



- SURFICIAL DEPOSITS
- Eolian deposits
- Qe** Eolian sand (Holocene)
- Hillslope and mass-movement deposits
- Qrf** Rock fall deposits (Holocene and late Pleistocene)
 - Qc** Colluvium and colluvial-fan deposits (Holocene and Pleistocene)
 - Qls** Landslide deposits (Holocene and Pleistocene)
- Spring deposits
- Qs** Spring deposits (Holocene and Pleistocene)
- Alluvial and basin-fill deposits
- Qaw** Active tributary wash and river deposits (latest Holocene)
 - Qyw1** Younger of the young axial river deposits (Holocene)
 - Qyw2** Older of the young axial river deposits (Holocene to late Pleistocene)
 - Qya** Young alluvial deposits, undivided (Holocene to late Pleistocene)
 - Qya1** Younger of the young alluvial deposits (Holocene)
 - Qya2** Older of the young alluvial deposits (Holocene to late Pleistocene)
 - Qiw** Intermediate axial river deposits, undivided (late and middle Pleistocene)
 - Qiw1** Youngest intermediate axial river deposits (late Pleistocene)
 - Qiw2** Older intermediate axial river deposits (late to middle Pleistocene)
 - Qiw3** Oldest intermediate axial river deposits (middle Pleistocene)
 - Qia** Intermediate alluvial deposits, undivided (late and middle Pleistocene)
 - Qia1** Younger of the intermediate alluvial deposits (late to middle Pleistocene)
 - Qia2** Older of the intermediate alluvial deposits (middle Pleistocene)
 - Qow** Old axial river deposits (middle to early? Pleistocene)
 - Qoa** Old alluvial deposits, undivided (middle to early? Pleistocene)
 - Qta** Very old alluvium (early Pleistocene and Pliocene)
 - Ta** Basin-fill deposits (Miocene)
- Tertiary mass-movement deposits
- Tgs** Gravity slide blocks (Miocene?)
- Undivided surficial deposits
- QTu** Quaternary to Tertiary deposits, undivided (Holocene to Miocene) (cross-section only)
- MIDDLE TERTIARY VOLCANIC AND INTRUSIVE ROCKS
- Tv** Volcanic rocks, undivided (Oligocene)
 - Tirc** Intrusive complex at Rattlesnake Mountain (Oligocene)
 - Ti** Intrusive rocks, undivided (Oligocene to Eocene)
 - Tir** Rhyolitic and other felsic composition intrusive rocks, undivided (Oligocene to Eocene)
 - Tia** Andesitic and other intermediate composition intrusive rocks, undivided (Oligocene to Eocene)
 - Tib** Basaltic and other mafic composition intrusive rocks, undivided (Oligocene to Eocene)
 - Tfb** Basaltic flow (Oligocene)

LIST OF MAP UNITS

- Burro Mesa Formation (Oligocene)
- Tbr** Rhyolite member
 - Tbw** Wasp Spring member
 - Tbi** Intrusive rocks, undivided
 - Tt** Trachytic lava, undivided (Oligocene)
- Sierra Quemada related rocks (Oligocene)
- Tqd** Sierra Quemada ring dike
 - Tqi** Sierra Quemada intrusive rocks, undivided
 - Tqv** Sierra Quemada vent breccia
- Dominguez Mountain related rocks (Oligocene)
- Tdm** Dominguez Mountain mafic lava flows
 - Tdd** Dominguez Mountain dike swarm
 - Tdi** Dominguez Mountain intrusive rocks, undivided
- South Rim Formation (Oligocene)
- Tse** Emory Peak rhyolite member
 - Tsb** Boot Rock member
 - Tsp** Pine Canyon rhyolite member
 - Tsr** Outflow deposits, undivided
 - Tsd** Ring dike
 - Tsi** Intrusive rocks, undivided
 - Tigh** Fayalite syenite of Grapevine Hills (Oligocene)
 - Timh** Fayalite syenite of McKinney Hills (Oligocene)
 - Tirm** Syenite of Rosillos Mountains (Oligocene)
- Chisos Formation (Oligocene and Eocene)
- Tcy** Younger part, undivided (Oligocene and Eocene)
 - Tctm** Tule Mountain Trachyandesite Member (Oligocene)
 - Tcbm** Bee Mountain Basalt Member (Oligocene)
 - Tcm** Mule Ear Spring Tuff Member (Oligocene)
 - Tcl** Undifferentiated lava flow (Eocene)
 - Tcas** Ash Spring Basalt Member (Eocene)
 - Tcac** Alamo Creek Basalt Member (Eocene)
 - Tco** Older part, undivided (Eocene) (cross-section only)
 - Tcstr** Sandstone, tuff, and rhyolite unit
 - Tcks** Siltstone unit
 - Tert** Rhyolite tuff unit
 - Tx** Christmas Mountains related volcanic rocks (Eocene)
- LOWER TERTIARY TO LOWER CRETACEOUS SEDIMENTARY ROCKS
- Tc** Canoe Formation (Eocene)
 - Thh** Hannold Hill Formation (Eocene)
- PALEOZOIC ROCKS
- Pzu** Paleozoic rocks, undivided (Lower Pennsylvanian through Ordovician)
 - PMT** Tesnus Formation (Lower Pennsylvanian and Upper Mississippian)
 - MOu** Mississippian to Ordovician rocks, undivided
- Black Peaks Formation (Paleocene to Upper Cretaceous)
- TKbp** Black Peaks Formation (Paleocene to Upper Cretaceous)
 - Kj** Javelina Formation (Upper Cretaceous)
 - Ka** Aguja Formation (Upper Cretaceous)
 - Kp** Pen Formation (Upper Cretaceous)
 - Kb** Boquillas Formation, undivided (Upper Cretaceous)
 - Kbs** San Vicente Member
 - Kbe** Ernst Member
 - Kbd** Buda Limestone and Del Rio Clay, undivided (Upper Cretaceous) (cross-section only)
 - Kbu** Buda Limestone (Upper Cretaceous)
 - Kdr** Del Rio Clay (Upper Cretaceous)
 - Kse** Santa Elena Limestone (Lower Cretaceous)
 - Ksp** Sue Peaks Formation (Lower Cretaceous)
 - Kdc** Del Carmen Limestone (Lower Cretaceous)
 - Ktrm** Telephone Canyon Formation and Maxon Sandstone, undivided (Lower Cretaceous)
 - Kgr** Glen Rose Limestone (Lower Cretaceous)

MAP EXPLANATION

- Contact
- Faults**
 - Normal—Dashed where approximately located, dotted where concealed. Bar and ball on downthrown side
 - Buried—Inferred from geophysical data
 - Reverse—Dotted where concealed. Showing relative motion; U on upthrown side, D on downthrown side; Rosillos Mountains only
 - Oblique-slip, right-lateral offset—Dotted where concealed. Bar and ball on downthrown side; paired arrows indicate relative right-lateral strike-slip movement
 - Oblique-slip, left-lateral offset—Dotted where concealed. Bar and ball on downthrown side; paired arrows indicate relative left-lateral strike-slip movement
 - Thrust—Dashed where approximately located, dotted where concealed. Sawteeth on upper plate
- Dike
- Anticline—Dashed where approximately located, dotted where concealed
- Syncline—Dashed where approximately located, dotted where concealed
- Strike and dip of bedding**
 - Inclined
 - Horizontal
 - Vertical
 - Overturned
- Geochronology sample location and map sample number (Appendix)