

Major Land Resource Area 080B

Texas North-Central Prairies

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Ecological site keys

MLRA 80B Ecological Site Key

1 Landform is a flood plain or flood-plain step

- A. Clayey surface texture ...R080BY144TX - Clayey Bottomland 26-33" PZ ... R080BY144TX – Clayey Bottomland 26-33" PZ
- B. Loamy surface texture ... R080BY151TX - Loamy Bottomland 26-33" PZ ... R080BY151TX – Loamy Bottomland 26-33" PZ
- C. Sandy surface texture ... Go to MLRA 84B Key

2 Landform is a drainageway

- A. Dark red (Permian) colors within 60" ...Go to MLRA 80A Key
- B. 7.5YR to 10YR colors throughout (Pennsylvanian sediments) ...Draw (Not yet established)

3 Landform is a stream terrace

A. Sandy surface texture

- 1 Greater than 80" of fine sand (no lamellae or clay increase) ... R080BY690TX – SAND HILLS 26-33" PZ
- 2 Clay increase within 80" (argillic horizon or lamellae)
 - a. Greater than 20" of sand or loamy sand over argillic horizon
 - b. Less than 20" of sand or loamy sand over argillic horizon ... R080BY153TX - Loamy Sand 26-33" PZ ... R080BY153TX – Loamy Sand 26-33" PZ

B. Loamy surface texture

1 Argillic horizon present

- a. Clayey argillic horizon ... R080BY164TX - Tight Sandy Loam 26-33" PZ ... R080BY164TX – Tight Sandy Loam 26-33" PZ
- b. Loamy argillic horizon ... R080BY159TX - Sandy Loam 26-33" PZ ... R080BY159TX – Sandy Loam 26-33" PZ

2 Argillic horizon not present

- a. Sandy Clay Loam or coarser surface texture ...R080BY159TX - Sandy Loam 26-33" PZ ... R080BY159TX – Sandy Loam 26-33" PZ
- b. Loam, Clay Loam or silty surface texture ...R080BY146TX - Clay Loam 26-33" PZ ... R080BY146TX – Clay Loam 26-33" PZ

C. Clayey surface texture ...R080BY607TX - Clayey Upland 26-33" PZ ... R080BY607TX – Clayey Upland 26-33" PZ

4 Landform is a dip slope or low ridge (Upland ridge top with less than 10 percent slope gradient)

1 Limestone bedrock or petrocalcic horizon (caliche) within 60"

A. Limestone bedrock or petrocalcic horizon within 40"

1 Surface horizon is noneffervescent to slightly effervescent

- a. Subsurface horizons are clayey with red colors
 - i. Lithic contact with limestone within 20" ...R080BY155TX ... R080BY155TX – Redland 26-33" PZ
 - ii. Lithic contact with limestone greater than 20" ...R080BY148TX ... R080BY148TX – Deep

Redland 26-33" PZ

b. Subsurface horizons are not clayey with red colors

i. Lithic contact with limestone within 20" ...R080BY154TX ... R080BY154TX – Low Stony Hill 26-33" PZ

ii. Lithic contact with limestone greater than 20" ...R080BY146TX ... R080BY146TX – Clay Loam 26-33" PZ

2 Surface horizon is strongly to violently effervescent ...R080BY160TX ... R080BY160TX – Shallow 26-33" PZ

B. Limestone bedrock or petrocalcic horizon greater than 40"Go to Key 6

2 Sandstone or conglomerate bedrock within 60"

A. Sandstone bedrock within 20" ...R080BY157TX ... R080BY157TX – Sandstone Hill 26-33" PZ

B. Sandstone bedrock greater than 20"

1 Greater than 5% surface cover of sandstone fragments ...R080BY157TX ... R080BY157TX – Sandstone Hill 26-33" PZ

2 Less than 5% surface cover of sandstone fragments

a. Clayey subsurface horizons ...R080BY164TX ... R080BY164TX – Tight Sandy Loam 26-33" PZ

b. Loamy subsurface horizons

i. Sandy surface texture (Loamy sand or sand) ...R080BY153TX ... R080BY153TX – Loamy Sand 26-33" PZ

ii. Loamy surface texture (Sandy Loam, Sandy Clay Loam, Loam)...R080BY159TX ... R080BY159TX – Sandy Loam 26-33" PZ

5 Landform is a scarp slope

1 Greater than 5% surface cover of stones and boulders

A. Soil is noncalcareous within 20"

1 Limestone stones and boulders cover surface ... R080BY163TX – Steep Rocky 26-33" PZ

2 Conglomerate or sandstone stones and boulders cover surface ... R080BY143TX – Bouldery Hill 26-33

B. Soil is calcareous within 20"

1 Limestone/sandstone bedrock within 40" (Structural bench) ...R080BY163TX ... R080BY163TX – Steep Rocky 26-33" PZ

C. Limestone/sandstone bedrock not within 40"

i. Mollic surface colors not present ...R080BY15TX ... R080BY156TX – Rocky Hill 26-33" PZ

ii. Mollic epipedon or thin mollic if eroded ...R080BY163TX ... R080BY163TX – Steep Rocky 26-33" PZ

2 Less than 5% surface cover of stone and boulders

A. Limestone/sandstone bedrock within 40" (Structural bench) ...Go to Key 4

B. Limestone/sandstone bedrock not within 40"

1 Greater than 30" to shale/claystone bedrock ...R080BY604TX ... R080BY604TX – Clay Slopes 26-33" PZ

2 Less than 30" to shale/claystone bedrock ...Key 4

6 Landform is on a strike valley

1 Soil is calcareous within 10"

A. Less than 30" to shale/claystone bedrock

B. Greater than 30" to bedrock

1 Slickensides present in subsurface; cracks to surface when dry ...R080BY607TX ... R080BY607TX – Clayey Upland 26-33" PZ

2 Slickensides not present in subsurface; limited cracking to surface when dry

a. Less than 60" to shale/claystone bedrock ...R080BY604TX ... R080BY604TX – Clay Slopes 26-33" PZ

- b. Greater than 60" to shale/claystone bedrock ...R080BY146TX ... R080BY146TX – Clay Loam 26-33" PZ

2 Soil is not calcareous within 10"

A. Mollic epipedon (and not hard setting)

- 1 Less than 20 percent clay content in surface horizon ...R080BY152TX ... R080BY152TX – Loamy 26-33" PZ

- 2 Greater than 20 percent clay content in surface horizon ...R080BY146TX ... R080BY146TX – Clay Loam 26-33" PZ

B. Ochric epipedon (including hard setting mollic epipedons)

- 1 Hard setting surface horizon ...R080BY147TX ... R080BY147TX – Claypan 26-33" PZ

2 Surface horizon is not hard setting

a. Sandy surface horizon

- i. Greater than 20" of sand or loamy sand over argillic horizonGo to MLRA 84B Key

- ii. Less than 20" of sand or loamy sand over argillic horizon ...R080BY153TX ... R080BY153TX – Loamy Sand 26-33" PZ

b. Loamy surface horizon (sandy loam, sandy clay loam, loam, etc.)

i. Argillic horizon present

- 1 Clayey argillic horizon ... R080BY164TX ... R080BY164TX – Tight Sandy Loam 26-33" PZ

- 2 Loamy argillic horizon ... R080BY159TX ... R080BY159TX – Sandy Loam 26-33" PZ

- ii. Argillic horizon not present ...R080BY146TX ... R080BY146TX – Clay Loam 26-33" PZ