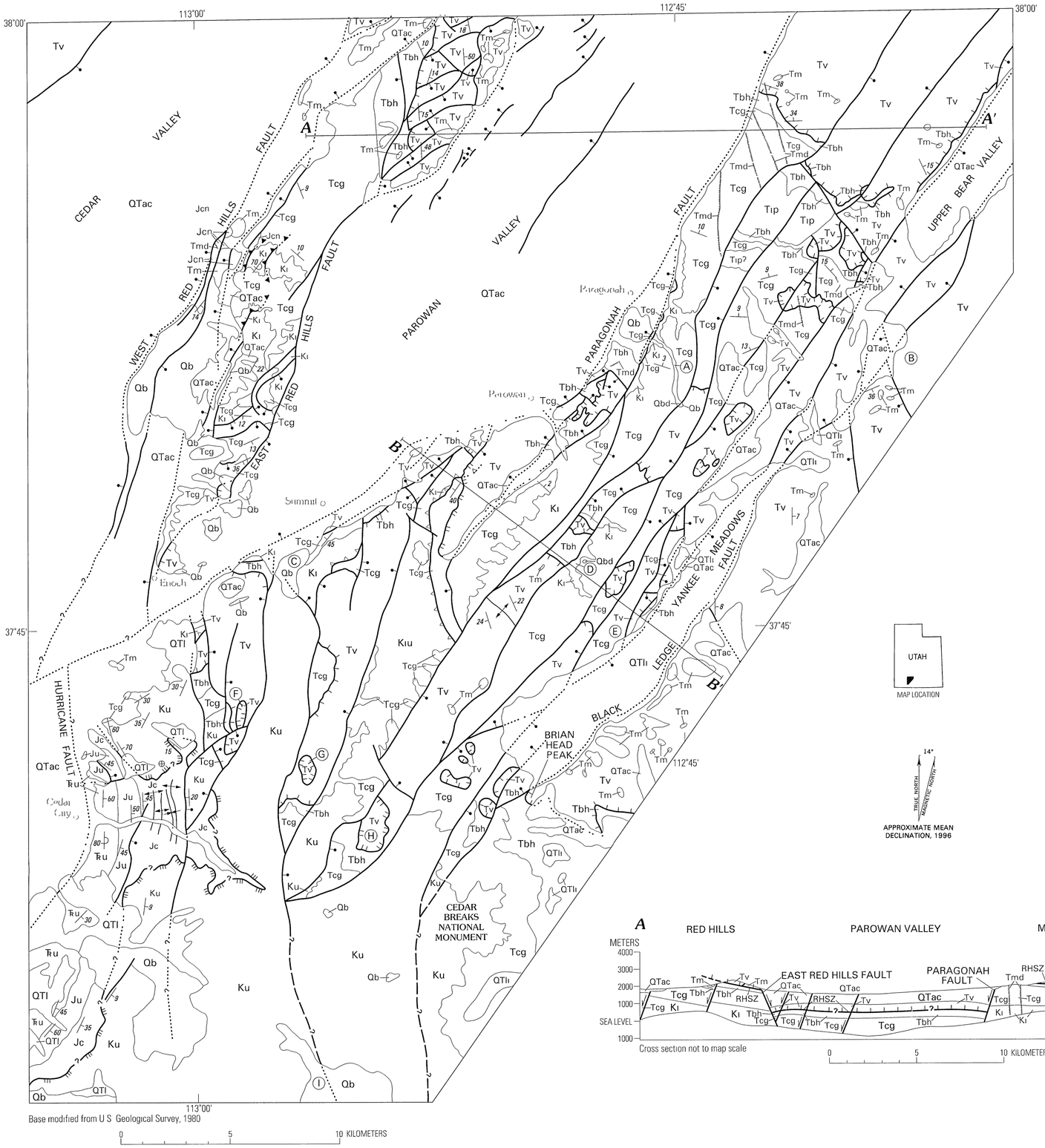


EXPLANATION

- **Qb** — **Quaternary basaltic volcanic rocks**
- **Qbd** — **Quaternary basaltic dike**
- **QTac** — **Quaternary and Tertiary alluvium and colluvium**
- **QTl** — **Quaternary and Tertiary(?) landslide deposit**
- **QTli** — **Quaternary and Tertiary(?) landslide deposit predominantly of Isom Formation**
- **Tm** — **Miocene megabreccia block**—Gravity-slide blocks composed of Tertiary volcanic and sedimentary rocks undivided
- **Tmd** — **Miocene mafic dike**—Not all dikes shown
- **Tip** — **Miocene intrusive and associated rocks of Iron Peak laccolith**—Gabbroic body and mafic dikes
- **Tv** — **Miocene and Oligocene volcanic rocks, undivided**—Includes Harmony Hills Tuff, Bauers Tuff Member of Condor Canyon Formation, and Leach Canyon, Mount Dutton, and Bear Valley Formations, mudflow and lava-flow breccia and tuffaceous sandstone unit, Isom, Lund, and Wah Wah Springs Formations (Includes Brian Head Formation locally) Composed mostly of ash-flow tuff and some tuffaceous sandstone and volcanic mudflow breccia
- **Tbh** — **Oligocene and Eocene Brian Head Formation**—Composed mostly of sandstone, tuffaceous sandstone, mudflow breccia, pebble-boulder conglomerate, and minor limestone, limy shale, and local ash-flow tuff
- **Tcg** — **Eocene-Paleocene Claron Formation and Paleocene Grand Castle Formation**—Sandstone, siltstone, limestone, and conglomerate
- **Ki** — **Cretaceous Iron Springs Formation**—Sandstone, siltstone, shale, and conglomerate
- **Kiu** — **Cretaceous Iron Springs, Wahweap, Straight Cliffs, and Dakota Formations, and Tropic Shale, undivided**—Sandstone, siltstone, shale, and conglomerate
- **Ku** — **Cretaceous Wahweap, Straight Cliffs, and Dakota Formations, and Tropic Shale, undivided**—Sandstone, siltstone, shale, and conglomerate
- **Jc** — **Jurassic Carmel Formation**—Limestone, sandstone, mudstone, siltstone, and gypsum
- **Jcn** — **Jurassic Carmel Formation and Temple Cap and Navajo Sandstones**—Sandstone, limestone, mudstone, siltstone, and gypsum
- **Ju** — **Jurassic Carmel Formation, Temple Cap and Navajo Sandstones, and Kayenta and Moenave Formations, undivided**—Limestone, sandstone, mudstone, siltstone, and gypsum
- **Tru** — **Triassic Chinle and Moenkopi Formations, undivided**—Siltstone, mudstone, sandstone, gypsum, and limestone

- **Contact**
- **Normal fault**—Dotted where concealed, dashed where location uncertain, queried where uncertain, bar and ball on downthrown side where known
- **Red Hills low-angle shear zone**—Dotted where concealed, hachures on upper plate, in cross section labeled RHSZ
- **Low-angle fault within Tertiary volcanic and volcaniclastic and Tertiary sedimentary rocks**—Hachures on upper plate
- **Low-angle fault within Mesozoic rocks**—Hachures on upper plate, queried where uncertain
- **Tertiary thrust fault**—Dotted where concealed, sawteeth on upper plate
- **Mesozoic thrust fault**—Dotted where concealed, sawteeth on upper plate
- **Syncline**—Dotted where concealed
- **Anticline**—Dotted where concealed
- 15 — **Strike and dip of beds**
- ⊕ — **Horizontal beds**
- 70 — **Strike and dip of overturned beds**

LOCATIONS REFERRED TO IN TEXT

- (A) Water Canyon
- (B) Mortensen Canyon
- (C) Cinder Hill
- (D) Second Left Hand Canyon
- (E) Upper Second Left Hand Canyon
- (F) Dairy Hill
- (G) Eagle Peak
- (H) High Mountain
- (I) Black Mountain

PUBLISHED GEOLOGIC MAP DATA SOURCES

Anderson, J J , 1965, Geology of northern Markagunt Plateau, Utah Austin, Texas, University of Texas Ph D dissertation, 194 p

Anderson, J J , Ivari, T A , and Rowley, P D , 1987, Geologic map of the Little Creek Peak quadrangle, Garfield and Iron Counties, Utah Utah Geological and Mineral Survey Map 104, scale 1 24,000

Averitt, Paul, 1962, Geology and coal resources of the Cedar Mountain quadrangle, Iron County, Utah U S Geological Survey Professional Paper 389, 72 p

Averitt, Paul, and Threet, R L , 1973, Geologic map of the Cedar City quadrangle, Iron County, Utah U S Geological Survey Geologic Quadrangle Map GQ–1120, scale 1 24,000

Ivari, T A , 1979, Cenozoic geologic evolution of the east central Markagunt Plateau, Utah Kent, Ohio, Kent State University M S thesis, 154 p

Judy, J R , 1974, Cenozoic stratigraphic and structural evolution of the west-central Markagunt Plateau, Utah Kent, Ohio, Kent State University M S thesis, 107 p

Maldonado, Florian, and Moore, R C , 1993, Preliminary geologic map of the Parowan Quadrangle, Iron County, Utah U S Geological Survey Open-File Report 93-3, scale 1 24,000

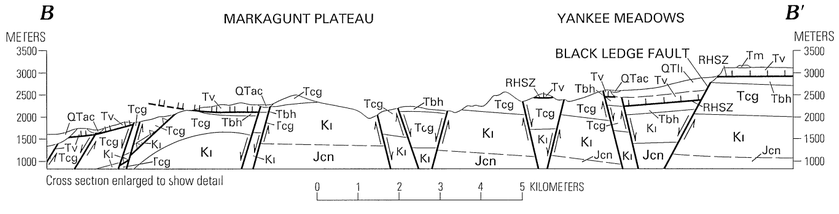
Maldonado, Florian, and Williams, V S , 1993, Geologic map of the Paragonah quadrangle, Iron County, Utah U S Geological Survey Geologic Quadrangle Map GQ–1713, scale 1 24,000

———1993, Geologic map of the Parowan Gap quadrangle, Iron County, Utah U S Geological Survey Geologic Quadrangle Map GQ–1712, scale 1 24,000

Moore, R C , 1982, The geology of a portion of the west-central Markagunt Plateau, southwestern Utah Kent, Ohio, Kent State University M S thesis, 72 p

UNPUBLISHED GEOLOGIC MAP DATA SOURCES

Map compiled from many sources, listed in references of this report, additional sources of information are unpublished mapping of the Cottonwood Mountain quadrangle, Iron County, Utah, by Florian Maldonado, J J Anderson, and R E Anderson, unpublished mapping of the Flanigan Arch and Brian Head quadrangles, Iron County, Utah, by E G Sable, and unpublished mapping of the Summit quadrangle, Iron County, Utah, by Florian Maldonado and E G Sable



MAP SHOWING GENERALIZED GEOLOGY OF THE WESTERN MARKAGUNT PLATEAU AND RED HILLS, SOUTHWESTERN UTAH

By
Florian Maldonado, Edward G. Sable, and L. David Nealey

1997