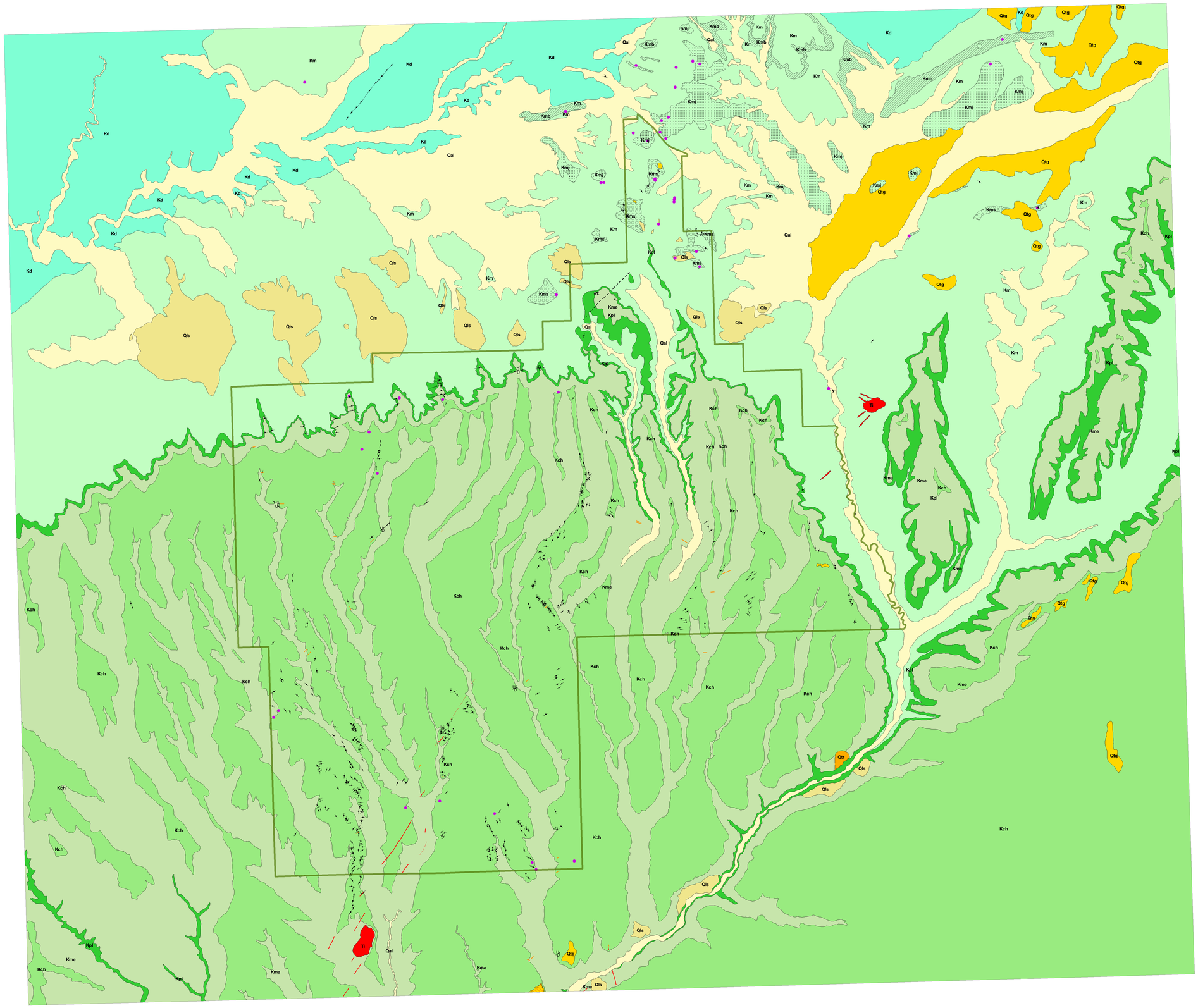
Geology of Mesa Verde NP



The original maps digitized by NPS staff to create this product were:

Griffitts, Mary O., 1999, Mesa Verde National Park Geology: National Park Service, scale 1:24,000.

Condon, Steven M., 1991, Geologic and structure contour map of the Ute Mountain Ute Indian Reservation and adjacent areas, southwest Colorado and northwest New Mexico: U.S. Geological Survey Miscellaneous Investigations Series Map I-2083, scale 1:100,000.

Ekren, E.B. and Houser, F.N., 1965, Geology and petrology of the Ute Mountains area, Colorado: U.S. Geological Survey Professional Paper 481, scale 1:48,000.

Hayner, D.D., Vogel, J.D., and Wyant, D.G., 1972, Geology, structure and uranium deposits of the Cortez Quadrangle, Colorado and Utah: U.S. Geological Survey Miscellaneous Investigations Series Map I-629, scale 1:250,000.

Leckie, R. Mark, Kirkland, James I., and Elder, William P., 1997, Stratigraphic framework and correlation of a principal section of the Mancos Shale (Upper Cretaceous), Mesa Verde, Colorado: New Mexico Geological Society Guidebook, 48th Field Conference, Mesozoic Geology and Paleontology of the Four Corners Region.

Wanek, A.A., 1959, Geology and fuel resources of the Mesa Verde area, Montezuma and La Plata counties, Colorado: U.S. Geological Survey Bulletin 1072-M, scale 1:63,360.

Base maps from U.S. Geological Survey 7.5 minute series topographic quadrangle maps Cortez (1965, photorevised 1979), Point Lookout (1965, photorevised 1973), Mancos (1965), Wetherill Mesa (1966, photorevised 1975), Moccasin Mesa (1967, photorevised 1975), and Trail Canyon (1966), Colorado; also from 7.5 minute series orthophotoquads Cortez (1975), Point Lookout (1978), Mancos (1978), Wetherill Mesa (1975), Moccasin Mesa (1975), and Trail Canyon (1975), Colorado.

Digital geologic data and cross sections for Mesa Verde National Park, and all other digital geologic data prepared as part of the Geologic Resources Divisions Geologic Resource Evaluation program, are available online: http://www2.nature.nps.gov/geology/inventory/gre_publications.cfm

NPS Boundary

Gelolgic Attitude and Observation Points

- strike of vertical joints
- upthrown side of fault
- downthrown side of fault

Age Date Localities

- paleontologic sample

Linear Joints

- joint, known location

Faults

- approximate location
- inferred location

Linear Dike Units

- Ti - known location
- Ti - approximate location

Geologic Contacts

- known location
- approximate location
- concealed location
- quadrangle boundary

Linear Geologic Units

- Qtr - travertine

Geologic Units

- Qal - alluvium
- Qls - colluvium
- Qtg - high level terrace gravels
- Qtgt - high level terrace gravels with travertine cement
- Qtr - travertine
- Ti - minette
- Kch - Cliff House Formation
- Kme - Menefee Formation
- Kpl - Point Lookout Formation
- Km - Mancos Formation
- Kms - Mancos Formation, Smoky Hill oyster bench
- Kmj - Mancos Formation, Juana Lopez Member
- Kmb - Mancos Formation, Bridge Creek Member
- Kd - Dakota Sandstone

N
W E
S

0 1.25 2.5 5 Miles

0 1.5 3 6 Kilometers