

**PEDON DESCRIPTION**

**Print Date:** Jun 29 2017  
**Description Date:** Jun 9 2017  
**Describer:** David Jalal and Lynn Loomis  
**Site ID:** S2017-TX243-0136

**Country:** United States  
**State:** Texas  
**County:** Jeff Davis  
**MLRA:** Southern Desertic Basins, Plains, and Mountains  
**Soil Survey Area:** Jeff Davis County, Texas  
**Quad Name:** Blue Mountain, Texas

**Pedon ID:** S2017-TX243-0136  
**Soil Name as Described/Sampled:** Liv-nonskeletal  
**Classification:** Fine, mixed, superactive, thermic Pachic Paleustolls  
**Particle Size Control Section:** 11 to 61 cm

**Std Latitude:** 30.5436700  
**Std Longitude:** -104.0266567  
**Latitude:** 30 deg 32 min 37.21 sec N  
**Longitude:** 104 deg 1 min 35.96 sec W  
**Datum:** WGS84  
**UTM Zone:** 13

**Physiographic Division:** Intermontane Plateaus  
**Physiographic Province:** Basin and Range Province  
**Physiographic Section:** Mexican Highland  
**Geomorphic Setting:** fan remnant on piedmont slope on mountains

**UTM Easting:** 593363 meters  
**UTM Northing:** 3379434 meters

**Existing Vegetation:** Arizona cottontop, beeblossom, black grama, blue grama, broadleaf milkweed, cactus apple, cane bluestem, Cooley's bundleflower, croton, Cuman ragweed, eryngo, globemallow, greenthread, groundcherry, lacy tansyaster, littleleaf sumac, lyreleaf greeneyes, polkadots, Riddell's ragwort, sideoats grama, snoutbean, spiderling, Texas sacahuista, Texas skeletonplant, Texas thistle, thoroughwort, tree cholla, tree cholla, twinleaf senna, upright prairie coneflower, western honey mesquite, zinnia

**Diagnostic Features:** mollic epipedon 0 to 64 cm.  
 argillic horizon 11 to 150 cm.

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
8.2	1,650.5	233	14.6			488				

A--0 to 11 centimeters (0.0 to 4.3 inches); brown (10YR 4/3) very gravelly sandy clay loam, very dark brown (10YR 2/2), moist; moderate medium subangular blocky parts to moderate fine subangular blocky parts to moderate very fine subangular blocky structure; slightly hard, friable; common very fine roots and few medium roots and many fine roots; 45 percent rhyolite gravel; noneffervescent; clear smooth boundary.

Bt1--11 to 24 centimeters (4.3 to 9.4 inches); dark brown (7.5YR 3/2) very gravelly sandy clay, dark brown (7.5YR 3/2), moist; moderate medium subangular blocky parts to moderate fine subangular blocky structure; slightly hard, friable; common very fine roots and few medium roots and common fine roots; few fine high-continuity tubular pores; 45 percent rhyolite gravel; noneffervescent; clear smooth boundary.

Bt2--24 to 42 centimeters (9.4 to 16.5 inches); very dark gray (5YR 3/1) very gravelly sandy clay, very dark gray (5YR 3/1), moist; moderate medium subangular blocky parts to moderate fine subangular blocky structure; hard, friable; common very fine roots and few medium roots and common fine roots; 3 percent distinct clay films on ped faces and 15 percent distinct clay films on rock fragments; 45 percent rhyolite gravel and 10 percent rhyolite cobbles; noneffervescent; gradual smooth boundary.

Bt3--42 to 64 centimeters (16.5 to 25.2 inches); dark reddish brown (5YR 3/2) very gravelly sandy clay, dark reddish brown (5YR 2.5/2), moist; weak medium prismatic parts to moderate medium subangular blocky parts to moderate fine subangular blocky structure; slightly hard, friable; common very fine roots and very few medium roots and common fine roots; 3 percent distinct clay films on ped faces and 15 percent distinct clay films on rock fragments; 45 percent rhyolite gravel and 10 percent rhyolite cobbles; noneffervescent; clear smooth boundary.

Btk1--64 to 89 centimeters (25.2 to 35.0 inches); reddish brown (5YR 4/4) very gravelly sandy clay, reddish brown (5YR 4/3), moist; 43 percent clay; moderate medium prismatic, and moderate thick subangular blocky structure; hard, friable, very sticky, very plastic; common very fine roots and common fine roots; 2 percent coarse distinct irregular carbonate masses in matrix and 5 percent coarse prominent spherical insect casts in matrix; 45 percent rhyolite gravel; very slight effervescence; clear smooth boundary.

Btk2--89 to 150 centimeters (35.0 to 59.1 inches); strong brown (7.5YR 5/6) extremely gravelly sandy clay, strong brown (7.5YR 4/6), moist; 36 percent clay; moderate medium prismatic parts to moderate medium subangular blocky structure; very hard, friable, moderately sticky, very plastic; common very fine roots and common very fine roots; 15 percent prominent carbonate coats on rock fragments; 3 percent coarse irregular carbonate masses and 2 percent fine threadlike carbonate masses; 45 percent rhyolite gravel and 15 percent indurated rhyolite cobbles; slight effervescence; clear broken boundary.

Bkk--130 to 150 centimeters (51.2 to 59.1 inches); very pale brown (10YR 8.5/2) very gravelly sandy clay loam, very pale brown (10YR 8/3), moist; 33 percent clay; moderate medium subangular blocky, and moderate fine subangular blocky structure; moderately hard, friable, moderately sticky, moderately plastic; common very fine roots and common fine roots; 45 percent rhyolite gravel; violent effervescence.