USDA icon **Natural Resources Conservation Service**

Major Land Resource Area 080B
Texas North-Central Prairies

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Ecological site keys

MLRA 80B Ecological Site Key

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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