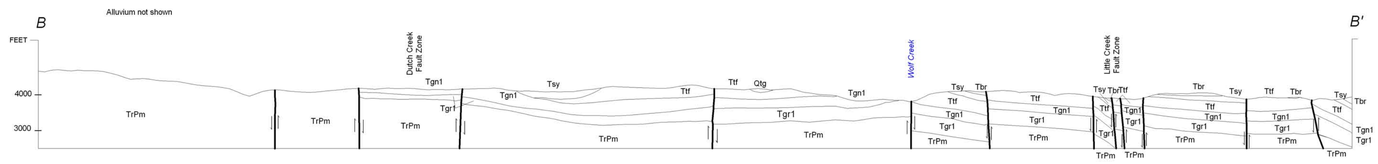
TIME ROCK CHART



After Berggren and others, 1985; Kent and Gradstein, 1985; and Compton, 1985.

GEOLOGIC CROSS SECTIONS





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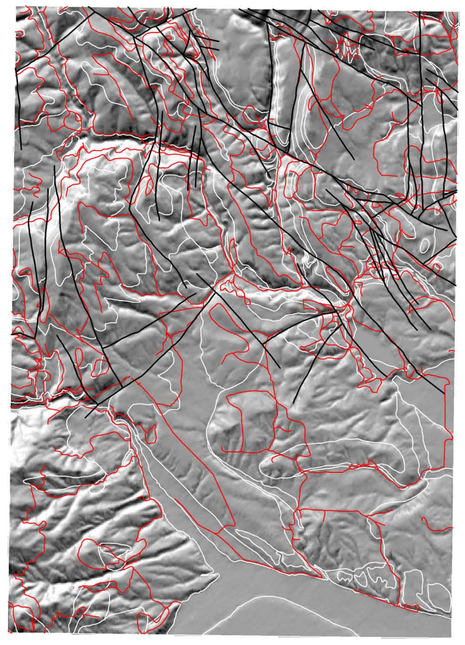
and D.G. Bailey, Hamilton College

Field work conducted in 1996

Cartography by Paul Staub

This map is available in digital format



Traverses made to collect data for this map shown in red, geologic contacts in white, faults in black.
Approximate scale 1:62,500.