Geologic Map of the La Grande Reservoir Quadrangle, Union County, Oregon

State of Oregon
Department of Geology and Mineral Industries
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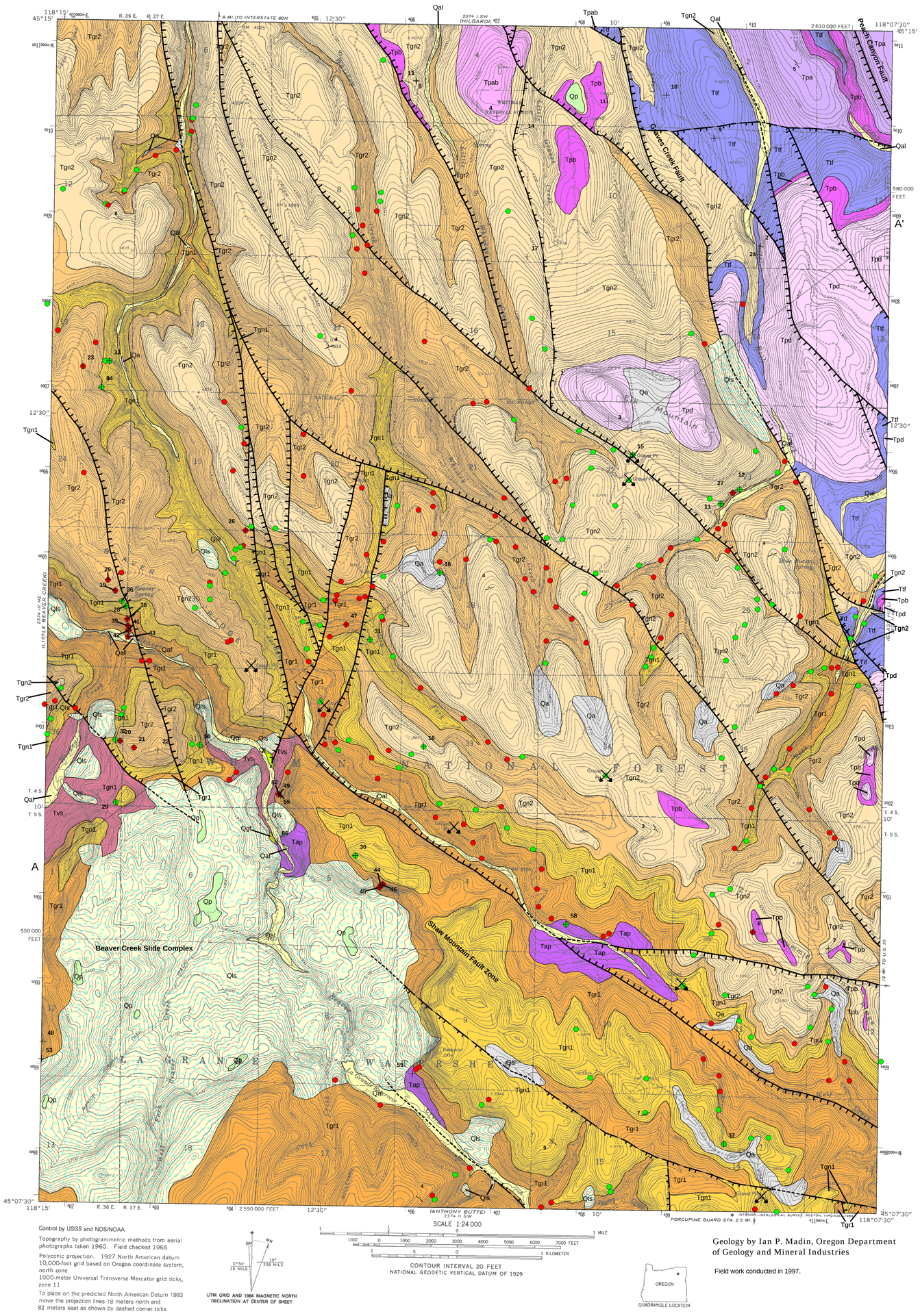
By Ian P. Madin



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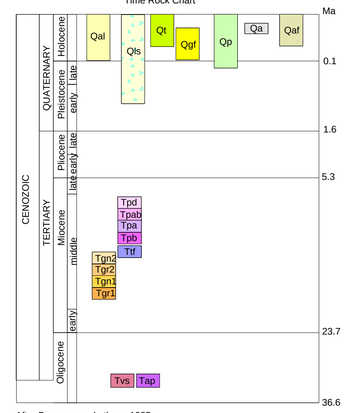
Field work conducted in 1997.

Time Rock Chart



After Berggren and others, 1985.

Explanation of Map Units

Surficial Units

- Qa — Mazama Ash (Holocene)
- Qp — Paludal deposits (Holocene)
- Qal — Alluvium (Holocene)
- Qaf — Alluvial fan deposits (Holocene)
- Qgf — Outburst flood deposits (Pleistocene)
- Qt — Terrace deposits (Pleistocene)
- Qls — Landslides (Quaternary)

Glass Hill volcanics (Powder River Volcanic field)

- Tpd — Dacite (middle Miocene)
- Tpab — Olivine trachybasalt (middle Miocene)
- Tpa — Andesite (middle Miocene)
- Tpb — Olivine basalt (middle Miocene)

Columbia River Basalt Group

- Ttf — Andesite of Tucker Flat (Middle Miocene)

Grande Ronde Basalt

- Tgn2 — N2 magnetostratigraphic unit undifferentiated (middle Miocene)
- Tgr2 — R2 magnetostratigraphic unit undifferentiated (middle Miocene)
- Tgn1 — N1 magnetostratigraphic unit undifferentiated (middle Miocene)
- Tgr1 — R1 magnetostratigraphic unit undifferentiated (middle Miocene)

John Day Formation

- Tvs — Volcaniclastic rocks (Oligocene)
- Tap — Andesite and dacite porphyry (Oligocene)

Symbol Legend

- Contact, approximately located
- Fault, approximately located, ticks on downthrown side
- Inferred fault, approximately located, ticks on downthrown side
- Buried fault
- Geochemical sample site
- Paleomanetic polarity data sites
- Normal Polarity
- Reverse Polarity
- Rock quarry
- Strike and dip of beds interpreted from airphotos

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Cross Section A-A'