

PEDON 03

SITE INFORMATION

The site is located in Randall County north of Canyon, Texas. The area was formerly grazed pasture (excluded from grazing rotations for the last 30+ years). The slope is 2% and the area is dominated by mid and short grasses, forbs, and sparse mesquite trees. The soil was formed in calcareous, loamy eolian deposits. There is no flooding or ponding potential.

LANDFORM

The pedon is on gently sloping upland plains ~250 feet upslope from a dry creekbed. The zone is transitional between 0-1% sloped plains and more diverse topography near the edge of Palo Duro Canyon.

HILLSLOPE POSITION



SOIL MOISTURE AND TEMPERATURE REGIMES

Ustic moisture regime bordering on aridic. Thermic temperature regime.

SOIL PIT INFORMATION

Clay films are visible on ped surfaces in horizons 2-5. Identifiable secondary carbonates ($\geq 5\%$) are in horizons 4-5. Color blocks on the pit's measuring tape represent 10 cm increments.

CHARACTERIZATION DATA

Horizon	% OC	pH	% BS	% CaCO ₃
1	0.8	8.2	76	2
2	0.7	8.3	75	2
3	0.6	8.3	79	21
4	0.6	8.4	81	26
5	0.6	8.4	86	55

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SITE IMAGE



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PROFILE IMAGE



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SCORECARD

SCORECARD
 VIRTUAL NATIONAL
 SOIL JUDGING
 CONTEST
 APRIL 5-16, 2021

1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
Total		

Contestant: _____
 School: PRACTICE
 Pedon Number: 03

I. Soil Morphology

Score:

Horizonation				Boundary		Texture					Color			Structure		Cons.	Soil Features			Score		
Master		Sub. (5)	No. (5)	Dep. (cm)	Dist.	Sand (%)	Silt (%)	Clay (%) (5)	CF (%)	CF mod. (5)	Class (5)	Hue	Value	Chr.	Grade	Shape	Moist Strength	Redox		Eff.	(35)	
Pre. (5)	Let. (5)																	Depl.	Conc.			
				11	C	39	30		-			10 YR	3	2	2	SBK	F1	-	-	SL		
				31	C	34	28		-			10 YR	3	3	2	SBK	F1	-	-	SL		
				48	G	34	27		-			7.5 YR	3	4	3	SBK PR	F1	-	-	SL		
				94	G	34	27		1			7.5 YR	3	4	3	PR	F1	-	-	VE		
				116+	-	35	28		1			7.5 YR	7	2	2	SBK PR	F1	-	-	VE		

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2. Soil Profile Characteristics

Score:

Hydraulic Conductivity (10)		Loading Rate at 75 cm (5)	Effective Soil Depth (5)	Water Retention Difference (5)	Soil Wetness Class (5)
Surface (5) ____ High ____ Mod. ____ Low	Limiting Layer (5) ____ High ____ Mod. ____ Low	____ gpd/ft ² (3) Ref. (2) ____	____ V. shallow (<25 cm) ____ Shallow (25 to 49 cm) ____ Mod. deep (50 to 99 cm) ____ Deep (100 to 149 cm) ____ Very deep (≥150 cm)	____ Very low (< 7.5 cm) ____ Low (7.5 to < 15 cm) ____ Mod. (15 to < 22.5 cm) ____ High (≥ 22.5 cm)	____ (> 150 cm) ____ (100 to 150 cm) ____ (50 to 99 cm) ____ (25 to 49 cm) ____ (< 25 cm)

3. Site Characteristics

Score:

Parent Material (GIVEN)	Landform (GIVEN)	Slope (GIVEN)	Slope Profile (5)	Surface Runoff (5)	Eros. Pot. (5)
LOAMY EDLIAN	Upland PLAINS	2% _b	____ Summit ____ Shoulder ____ Backslope ____ Footslope ____ Toeslope ____ None	____ Ponded ____ Very slow ____ Slow ____ Medium ____ Rapid ____ Very rapid	____ Very Low ____ Low ____ Medium ____ High ____ Very High

4. Soil Classification

Score:

Epipedon (5)	Subsurface horizons and/or diagnostic features (5 each)	Order (10)	Suborder (10)	Great Group (10)

5. Interpretations

Score:

Houses with Basements (3)	Septic Tank Abs. Fields (3)	Local Roads and Streets (3)	Corn (3)	Hopyards (3)	Created Wetlands (3)
____ Slight ____ Moderate ____ Severe	____ Slight ____ Moderate ____ Severe	____ Slight ____ Moderate ____ Severe	____ Slight ____ Moderate ____ Severe	____ Slight ____ Moderate ____ Severe	____ Slight ____ Moderate ____ Severe
Reason # (2): ____	Reason # (2): ____	Reason (2): ____	Reason (2): ____	Reason (2): ____	Reason (2): ____