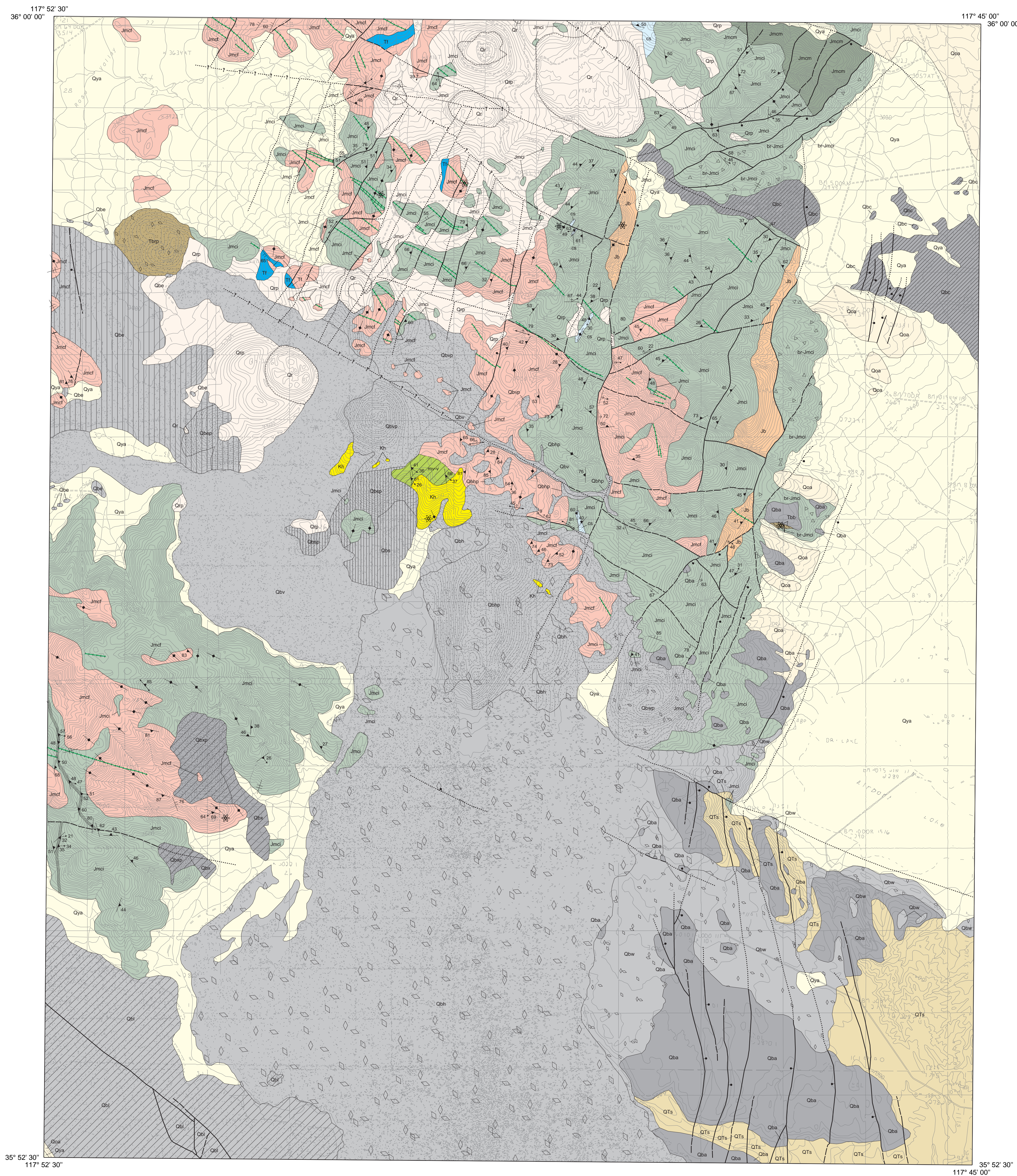


Volcano Peak Quadrangle



EXPLANATION†

COVER UNITS

- Qya Younger Alluvium*
- Qbwp Basalt of Volcano Peak, pyroclastic*
- Qbv Basalt of Volcano Peak*
- Qbap Basalt South of Volcano Peak, pyroclastic*
- Qbs Basalt South of Volcano Peak*
- Qbe Basalt East of Little Lake, pyroclastic*
- Qbe Basalt East of Little Lake*
- Qrp Rhyolite West of Coso Hot Springs, pyroclastic*
- Qr Rhyolite West of Coso Hot Springs*
- Qbw Basalt West of White Hills, pyroclastic*
- Qbw Basalt West of White Hills*
- Qbap Basalt West of Airport Lake, pyroclastic*
- Qbap Basalt West of Airport Lake*
- Qbs Basalt Southeast of Little Lake*
- Qoa Older Alluvium*
- Qsw Basalt of Coso Wash*
- Qsh Basalt of Hill 3661, pyroclastic*
- Qsh Basalt of Hill 3661*
- Qba Basalt of Airport Lake*
- Qts Sedimentary Rocks of White Hills*
- Qsv Basalt of Rose Valley, pyroclastic*
- Qsb Basalt of Coso Basin (3.56±0.86 Ma)

MAP SYMBOLS

- Boundary of Quaternary rhyolite within overall pyroclastic deposits; tick marks face toward engine center
- Boundary of probable landslide; tick marks localized along base of slide block and face toward structural top
- Approximate structural limit of tectonic breccia; tick marks localized along brecciated side of contact
- Fault contact: solid (known), dashed (approximate), dotted (inferred), quartered where conjectural. Ball and bar on down-dropped side of normal fault; teeth on upper plate of thrust fault
- Ductile shear (mylonite) zone
- Intrusive or depositional contact: solid (known), dashed (approximate), short dash with query (inferred)
- Fold axis: syncline, anticline, doubly-plunging syncline
- Strike and dip of bedding plane: inclined
- Strike and dip of flow foliation: inclined, vertical
- Strike and dip of fault plane: inclined, w/ down-dip lineation, w/ horizontal lineation, w/ oblique lineation, w/ horizontal lineation, w/ oblique lineation
- Strike and dip of fracture cleavage: inclined, vertical
- Strike and dip of joint plane: inclined, vertical
- Strike and dip of foliation/compositional layering: inclined, vertical, w/ down-dip lineation, w/ horizontal lineation, w/ oblique lineation
- Locality of sample used for radiometric age determination

BASEMENT UNITS

- Tectonic breccia derived from various basement units. Specific proth indicated by unit label suffix (e.g., br-kr) designates breccia derived from unit K3—Leucogranite of Cactus Flak
- T1 Felicité Intrusions
- KH Hillside Pluton (Biotite-muscovite Alkali-feldspar Granite) [75±1 Ma]
- Jkd—Independence Dike Swarm (red: felsic; green: mafic-intermediate) [166±1 to ~119 Ma]
- Jb Blackspot Pluton (Quartz Monzonite) [150±1 Ma]
- Jmcm Mixed Complex, mafic component (Hornblende Gabbro)
- Jmci Mixed Complex, intermediate component (Quartz Monzonite) to (Diorite) [151±1 Ma]
- Jmcd Mixed Complex, felsic component (Alkali-feldspar Granite) to (Quartz Monzonite) [164±1 Ma]
- Metavolcanic Rocks of Volcano Peak; intermediate-mafic, porphyritic
- cs, etc. Metamorphic Rocks of Uncertain Age (see Chapter One for details)

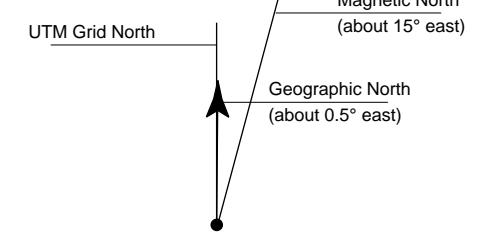
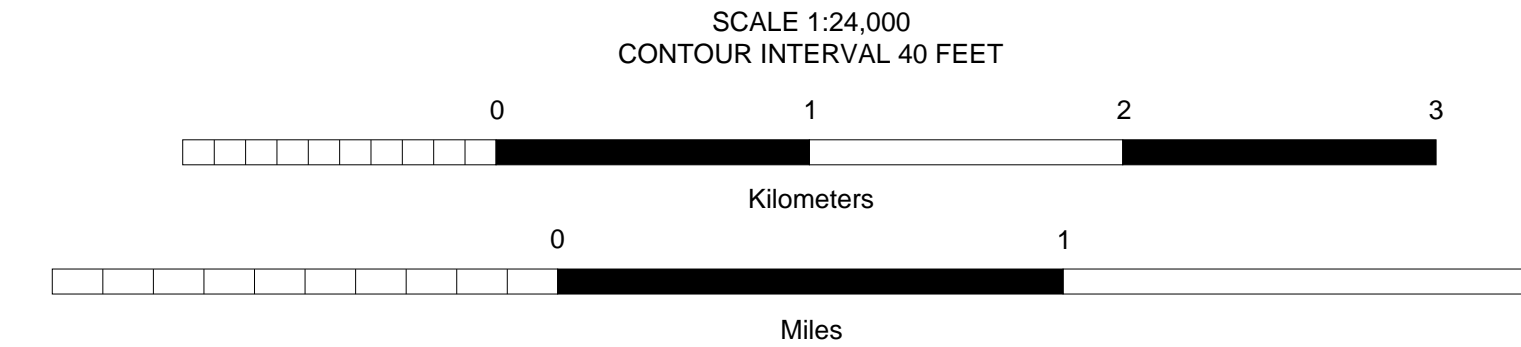
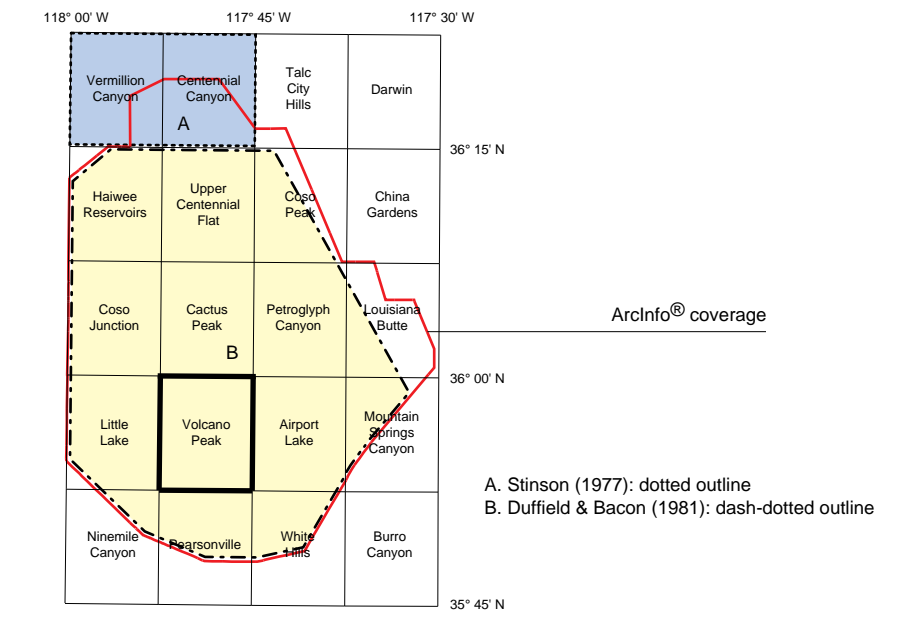
† Units listed represent only the geologic column for this qua drangle. The geologic column for the entire Coso Range, including description of the radiometric ages cited here, is listed within the text file on this CD. Units highlighted with an asterisk (*) were defined and described by Duffield & Bacon (1981). Map symbols shown represent the complete set of symbols used in this study. Some of those illustrated may not be relevant to the geology of this particular quadrangle.

GEOLOGIC MAP OF THE VOLCANO PEAK 7.5' QUADRANGLE; INYO COUNTY, CALIFORNIA

Compilation by Richard S. Whitmarsh
1997

Total map area of Whitmarsh (see reference map) includes some contacts and unit labels established by Stinson (1977) and Duffield & Bacon (1981). Contacts within the Cenozoic cover sequence either copied or adapted from Duffield & Bacon (1981). Structural data and contacts within the pre-Cenozoic basement complex, except with unit Mzb, established by Whitmarsh 1994-1996.

References Cited:
Duffield, W.A. and Bacon, C.R. 1981. Geologic map of the Coso volcanic field and adjacent areas, Inyo County, California. U.S.G.S. Miscellaneous Investigations Series, Map I-1200.
Stinson, M.C. 1977. Geologic map and sections of the Keeler 15-minute quadrangle, Inyo County, California. California Division of Mines and Geology, Map S sheet 38.



Topographic base: VOLCANO PEAK 7.5' QUADRANGLE (USGS, PROVISIONAL EDITION 1983)

Reference map with 7.5 minute quadrangle boundaries. Red line delineates boundary of ArcInfo coverage compiled by Whitmarsh during 1994-1997 at the University of Kansas. Shaded areas (A and B) encompass portions of earlier geological maps containing contacts that have been included in this compilation. Bold black line highlights the locality and boundary of this quadrangle.