

003CD—Collinsville complex, 2 to 15 percent slopes

Map Unit Composition

Collinsville: 65 percent
 Collinsville Taxadjunct: 20 percent
 Minor components: 15 percent

Component Descriptions

Collinsville

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Summit, shoulder
Parent material: Sandstone residuum
Slope: 2 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Very low (About 1.4 inches)
Shrink-swell potential: Low (About 1.7 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Shallow Sandstone (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 6 inches; loam
 H2—6 to 11 inches; channery loam
 R—11 to 15 inches; unweathered bedrock

Collinsville Taxadjunct

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Summit, shoulder
Parent material: Sandstone residuum
Slope: 2 to 15 percent
Depth to restrictive feature: 4 to 26 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Low (About 3.1 inches)
Shrink-swell potential: Low (About 1.7 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Shallow Sandstone (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 6 inches; loam
 H2—6 to 23 inches; channery loam
 R—23 to 27 inches; unweathered bedrock

Minor Components

Dennis

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Talihina

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 2 to 7 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Eram

Composition: About 3 percent
Geomorphic Position: hillslope on upland
Slope: 2 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Summit

Composition: About 2 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

003DE—Dennis silty clay loam, 1 to 4 percent slopes, eroded

Map Unit Composition

Dennis: 95 percent
 Minor components: 5 percent

Component Descriptions

Dennis

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 9.5 inches)
Shrink-swell potential: High (About 7.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: Medium
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silty clay loam
 H2—10 to 21 inches; silty clay loam
 H3—21 to 47 inches; silty clay
 H4—47 to 60 inches; silty clay

Minor Components

Eram

Phase: Eroded
Composition: About 3 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Kenoma

Phase: Eroded
Composition: About 2 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

003EH—Eram Soils, 4 to 7 percent slopes, eroded

Map Unit Composition

Eram: 85 percent
 Minor components: 15 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 4 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 5.2 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 15 inches; silty clay loam
 H2—15 to 33 inches; silty clay loam
 Cr—33 to 37 inches;

Minor Components

Talihina

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 15 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Dennis

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Collinsville

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 2 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe35-42)

003EK—Eram-Clareson complex, 1 to 15 percent slopes

Map Unit Composition

Eram: 60 percent
 Clareson: 20 percent
 Minor components: 20 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 5.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 9 inches; silty clay loam
H2—9 to 33 inches; silty clay loam
Cr—33 to 37 inches;

Clareson

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from limestone, unspecified
Slope: 1 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Very low (About 1.9 inches)
Shrink-swell potential: Moderate (About 4.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Shallow Flats (pe35-42)
Land capability (nonirrigated): 6s

Typical Profile:

H1—0 to 7 inches; flaggy silty clay loam
H2—7 to 16 inches; very flaggy silty clay
H3—16 to 24 inches; extremely flaggy silty clay
R—24 to 32 inches; unweathered bedrock

Minor Components

Rock outcrop

Composition: About 5 percent

Talihina

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 15 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Summit

Composition: About 4 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Catoosa

Composition: About 3 percent
Geomorphic Position: hillslope on upland
Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Dennis

Composition: About 3 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

003LE—Leanna silt loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Leanna: 88 percent
Minor components: 12 percent

Component Descriptions

Leanna

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty and clayey alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.4 inches)
Shrink-swell potential: Very high (About 10.7 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 6 to 24 inches
Runoff class: Medium

Ecological site: Clay Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 17 inches; silt loam
 H2—17 to 37 inches; silty clay
 H3—37 to 64 inches; silty clay

Minor Components

Lanton

Composition: About 3 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Loamy Lowland (pe35-42)

Osage

Composition: About 3 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe35-42)

Verdigris

Composition: About 3 percent
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe35-42)

Woodson

Composition: About 3 percent
Geomorphic Position: divide on upland
Slope: 1 to 3 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

003LH—Lula silt loam, 0 to 3 percent slopes

Map Unit Composition

Lula: 85 percent
 Minor components: 15 percent

Component Descriptions

Lula

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Summit
Parent material: Residuum weathered from limestone, unspicified
Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.8 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 13 inches; silt loam
 H2—13 to 29 inches; silty clay loam
 H3—29 to 49 inches; silty clay loam
 R—49 to 53 inches; unweathered bedrock

Minor Components

Catoosa

Composition: About 5 percent
Slope: 0 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Clareson

Composition: About 5 percent
Slope: 1 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Flats (pe35-42)

Kenoma

Composition: About 5 percent
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

003SE—stony Land-Talihina complex, 15 to 45 percent slopes

Map Unit Composition

Stony Land: 60 percent
 Talihina: 20 percent
 Minor components: 20 percent

Component Descriptions

Stony Land

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Parent material: Residuum
Slope: 15 to 45 percent
Drainage class: Excessively drained
Depth to seasonal water saturation: More than 6 feet

Land capability (nonirrigated): 7e

Talihina

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Clayey residuum weathered from shale

Slope: 4 to 15 percent

Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: Very low (About 2.5 inches)

Shrink-swell potential: High (About 8.1 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 6 to 24 inches

Runoff class: High

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; silty clay loam

H2—7 to 12 inches; silty clay loam

H3—12 to 15 inches; silty clay loam

Cr—15 to 19 inches; weathered bedrock

Minor Components

Clareson

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 1 to 15 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Drainage class: Well drained

Ecological site: Shallow Flats (pe35-42)

Dennis

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 1 to 15 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Summit

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 4 to 7 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

003WF—Woodson silt loam, 1 to 3 percent slopes

Map Unit Composition

Woodson: 85 percent

Minor components: 15 percent

Component Descriptions

Woodson

MLRA: 112 - Cherokee Prairies

Landform: Paleoterrace on upland

Parent material: Silty and clayey alluvium over silty and clayey residuum weathered from shale,

clayey

Slope: 1 to 3 percent

Drainage class: Somewhat poorly drained

Slowest permeability: Very slow (About 0.00 in/hr)

Available water capacity: Moderate (About 8.7 inches)

Shrink-swell potential: Very high (About 13.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 4 to 9 inches

Runoff class: High

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 8 inches; silt loam

H2—8 to 29 inches; silty clay

H3—29 to 64 inches; silty clay

Minor Components

Eram

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 1 to 2 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Kenoma

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Summit

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 2 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Geomorphic Position: ridge on paleoterrace
 on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

011CA—Catoosa silt loam, 0 to 2 percent slopes

Map Unit Composition

Catoosa: 85 percent
 Minor components: 15 percent

Component Descriptions

Catoosa

MLRA: 112 - Cherokee Prairies
Landform: Upland, ridge
Hillslope position: Summit
Parent material: Residuum weathered from limestone
Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 4.6 inches)
Shrink-swell potential: High (About 7.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 11 inches; silt loam
 H2—11 to 16 inches; silty clay loam
 H3—16 to 27 inches; silty clay loam
 R—27 to 35 inches; unweathered bedrock

Minor Components

Clareson

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Flats (pe35-42)

Kenoma

Composition: About 5 percent

059CM—Clareson-Eram silty clay loams, 3 to 15 percent slopes

Map Unit Composition

Clareson: 55 percent
 Eram: 30 percent
 Minor components: 15 percent

Component Descriptions

Clareson

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from limestone
Slope: 3 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 3.2 inches)
Shrink-swell potential: Moderate (About 5.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Shallow Flats (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 15 inches; silty clay loam
 H3—15 to 26 inches; flaggy silty clay loam
 R—26 to 34 inches; unweathered bedrock

Eram

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale
Slope: 3 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Low (About 5.6 inches)
Shrink-swell potential: High (About 7.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 9 to 14 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 38 inches; silty clay
 Cr—38 to 46 inches; weathered bedrock

Minor Components

Bates

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Rock outcrop

Composition: About 5 percent
Geomorphic Position: hillslope on upland

AED—Arents, Earthen Dam

Bb—Bates loam, 1 to 4 percent slopes

Map Unit Composition

Bates: 85 percent
 Minor components: 15 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on ridge on upland
Hillslope position: Summit, backslope
Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-shale
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 5.6 inches)

Shrink-swell potential: Moderate (About 3.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 10 inches; loam
 H2—10 to 21 inches; clay loam
 H3—21 to 31 inches; gravelly clay loam
 Cr—31 to 35 inches;

Minor Components

Rock outcrop

Composition: About 5 percent

Dennis

Composition: About 5 percent
Geomorphic Position: hillslope on divide on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Bc—Bates loam, 4 to 8 percent slopes

Map Unit Composition

Bates: 85 percent
 Minor components: 15 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-shale
Slope: 4 to 8 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 5.4 inches)
Shrink-swell potential: Moderate (About 3.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 7 inches; loam
 H2—7 to 18 inches; clay loam
 H3—18 to 31 inches; gravelly clay loam
 Cr—31 to 35 inches;

Minor Components

Dennis

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 4 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Lebo

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Cb—Catoosa silt loam, 1 to 3 percent slopes

Map Unit Composition

Catoosa: 85 percent
 Minor components: 15 percent

Component Descriptions

Catoosa

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on ridge on upland
Hillslope position: Summit
Parent material: Residuum weathered from limestone
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 5.7 inches)
Shrink-swell potential: Very high (About 9.1 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 12 inches; silt loam
 H2—12 to 25 inches; silty clay loam
 H3—25 to 29 inches; silty clay
 R—29 to 33 inches; unweathered bedrock

Minor Components

Clareson

Composition: About 4 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 7 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Flats (pe35-42)

Kenoma

Composition: About 4 percent
Geomorphic Position: hillslope on ridge on paleoterrace on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Summit

Composition: About 4 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Eram

Composition: About 3 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Cm—Clareson-Rock outcrop complex, 2 to 15 percent slopes

Map Unit Composition

Clareson: 60 percent
Rock outcrop: 20 percent
Minor components: 20 percent

Component Descriptions

Clareson

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on ridge on upland
Hillslope position: Summit
Parent material: Silty and clayey residuum weathered from limestone, unspecified
Slope: 7 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 3.9 inches)
Shrink-swell potential: High (About 6.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Shallow Flats (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 11 inches; silty clay loam
H2—11 to 16 inches; flaggy silty clay loam
H3—16 to 33 inches; very flaggy silty clay
R—33 to 37 inches; unweathered bedrock

Rock outcrop

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Shoulder
Drainage class: Well drained
Depth to seasonal water saturation: More than 6 feet
Land capability (nonirrigated): 8

Minor Components

Catoosa

Composition: About 5 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 1 to 3 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 4 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Lebo

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Summit

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 8 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

De—Dennis silt loam, 1 to 3 percent slopes

Map Unit Composition

Dennis: 90 percent
Minor components: 10 percent

Component Descriptions

Dennis

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on divide on upland
Hillslope position: Backslope, footslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: Very high (About 9.4 LEP)
Flooding hazard: None

Depth to seasonal water saturation: About 24 to 36 inches

Runoff class: Medium

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 11 inches; silt loam

H2—11 to 17 inches; silty clay loam

H3—17 to 25 inches; silty clay

H4—25 to 60 inches; silty clay

Minor Components

Bates

Composition: About 4 percent

Geomorphic Position: hillslope on ridge on upland

Slope: 1 to 4 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 3 percent

Geomorphic Position: hillslope on ridge on upland

Slope: 1 to 4 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Kenoma

Composition: About 3 percent

Geomorphic Position: hillslope on ridge on paleoterrace on upland

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Df—Dennis silt loam, 3 to 6 percent slopes

Map Unit Composition

Dennis: 85 percent

Minor components: 15 percent

Component Descriptions

Dennis

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Silty and clayey residuum weathered from shale, unspecified

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: High (About 10.6 inches)

Shrink-swell potential: Very high (About 9.4 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 24 to 36 inches

Runoff class: High

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silt loam

H2—10 to 16 inches; silty clay loam

H3—16 to 24 inches; silty clay

H4—24 to 60 inches; silty clay

Minor Components

Kenoma

Composition: About 5 percent

Geomorphic Position: hillslope on ridge on paleoterrace on upland

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Bates

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 4 to 8 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent

Geomorphic Position: hillslope on ridge on upland

Slope: 4 to 8 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Ec—Eram silty clay loam, 1 to 4 percent slopes

Map Unit Composition

Eram: 85 percent

Minor components: 15 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on ridge on upland

Hillslope position: Backslope

Parent material: Silty and clayey residuum weathered from shale, unspecified

Slope: 1 to 4 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: Low (About 4.2 inches)

Shrink-swell potential: High (About 6.4 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 24 to 36 inches

Runoff class: Medium

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silty clay loam

H2—10 to 27 inches; silty clay

Cr—27 to 31 inches;

Minor Components

Dennis

Composition: About 4 percent

Geomorphic Position: hillslope on divide on upland

Slope: 1 to 3 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Bates

Composition: About 4 percent

Geomorphic Position: hillslope on ridge on upland

Slope: 1 to 4 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe35-42)

Catoosa

Composition: About 4 percent

Geomorphic Position: hillslope on ridge on upland

Slope: 1 to 3 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe35-42)

Summit

Composition: About 3 percent

Geomorphic Position: hillslope on upland

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Ed—Eram silty clay loam, 4 to 8 percent slopes

Map Unit Composition

Eram: 85 percent

Minor components: 15 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on ridge on upland

Hillslope position: Backslope

Parent material: Silty and clayey residuum weathered from shale, unspecified

Slope: 4 to 8 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: Low (About 4.2 inches)

Shrink-swell potential: High (About 6.4 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 24 to 36 inches

Runoff class: High

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 9 inches; silty clay loam

H2—9 to 27 inches; silty clay

Cr—27 to 31 inches;

Minor Components

Dennis

Composition: About 4 percent

Geomorphic Position: hillslope on upland

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Lebo

Composition: About 4 percent

Geomorphic Position: hillslope on upland

Slope: 15 to 30 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe35-42)

Bates

Composition: About 4 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Summit

Composition: About 3 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 8 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Ef—Eram-Lebo silty clay loams, 5 to 20 percent slopes

Map Unit Composition

Eram: 50 percent
 Lebo: 30 percent
 Minor components: 20 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 5 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: High (About 6.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 36 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; silty clay loam
 H2—8 to 27 inches; silty clay
 Cr—27 to 31 inches; weathered bedrock

Lebo

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum weathered from shale-sandstone
Slope: 8 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Impermeable (About 0.00 in/hr)
Available water capacity: Moderate (About 6.3 inches)
Shrink-swell potential: Very high (About 9.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 12 inches; silty clay
 H2—12 to 28 inches; silty clay
 H3—28 to 38 inches; extremely channery silty clay loam
 Cr—38 to 42 inches; weathered bedrock

Minor Components**Clareson**

Composition: About 10 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 7 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Flats (pe35-42)

Dennis

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Hp—Hepler silt loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Hepler: 90 percent
 Minor components: 10 percent

Component Descriptions

Hepler

MLRA: 112 - Cherokee Prairies

Landform: Flood plain on river valley

Parent material: Silty alluvium

Slope: 0 to 2 percent

Drainage class: Somewhat poorly drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: High (About 10.6 inches)

Shrink-swell potential: Moderate (About 3.2 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: About 12 to 36 inches

Runoff class: Medium

Ecological site: Loamy Lowland (pe35-42)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 9 inches; silt loam

H2—9 to 25 inches; silt loam

H3—25 to 40 inches; silty clay loam

H4—40 to 60 inches; silty clay loam

Minor Components

Mason

Composition: About 10 percent

Slope: 0 to 1 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe35-42)

INT—Aquolls

Map Unit Composition

Aquolls: 100 percent

Component Descriptions

Aquolls

MLRA: 112 - Cherokee Prairies

Landform: Depression on terrace on river valley

Parent material: Alluvium

Slope: 0 to 1 percent

Drainage class: Very poorly drained

Flooding hazard: None

Ponding hazard: Occasional

Depth to seasonal water saturation: About 0 to 0 inches

Runoff class: Negligible

Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 72 inches; variable

General Considerations: This map unit was formerly labeled as an Intermittent Water spot symbol. These depressional areas contain soils that are occasionally ponded for long duration.

Ke—Kenoma silt loam, 1 to 4 percent slopes

Map Unit Composition

Kenoma: 90 percent

Minor components: 10 percent

Component Descriptions

Kenoma

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on ridge on paleoterrace on upland

Hillslope position: Backslope

Parent material: Loess over ancient clayey alluvium and/or residuum weathered from limestone and

shale

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Slowest permeability: Very slow (About 0.00 in/hr)

Available water capacity: High (About 9.0 inches)

Shrink-swell potential: Very high (About 9.9 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: High

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silt loam

H2—10 to 22 inches; silty clay

H3—22 to 44 inches; silty clay

H4—44 to 60 inches; silty clay

Minor Components

Dennis

Composition: About 4 percent

Geomorphic Position: hillslope on divide on upland

Slope: 1 to 3 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 3 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Catoosa

Composition: About 3 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

La—Lanton silt loam, occasionally flooded

Map Unit Composition

Lanton: 90 percent
 Minor components: 10 percent

Component Descriptions

Lanton

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty and clayey alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.7 inches)
Shrink-swell potential: Low (About 2.2 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: Medium
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 14 inches; silt loam
 H2—14 to 38 inches; silt loam
 H3—38 to 53 inches; silt loam, silty clay loam
 H4—53 to 60 inches; silty clay loam

Minor Components

Osage

Composition: About 10 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe35-42)

Lb—Lebo channery silty clay loam, 15 to 30 percent slopes

Map Unit Composition

Lebo: 85 percent
 Minor components: 15 percent

Component Descriptions

Lebo

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum weathered from shale-sandstone
Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Impermeable (About 0.00 in/hr)
Available water capacity: Moderate (About 6.2 inches)
Shrink-swell potential: High (About 8.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 11 inches; gravelly silty clay loam
 H2—11 to 27 inches; channery silty clay loam
 H3—27 to 38 inches; extremely channery silty clay loam
 Cr—38 to 42 inches;

Minor Components

Clareson

Composition: About 5 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 7 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Flats (pe35-42)

Rock outcrop

Composition: About 5 percent
Geomorphic Position: ridge on upland
Drainage class: Well drained

Eram

Composition: About 5 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 4 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe35-42)

Hepler

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe35-42)

Verdigris

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe35-42)

M-W—Miscellaneous Water**Mb—Mason silt loam, 0 to 2 percent slopes, rarely flooded****Map Unit Composition**

Mason: 85 percent
 Minor components: 15 percent

Component Descriptions**Mason**

MLRA: 112 - Cherokee Prairies
Landform: Stream terrace on river valley
Parent material: Silty alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 18 inches; silt loam
 H2—18 to 50 inches; silty clay loam
 H3—50 to 60 inches; silty clay loam

Minor Components**Osage**

Composition: About 5 percent

Nf—Newtonia silt loam, 0 to 1 percent slopes**Map Unit Composition**

Newtonia: 90 percent
 Minor components: 10 percent

Component Descriptions**Newtonia**

MLRA: 112 - Cherokee Prairies
Landform: Ridge on paleoterrace on upland
Hillslope position: Summit
Parent material: Loess over ancient silty and clayey alluvium over residuum weathered from limestone
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 11.3 inches)
Shrink-swell potential: Moderate (About 3.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 13 inches; silt loam
 H2—13 to 26 inches; silty clay loam
 H3—26 to 49 inches; silty clay loam
 H4—49 to 60 inches; silty clay loam

Minor Components**Kenoma**

Composition: About 10 percent
Geomorphic Position: hillslope on ridge on paleoterrace on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Ng—Newtonia silt loam, 1 to 4 percent slopes

Map Unit Composition

Newtonia: 90 percent
 Minor components: 10 percent

Component Descriptions

Newtonia

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on ridge on upland
Hillslope position: Backslope
Parent material: Loess over ancient silty and clayey alluvium over residuum weathered from limestone
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 11.3 inches)
Shrink-swell potential: Moderate (About 3.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 13 inches; silt loam
 H2—13 to 26 inches; silty clay loam
 H3—26 to 49 inches; silty clay loam
 H4—49 to 60 inches; silty clay loam

Minor Components

Welda

Composition: About 10 percent
Slope: 2 to 5 percent
Drainage class: Well drained
Ecological site: Savannah (pe35-42)

Nh—Newtonia silt loam, 4 to 8 percent slopes

Map Unit Composition

Newtonia: 85 percent
 Minor components: 15 percent

Component Descriptions

Newtonia

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loess over ancient silty and clayey alluvium over residuum weathered from limestone
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 11.2 inches)
Shrink-swell potential: Moderate (About 3.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 11 inches; silt loam
 H2—11 to 24 inches; silty clay loam
 H3—24 to 47 inches; silty clay loam
 H4—47 to 60 inches; silty clay loam

Minor Components

Kenoma

Composition: About 15 percent
Geomorphic Position: hillslope on ridge on paleoterrace on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Oh—Okemah silt loam, 0 to 3 percent slopes

Map Unit Composition

Okemah: 90 percent
 Minor components: 10 percent

Component Descriptions

Okemah

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on stream terrace on upland

Hillslope position: Footslope

Parent material: Silty and clayey colluvium and/or silty and clayey residuum weathered from shale

Slope: 0 to 3 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Moderate (About 9.0 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 24 to 36 inches

Runoff class: Medium

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 12 inches; silt loam

H2—12 to 18 inches; silty clay loam

H3—18 to 24 inches; silty clay

H4—24 to 60 inches; silty clay

Minor Components

Woodson

Composition: About 10 percent

Slope: 0 to 2 percent

Drainage class: Somewhat poorly drained

Ecological site: Clay Upland (pe35-42)

Om—Kanima silty clay loam, 15 to 50 percent slopes

Map Unit Composition

Kanima: 100 percent

Component Descriptions

Kanima

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Mine spoil or earthy fill

Slope: 15 to 50 percent

Drainage class: Excessively drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: Low (About 4.5 inches)

Shrink-swell potential: Moderate (About 3.3 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Land capability (nonirrigated): 7s

Typical Profile:

H1—0 to 6 inches; channery silty clay loam

H2—6 to 60 inches; very channery silty clay loam

Op—Kanima silty clay loam, 2 to 15 percent slopes

Map Unit Composition

Kanima: 100 percent

Component Descriptions

Kanima

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Mine spoil or earthy fill

Slope: 2 to 15 percent

Drainage class: Excessively drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: Low (About 4.5 inches)

Shrink-swell potential: Moderate (About 3.3 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: High

Land capability (nonirrigated): 6s

Typical Profile:

H1—0 to 6 inches; channery silty clay loam

H2—6 to 60 inches; very channery silty clay loam

Ot—Osage silty clay loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Composition

Osage: 85 percent

Minor components: 15 percent

Component Descriptions

Osage

MLRA: 112 - Cherokee Prairies

Landform: Flood plain on river valley

Parent material: Clayey alluvium

Slope: 0 to 1 percent

Drainage class: Poorly drained

Slowest permeability: Very slow (About 0.00 in/hr)

Available water capacity: Moderate (About 7.7 inches)

Shrink-swell potential: Very high (About 13.5 LEP)

Flooding hazard: Occasional

Ponding hazard: Occasional

Depth to seasonal water saturation: About 0 to 12 inches

Runoff class: High

Ecological site: Clay Lowland (pe35-42)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 15 inches; silty clay loam

H2—15 to 44 inches; silty clay

H3—44 to 60 inches; silty clay

Minor Components

Lanton

Composition: About 10 percent

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Ecological site: Loamy Lowland (pe35-42)

Verdigris

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe35-42)

Slope: 0 to 1 percent

Drainage class: Poorly drained

Slowest permeability: Very slow (About 0.00 in/hr)

Available water capacity: Moderate (About 6.9 inches)

Shrink-swell potential: Very high (About 14.5 LEP)

Flooding hazard: Occasional

Ponding hazard: Occasional

Depth to seasonal water saturation: About 0 to 12 inches

Runoff class: High

Ecological site: Clay Lowland (pe35-42)

Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 8 inches; silty clay

H2—8 to 23 inches; silty clay

H3—23 to 44 inches; silty clay

H4—44 to 60 inches; silty clay

Minor Components

Lanton

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Ecological site: Loamy Lowland (pe35-42)

Verdigris

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe35-42)

Pc—Parsons silt loam, 0 to 2 percent slopes

Map Unit Composition

Parsons: 90 percent

Minor components: 10 percent

Component Descriptions

Parsons

MLRA: -

Landform: Divide on paleoterrace on upland

Parent material: Loess over ancient clayey alluvium and/or residuum weathered from shale

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 9.0 inches)

Ov—Osage silty clay, occasionally flooded

Map Unit Composition

Osage: 90 percent

Minor components: 10 percent

Component Descriptions

Osage

MLRA: 112 - Cherokee Prairies

Landform: Flood plain on river valley

Parent material: Clayey alluvium

Shrink-swell potential: High (About 7.7 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 9 inches; silt loam
 H2—9 to 13 inches; silt loam
 H3—13 to 60 inches; silty clay

Minor Components

Dennis

Composition: About 10 percent
Geomorphic Position: hillslope on divide on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Po—Pits, Quarries

General Considerations: Pits are open excavations from which soil and commonly underlying material have been removed, exposing either rock or other material. Kinds include Pits, mine; Pits, gravel; and Pits, quarry. Commonly, pits are closely associated with Dumps.

Sn—Summit silty clay loam, 1 to 4 percent slopes

Map Unit Composition

Summit: 85 percent
 Minor components: 15 percent

Component Descriptions

Summit

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey colluvium and/or silty and clayey residuum weathered from calcareous shale
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Moderate (About 8.1 inches)
Shrink-swell potential: High (About 8.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 36 inches
Runoff class: Medium
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 11 inches; silty clay loam
 H2—11 to 24 inches; silty clay
 H3—24 to 33 inches; silty clay
 H4—33 to 60 inches; silty clay

Minor Components

Catoosa

Composition: About 15 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

So—Summit silty clay loam, 4 to 8 percent slopes

Map Unit Composition

Summit: 85 percent
 Minor components: 15 percent

Component Descriptions

Summit

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey colluvium and/or silty and clayey residuum weathered from calcareous shale
Slope: 4 to 8 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.0 inches)
Shrink-swell potential: High (About 8.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 24 to 36 inches
Runoff class: Medium
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 9 inches; silty clay loam
 H2—9 to 22 inches; silty clay
 H3—22 to 31 inches; silty clay
 H4—31 to 60 inches; silty clay

Minor Components**Catoosa**

Composition: About 10 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Dennis

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Vb—Verdigris silt loam, 0 to 2 percent slopes, occasionally flooded**Map Unit Composition**

Verdigris: 90 percent
 Minor components: 10 percent

Component Descriptions**Verdigris**

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Low (About 2.2 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 9 inches; silt loam
 H2—9 to 32 inches; silt loam
 H3—32 to 52 inches; silt loam

H4—52 to 60 inches; silt loam

Minor Components**Osage**

Composition: About 10 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe35-42)

Vc—Verdigris silt loam, 0 to 2 percent slopes, frequently flooded**Map Unit Composition**

Verdigris: 85 percent
 Minor components: 15 percent

Component Descriptions**Verdigris**

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.9 inches)
Shrink-swell potential: Low (About 2.2 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 9 inches; silt loam
 H2—9 to 32 inches; silt loam
 H3—32 to 52 inches; silt loam
 H4—52 to 60 inches; silt loam

Minor Components**Osage**

Composition: About 10 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe35-42)

Summit

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

W—Water**We—Welda silt loam, 2 to 5 percent slopes****Map Unit Composition**

Welda: 90 percent
 Minor components: 10 percent

Component Descriptions**Welda**

MLRA: 112 - Cherokee Prairies
Landform: Stream terrace on upland
Parent material: Silty and clayey sediments
Slope: 2 to 5 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 11.2 inches)
Shrink-swell potential: High (About 7.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Savannah (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 7 inches; silt loam
 H2—7 to 10 inches; silty clay loam
 H3—10 to 35 inches; silty clay
 H4—35 to 60 inches; clay loam

Minor Components**Catoosa**

Composition: About 10 percent
Geomorphic Position: hillslope on ridge on upland
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Wo—Woodson silt loam, 0 to 2 percent slopes**Map Unit Composition**

Woodson: 85 percent
 Minor components: 15 percent

Component Descriptions**Woodson**

MLRA: 112 - Cherokee Prairies
Landform: Divide on paleoterrace on upland
Parent material: Silty loess over ancient clayey alluvium and/or silty and clayey residuum weathered from clayey shale
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.6 inches)
Shrink-swell potential: Very high (About 13.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 24 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 7 inches; silt loam
 H2—7 to 30 inches; silty clay
 H3—30 to 40 inches; silty clay
 H4—40 to 60 inches; silty clay

Minor Components**Summit**

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Okemah

Composition: About 5 percent
Geomorphic Position: hillslope on stream terrace on upland
Slope: 0 to 3 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)