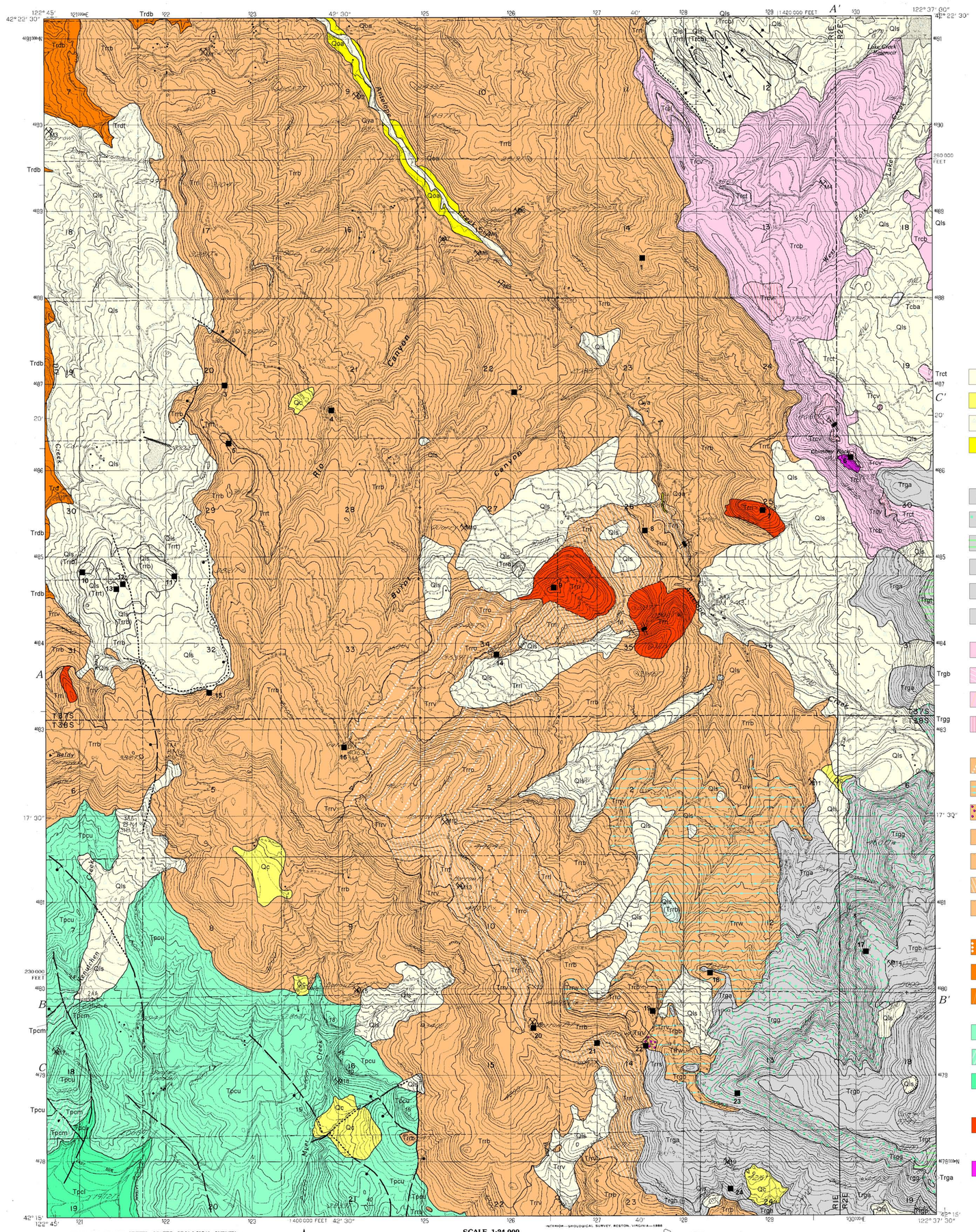
Geology and Mineral Resources Map of the Rio Canyon Quadrangle, Jackson County, Oregon

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

1998



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY ..... USGS, NOS/NOAA
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1981
FIELD CHECKED ..... 1982 MAP EDITED 1988
PROJECTION ..... LAMBERT CONFORMAL CONIC
GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR ..... ZONE 10
10,000-FOOT STATE GRID TICKS ..... OREGON, SOUTH ZONE
UTM GRID DECLINATION ..... 0°13' EAST
1980 MAGNETIC NORTH DECLINATION ..... 18°30' EAST
VERTICAL DATUM ... NATIONAL GEODETIC VERTICAL DATUM OF 1929
HORIZONTAL DATUM ..... 1927 NORTH AMERICAN DATUM

To place on the predicted North American Datum of 1983, move the projection lines as shown by dashed corner ticks (20 meters north / 95 meters east)

There may be private inholdings within the boundaries of any Federal and State Reservations shown on this map

No distinction made between houses, barns, and other buildings

SCALE 1:24 000

KILOMETERS 1 0 1 2
METERS 1000 0 1000 2000
MILES 1 .5 0 1
FEET 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000

CONTOUR INTERVAL 40 FEET

CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 FOOT
OTHER ELEVATIONS SHOWN TO THE NEAREST FOOT
To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048

OREGON
QUADRANGLE LOCATION

Geology by Frank R. Hladky,
Oregon Department of Geology and Mineral Industries

Reviewed by M.L. Ferns, Oregon Department of Geology and Mineral Industries

Field work conducted in 1996

Cartography by Paul Staub

This map is available in digital format

GMS-108

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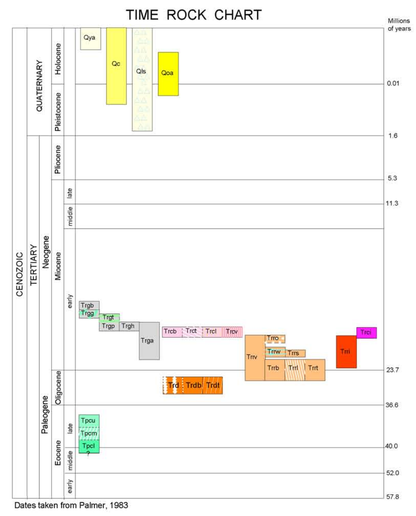
By Frank R. Hladky

Funded in part by the U.S. Geological Survey, Department of the Interior, assistance Award No. 1434-HQ-96-AG-01514 of the STATEMAP prpogram,

TIME ROCK CHART



Dates taken from Palmer, 1983

EXPLANATION OF MAP UNITS

(See accompanying text for complete geologic explanation)

Surficial Deposits

- Qya — Young alluvium (Holocene)
- Qc — Colluvium (Holocene and Pleistocene)
- Qls — Landslide deposits (Holocene and Pleistocene)
- Qoa — Old alluvium (Holocene and Pleistocene)

Tertiary Volcanic Rocks

Roxy Formation (lower Miocene and Oligocene)

Grizzly Peak member

- Trgb — Basaltic andesite
- Trgg — Vent deposits
- Trgt — Tuff
- Trgp — Pyroclastic rocks, undivided
- Trgh — Lahar deposits
- Trga — Basaltic andesite

Chimney Rock member

- Trcb — Basaltic andesite and andesite
- Trct — Tuff
- Trcl — Lahar deposits
- Trcv — Vent deposits

Rio Canyon member

- Trro — Olivine andesite
- Trrw — Welded tuff
- Trrs — Tuff
- Trrv — Vent agglutinate
- Trrb — Basalt and basaltic andesite
- Trri — Lithic tuff
- Trrt — Tuff

Dry Creek Member

- Trd — Undivided tuffaceous rocks and basaltic andesite
- Trdb — Basaltic andesite
- Trdt — Tuff

Payne Cliffs Formation of McKnight (1971) (upper and middle (?) Eocene)

- Tpcu — Upper part
- Tpcm — Middle part
- Tpcl — Lower part

Intrusive Rocks

Intrusive and hypabyssal rocks related to the Rio Canyon member (ower Miocene)

- Tri — Basaltic andesite and andesite intrusive rocks

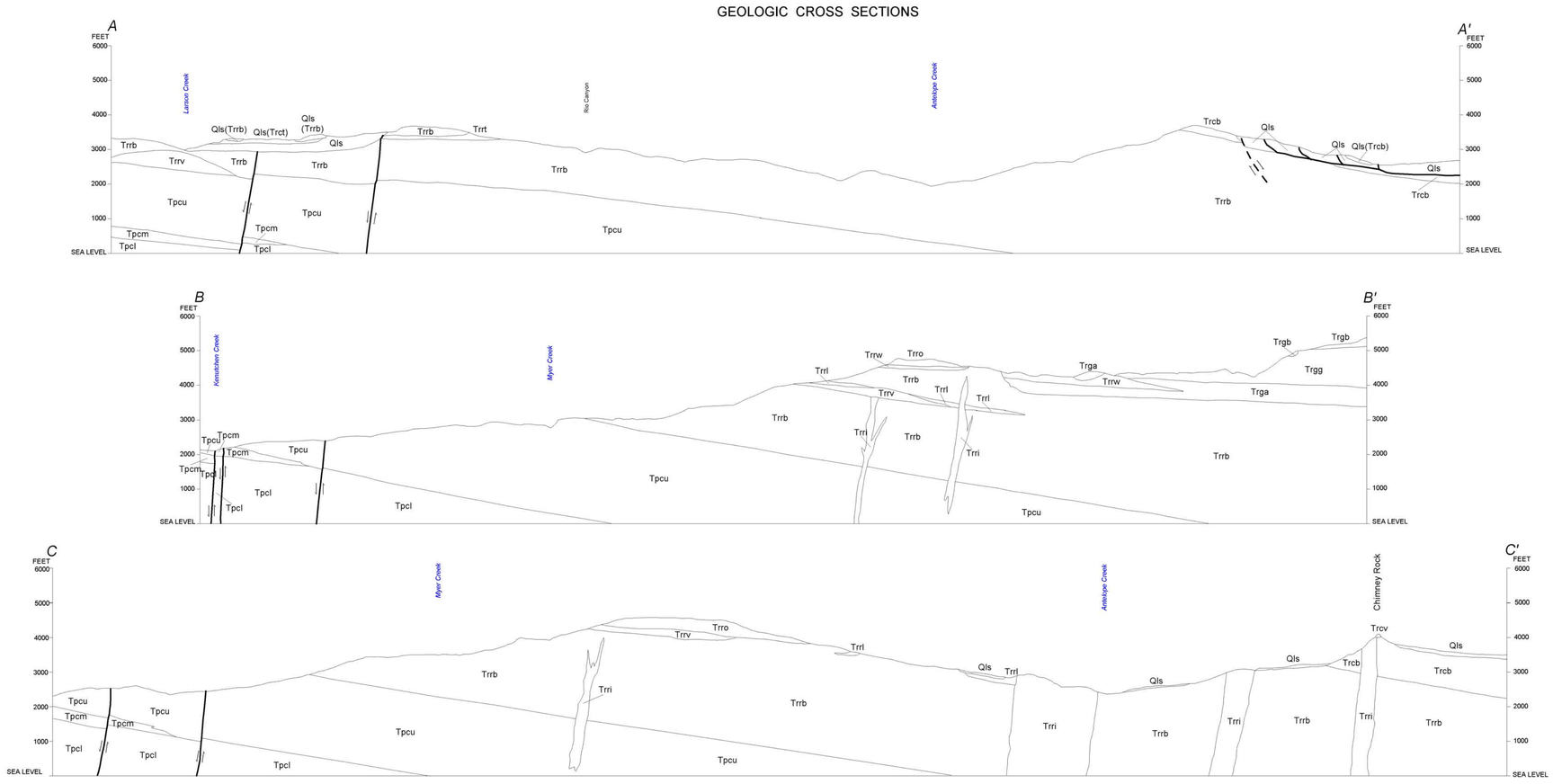
Intrusive and hypabyssal rocks related to the Chimney Rock member (lower Miocene)

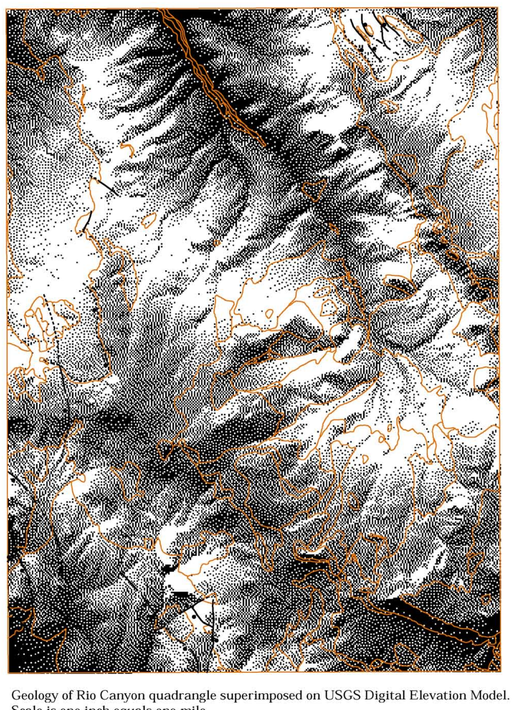
- Trci — Andesite intrusive rocks

MAP SYMBOLS

- Contact--Approximately located
- Fault -- Dashed where approximately located; dotted where concealed; ball and bar on downthrown side
- 25 — Strike and dip of bedding
- 25 — Strike and dip of beds -- Visual field estimate
- Horizontal bedding
- Vertical dike
- Landslide scarp
- Landslide boulder 3-10 m across, rock type indicated
- 24 — Sample location with map number -- See Table 1 in accompanying text
- M19 — Mine/quarry location with map number -- See Table 2 in accompanying text

GEOLOGIC CROSS SECTIONS





Geology of Rio Canyon quadrangle superimposed on USGS Digital Elevation Model. Scale is one inch equals one mile.