

001CA—Catoosa silt loam, 0 to 2 percent slopes**Map Unit Composition**

Catoosa: 90 percent
 Minor components: 10 percent

Component Descriptions**Catoosa**

MLRA: 112 - Cherokee Prairies

Landform: Ridge on upland

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 5.4 inches)

Shrink-swell potential: High (About 6.0 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 27 inches; silty clay loam

R—27 to 31 inches; unweathered bedrock

Minor Components**Kenoma**

Composition: About 6 percent

Landform: hillslope on upland

Slope: 1 to 3 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Zaar

Composition: About 4 percent

Landform: hillslope on upland

Slope: 3 to 7 percent

Drainage class: Somewhat poorly drained

Ecological site: Clay Upland (pe35-42)

001CB—Catoosa-Rock outcrop complex, 1 to 8 percent slopes**Map Unit Composition**

Catoosa: 60 percent
 Rock outcrop: 30 percent
 Minor components: 10 percent

Component Descriptions**Catoosa**

MLRA: 112 - Cherokee Prairies

Landform: Ridge on upland

Hillslope position: Summit

Parent material: Residuum weathered from limestone

Slope: 1 to 8 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 5.4 inches)

Shrink-swell potential: High (About 6.0 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): 6s

Typical Profile:

H1—0 to 11 inches; silty clay loam

H2—11 to 27 inches; silty clay loam

R—27 to 31 inches; unweathered bedrock

Rock outcrop

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland

Depth to seasonal water saturation: More than 6 feet

Land capability (nonirrigated): 8

Minor Components**Eram**

Composition: About 10 percent

Landform: ridge on upland

Drainage class: Moderately well drained

Slope: 4 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)

001CC—Collinsville-Bates complex, 2 to 15 percent slopes

Map Unit Composition

Collinsville: 50 percent
Bates: 40 percent
Minor components: 10 percent

Component Descriptions

Collinsville

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum weathered from sandstone
Slope: 2 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Very low (About 2.0 inches)
Shrink-swell potential: Low (About 1.8 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 7 inches; fine sandy loam
H2—7 to 15 inches; gravelly fine sandy loam
R—15 to 17 inches; unweathered bedrock

Bates

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Sandy and silty residuum weathered from sandstone
Slope: 2 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 5.2 inches)
Shrink-swell potential: Low (About 2.8 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): 6e

Typical Profile:

H1—0 to 8 inches; loam
H2—8 to 11 inches; loam
H3—11 to 32 inches; gravelly clay loam
Cr—32 to 34 inches; weathered bedrock

Minor Components

Catoosa

Composition: About 4 percent
Landform: ridge on upland
Slope: 1 to 8 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 3 percent
Landform: drainageway on upland ridge on upland
Slope: 4 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)

Dennis

Composition: About 3 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

001ZB—Zaar silty clay, 3 to 7 percent slopes

Map Unit Composition

Zaar: 100 percent

Component Descriptions

Zaar

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland, drainageway on upland
Hillslope position: Footslope
Parent material: Residuum weathered from shale

Slope: 3 to 7 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.5 inches)
Shrink-swell potential: Very high (About 11.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 18 inches; silty clay
 H2—18 to 57 inches; silty clay
 H3—57 to 63 inches; silty clay

031EP—Eram-Apperson silty clay loams, 4 to 7 percent slopes

Map Unit Composition

Eram: 50 percent
 Apperson: 35 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: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.0 inches)
Shrink-swell potential: Moderate (About 4.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 8 inches; silty clay loam

H2—8 to 26 inches; silty clay
 Cr—26 to 30 inches; weathered bedrock

Apperson

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Clayey residuum
Slope: 4 to 7 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 7.0 inches)
Shrink-swell potential: High (About 8.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: High
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 9 inches; silty clay loam
 H2—9 to 14 inches; silty clay loam
 H3—14 to 42 inches; silty clay
 R—42 to 46 inches; unweathered bedrock

Minor Components

Shidler

Composition: About 5 percent
Landform: rim on upland
Slope: 1 to 5 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Limy (pe35-42)

Clareson

Composition: About 5 percent
Landform: ridge on upland
Slope: 1 to 5 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

031ES—Eram-Shidler silty clay loams, 4 to 15 percent slopes

Map Unit Composition

Eram: 60 percent
Shidler: 25 percent
Minor components: 15 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope, summit
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 4 to 15 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 4.0 inches)
Shrink-swell potential: Moderate (About 4.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; silty clay loam
H2—8 to 26 inches; silty clay
Cr—26 to 30 inches; weathered bedrock

Shidler

MLRA: 112 - Cherokee Prairies
Landform: Rim on upland
Hillslope position: Shoulder
Parent material: Residuum weathered from limestone
Slope: 4 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.4 inches)
Shrink-swell potential: Moderate (About 4.6 LEP)
Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Shallow Limy (pe35-42)

Land capability (nonirrigated): 7s

Typical Profile:

H1—0 to 12 inches; silty clay loam
R—12 to 16 inches; unweathered bedrock

Minor Components

Olpe

Composition: About 15 percent
Landform: hillslope on upland
Slope: 4 to 15 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

073AT—Aquents, frequently flooded

Map Unit Composition

Aquents: 100 percent

Component Descriptions

Aquents

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Alluvium
Slope: 0 to 5 percent
Drainage class: Somewhat poorly drained
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 60 inches; stratified variable

073CA—Chase silty clay loam, occasionally flooded

Map Unit Composition

Chase: 90 percent
Minor components: 10 percent

Component Descriptions

Chase

MLRA: 76 - Bluestem Hills

Landform: Flood plain on river valley

Parent material: Silty and clayey alluvium

Slope: 0 to 2 percent

Drainage class: Somewhat poorly drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 9.9 inches)

Shrink-swell potential: Moderate (About 5.4 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: About 24 to 48 inches

Runoff class: High

Ecological site: Loamy Lowland (pe30-36)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 14 inches; silty clay loam

H2—14 to 45 inches; silty clay loam

H3—45 to 60 inches; silty clay

Minor Components

Ivan

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

Reading

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

073CM—Clime silty clay, 3 to 7 percent slopes

Map Unit Composition

Clime: 90 percent

Minor components: 10 percent

Component Descriptions

Clime

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Silty and clayey residuum weathered from calcareous shale

Slope: 3 to 7 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 4.4 inches)

Shrink-swell potential: High (About 7.7 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Limy Upland (pe30-36)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 11 inches; silty clay

H2—11 to 23 inches; silty clay

H3—23 to 33 inches; silty clay

Cr—33 to 37 inches; unweathered bedrock

Minor Components

Martin

Composition: About 10 percent

Landform: hillslope on upland

Slope: 4 to 7 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe30-36)

073CS—Clime-Sogn complex, 5 to 20 percent slopes

Map Unit Composition

Clime: 60 percent

Sogn: 20 percent

Minor components: 20 percent

Component Descriptions

Clime

MLRA: 76 - Bluestem Hills

Landform: Ridge on upland

Hillslope position: Backslope

Parent material: Silty and clayey residuum weathered from calcareous shale

Slope: 5 to 20 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 4.4 inches)

Shrink-swell potential: High (About 7.7 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 11 inches; silty clay
 H2—11 to 23 inches; silty clay
 H3—23 to 33 inches; silty clay
 Cr—33 to 37 inches; unweathered bedrock

Sogn

MLRA: 76 - Bluestem Hills
Landform: Ridge on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from limestone
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 1.4 inches)
Shrink-swell potential: Moderate (About 4.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe30-36)
Land capability (nonirrigated): 7s

Typical Profile:

H1—0 to 7 inches; silty clay loam
 R—7 to 11 inches; unweathered bedrock

Minor Components

Dwight

Composition: About 5 percent
Landform: divide on hillslope on upland
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Labette

Composition: About 5 percent
Landform: 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: Loamy Upland (pe30-36)

Rock outcrop

Composition: About 5 percent

Martin

Composition: About 5 percent
Landform: hillslope on upland
Slope: 4 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe30-36)

073DS—Dennis silty clay loam, 2 to 6 percent slopes, eroded

Map Unit Composition

Dennis: 100 percent

Component Descriptions

Dennis

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Footslope, backslope
Parent material: Silty and clayey residuum weathered from shale
Slope: 2 to 6 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.3 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 6 inches; silty clay loam
 H2—6 to 16 inches; silty clay loam
 H3—16 to 60 inches; silty clay

073IC—Ivan silt loam, channeled

Map Unit Composition

Ivan: 85 percent
 Minor components: 15 percent

Component Descriptions

Ivan*MLRA:* 76 - Bluestem Hills*Landform:* Channel on flood plain on river valley*Parent material:* Alluvium*Slope:* 0 to 1 percent*Drainage class:* Well drained*Slowest permeability:* Moderate (About 0.60 in/hr)*Available water capacity:* Very high (About 12.9 inches)*Shrink-swell potential:* Moderate (About 4.7 LEP)*Flooding hazard:* Frequent*Depth to seasonal water saturation:* More than 6 feet*Runoff class:* Low*Ecological site:* Loamy Lowland (pe30-36)*Land capability (nonirrigated):* 5w*Typical Profile:*

H1—0 to 27 inches; silt loam

H2—27 to 60 inches; silt loam

Minor Components**Chase***Composition:* About 4 percent*Slope:* 0 to 2 percent*Drainage class:* Somewhat poorly drained*Ecological site:* Loamy Lowland (pe30-36)**Osage***Composition:* About 4 percent*Slope:* 0 to 1 percent*Drainage class:* Poorly drained*Ecological site:* Clay Lowland (pe30-36)**Dennis***Composition:* About 4 percent*Landform:* hillslope on upland*Slope:* 1 to 4 percent*Drainage class:* Moderately well drained*Ecological site:* Loamy Upland (pe30-36)**Martin***Composition:* About 3 percent*Landform:* hillslope on upland*Slope:* 4 to 7 percent*Drainage class:* Moderately well drained*Ecological site:* Loamy Upland (pe30-36)**073IF—Ivan silt loam, occasionally flooded****Map Unit Composition**

Ivan: 90 percent

Minor components: 10 percent

Component Descriptions**Ivan***MLRA:* 76 - Bluestem Hills*Landform:* Flood plain on river valley*Parent material:* Alluvium*Slope:* 0 to 1 percent*Drainage class:* Well drained*Slowest permeability:* Moderate (About 0.60 in/hr)*Available water capacity:* Very high (About 13.2 inches)*Shrink-swell potential:* Moderate (About 4.7 LEP)*Flooding hazard:* Occasional*Depth to seasonal water saturation:* More than 6 feet*Runoff class:* Low*Ecological site:* Loamy Lowland (pe30-36)*Land capability (nonirrigated):* 2w*Typical Profile:*

H1—0 to 38 inches; silt loam

H2—38 to 60 inches; silt loam

Minor Components**Chase***Composition:* About 10 percent*Slope:* 0 to 2 percent*Drainage class:* Somewhat poorly drained*Ecological site:* Loamy Lowland (pe30-36)**073KE—Kenoma silty clay loam, 2 to 5 percent slopes, eroded****Map Unit Composition**

Kenoma: 100 percent

Component Descriptions**Kenoma***MLRA:* 112 - Cherokee Prairies*Landform:* Hillslope on upland

Hillslope position: Shoulder, summit
Parent material: Loess over ancient clayey alluvium and/or residuum weathered from limestone and shale
Slope: 2 to 5 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.4 inches)
Shrink-swell potential: Moderate (About 5.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:
 H1—0 to 4 inches; silty clay loam
 H2—4 to 36 inches; silty clay
 H3—36 to 60 inches; silty clay loam

073LA—Labette silty clay loam, 1 to 4 percent slopes

Map Unit Composition

Labette: 90 percent
 Minor components: 10 percent

Component Descriptions

Labette
MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Shoulder, summit
Parent material: Silty and clayey residuum weathered from limestone and shale
Slope: 1 to 4 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: Very high (About 14.0 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium

Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 2e

Typical Profile:
 H1—0 to 9 inches; silty clay loam
 H2—9 to 19 inches; silty clay loam
 H3—19 to 27 inches; silty clay
 R—27 to 31 inches; unweathered bedrock

Minor Components

Sogn
Composition: About 10 percent
Landform: hillslope on upland
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

073LD—Labette-Dwight complex, 0 to 3 percent slopes

Map Unit Composition

Labette: 65 percent
 Dwight: 30 percent
 Minor components: 5 percent

Component Descriptions

Labette
MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Summit
Parent material: Silty and clayey residuum weathered from limestone and shale
Slope: 0 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 4.6 inches)
Shrink-swell potential: Very high (About 14.0 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:
 H1—0 to 9 inches; silty clay loam

H2—9 to 19 inches; silty clay loam
 H3—19 to 27 inches; silty clay
 R—27 to 31 inches; unweathered bedrock

Dwight

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Hillslope position: Summit

Parent material: Loess over clayey ancient alluvium over residuum

Slope: 0 to 3 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)

Drainage class: Moderately well drained

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

Available water capacity: Low (About 5.8 inches)

Shrink-swell potential: Very high (About 9.7 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Clay Pan (pe30-36)

Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 4 inches; silt loam

H2—4 to 32 inches; clay

H3—32 to 44 inches; silty clay

R—44 to 48 inches; unweathered bedrock

Minor Components**Zaar**

Composition: About 5 percent

Landform: hillslope on upland

Slope: 0 to 2 percent

Drainage class: Somewhat poorly drained

Ecological site: Clay Upland (pe30-36)

073MA—Martin silty clay loam, 1 to 4 percent slopes**Map Unit Composition**

Martin: 100 percent

Component Descriptions**Martin**

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Hillslope position: Footslope

Parent material: Silty and clayey colluvium derived from limestone-shale over silty and clayey

residuum weathered from limestone-shale

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 11.3 inches)

Shrink-swell potential: High (About 7.7 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About inches

Runoff class: Medium

Ecological site: Loamy Upland (pe30-36)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 11 inches; silty clay loam

H2—11 to 52 inches; silty clay

H3—52 to 60 inches; clay

073NZ—Niotaze-Darnell complex, 6 to 35 percent slopes**Map Unit Composition**

Niotaze: 75 percent

Darnell: 15 percent

Minor components: 10 percent

Component Descriptions**Niotaze**

MLRA: 84A - Cross Timbers

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Clayey residuum weathered from sandstone and shale

Slope: 6 to 35 percent

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

Drainage class: Somewhat poorly drained

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

Available water capacity: Low (About 4.3 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 24 inches

Runoff class: Very high

Ecological site: Savannah (pe35-42)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 9 inches; loam
 H2—9 to 27 inches; silty clay
 Cr—27 to 31 inches; weathered bedrock

Darnell

MLRA: 84A - Cross Timbers

Landform: Hillslope on upland

Hillslope position: Summit

Parent material: Loamy residuum

Slope: 6 to 35 percent

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

Drainage class: Well drained

Slowest permeability: Moderately rapid (About 2.00 in/hr)

Available water capacity: Very low (About 2.3 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Shallow Savannah (pe35-42)

Land capability (nonirrigated): 7e

Typical Profile:

H1—0 to 6 inches; fine sandy loam
 H2—6 to 16 inches; fine sandy loam
 Cr—16 to 20 inches; weathered bedrock

Minor Components**Rock outcrop**

Composition: About 10 percent

073RE—Reading silt loam, 0 to 2 percent slopes, rarely flooded**Map Unit Composition**

Reading: 90 percent

Minor components: 10 percent

Component Descriptions**Reading**

MLRA: 76 - Bluestem Hills

Landform: Stream terrace on river valley

Parent material: Silty alluvium

Slope: 0 to 1 percent

Drainage class: Well drained

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

Available water capacity: High (About 11.4 inches)

Shrink-swell potential: Moderate (About 4.4 LEP)

Flooding hazard: Rare

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Loamy Lowland (pe30-36)

Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 13 inches; silt loam
 H2—13 to 44 inches; silty clay loam
 H3—44 to 60 inches; silty clay loam

Minor Components**Chase**

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Somewhat poorly drained

Ecological site: Loamy Lowland (pe30-36)

Reading

Composition: About 5 percent

Slope: 7 to 12 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

073ST—Steedman stony loam, 3 to 12 percent slopes**Map Unit Composition**

Steedman: 85 percent

Minor components: 15 percent

Component Descriptions**Steedman**

MLRA: 84A - Cross Timbers

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Clayey residuum weathered from clayey shale

Slope: 3 to 12 percent

Surface fragments: About

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 3.8 inches)

Shrink-swell potential: High (About 7.2 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 24 inches

Runoff class: Very high

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; stony loam

H2—8 to 30 inches; silty clay

Cr—30 to 34 inches; weathered bedrock

Minor Components

Rock outcrop

Composition: About 10 percent

Darnell

Composition: About 5 percent

Landform: hillslope on upland

Slope: 6 to 12 percent

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

Drainage class: Well drained

Ecological site: Shallow Savannah (pe35-42)

**205BH—Bates-Collinsville loams,
3 to 7 percent slopes**

Map Unit Composition

Bates: 50 percent

Collinsville: 35 percent

Minor components: 15 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies

Landform: Ridge on upland

Hillslope position: Summit

Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and

silty residuum weathered from sandstone-shale

Slope: 3 to 7 percent

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

Drainage class: Well drained

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

Available water capacity: Low (About 5.0 inches)

Shrink-swell potential: Moderate (About 3.1 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): 4e

Typical Profile:

H1—0 to 10 inches; loam

H2—10 to 12 inches; loam

H3—12 to 19 inches; clay loam

H4—19 to 27 inches; gravelly clay loam

Cr—27 to 31 inches; weathered bedrock

Collinsville

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Sandstone residuum

Slope: 3 to 7 percent

Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)

Drainage class: Well drained

Slowest permeability: Moderately rapid (About 2.00 in/hr)

Available water capacity: Very low (About 2.2 inches)

Shrink-swell potential: Low (About 1.8 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very low

Ecological site: Shallow Sandstone (pe35-42)

Land capability (nonirrigated): 6s

Typical Profile:

H1—0 to 6 inches; loam

H2—6 to 14 inches; fine sandy loam

R—14 to 18 inches; unweathered bedrock

Minor Components

Dennis

Composition: About 8 percent

Landform: hillslope on upland

Slope: 4 to 7 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 7 percent

Landform: hillslope on upland

Slope: 3 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)

205BO—Bates-Collinsville loams, 7 to 20 percent slopes

Map Unit Composition

Bates: 45 percent
Collinsville: 40 percent
Minor components: 15 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-shale
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 4.4 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): 6e

Typical Profile:

H1—0 to 7 inches; loam
H2—7 to 13 inches; loam
H3—13 to 20 inches; clay loam
H4—20 to 25 inches; gravelly clay loam
Cr—25 to 29 inches; weathered bedrock

Collinsville

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Sandstone residuum
Slope: 7 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Very low (About 2.2 inches)
Shrink-swell potential: Low (About 1.8 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): 7s

Typical Profile:

H1—0 to 6 inches; loam
H2—6 to 14 inches; fine sandy loam
R—14 to 18 inches; unweathered bedrock

Minor Components

Dennis

Composition: About 8 percent
Landform: hillslope on upland
Slope: 4 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 7 percent
Landform: hillslope on upland
Slope: 3 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)

205DW—Dennis-Dwight silt loams, 1 to 5 percent slopes

Map Unit Composition

Dennis: 65 percent
Dwight: 25 percent
Minor components: 10 percent

Component Descriptions

Dennis

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 5 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.3 inches)
Shrink-swell potential: High (About 8.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 28 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 60 inches; silty clay

Dwight

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on paleoterrace on upland
Hillslope position: Footslope
Parent material: Silty and clayey residuum weathered from limestone, cherty
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 7.5 inches)
Shrink-swell potential: Very high (About 9.0 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Pan (pe30-36)
Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 4 inches; silt loam
 H2—4 to 42 inches; silty clay
 H3—42 to 60 inches; silty clay

Minor Components

Bates

Composition: About 10 percent
Landform: 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)

205EB—Eram silt loam, 1 to 3 percent slopes

Map Unit Composition

Eram: 90 percent
 Minor components: 10 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope, summit
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 3 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 4.8 inches)
Shrink-swell potential: High (About 8.3 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): 3e

Typical Profile:

H1—0 to 9 inches; silt loam
 H2—9 to 24 inches; silty clay
 H3—24 to 32 inches; silty clay
 Cr—32 to 36 inches; weathered bedrock

Minor Components

Bates

Composition: About 5 percent
Landform: 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)

Ringo

Composition: About 5 percent
Landform: hillslope on upland
Slope: 15 to 35 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

205EC—Eram silt loam, 3 to 7 percent slopes

Map Unit Composition

Eram: 90 percent
 Minor components: 10 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: 3 to 7 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 3.7 inches)

Shrink-swell potential: High (About 8.3 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; silt loam

H2—9 to 20 inches; silty clay loam

H3—20 to 24 inches; silty clay

Cr—24 to 28 inches; weathered bedrock

Minor Components

Ringo

Composition: About 5 percent

Landform: hillslope on upland

Slope: 15 to 35 percent

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

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Bates

Composition: About 5 percent

Landform: hillslope on upland

Slope: 4 to 7 percent

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

Drainage class: Well drained

Ecological site: Loamy Upland (pe35-42)

205LA—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 2 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: Moderate (About 4.6 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 7 inches; silt loam

H2—7 to 37 inches; silty clay loam

H3—37 to 60 inches; silty clay

Minor Components

Mason

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe35-42)

Osage

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

Ecological site: Clay Lowland (pe35-42)

205ND—Niotaze-Darnell complex, 4 to 30 percent slopes

Map Unit Composition

Niotaze: 50 percent

Darnell: 35 percent

Minor components: 15 percent

Component Descriptions

Niotaze

MLRA: 84A - Cross Timbers

Landform: Hillslope on upland

Hillslope position: Footslope

Parent material: Clayey residuum weathered from sandstone and shale

Slope: 4 to 30 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.8 inches)
Shrink-swell potential: High (About 7.0 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: High
Ecological site: Savannah (pe35-38)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 5 inches; cobbly fine sandy loam
 H2—5 to 9 inches; cobbly fine sandy loam
 H3—9 to 24 inches; silty clay
 H4—24 to 36 inches; silty clay
 Cr—36 to 40 inches; weathered bedrock

Darnell

MLRA: 84A - Cross Timbers
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum
Slope: 4 to 15 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.4 inches)
Shrink-swell potential: Low (About 1.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Shallow Savannah (pe35-38)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 6 inches; fine sandy loam
 H2—6 to 17 inches; fine sandy loam
 Cr—17 to 21 inches; weathered bedrock

Minor Components

Stephenville

Composition: About 10 percent
Landform: hillslope on upland
Slope: 6 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Savannah (pe35-38)

Rock outcrop

Composition: About 5 percent

205SC—Shidler-Catoosa complex, 1 to 8 percent slopes

Map Unit Composition

Shidler: 70 percent
 Catoosa: 20 percent
 Minor components: 10 percent

Component Descriptions

Shidler

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Shoulder
Parent material: Residuum weathered from limestone
Slope: 1 to 8 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.0 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; silty clay loam
 R—10 to 14 inches; unweathered bedrock

Catoosa

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
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 5.0 inches)
Shrink-swell potential: High (About 6.0 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 8 inches; silt loam
 H2—8 to 26 inches; silty clay loam
 R—26 to 30 inches; unweathered bedrock

Minor Components

Ringo

Composition: About 4 percent
Landform: hillslope on upland
Slope: 15 to 35 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Apperson

Composition: About 3 percent
Landform: hillslope on upland
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Girard

Composition: About 3 percent
Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe35-42)

Slope: 4 to 25 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 4.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 12 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe35-38)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; gravelly silt loam
 H2—8 to 32 inches; silty clay
 Cr—32 to 36 inches; weathered bedrock

Minor Components

Bates

Composition: About 5 percent
Landform: ridge on upland
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Collinsville

Composition: About 5 percent
Landform: hillslope on upland
Slope: 7 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Sandstone (pe35-42)

205SF—Steedman gravelly silt loam, 4 to 25 percent slopes, stony

Map Unit Composition

Steedman: 90 percent
 Minor components: 10 percent

Component Descriptions

Steedman

MLRA: 84A - Cross Timbers
Landform: Hillslope on upland
Hillslope position: Summit, backslope
Parent material: Clayey residuum weathered from clayey shale

AED—Arents, Earthen Dam

Bb—Bates loam, 1 to 4 percent slopes

Map Unit Composition

Bates: 98 percent
 Minor components: 2 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies

Landform: Hillslope 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: Moderately slow (About 0.20 in/hr)
Available water capacity: Moderate (About 6.3 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 16 inches; loam
H2—16 to 27 inches; clay loam
H3—27 to 33 inches; very gravelly clay loam
Cr—33 to 37 inches;

Minor Components

Dennis

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

Eram

Composition: About 1 percent
Landform: 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)

Bc—Bates loam, 4 to 7 percent slopes

Map Unit Composition

Bates: 97 percent
Minor components: 3 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 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Moderate (About 6.3 inches)
Shrink-swell potential: Moderate (About 3.1 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 16 inches; loam
H2—16 to 27 inches; clay loam
H3—27 to 33 inches; extremely gravelly clay loam
Cr—33 to 37 inches; weathered bedrock

Minor Components

Collinsville

Composition: About 1 percent
Landform: hillslope on upland
Slope: 7 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Sandstone (pe35-42)

Dennis

Composition: About 1 percent
Landform: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 1 percent
Landform: hillslope on upland
Slope: 4 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)

BOP—Borrow Pits

Map Unit Composition

Borrow Pits: 100 percent

Component Descriptions

Borrow Pits

MLRA: 112 - Cherokee Prairies

Depth to seasonal water saturation: More than 6 feet

General Considerations: An open excavation from which soil and underlying material have been removed usually for construction purposes.

Ca—Clareson-Sogn complex, 1 to 8 percent slopes

Map Unit Composition

Clareson: 50 percent

Sogn: 35 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, unspecified

Slope: 1 to 8 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 3.3 inches)

Shrink-swell potential: Moderate (About 5.9 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 9 inches; silty clay loam

H2—9 to 16 inches; flaggy silty clay loam

H3—16 to 25 inches; very flaggy silty clay

R—25 to 33 inches; unweathered bedrock

Sogn

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland

Hillslope position: Summit

Parent material: Loamy residuum weathered from limestone, unspecified

Slope: 1 to 8 percent

Surface fragments: About 10 to 25 percent boulders

Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)

Drainage class: Somewhat excessively drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very low (About 1.8 inches)

Shrink-swell potential: Moderate (About 4.6 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Ecological site: Shallow Limy (pe35-42)

Land capability (nonirrigated): 7s

Typical Profile:

H1—0 to 9 inches; silty clay loam

R—9 to 13 inches; unweathered bedrock

Minor Components

Lula

Composition: About 15 percent

Landform: hillslope on upland

Slope: 0 to 2 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe35-42)

Cd—Cleora fine sandy loam, occasionally flooded

Map Unit Composition

Cleora: 98 percent

Minor components: 2 percent

Component Descriptions

Cleora

MLRA: 84A - Cross Timbers

Landform: Flood plain on river valley
Parent material: Loamy alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 8.9 inches)
Shrink-swell potential: Low (About 1.6 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 18 inches; fine sandy loam
 H2—18 to 90 inches; fine sandy loam

Minor Components

Mason

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

Verdigris

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

Da—Darnell-Niotaze complex, 24 to 45 percent slopes

Map Unit Composition

Darnell: 55 percent
 Niotaze: 40 percent
 Minor components: 5 percent

Component Descriptions

Darnell

MLRA: 84A - Cross Timbers
Landform: Hillslope on upland
Hillslope position: Shoulder, backslope
Parent material: Loamy residuum
Slope: 25 to 45 percent
Surface fragments: About 10 to 25 percent flagstones
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained

Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Very low (About 2.3 inches)
Shrink-swell potential: Low (About 1.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Savannah (pe35-38)
Land capability (nonirrigated): 7s

Typical Profile:

H1—0 to 4 inches; fine sandy loam
 H2—4 to 16 inches; fine sandy loam
 R—16 to 20 inches; unweathered bedrock

Niotaze

MLRA: 84A - Cross Timbers
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Clayey residuum weathered from sandstone and shale
Slope: 25 to 45 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 3.9 inches)
Shrink-swell potential: High (About 7.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: Very high
Ecological site: Savannah (pe35-38)
Land capability (nonirrigated): 7e

Typical Profile:

H1—0 to 9 inches; loam
 H2—9 to 24 inches; silty clay
 Cr—24 to 28 inches; weathered bedrock

Minor Components

Stephenville

Composition: About 5 percent
Landform: hillslope on upland
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Savannah (pe35-38)

Dd—Dennis silt loam, 1 to 3 percent slopes**Map Unit Composition**

Dennis: 98 percent
Minor components: 2 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 3 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: High (About 9.3 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: High
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 10 inches; silt loam
H2—10 to 15 inches; silty clay loam
H3—15 to 74 inches; silty clay
H4—74 to 90 inches; silty clay loam

Minor Components**Eram**

Composition: About 1 percent
Landform: 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

Composition: About 1 percent
Landform: hillslope on paleoterrace on upland
Slope: 1 to 2 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

De—Dennis silt loam, 3 to 6 percent slopes**Map Unit Composition**

Dennis: 98 percent
Minor components: 2 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: Very slow (About 0.00 in/hr)
Available water capacity: High (About 9.3 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silt loam
H2—10 to 15 inches; silty clay loam
H3—15 to 74 inches; silty clay
H4—74 to 90 inches; silty clay loam

Minor Components**Bates**

Composition: About 1 percent
Landform: hillslope on upland
Slope: 4 to 7 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 1 percent
Landform: hillslope on upland
Slope: 4 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)

Df—Dennis silty clay loam, 1 to 3 percent slopes, eroded**Map Unit Composition**

Dennis: 98 percent
 Minor components: 2 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 3 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: High
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 8 inches; silty clay loam
 H2—8 to 67 inches; silty clay
 H3—67 to 83 inches; silty clay loam

Minor Components**Eram**

Composition: About 1 percent
Landform: 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)

Bates

Composition: About 1 percent
Landform: hillslope 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)

Dg—Dennis And Eram Soils, 3 to 7 percent slopes, eroded**Map Unit Composition**

Dennis: 50 percent
 Eram: 30 percent
 Minor components: 20 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 7 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 8 inches; silty clay loam
 H2—8 to 67 inches; silty clay
 H3—67 to 83 inches; silty clay loam

Eram

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 3 to 7 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 4.6 inches)
Shrink-swell potential: High (About 8.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; silty clay
H2—7 to 31 inches; silty clay
Cr—31 to 35 inches; weathered bedrock

Minor Components

Bates

Composition: About 20 percent
Landform: hillslope on upland
Slope: 4 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Dw—Dwight silt loam, 0 to 2 percent slopes

Map Unit Composition

Dwight: 98 percent
Minor components: 2 percent

Component Descriptions

Dwight

MLRA: 76 - Bluestem Hills
Landform: Divide on hillslope on upland
Hillslope position: Summit
Parent material: Loess over clayey ancient alluvium over residuum
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 6.9 inches)
Shrink-swell potential: High (About 7.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Pan (pe30-36)
Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 4 inches; silt loam
H2—4 to 32 inches; clay
H3—32 to 52 inches; silty clay
Cr—52 to 60 inches; weathered bedrock

Minor Components

Kenoma

Composition: About 1 percent
Landform: hillslope on paleoterrace on upland
Slope: 1 to 2 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Woodson

Composition: About 1 percent
Landform: divide on paleoterrace on upland
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

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

Map Unit Composition

Eram: 98 percent
Minor components: 2 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Summit
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: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.7 inches)
Shrink-swell potential: High (About 6.6 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): 3e

Typical Profile:

H1—0 to 10 inches; silty clay loam
H2—10 to 31 inches; silty clay
Cr—31 to 35 inches;

Minor Components

Bates

Composition: About 1 percent
Landform: hillslope 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)

Dennis

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

Ec—Eram silty clay loam, 4 to 7 percent slopes**Map Unit Composition**

Eram: 98 percent
 Minor components: 2 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: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.7 inches)
Shrink-swell potential: High (About 6.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 10 inches; silty clay loam
 H2—10 to 31 inches; silty clay
 Cr—31 to 35 inches;

Minor Components**Dennis**

Composition: About 1 percent
Landform: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Bates

Composition: About 1 percent
Landform: hillslope on upland
Slope: 4 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Ex—Eram-Collinsville complex, 4 to 25 percent slopes**Map Unit Composition**

Eram: 60 percent
 Collinsville: 20 percent
 Minor components: 20 percent

Component Descriptions**Eram**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Summit
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 4 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 4.3 inches)
Shrink-swell potential: High (About 6.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 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 28 inches; silty clay
 Cr—28 to 32 inches; weathered bedrock

Collinsville

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Sandstone residuum
Slope: 7 to 20 percent
Surface fragments: About 0 to 10 percent (shape or size unspecified)

Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Very low (About 2.2 inches)
Shrink-swell potential: Low (About 1.6 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): 7s

Typical Profile:

H1—0 to 6 inches; loam
 H2—6 to 14 inches; loam
 R—14 to 18 inches; unweathered bedrock

Minor Components

Dennis

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

Bates

Composition: About 10 percent
Landform: hillslope on upland
Slope: 4 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

GRP—Gravel Pits And Quarries

Ha—Hepler silt loam, occasionally flooded

Map Unit Composition

Hepler: 97 percent
 Minor components: 3 percent

Component Descriptions

Hepler

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty alluvium

Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.8 inches)
Shrink-swell potential: Moderate (About 3.3 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 30 inches; silt loam
 H2—30 to 37 inches; silt loam
 H3—37 to 80 inches; silty clay loam

Minor Components

Leanna

Phase: Drained
Composition: About 1 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe35-42)

Osage

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

Verdigris

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

Ka—Kenoma silt loam, 1 to 2 percent slopes

Map Unit Composition

Kenoma: 98 percent
 Minor components: 2 percent

Component Descriptions

Kenoma

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on paleoterrace on upland
Hillslope position: Summit

Parent material: Loess over ancient clayey alluvium and/or residuum weathered from limestone and shale
Slope: 1 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: High (About 8.4 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): 3e

Typical Profile:
 H1—0 to 11 inches; silt loam
 H2—11 to 28 inches; silty clay
 H3—28 to 80 inches; silty clay

Minor Components

Dennis

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

Woodson

Composition: About 1 percent
Landform: divide on paleoterrace on upland
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

Ko—Kenoma-Olpe complex, 2 to 7 percent slopes

Map Unit Composition

Kenoma: 50 percent
 Olpe: 30 percent
 Minor components: 20 percent

Component Descriptions

Kenoma

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on paleoterrace on upland
Hillslope position: Backslope
Parent material: Loess over ancient clayey alluvium and/or residuum weathered from limestone and

shale
Slope: 2 to 7 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: High (About 7.9 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:
 H1—0 to 11 inches; silt loam
 H2—11 to 28 inches; silty clay
 H3—28 to 80 inches; silty clay

Olpe

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on paleoterrace on upland
Hillslope position: Backslope, summit
Parent material: Clayey alluvium
Slope: 2 to 7 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.0 inches)
Shrink-swell potential: High (About 6.7 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): 4e

Typical Profile:
 H1—0 to 6 inches; silt loam
 H2—6 to 15 inches; very gravelly silt loam
 H3—15 to 24 inches; very gravelly silty clay loam
 H4—24 to 60 inches; very gravelly clay loam

Minor Components

Dennis

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

Eram

Composition: About 10 percent
Landform: hillslope on upland
Slope: 4 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)

Kw—Kenoma And Woodson Soils, 1 to 3 percent slopes, eroded

Map Unit Composition

Kenoma: 60 percent
Woodson: 30 percent
Minor components: 10 percent

Component Descriptions

Kenoma

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on paleoterrace on upland
Hillslope position: Backslope, shoulder
Parent material: Loess over ancient clayey alluvium and/or residuum weathered from limestone and shale
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: High (About 7.9 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 7 inches; silt loam
H2—7 to 28 inches; silty clay
H3—28 to 76 inches; silty clay

Woodson

MLRA: 112 - Cherokee Prairies
Landform: Divide on paleoterrace on upland
Hillslope position: Summit
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: Slow (About 0.06 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): 4s

Typical Profile:

H1—0 to 7 inches; silt loam
H2—7 to 28 inches; silty clay
H3—28 to 74 inches; silty clay

Minor Components

Dwight

Composition: About 5 percent
Landform: divide on hillslope on upland
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Dennis

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

La—Leanna silt loam, occasionally flooded

Map Unit Composition

Leanna: 90 percent
Minor components: 10 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 10.2 inches)
Shrink-swell potential: High (About 6.9 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 16 inches; silt loam
H2—16 to 52 inches; silty clay
H3—52 to 60 inches; silty clay loam

Minor Components

Osage

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe35-42)

Hepler

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe35-42)

Lb—Lula silt loam, 0 to 2 percent slopes

Map Unit Composition

Lula: 98 percent
Minor components: 2 percent

Component Descriptions

Lula

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Summit
Parent material: Fine-silty residuum weathered from limestone
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 5.2 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 9 inches; silt loam

H2—9 to 18 inches; silty clay loam
H3—18 to 57 inches; silty clay loam
R—57 to 65 inches; unweathered bedrock

Minor Components

Clareson

Composition: About 1 percent
Landform: hillslope on upland
Slope: 1 to 8 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 1 percent
Landform: hillslope on paleoterrace on upland
Slope: 1 to 2 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Ld—Lula-Dwight complex, 0 to 2 percent slopes

Map Unit Composition

Lula: 45 percent
Dwight: 30 percent
Minor components: 25 percent

Component Descriptions

Lula

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Summit
Parent material: Residuum weathered from limestone, unspecified
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Moderate (About 5.2 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): 3e

Typical Profile:

H1—0 to 9 inches; silt loam
 H2—9 to 18 inches; silty clay loam
 H3—18 to 57 inches; silty clay loam
 R—57 to 65 inches; unweathered bedrock

Dwight

MLRA: 112 - Cherokee Prairies

Landform: Divide on hillslope on upland

Hillslope position: Summit

Parent material: Loess over clayey ancient alluvium over residuum

Slope: 0 to 2 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)

Drainage class: Moderately well drained

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

Available water capacity: Moderate (About 6.9 inches)

Shrink-swell potential: High (About 7.6 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Clay Pan (pe35-42)

Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 4 inches; silt loam
 H2—4 to 32 inches; clay
 H3—32 to 52 inches; silty clay
 Cr—52 to 60 inches; weathered bedrock

Minor Components**Kenoma**

Composition: About 20 percent

Landform: hillslope on paleoterrace on upland

Slope: 1 to 2 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Clareson

Composition: About 5 percent

Landform: hillslope on upland

Slope: 1 to 8 percent

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

Drainage class: Well drained

Ecological site: Shallow Flats (pe35-42)

Ma—Mason silt loam, rarely flooded**Map Unit Composition**

Mason: 98 percent

Minor components: 2 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: Moderately slow (About 0.20 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: Medium

Ecological site: Loamy Lowland (pe35-42)

Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 12 inches; silt loam
 H2—12 to 20 inches; silt loam
 H3—20 to 46 inches; silty clay loam
 H4—46 to 60 inches; clay loam

Minor Components**Verdigris**

Composition: About 1 percent

Slope: 0 to 1 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe35-42)

Hepler

Composition: About 1 percent

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Ecological site: Loamy Lowland (pe35-42)

Ns—Niotaze-Stephenville complex, 4 to 25 percent slopes

Map Unit Composition

Niotaze: 50 percent
 Stephenville: 40 percent
 Minor components: 10 percent

Component Descriptions

Niotaze

MLRA: 84A - Cross Timbers
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Clayey residuum weathered from sandstone and shale
Slope: 4 to 25 percent
Surface fragments: About 0 to 10 percent flagstones
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 3.9 inches)
Shrink-swell potential: High (About 7.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: Very high
Ecological site: Savannah (pe35-38)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 9 inches; loam
 H2—9 to 24 inches; silty clay
 Cr—24 to 28 inches; weathered bedrock

Stephenville

MLRA: 84A - Cross Timbers
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Fine-loamy residuum weathered from sandstone
Slope: 4 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 4.2 inches)
Shrink-swell potential: Low (About 2.2 LEP)
Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: High

Ecological site: Savannah (pe35-38)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 14 inches; fine sandy loam
 H2—14 to 31 inches; sandy clay loam
 Cr—31 to 35 inches; weathered bedrock

Minor Components

Darnell

Composition: About 10 percent
Landform: hillslope on upland
Slope: 25 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Shallow Savannah (pe35-38)

Od—Olpe Soils, 4 to 15 percent slopes

Map Unit Composition

Olpe: 98 percent
 Minor components: 2 percent

Component Descriptions

Olpe

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on paleoterrace on upland
Hillslope position: Summit, backslope
Parent material: Clayey alluvium
Slope: 4 to 15 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.0 inches)
Shrink-swell potential: High (About 6.7 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 6 inches; silt loam
 H2—6 to 15 inches; very gravelly silt loam
 H3—15 to 24 inches; very gravelly silty clay loam
 H4—24 to 60 inches; very gravelly clay loam

Minor Components**Kenoma**

Composition: About 1 percent
Landform: hillslope on paleoterrace on upland
Slope: 1 to 2 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Lula

Composition: About 1 percent
Landform: hillslope on upland
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Phase: Drained
Composition: About 1 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe35-42)

Verdigris

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

Osage

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

Og—Osage silty clay, occasionally flooded**Map Unit Composition**

Osage: 97 percent
 Minor components: 3 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 6.4 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): 3w

Typical Profile:

H1—0 to 18 inches; silty clay
 H2—18 to 70 inches; silty clay
 H3—70 to 90 inches; silty clay

Minor Components**Leanna****Os—Osage silty clay loam, occasionally flooded****Map Unit Composition**

Osage: 97 percent
 Minor components: 3 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 7.0 inches)
Shrink-swell potential: Very high (About 13.5 LEP)
Flooding hazard: Occasional
Ponding hazard: Occasional
Depth to seasonal water saturation: About 0 to 18 inches
Runoff class: High
Ecological site: Clay Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 18 inches; silty clay loam
 H2—18 to 70 inches; silty clay
 H3—70 to 90 inches; silty clay

Minor Components**Osage**

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

Leanna

Phase: Drained
Composition: About 1 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe35-42)

Verdigris

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

Rc—Ringo silty clay loam, 4 to 7 percent slopes**Map Unit Composition**

Ringo: 99 percent
 Minor components: 1 percent

Component Descriptions**Ringo**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum weathered from limestone
Slope: 4 to 7 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.9 inches)
Shrink-swell potential: High (About 7.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 8 inches; silty clay loam
 H2—8 to 37 inches; silty clay
 H3—37 to 50 inches; silty clay
 Cr—50 to 60 inches; weathered bedrock

Minor Components**Summit**

Composition: About 1 percent
Landform: hillslope on upland
Slope: 4 to 7 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Upland (pe35-42)

Rd—Ringo-Sogn complex, 4 to 15 percent slopes**Map Unit Composition**

Ringo: 50 percent
 Sogn: 30 percent
 Minor components: 20 percent

Component Descriptions**Ringo**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum weathered from limestone
Slope: 4 to 15 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.9 inches)
Shrink-swell potential: High (About 7.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; silty clay loam
 H2—8 to 37 inches; silty clay
 H3—37 to 50 inches; silty clay
 Cr—50 to 60 inches; weathered bedrock

Sogn

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from limestone

Slope: 4 to 15 percent
Surface fragments: About 0 to 10 percent boulders
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 1.8 inches)
Shrink-swell potential: Moderate (About 4.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Shallow Limy (pe35-42)
Land capability (nonirrigated): 7s

Typical Profile:
 H1—0 to 9 inches; silty clay loam
 R—9 to 13 inches; unweathered bedrock

Minor Components

Clareson

Composition: About 20 percent
Landform: hillslope on upland
Slope: 1 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Flats (pe35-42)

Sa—Stephenville fine sandy loam, 1 to 4 percent slopes

Map Unit Composition

Stephenville: 98 percent
 Minor components: 2 percent

Component Descriptions

Stephenville

MLRA: 84A - Cross Timbers
Landform: Hillslope on upland
Hillslope position: Shoulder
Parent material: Fine-loamy residuum weathered from sandstone
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 4.2 inches)
Shrink-swell potential: Low (About 2.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Savannah (pe35-38)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 14 inches; fine sandy loam
 H2—14 to 31 inches; sandy clay loam
 Cr—31 to 35 inches; weathered bedrock

Minor Components

Niotaze

Composition: About 1 percent
Landform: hillslope on upland
Slope: 4 to 25 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Somewhat poorly drained
Ecological site: Savannah (pe35-38)

Darnell

Composition: About 1 percent
Landform: hillslope on upland
Slope: 25 to 45 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Shallow Savannah (pe35-38)

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

Map Unit Composition

Summit: 98 percent
 Minor components: 2 percent

Component Descriptions

Summit

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

Available water capacity: Moderate (About 8.9 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: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 16 inches; silty clay loam
 H2—16 to 40 inches; silty clay
 H3—40 to 64 inches; silty clay

Minor Components

Ringo

Composition: About 1 percent
Landform: hillslope on upland
Slope: 4 to 7 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe35-42)

Woodson

Composition: About 1 percent
Landform: divide on paleoterrace on upland
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

Se—Summit silty clay loam, 4 to 7 percent slopes

Map Unit Composition

Summit: 99 percent
 Minor components: 1 percent

Component Descriptions

Summit

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey residuum weathered from shale, calcareous
Slope: 4 to 7 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.9 inches)
Shrink-swell potential: High (About 8.2 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 16 inches; silty clay loam
 H2—16 to 40 inches; silty clay
 H3—40 to 64 inches; silty clay

Minor Components

Ringo

Composition: About 1 percent
Landform: hillslope on upland
Slope: 4 to 7 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe35-42)

Va—Verdigris silt loam, occasionally flooded

Map Unit Composition

Verdigris: 97 percent
 Minor components: 3 percent

Component Descriptions

Verdigris

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 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 6 inches; silt loam
 H2—6 to 82 inches; silty clay loam

Minor Components

Mason

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

Hepler

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

Osage

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

Vc—Verdigris Soils, channeled**Map Unit Composition**

Verdigris: 98 percent
 Minor components: 2 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: Moderate (About 0.60 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 6 inches; silt loam
 H2—6 to 82 inches; silty clay loam

Minor Components**Hepler**

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

Leanna

Phase: Drained
Composition: About 1 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe35-42)

W—Water**Map Unit Composition**

Water: 100 percent

Component Descriptions**Water**

MLRA: -
Depth to seasonal water saturation: More than 6 feet

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

Woodson: 98 percent
 Minor components: 2 percent

Component Descriptions**Woodson**

MLRA: 112 - Cherokee Prairies
Landform: Divide on paleoterrace on upland
Hillslope position: Summit
Parent material: Loess over clayey alluvium residuum weathered from shale
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 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 6 to 24 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 8 inches; silt loam
 H2—8 to 29 inches; silty clay
 H3—29 to 75 inches; silty clay

Minor Components

Summit

Composition: About 1 percent
Landform: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Upland (pe35-42)

Kenoma

Composition: About 1 percent
Landform: hillslope on paleoterrace on upland
Slope: 1 to 2 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Za—Zaar silty clay, 1 to 4 percent slopes

Map Unit Composition

Zaar: 85 percent
 Minor components: 15 percent

Component Descriptions

Zaar

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Clayey colluvium and/or residuum weathered from shale
Slope: 1 to 4 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 18.9 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 24 inches

Runoff class: Medium

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silty clay
 H2—10 to 24 inches; silty clay
 H3—24 to 56 inches; silty clay
 H4—56 to 60 inches; silty clay

Minor Components

Eram

Composition: About 10 percent
Landform: hillslope on upland
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Woodson

Composition: About 5 percent
Landform: ridge on paleoterrace on upland
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)