

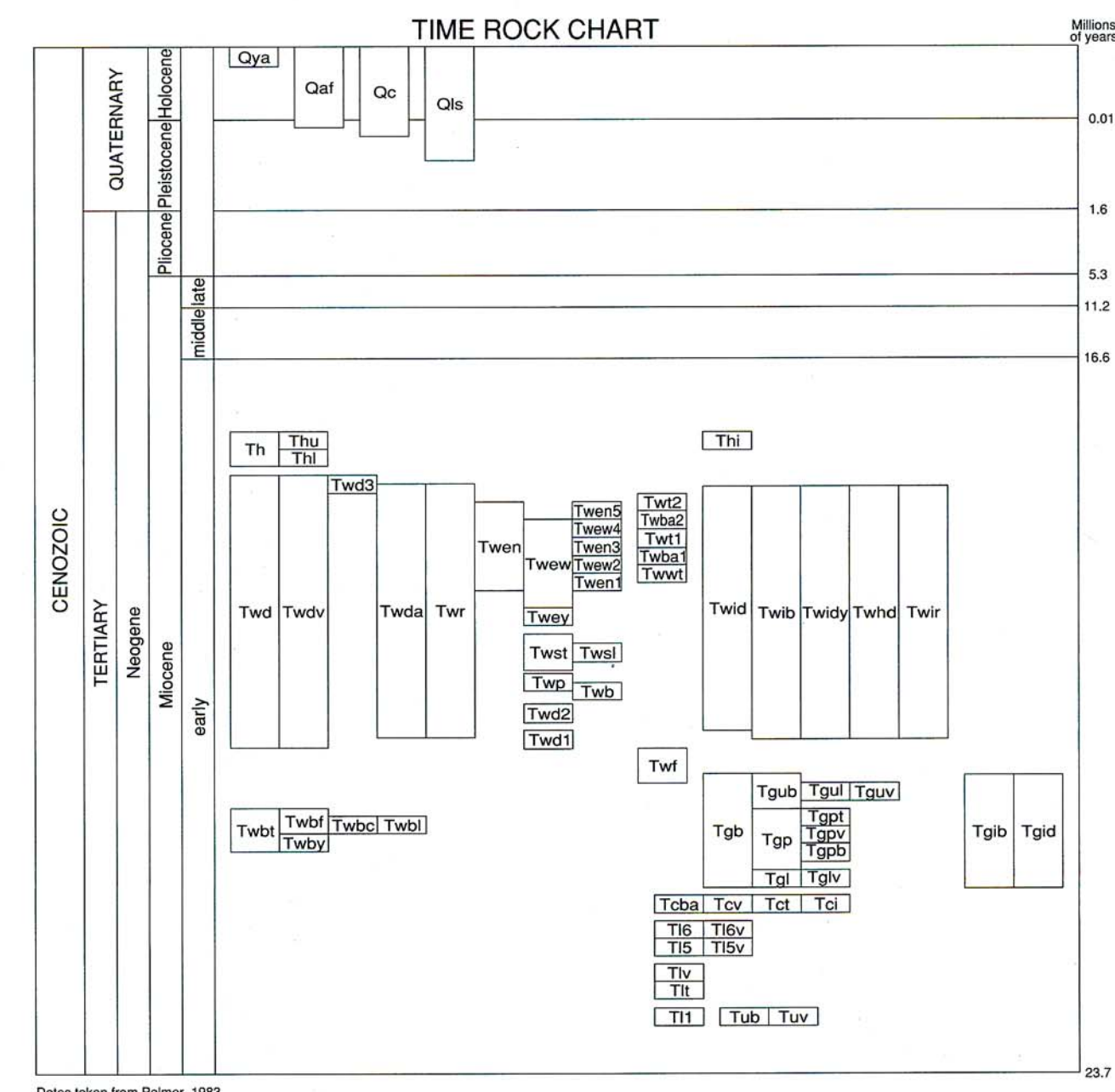
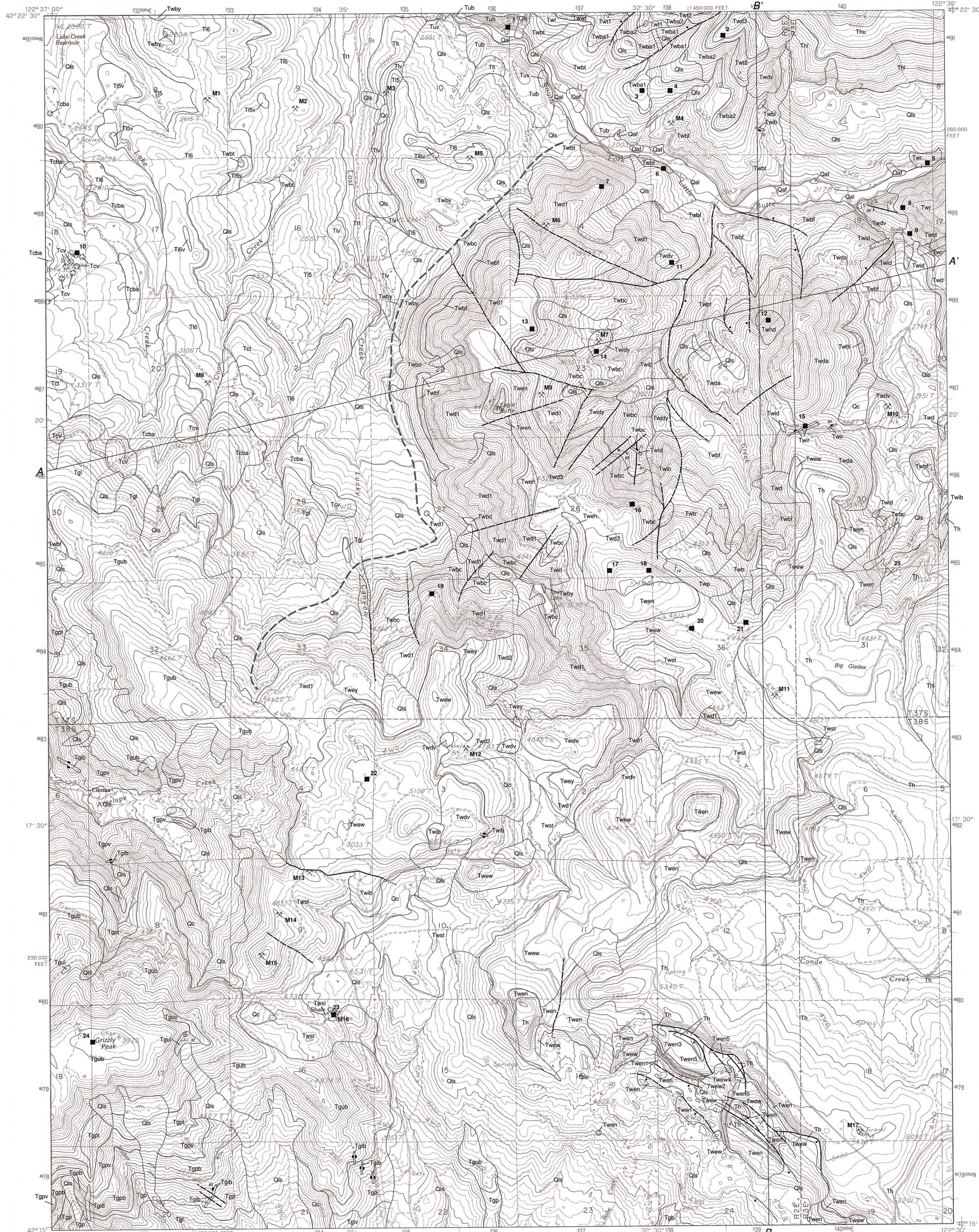
# Geology and Mineral Resources Map of the Grizzly Peak Quadrangle, Jackson County, Oregon

1996

STATE OF OREGON  
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES  
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**GMS-106**  
Geology and Mineral Resources Map of the Grizzly Peak Quadrangle,  
Jackson County, Oregon  
By F.R. Hladky

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## EXPLANATION OF MAP UNITS

(see accompanying text for full explanations)

### Surficial Deposits

- Qya Young alluvium (Holocene)
- Qal Alluvial fan deposits (Holocene and Pleistocene)
- Qc Colluvium (Holocene and Pleistocene)
- Qls Landslide deposits (Holocene and Pleistocene)

### Tertiary Volcanic Rocks

- Th Heppie Formation of Hladky (1995), undivided (lower Miocene)
- Thu Upper part
- Thl Lower part

### Wasson Formation (lower Miocene)

- Eagle Butte-Shale City member
- Dacite, undivided
- Dacite vent deposits, undivided
- Dacite unit 3
- Dacite
- Rhyolite

- Tuff of Eagle Butte
- Nonwelded facies, undivided
- Welded facies, undivided
- Nonwelded tuff
- Welded tuff
- Nonwelded tuff
- Nonwelded tuff
- Vitrophyre

- Tuff of Shale City
- Lacustrine facies
- Mafic pyroclastic rocks
- Basaltic andesite
- Dacite unit 2
- Dacite unit 1

- Heppie Mountain member
- Dacite tuff
- Basaltic andesite
- Dacite tuff
- Basaltic andesite
- White tuff of Wells (1956)
- Lava flows of Wells (1956)

- Buff tuff of Wells (1956), undivided
- Fine-grained facies
- Coarse-grained facies
- Lacustrine facies
- Vitrophyre

- Volcanic rocks of Grizzly Peak (lower Miocene)
- Basaltic andesite, undivided
- Upper unit
- Basaltic andesite
- Lahar deposits
- Vent deposits

- Pyroclastic unit, undivided
- Tuff
- Vent deposits
- Basaltic andesite

- Lower unit
- Basaltic andesite
- Vent deposits

- Volcanic rocks of Chimney Rock (lower Miocene)
- Basaltic andesite to andesite lava flows
- Vent deposits
- Tuff

- Basaltic andesite of Lake Creek of Hladky (1995) (lower Miocene)
- Basaltic andesite
- Basaltic andesite vent deposits
- Basaltic andesite
- Basaltic andesite vent deposits
- Basaltic andesite vent deposits
- Tuff
- Basaltic andesite

- Volcanic rocks of the South Fork Little Butte Creek of Hladky (1995) and basaltic andesite of Lake Creek of Hladky (1995), undifferentiated (lower Miocene)
- Basaltic andesite (lower Miocene)
- Vent deposits (lower Miocene)

### Intrusive Rocks

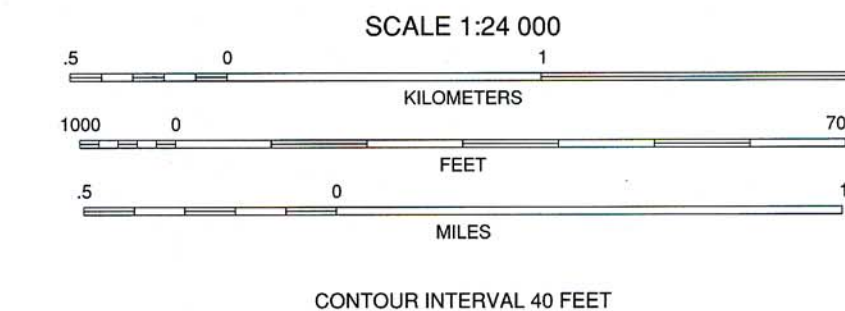
- Thl Hypabyssal rocks of the Heppie Formation of Hladky (1995) (lower Miocene)
- Intrusive and hypabyssal rocks of the Wasson Formation (lower Miocene)
- Dacitic dikes
- Basaltic andesite intrusive rocks
- Vitrophyric dacite intrusive rocks
- Hornblende dacite
- Intrusive rhyolite

- Intrusive and hypabyssal rocks related to the volcanic rocks of Grizzly Peak (lower Miocene)
- Basaltic andesite dikes
- Dacite intrusive rocks

- Intrusive and hypabyssal rocks related to the volcanic rocks of Chimney Rock (lower Miocene)
- Basaltic andesite to dacitic intrusive rocks

Funded in part by the National Geologic Mapping Program (STATEMAP) administered by the U.S. Geological Survey

Base map by U.S. Geological Survey  
Control by USGS, NGS/NOAA  
Projection: Lambert conformal conic  
Grid: 1000-meter Universal Transverse Mercator, Zone 10  
10,000-foot State Grid Ticks, Oregon, south zone  
UTM declination: 18 minutes east  
1980 magnetic north declination: 18 degrees, 30 minutes east  
Vertical Datum: National Geodetic Vertical Datum of 1929  
Horizontal Datum: 1927 North American Datum



## MAP SYMBOLS

- Contact -- Approximately located
- Fault -- Dashed where inferred; dotted where concealed; ball and bar on downthrown side; dip in degrees
- Inferred western margin of Eagle Butte siliceous eruptive complex (EBSEC)
- Strike and dip of bedding
- Strike and dip of bedding -- Visual field estimate or 3-point calculation
- Horizontal bedding
- Strike and dip of dike
- Vertical dike
- Landslide scarp
- Landslide or lateral blast boulder -- 3-10 m across, rock type indicated
- Sample location with map number -- See Tables 3 and 4 in accompanying text
- Mine location with map number -- See Table 5 in accompanying text
- Radiometric age sample site with map number -- See Table 2 in accompanying text

## GEOLOGIC CROSS SECTIONS

Not all surficial units are shown

