

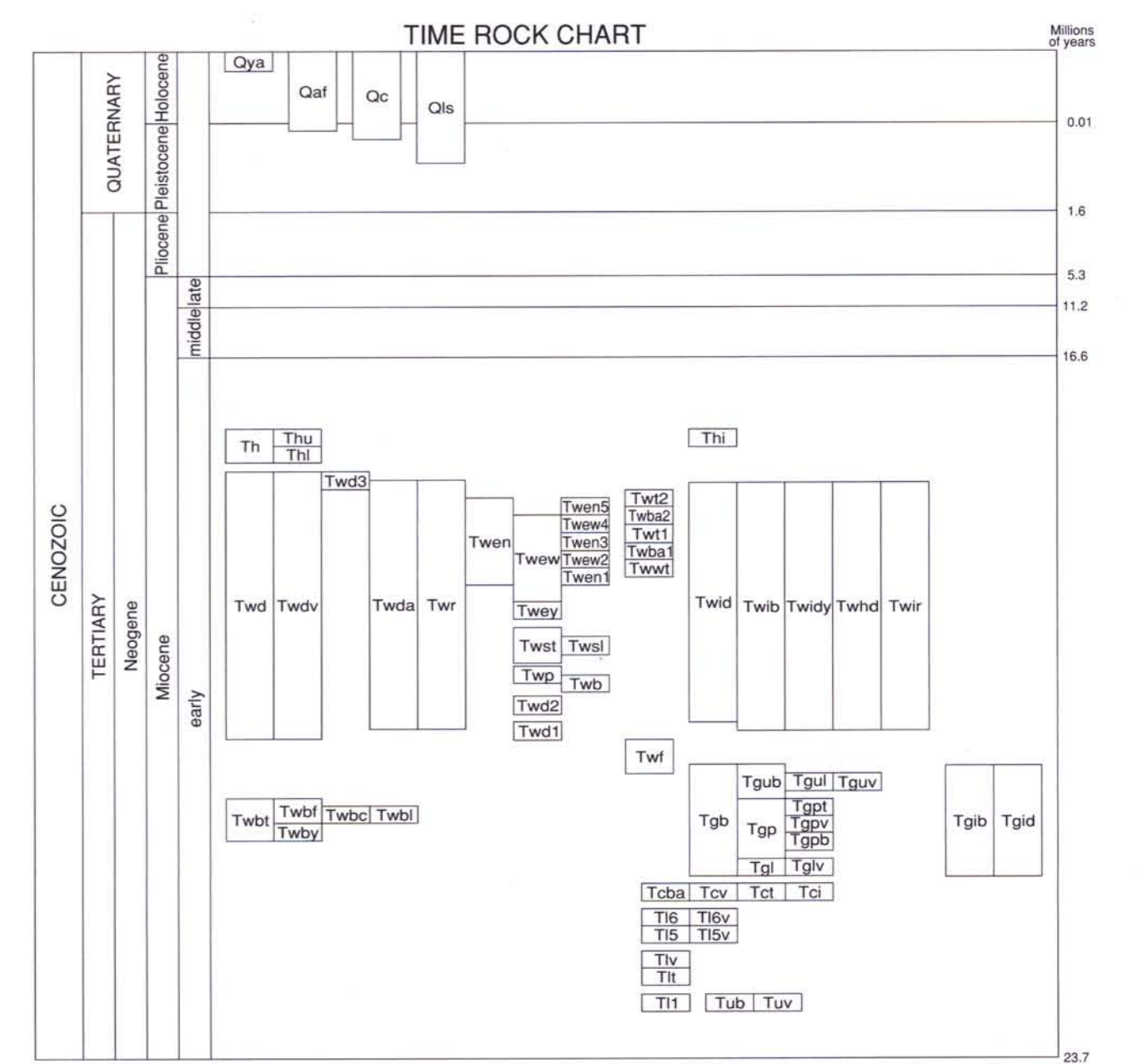
# Geology and Mineral Resources Map of the Grizzly Peak Quadrangle, Jackson County, Oregon

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 explanation)
- #### Surficial Deposits
- Qya Young alluvium (Holocene)
  - Qaf 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
      - Twd Dacite vent deposits, undivided
      - Twd3 Dacite unit 3
      - Twda Dacite
      - Twr Rhyolite
    - Twen Twen
      - Twew Welded facies, undivided
      - Twen5 Nonwelded tuff
      - Twen4 Welded tuff
      - Twen3 Nonwelded tuff
      - Twen2 Welded tuff
      - Twen1 Nonwelded tuff
      - Twey Vitrophyre
    - Tuff of Shale City
      - Twst Lacustrine facies
      - Twp Mafic pyroclastic rocks
      - Twb Basaltic andesite
        - Twd2 Dacite unit 2
        - Twd1 Dacite unit 1
    - Heppie Mountain member
      - Tw2 Dacite tuff
        - Twba2 Basaltic andesite
        - Tw1 Dacite tuff
          - Twba1 Basaltic andesite
          - Twst White tuff of Wells (1956)
          - Twf Lava flows of Wells (1956)
          - Twbt Buff tuff of Wells (1956), undivided
            - Twbf Fine-grained facies
            - Twbc Coarse-grained facies
            - Twbl Lacustrine facies
            - Twby Vitrophyre
  - Volcanic rocks of Grizzly Peak (lower Miocene)
    - Tgub Basaltic andesite, undivided
      - Tgub Basaltic andesite
      - Tgul Lahar deposits
      - Tguv Vent deposits
    - Tgp Pyroclastic unit, undivided
      - Tgpt Tuff
      - Tgpv Vent deposits
      - Tgpb Basaltic andesite
    - Lower unit
      - Tgl Basaltic andesite
      - Tglv Vent deposits
  - Volcanic rocks of Chimney Rock (lower Miocene)
    - Tcba Basaltic andesite to andesite lava flows
    - Tcv Vent deposits
    - Tct Tuff
    - T16 Basaltic andesite of Lake Creek of Hladky (1995) (lower Miocene)
    - T15 Basaltic andesite
    - T15v Basaltic andesite vent deposits
    - T15 Basaltic andesite
    - T15v Basaltic andesite vent deposits
    - Th Basaltic andesite vent deposits
    - Tt Tuff
    - T11 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)
    - Tub Basaltic andesite (lower Miocene)
    - Tuv Vent deposits (lower Miocene)
- #### Intrusive Rocks
- Thi Hypabyssal rocks of the Heppie Formation of Hladky (1995) (lower Miocene)
  - Intrusive and hypabyssal rocks of the Wasson Formation (lower Miocene)
    - Twid Dacite dikes
    - Twbd Basaltic andesite intrusive rocks
    - Twidy Vitrophyric dacite intrusive rocks
    - Twhd Hornblende dacite
    - Twir Intrusive rhyolite
  - Intrusive and hypabyssal rocks related to the volcanic rocks of Grizzly Peak (lower Miocene)
    - Tgid Basaltic andesite dikes
    - Tgdi Dacite intrusive rocks
  - Intrusive and hypabyssal rocks related to the volcanic rocks of Chimney Rock (lower Miocene)
    - Tci Basaltic andesite to dacite intrusive rocks

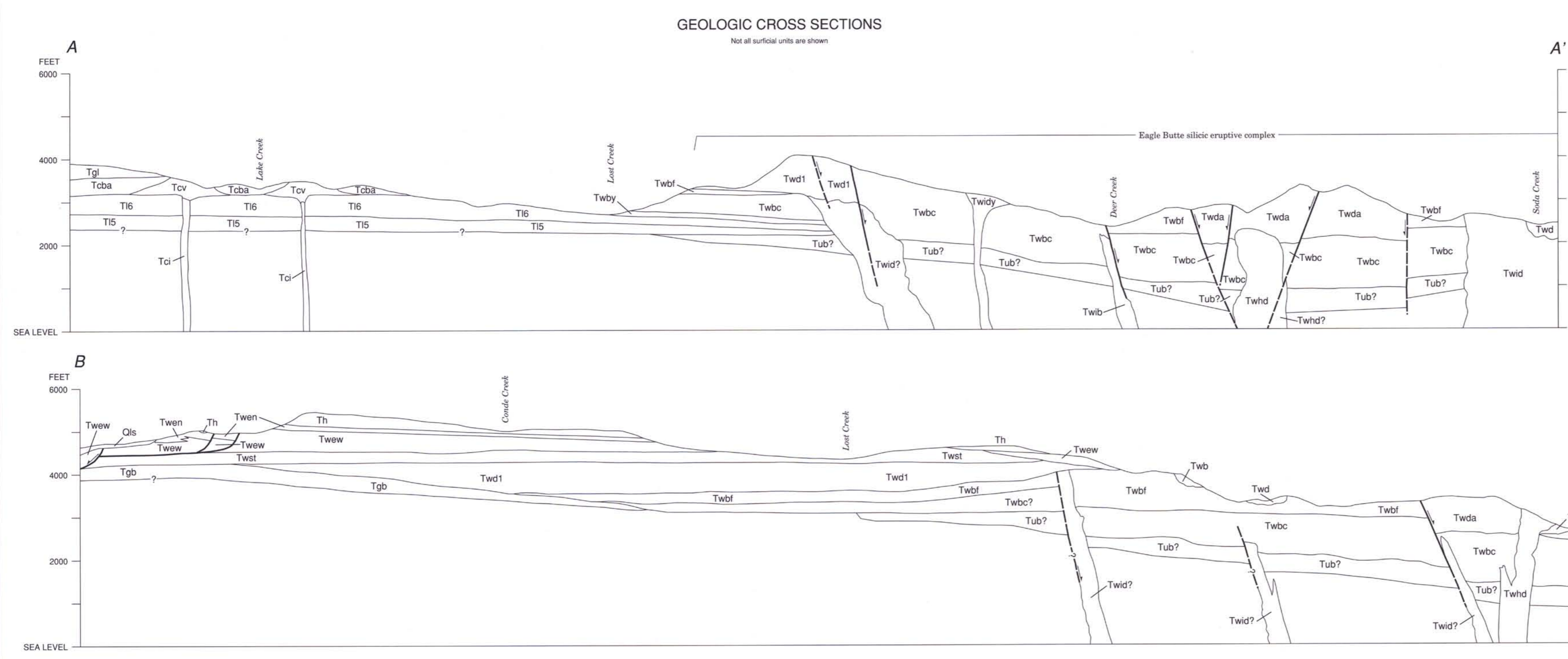
Base map by U.S. Geological Survey  
Control by USGS, NGS, NOAA  
Projection: Lambert conformal conic  
Grid: 10,000-meter Universal Transverse Mercator, Zone 10  
10,000-foot State Grid Ticks, Oregon, south zone  
UTM declination: 18 minutes east  
1980 magnetic north declination: 18 degrees, 30 minutes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

SCALE 1:24 000

CONTOUR INTERVAL 40 FEET

Geology by Frank R. Hladky, Oregon Department of Geology and Mineral Industries  
Reviewed by George R. Priest, Oregon Department of Geology and Mineral Industries  
Field work conducted 1994-1995  
Cartography by Mark E. Neuhaus  
This map is available in digital formats

- ### 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 silicic 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



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