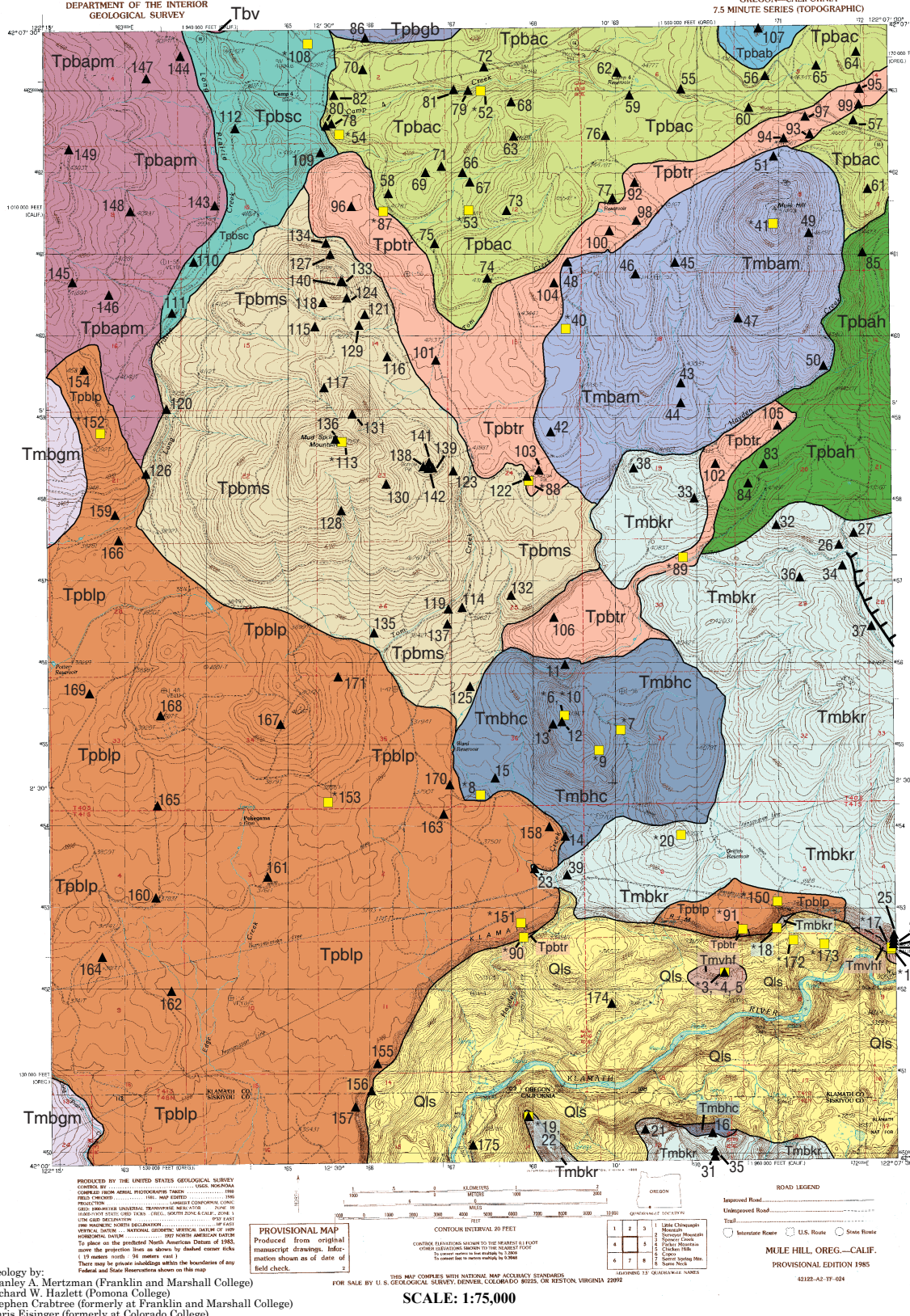
STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
VICKI S. McCONNELL, STATE GEOLOGIST

Preliminary Geologic Map of the Mule Hill 7.5′ Quadrangle, Klamath County, Oregon, and Siskiyou County, California

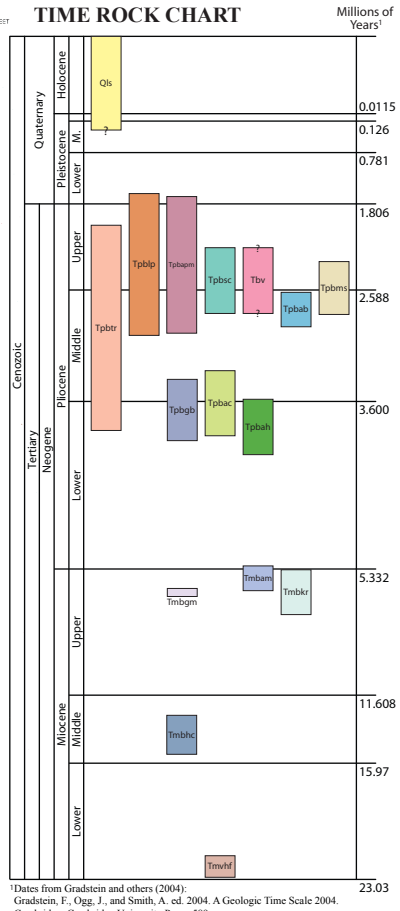
2008

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

MULE HILL QUADRANGLE
OREGON—CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)



TIME ROCK CHART



[1]Dates from Gradstein and others (2004):
Gradstein, F., Ogg, J., and Smith, A. ed. 2004. A Geologic Time Scale 2004. Cambridge, Cambridge University Press, 589p.

MAP UNITS

(A full description of the geologic units is found in the accompanying text.)

Surficial Units

- Qls — Landslide deposits (Pleistocene to Holocene)

Volcanic Units

- Tbv — Basaltic to basaltic andesite vent deposits (Pliocene)
- Tpblp — Basalt of Long Prairie (Mid. Pliocene to Lo. Pleistocene)
- Tpbapm — Bas. And. of Parker Mountain (Mid. Pliocene to Lo. Pleistocene)
- Tpbms — Basalt of Mud Spring Mountain (Middle to Upper Pliocene)
- Tpbsc — Basalt of Sheepy Creek (Middle to Upper Pliocene)
- Tpbab — Bas. And. of Buck Mountain (Middle Pliocene)
- Tpbtr — Basalt of Tom Reservoir (Lower to Upper Pliocene)
- Tpbgb — Basalt of Grouse Butte (Lower to Middle Pliocene)
- Tpbah — Bas. And. of Hayden Mountain (Lower to Middle Pliocene)
- Tpbac — Bas. And. of Camp Creek (Lower to Middle Pliocene)
- Tmbam — Bas. And. of Mule Hill (Up. Miocene to Lo. Pliocene)
- Tmbgm — Basalt of Grizzly Mountain (Upper Miocene)
- Tmbkr — Basalt of the Klamath Rim (Upper Miocene)
- Tmbhc — Bas. to And. of Hayden Creek (Middle Miocene)
- Tmvhf — Heppsie Formation (Lower Miocene)

OPEN-FILE REPORT O-08-08

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PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY ..... USGS, NOS/NOAA
PHOTOGRAPHS FROM AERIAL PHOTOGRAPHS TAKEN 1988
FIELD CHECKED ..... 1991; MAP EDITED 1995
PROJECTION ..... LAMBERT CONFORMAL CONIC
GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR, ZONE 10
10,000-FOOT STATE GRID TICKS: OREG., SOUTH ZONE & CALIF., ZONE 1
UTM GRID DECLINATION ..... 0°53′ EAST
1988 MAGNETIC NORTH DECLINATION ..... 18° 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 (19 meters north , 94 meters east).
There may be private inholdings within the boundaries of any Federal and State Reservations shown on this map

PROVISIONAL MAP
Produced from original manuscript drawings. Information shown as of date of field check.

CONTOUR INTERVAL 20 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

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

ROAD LEGEND
Improved Road
Unimproved Road
Trail
Interstate Route ○ U.S. Route ○ State Route

MULE HILL, OREG.—CALIF.
PROVISIONAL EDITION 1985
42122-A2-TF-024

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Field Work: 1995, 1996, 1997, 1999, 2004, 2008

SCALE: 1:75,000

GEOLOGIC MAP SYMBOLS

- Contact -- Solid where approximately located; dashed where inferred.
- Fault -- Approximately located; bars are on the side of the down-dropped block.
- *# Sample location and map number for specimens with available age dates and chemical analyses -- Consult Table 1 in the attached text.
- # Sample location and map number for specimens with available chemical analyses -- Consult Table 1 in the attached text.

NOTES REGARDING THE MAP:

The above map was created in and exported from MapInfo Professional® version 7.0 in the following projection: Universal Transverse Mercator (NAD 27 for US): UTM Zone 10 (NAD 27 for US). The U.S. Geological Survey 7.5 minute Mule Hill quadrangle, the colored geologic units, the geologic unit boundaries, the fault, and the sample location symbols were exported from MapInfo and have since been kept in the same orientation. The exported map image has been uniformly resized using Adobe® Illustrator® CS3 to create a 1:75,000 scale. The colors of the exported map were adjusted using Adobe® Photoshop® CS3 to be consistent with USGS CMYK color standards. The map numbers and geologic unit labels were added to the map in Adobe® Illustrator® CS3. A final .pdf version of the map was created using Adobe® Illustrator® CS3.