PEDON 04

SITE INFORMATION

The site is in SE New Mexico. Vegetation is creosote bush with scattered broom snakeweed, black grama and tabosa grass. Elevation about 2190 ft.

LANDFORM

3.8% sloping to the west on an alluvial fan.

HILLSLOPE POSITION

SOIL MOISTURE AND TEMPERATURE REGIMES

Soil temperature regime is hyperthermic. Soil moisture regime is aridic (a.k.a. torric).

SOIL PIT INFORMATION

The soil formed in alluvium. Clay content is very low in all the soils of the region. Deeply buried bedrock is andesite and rhyolite, with sandstone in the Mountains to the west. Soils of the area are strongly alkaline. There is evidence of clay illuviation in the 3rd horizon. Sand is dominantly fine size with some very fine size. Textures vary with depth as to be expected on an alluvial fan. The 4th and 5th horizons are indurated, and the 4th has a laminar cap about 2 cm thick across the entire pit face.

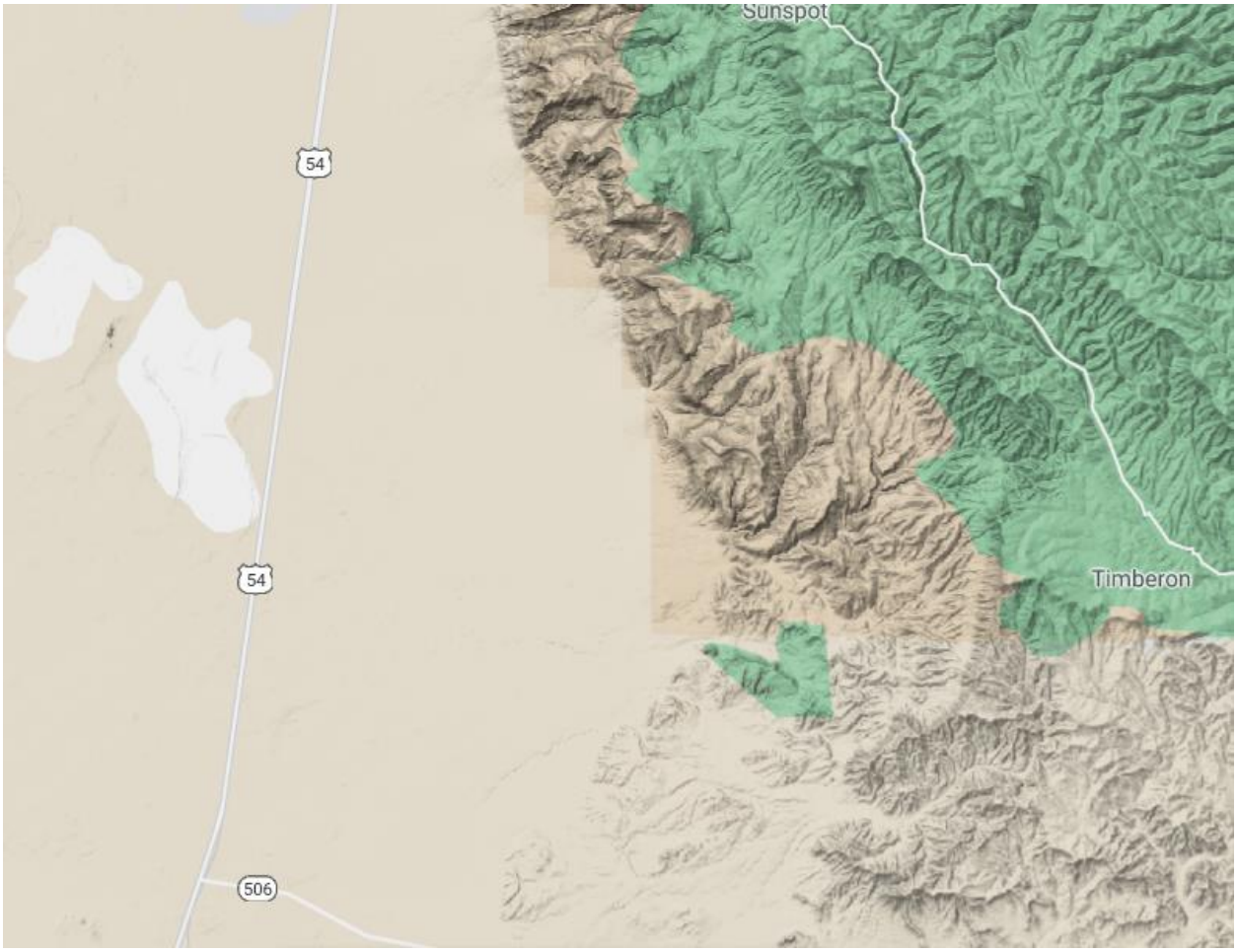
CHARACTERIZATION DATA (6 horizons to 200 cm)

Horizon	OC %	Base Sat %	pH (water)	$CaCO_3$ equiv	% visible carbonates
1	0.27	95	7.5	1	0
2	0.05	100	7.7	10	4
3	0.02	100	7.6	12	8
4	0.01	100	7.8	87	98
5	0.01	100	7.8	79	95
6	Tr	100	7.9	23	35

PEDON 04

SITE IMAGE

PEDON 04



PEDON 04

PROFILE IMAGE

PEDON 04

SCORECARD

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

1.		
2.		
3.		
4.		
5.		
Total		

Contestant:
School: PRACTICE
Pedon Number: 04

1. 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.		
				20	A	53	32		1			7.5 YR	4	4	1	SBK	FR	—	—	SL	
				61	C	46	31		2			7.5 YR	5	6	2	SBK	FR	—	—	ST	
				110	A	34	38		1			7.5 YR	5	4	2	SBK	FR	—	—	ST	
				133	A	55	23		5			10 YR	7	2	0	MA	XFI	—	—	VE	
				170	A	57	19		5			10 YR	8	1	0	MA	XFI	—	—	VE	
				200+	—	25	50		3			7.5 YR	5	4	0	MA	FR	—	—	ST	

PEDON 04

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/ft² (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)
Alluvium	Alluvial FAN (hyperthermic aridic)	3.8%	____ 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 Reason # (2): _____	_____ Slight _____ Moderate _____ Severe Reason # (2): _____	_____ Slight _____ Moderate _____ Severe Reason (2): _____	_____ Slight _____ Moderate _____ Severe Reason (2): _____	_____ Slight _____ Moderate _____ Severe Reason (2): _____	_____ Slight _____ Moderate _____ Severe Reason (2): _____