

## 011BH—Bolivar-Hector fine sandy loams, 5 to 15 percent slopes

### Map Unit Composition

Bolivar: 65 percent  
Hector: 20 percent  
Minor components: 15 percent

### Component Descriptions

#### Bolivar

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Residuum weathered from sandstone  
*Slope:* 5 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 5.5 inches)  
*Shrink-swell potential:* Moderate (About 5.0 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* High  
*Ecological site:* Savannah (pe35-42)  
*Land capability (nonirrigated):* 6e

#### Typical Profile:

H1—0 to 12 inches; fine sandy loam  
H2—12 to 17 inches; loam  
H3—17 to 26 inches; sandy clay loam  
H4—26 to 34 inches; loam  
Cr—34 to 36 inches; weathered bedrock

#### Hector

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Ridge on upland  
*Hillslope position:* Summit  
*Parent material:* Residuum weathered from sandstone  
*Slope:* 5 to 15 percent  
*Depth to restrictive feature:* 10 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 1.4 inches)  
*Shrink-swell potential:* Low (About 1.1 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):* 6e

#### Typical Profile:

H1—0 to 3 inches; fine sandy loam  
H2—3 to 7 inches; fine sandy loam  
H3—7 to 12 inches; fine sandy loam  
R—12 to 14 inches; unweathered bedrock

### Minor Components

#### 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)

#### Kenoma

*Composition:* About 5 percent  
*Geomorphic Position:* divide on upland terrace on river valley  
*Slope:* 1 to 3 percent  
*Drainage class:* Moderately well drained  
*Ecological site:* Clay Upland (pe35-42)

## 011EC—Eram-Collinsville complex, 5 to 12 percent slopes

### Map Unit Composition

Eram: 75 percent  
Collinsville: 15 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:* 5 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 4.6 inches)  
*Shrink-swell potential:* High (About 8.3 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 10 inches; silty clay loam  
 H2—10 to 30 inches; silty clay  
 Cr—30 to 32 inches; weathered bedrock

**Collinsville**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Ridge on upland  
*Hillslope position:* Shoulder  
*Parent material:* Sandstone residuum  
*Slope:* 5 to 12 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 1.7 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 Sandstone (pe35-42)  
*Land capability (nonirrigated):* 6e

*Typical Profile:*

H1—0 to 14 inches; fine sandy loam  
 R—14 to 16 inches; unweathered bedrock

**Minor Components**

**Bates**

*Composition:* About 6 percent  
*Geomorphic Position:* 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)

**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)

**011LE—Leanna silt loam, occasionally flooded**

**Map Unit Composition**

Leanna: 85 percent

Minor components: 15 percent

**Component Descriptions**

**Leanna**

*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 10.1 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 6 inches; silt loam  
 H2—6 to 13 inches; silt loam  
 H3—13 to 38 inches; silty clay  
 H4—38 to 60 inches; silty clay loam

**Minor Components**

**Mason**

*Composition:* About 15 percent  
*Slope:* 0 to 1 percent  
*Drainage class:* Well drained  
*Ecological site:* Loamy Lowland (pe35-42)

**011MA—Mason silt loam, rarely flooded**

**Map Unit Composition**

Mason: 90 percent  
 Minor components: 10 percent

**Component Descriptions**

**Mason**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Flood plain 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 17 inches; silt loam  
 H2—17 to 60 inches; silty clay loam

#### Minor Components

##### Lanton

*Composition:* About 10 percent  
*Slope:* 0 to 1 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Loamy Lowland (pe35-42)

### 011RC—Ringo-Clareson complex, 9 to 15 percent slopes

#### Map Unit Composition

Ringo: 70 percent  
 Clareson: 15 percent  
 Minor components: 15 percent

#### Component Descriptions

##### Ringo

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Residuum weathered from limestone  
*Slope:* 9 to 15 percent  
*Depth to restrictive feature:* 20 to 40 inches to bedrock (paralithic)  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Very slow (About 0.00 in/hr)  
*Available water capacity:* Low (About 5.0 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 10 inches; silty clay  
 H2—10 to 30 inches; silty clay

Cr—30 to 31 inches; weathered bedrock

##### Clareson

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Ridge on upland  
*Hillslope position:* Summit  
*Parent material:* Silty and clayey residuum weathered from limestone  
*Slope:* 1 to 4 percent  
*Surface fragments:* About 1 to 3 percent rounded stones  
*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 3.1 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):* 6s

*Typical Profile:*  
 H1—0 to 10 inches; stony silty clay loam  
 H2—10 to 15 inches; very flaggy silty clay loam  
 H3—15 to 32 inches; extremely flaggy silty clay  
 R—32 to 34 inches; unweathered bedrock

#### Minor Components

##### Catoosa

*Composition:* About 8 percent  
*Geomorphic Position:* ridge on upland  
*Slope:* 0 to 2 percent  
*Depth to restrictive feature:* 20 to 40 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Ecological site:* Loamy Upland (pe35-42)

##### Zaar

*Composition:* About 7 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 2 to 6 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

### 011ZB—Zaar silty clay, 2 to 6 percent slopes

#### Map Unit Composition

Zaar: 90 percent  
 Minor components: 10 percent

## Component Descriptions

### Zaar

*MLRA:* 112 - Cherokee Prairies

*Landform:* Hillslope on upland

*Hillslope position:* Footslope

*Parent material:* Ancient alluvium and/or clayey colluvium and/or residuum weathered from shale

*Slope:* 2 to 6 percent

*Drainage class:* Somewhat poorly drained

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

*Available water capacity:* Moderate (About 8.4 inches)

*Shrink-swell potential:* Very high (About 11.5 LEP)

*Flooding hazard:* None

*Depth to seasonal water saturation:* About 12 to 24 inches

*Runoff class:* Very high

*Ecological site:* Clay Upland (pe35-42)

*Land capability (nonirrigated):* 4e

#### Typical Profile:

H1—0 to 15 inches; silty clay

H2—15 to 48 inches; silty clay

H3—48 to 60 inches; silty clay

### Minor Components

#### Clareson

*Composition:* About 6 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)

#### Ringo

*Composition:* About 4 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 9 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)

## 021ES—Eram-Shidler silty clay loams, 4 to 12 percent slopes

### Map Unit Composition

Eram: 50 percent

Shidler: 40 percent

Minor components: 10 percent

## Component Descriptions

### Eram

*MLRA:* 112 - Cherokee Prairies

*Landform:* Ridge on upland

*Hillslope position:* Backslope

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

*Slope:* 6 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 4.0 inches)

*Shrink-swell potential:* Low (About 2.9 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):* 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:* Hillslope on upland

*Hillslope position:* Backslope

*Parent material:* Residuum weathered from limestone

*Slope:* 4 to 8 percent

*Depth to restrictive feature:* 10 to 20 inches to bedrock (lithic)

*Drainage class:* Well drained

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

*Available water capacity:* Very low (About 2.4 inches)

*Shrink-swell potential:* Moderate (About 5.3 LEP)

*Flooding hazard:* None

*Depth to seasonal water saturation:* More than 6 feet

*Runoff class:* High

*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

#### Zaar

*Composition:* About 5 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

*Drainage class:* Moderately well drained  
*Ecological site:* Loamy Lowland (pe35-42)

**Dennis**

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

**133EB—Eram silty clay loam, 1 to 3 percent slopes****Map Unit Composition**

Eram: 90 percent  
 Minor components: 10 percent

**021OS—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  
*Slope:* 0 to 2 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 12.5 LEP)  
*Flooding hazard:* Occasional  
*Ponding hazard:* Occasional  
*Depth to seasonal water saturation:* About 6 to 18 inches  
*Runoff class:* Negligible  
*Ecological site:* Clay Lowland (pe35-42)  
*Land capability (nonirrigated):* 3w

*Typical Profile:*

H1—0 to 6 inches; silty clay  
 H2—6 to 17 inches; silty clay  
 H3—17 to 60 inches; 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

**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 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 4.9 inches)  
*Shrink-swell potential:* High (About 8.3 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* About 6 to 31 inches  
*Runoff class:* High  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 3e

*Typical Profile:*

H1—0 to 11 inches; silty clay  
 H2—11 to 32 inches; clay  
 Cr—32 to 36 inches; weathered bedrock

**Minor Components****Bates**

*Composition:* About 5 percent  
*Geomorphic Position:* ridge on upland  
*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* 20 to 40 inches to bedrock (paralithic)  
*Drainage class:* Well drained  
*Ecological site:* Loamy Upland (pe35-42)

**Lebo**

*Composition:* About 5 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 8 to 15 percent  
*Depth to restrictive feature:* 20 to 40 inches to bedrock (paralithic)  
*Drainage class:* Well drained  
*Ecological site:* Loamy Upland (pe35-42)

## 133ET—Eram-Lebo silty clay loams, 4 to 15 percent slopes

### Map Unit Composition

Eram: 50 percent  
Lebo: 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:* 8 to 10 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 8.3 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* About 6 to 31 inches  
*Runoff class:* Very high  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 6e

*Typical Profile:*  
H1—0 to 8 inches; silty clay  
H2—8 to 27 inches; 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, clayey  
*Slope:* 8 to 15 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 5.9 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 16 inches; silty clay loam  
H2—16 to 27 inches; channery silty clay loam  
H3—27 to 32 inches; extremely channery silty clay loam  
Cr—32 to 36 inches; weathered bedrock

### Minor Components

#### Bates

*Composition:* About 5 percent  
*Geomorphic Position:* 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)

#### Collinsville

*Composition:* About 5 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 4 to 20 percent  
*Depth to restrictive feature:* 10 to 20 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Ecological site:* Shallow Sandstone (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)

## AED—Arents, Earthen Dam

## Ba—Bates loam, 1 to 4 percent slopes

### Map Unit Composition

Bates: 99 percent  
Minor components: 1 percent

### Component Descriptions

#### Bates

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope 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:* 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:* Low (About 5.8 inches)  
*Shrink-swell potential:* Moderate (About 3.5 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 23 inches; clay loam  
 H3—23 to 33 inches; clay loam  
 Cr—33 to 37 inches; weathered bedrock

**Minor Components****Dennis**

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

**Bb—Bates loam, 1 to 4 percent slopes, eroded****Map Unit Composition**

Bates: 99 percent  
 Minor components: 1 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:* 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:* Low (About 5.4 inches)  
*Shrink-swell potential:* Moderate (About 3.5 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 12 inches; loam  
 H2—12 to 19 inches; clay loam  
 H3—19 to 29 inches; clay loam  
 Cr—29 to 33 inches; weathered bedrock

**Minor Components****Dennis**

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

**Bc—Bates loam, 4 to 7 percent slopes****Map Unit Composition**

Bates: 99 percent  
 Minor components: 1 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:* Low (About 5.4 inches)  
*Shrink-swell potential:* Moderate (About 3.5 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 12 inches; loam  
 H2—12 to 19 inches; clay loam  
 H3—19 to 29 inches; clay loam  
 Cr—29 to 33 inches; weathered bedrock

**Minor Components**

**Dennis**

*Composition:* About 1 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 4 to 7 percent  
*Drainage class:* Moderately well drained  
*Ecological site:* Loamy Upland (pe35-42)

**Bd—Bates loam, 4 to 7 percent slopes, eroded**

**Map Unit Composition**

Bates: 99 percent  
 Minor components: 1 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:* Low (About 5.4 inches)  
*Shrink-swell potential:* Moderate (About 3.5 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 12 inches; loam  
 H2—12 to 19 inches; clay loam  
 H3—19 to 29 inches; clay loam  
 Cr—29 to 33 inches; weathered bedrock

**Minor Components**

**Dennis**

*Composition:* About 1 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 4 to 7 percent  
*Drainage class:* Moderately well drained  
*Ecological site:* Loamy Upland (pe35-42)

**Be—Bolivar-Hector complex, 5 to 12 percent slopes**

**Map Unit Composition**

Bolivar: 65 percent  
 Hector: 35 percent

**Component Descriptions**

**Bolivar**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Residuum weathered from sandstone  
*Slope:* 5 to 12 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 5.7 inches)  
*Shrink-swell potential:* Moderate (About 4.7 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* High  
*Ecological site:* Savannah (pe35-42)  
*Land capability (nonirrigated):* 6e

*Typical Profile:*

H1—0 to 10 inches; silt loam  
 H2—10 to 25 inches; silty clay loam  
 H3—25 to 32 inches; silty clay loam  
 Cr—32 to 36 inches; weathered bedrock

**Hector**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope



*Parent material:* Residuum weathered from sandstone  
*Slope:* 5 to 12 percent  
*Depth to restrictive feature:* 10 to 20 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Slowest permeability:* Moderate (About 0.57 in/hr)  
*Available water capacity:* Very low (About 1.4 inches)  
*Shrink-swell potential:* Low (About 1.8 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):* 6e

*Typical Profile:*

H1—0 to 2 inches; silt loam  
 H2—2 to 12 inches; silt loam  
 R—12 to 16 inches; unweathered bedrock

## **Bk—Hepler silt loam, frequently flooded**

### **Map Unit Composition**

Hepler Sil, Frequently Flooded: 100 percent

### **Component Descriptions**

#### **Hepler Sil, Frequently Flooded**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Flood plain on river valley  
*Parent material:* Silty alluvium  
*Slope:* 0 to 3 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 3.3 LEP)  
*Flooding hazard:* Frequent  
*Depth to seasonal water saturation:* About 12 to 36 inches  
*Runoff class:* Medium  
*Ecological site:* Loamy Lowland (pe35-42)  
*Land capability (nonirrigated):* 5w

*Typical Profile:*

H1—0 to 22 inches; silt loam  
 H2—22 to 35 inches; silty clay loam

H3—35 to 60 inches; silty clay loam

## **CA—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  
*Geomorphic Position:* hillslope on upland  
*Slope:* 1 to 3 percent  
*Drainage class:* Moderately well drained  
*Ecological site:* Clay Upland (pe35-42)

#### **Zaar**

*Composition:* About 4 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 3 to 7 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

## Ce—Cherokee silt loam, 0 to 1 percent slopes

### Map Unit Composition

Cherokee: 99 percent  
Minor components: 1 percent

### Component Descriptions

#### Cherokee

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Paleoterrace on upland  
*Parent material:* Loess over ancient 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 9.3 inches)  
*Shrink-swell potential:* Very high (About 9.4 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* About 0 to 18 inches  
*Runoff class:* High  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 3w

#### Typical Profile:

H1—0 to 15 inches; silt loam  
H2—15 to 45 inches; clay  
H3—45 to 60 inches; silty clay loam

#### Minor Components

##### Parsons

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

## Cf—Clareson flaggy silty clay loam, 0 to 3 percent slopes

### Map Unit Composition

Clareson: 97 percent  
Minor components: 3 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:* 0 to 3 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 2.5 inches)  
*Shrink-swell potential:* High (About 8.1 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):* 6s

#### Typical Profile:

H1—0 to 8 inches; flaggy silty clay loam  
H2—8 to 12 inches; flaggy silty clay loam  
H3—12 to 23 inches; very flaggy silty clay  
H4—23 to 27 inches; very flaggy silty clay  
R—27 to 31 inches; unweathered bedrock

#### Minor Components

##### Lula

*Composition:* About 1 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* 40 to 60 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Ecological site:* Loamy Upland (pe35-42)

##### Ringo

*Composition:* About 1 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 3 to 9 percent  
*Depth to restrictive feature:* 20 to 40 inches to bedrock (paralithic)  
*Drainage class:* Moderately well drained  
*Ecological site:* Clay Upland (pe35-42)

##### Zaar

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

**De—Dennis silt loam, 1 to 4 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 4 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:* High (About 6.5 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):* 2e

*Typical Profile:*

H1—0 to 12 inches; silt loam  
 H2—12 to 17 inches; silty clay loam  
 H3—17 to 60 inches; clay

**Minor Components****Bates**

*Composition:* About 1 percent  
*Geomorphic Position:* 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)

**Parsons**

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

**Df—Dennis silt loam, 1 to 4 percent slopes, eroded****Map Unit Composition**

Dennis: 100 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:* Moderate (About 8.9 inches)  
*Shrink-swell potential:* High (About 6.5 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; silty clay loam  
 H2—7 to 60 inches; clay

**Dg—Dennis silt loam, 4 to 7 percent slopes****Map Unit Composition**

Dennis: 99 percent  
 Minor components: 1 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:* 4 to 7 percent  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Slow (About 0.06 in/hr)

*Available water capacity:* High (About 9.2 inches)  
*Shrink-swell potential:* High (About 6.5 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):* 3e

*Typical Profile:*  
 H1—0 to 7 inches; silt loam  
 H2—7 to 12 inches; silty clay loam  
 H3—12 to 60 inches; clay

### Minor Components

#### Bates

*Composition:* About 1 percent  
*Geomorphic Position:* 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)

## Dh—Dennis silt loam, 4 to 7 percent slopes, eroded

### Map Unit Composition

Dennis: 100 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:* 4 to 7 percent  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Slow (About 0.06 in/hr)  
*Available water capacity:* Moderate (About 8.9 inches)  
*Shrink-swell potential:* High (About 6.5 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 7 inches; silty clay loam  
 H2—7 to 60 inches; clay

## Dp—Dennis-Parsons silt loams, 1 to 4 percent slopes

### Map Unit Composition

Dennis: 60 percent  
 Parsons: 40 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 9.4 inches)  
*Shrink-swell potential:* High (About 6.5 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 12 inches; silt loam  
 H2—12 to 17 inches; silty clay loam  
 H3—17 to 60 inches; clay

#### Parsons

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Loess over ancient clayey alluvium and/or residuum weathered from shale  
*Slope:* 1 to 3 percent  
*Drainage class:* Somewhat poorly drained  
*Slowest permeability:* Very slow (About 0.00 in/hr)  
*Available water capacity:* Moderate (About 9.0 inches)  
*Shrink-swell potential:* High (About 7.7 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):* 3e

*Typical Profile:*

H1—0 to 12 inches; silt loam  
 H2—12 to 38 inches; clay  
 H3—38 to 60 inches; silty clay loam

## **EC—Eram silty clay 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 4.5 inches)  
*Shrink-swell potential:* High (About 8.3 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* About 6 to 31 inches  
*Runoff class:* High  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 4e

*Typical Profile:*

H1—0 to 10 inches; silty clay  
 H2—10 to 29 inches; silty clay  
 Cr—29 to 31 inches; weathered bedrock

#### **Minor Components**

##### **Lebo**

*Composition:* About 5 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 8 to 15 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 5 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)

## **Er—Dennis silty clay loam, 3 to 8 percent slopes, severely eroded**

### **Map Unit Composition**

Dennis Sicl, 3-8%, Eroded: 100 percent

### **Component Descriptions**

#### **Dennis Sicl, 3-8%, Eroded**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Residuum weathered from shale  
*Slope:* 3 to 8 percent  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Slow (About 0.06 in/hr)  
*Available water capacity:* Moderate (About 8.8 inches)  
*Shrink-swell potential:* High (About 6.5 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 7 inches; silty clay loam  
 H2—7 to 60 inches; clay

## **Gd—Girard silty clay loam, frequently flooded**

### **Map Unit Composition**

Girard: 96 percent  
 Minor components: 4 percent

## Component Descriptions

### Girard

*MLRA:* 112 - Cherokee Prairies

*Landform:* Flood plain on valley

*Parent material:* Residuum weathered from limestone

*Slope:* 0 to 1 percent

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

*Drainage class:* Poorly drained

*Slowest permeability:* Slow (About 0.06 in/hr)

*Available water capacity:* Low (About 5.2 inches)

*Shrink-swell potential:* Very high (About 11.2 LEP)

*Flooding hazard:* Frequent

*Depth to seasonal water saturation:* About 0 to 24 inches

*Runoff class:* High

*Ecological site:* Clay Lowland (pe35-42)

*Land capability (nonirrigated):* 5w

#### Typical Profile:

H1—0 to 17 inches; silty clay loam

H2—17 to 34 inches; silty clay

R—34 to 38 inches; unweathered bedrock

### Minor Components

#### Clareson

*Composition:* About 1 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:* Shallow Flats (pe35-42)

#### Hepler Sil, Frequently Flooded

*Composition:* About 1 percent

*Slope:* 0 to 3 percent

*Drainage class:* 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)

#### Zaar

*Composition:* About 1 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 1 to 3 percent

*Drainage class:* Somewhat poorly drained

*Ecological site:* Clay Upland (pe35-42)

## He—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 11.4 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 22 inches; silt loam

H2—22 to 35 inches; silt loam

H3—35 to 60 inches; silty clay loam

### Minor Components

#### McCune

*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)

#### Radley

*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 3 percent slopes****Map Unit Composition**

Kenoma: 90 percent  
 Minor components: 10 percent

**Component Descriptions****Kenoma**

*MLRA:* 112 - Cherokee Prairies

*Landform:* Hillslope on upland

*Hillslope position:* Summit

*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 10.1 inches)

*Shrink-swell potential:* High (About 8.7 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 8 inches; silt loam

H2—8 to 32 inches; silty clay

H3—32 to 60 inches; silty clay

**Minor Components****Zaar**

*Composition:* About 6 percent

*Geomorphic Position:* hillslope on upland

drainageway on upland

*Slope:* 3 to 7 percent

*Drainage class:* Somewhat poorly drained

*Ecological site:* Clay Upland (pe35-42)

**Catoosa**

*Composition:* About 4 percent

*Slope:* 0 to 2 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: 95 percent  
 Minor components: 5 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 9.9 inches)

*Shrink-swell potential:* Moderate (About 4.3 LEP)

*Flooding hazard:* Occasional

*Depth to seasonal water saturation:* About 12 to 24 inches

*Runoff class:* High

*Ecological site:* Loamy Lowland (pe35-42)

*Land capability (nonirrigated):* 2w

**Typical Profile:**

H1—0 to 7 inches; silt loam

H2—7 to 21 inches; silt loam

H3—21 to 39 inches; silty clay loam

H4—39 to 60 inches; silty clay

**Minor Components****Osage**

*Composition:* About 5 percent

*Slope:* 0 to 2 percent

*Drainage class:* Poorly drained

*Ecological site:* Clay Lowland (pe35-42)

**Ls—Lula silt loam, 1 to 3 percent slopes****Map Unit Composition**

Lula: 97 percent  
 Minor components: 3 percent

**Component Descriptions****Lula**

*MLRA:* 112 - Cherokee Prairies

*Landform:* Hillslope on upland

*Hillslope position:* Summit

*Parent material:* Residuum weathered from limestone, unspecified

*Slope:* 1 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 8.1 inches)

*Shrink-swell potential:* Moderate (About 4.8 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):* 2e

*Typical Profile:*

H1—0 to 9 inches; silty clay loam

H2—9 to 41 inches; silty clay loam

H3—41 to 45 inches; silty clay loam

R—45 to 49 inches; unweathered bedrock

### Minor Components

#### Clareson

*Composition:* About 1 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:* Shallow Flats (pe35-42)

#### Dennis

*Composition:* About 1 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 1 to 4 percent

*Drainage class:* Moderately well drained

*Ecological site:* Loamy Upland (pe35-42)

#### Zaar

*Composition:* About 1 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 1 to 3 percent

*Drainage class:* Somewhat poorly drained

*Ecological site:* Clay Upland (pe35-42)

### Lt—Lula silty clay loam, 1 to 3 percent slopes, eroded

#### Map Unit Composition

Lula: 100 percent

### Component Descriptions

#### Lula

*MLRA:* 112 - Cherokee Prairies

*Landform:* Hillslope on upland

*Hillslope position:* Backslope

*Parent material:* Residuum weathered from limestone, unspecified

*Slope:* 1 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 8.1 inches)

*Shrink-swell potential:* Moderate (About 4.8 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 6 inches; silty clay loam

H2—6 to 41 inches; silty clay loam

H3—41 to 45 inches; silty clay loam

R—45 to 49 inches; unweathered bedrock

### Lu—Lula-Clareson complex, 1 to 3 percent slopes

#### Map Unit Composition

Lula: 50 percent

Clareson: 50 percent

### Component Descriptions

#### Lula

*MLRA:* 112 - Cherokee Prairies

*Landform:* Hillslope on upland

*Hillslope position:* Backslope

*Parent material:* Residuum weathered from limestone, unspecified

*Slope:* 1 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 8.1 inches)



*Shrink-swell potential:* Moderate (About 4.8 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 9 inches; silty clay loam

H2—9 to 41 inches; silty clay loam

H3—41 to 45 inches; silty clay

R—45 to 49 inches; unweathered bedrock

**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 3 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 2.5 inches)

*Shrink-swell potential:* High (About 8.1 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):* 6s

*Typical Profile:*

H1—0 to 8 inches; flaggy silty clay loam

H2—8 to 12 inches; flaggy silty clay loam

H3—12 to 23 inches; very flaggy silty clay

H4—23 to 27 inches; very flaggy silty clay

R—27 to 31 inches; unweathered bedrock

**M-W—Miscellaneous Water**

**Mc—McCune silt loam, occasionally flooded**

**Map Unit Composition**

McCune: 98 percent

Minor components: 2 percent

**Component Descriptions**

**McCune**

*MLRA:* 112 - Cherokee Prairies

*Landform:* Flood plain on river valley

*Parent material:* Alluvium

*Slope:* 0 to 1 percent

*Drainage class:* Somewhat poorly drained

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

*Available water capacity:* Very high (About 12.0 inches)

*Shrink-swell potential:* Low (About 2.1 LEP)

*Flooding hazard:* Occasional

*Depth to seasonal water saturation:* About 6 to 24 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 46 inches; silty clay loam

H3—46 to 60 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)

**Radley**

*Composition:* About 1 percent

*Slope:* 0 to 1 percent

*Drainage class:* Moderately well drained

*Ecological site:* Loamy Lowland (pe35-42)

**Md—Kanima silty clay loam, 3 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:* Residuum

*Slope:* 3 to 50 percent

*Drainage class:* Well drained

*Slowest permeability:* Moderately slow (About 0.20 in/hr)  
*Available water capacity:* Low (About 4.5 inches)  
*Shrink-swell potential:* Moderate (About 4.3 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* 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

## **Os—Osage 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 6.8 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:* Very high  
*Ecological site:* Clay Lowland (pe35-42)  
*Land capability (nonirrigated):* 3w

*Typical Profile:*

H1—0 to 15 inches; silty clay  
 H2—15 to 30 inches; clay  
 H3—30 to 60 inches; clay

#### **Minor Components**

##### **Hepler**

*Composition:* About 1 percent  
*Slope:* 0 to 1 percent

*Drainage class:* Somewhat poorly drained  
*Ecological site:* Loamy Lowland (pe35-42)

#### **Radley**

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

#### **Zaar**

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

## **Pa—Parsons silt loam, 0 to 1 percent slopes**

### **Map Unit Composition**

Parsons: 98 percent  
 Minor components: 2 percent

### **Component Descriptions**

#### **Parsons**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Paleoterrace on upland  
*Hillslope position:* Summit  
*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:* Very slow (About 0.00 in/hr)  
*Available water capacity:* High (About 9.1 inches)  
*Shrink-swell potential:* High (About 7.7 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):* 2s

*Typical Profile:*

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

#### **Minor Components**

##### **Dennis**

*Composition:* About 1 percent  
*Geomorphic Position:* hillslope on upland

*Slope:* 1 to 4 percent  
*Drainage class:* Moderately well drained  
*Ecological site:* Loamy Upland (pe35-42)

**Cherokee**

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

**Pb—Parsons silt loam, 1 to 3 percent slopes****Map Unit Composition**

Parsons: 97 percent  
 Minor components: 3 percent

**Component Descriptions****Parsons**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Loess over ancient clayey alluvium and/or residuum weathered from shale  
*Slope:* 1 to 3 percent  
*Drainage class:* Somewhat poorly drained  
*Slowest permeability:* Very slow (About 0.00 in/hr)  
*Available water capacity:* High (About 9.1 inches)  
*Shrink-swell potential:* High (About 7.7 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):* 3e

*Typical Profile:*

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

**Minor Components****Dennis**

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

**Bates**

*Composition:* About 1 percent  
*Geomorphic Position:* 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)

**Cherokee**

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

**Pc—Parsons silt loam, 1 to 3 percent slopes, eroded****Map Unit Composition**

Parsons: 99 percent  
 Minor components: 1 percent

**Component Descriptions****Parsons**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Loess over ancient clayey alluvium and/or residuum weathered from shale  
*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:* High (About 7.7 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 7 inches; silt loam  
 H2—7 to 33 inches; silty clay  
 H3—33 to 60 inches; silty clay

**Minor Components****Dennis**

*Composition:* About 1 percent

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

## **Ra—Radley silt loam, occasionally flooded**

### **Map Unit Composition**

Radley: 98 percent  
 Minor components: 2 percent

### **Component Descriptions**

#### **Radley**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Flood plain on river valley  
*Parent material:* Alluvium  
*Slope:* 0 to 1 percent  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Moderate (About 0.60 in/hr)  
*Available water capacity:* Very high (About 12.2 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 12 inches; silt loam  
 H2—12 to 60 inches; silt loam

### **Minor Components**

#### **McCune**

*Composition:* About 1 percent  
*Slope:* 0 to 1 percent  
*Drainage class:* Somewhat poorly 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)

## **Rh—Radley-Hepler silt loams, frequently flooded**

### **Map Unit Composition**

Radley: 50 percent  
 Hepler: 40 percent  
 Minor components: 10 percent

### **Component Descriptions**

#### **Radley**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Flood plain on river valley  
*Parent material:* Alluvium  
*Slope:* 0 to 1 percent  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Moderate (About 0.60 in/hr)  
*Available water capacity:* Very high (About 12.2 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 12 inches; silt loam  
 H2—12 to 60 inches; silt loam

#### **Hepler**

*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:* Moderately slow (About 0.20 in/hr)  
*Available water capacity:* High (About 11.4 inches)  
*Shrink-swell potential:* Moderate (About 3.3 LEP)  
*Flooding hazard:* Frequent  
*Depth to seasonal water saturation:* About 12 to 36 inches  
*Runoff class:* Medium  
*Ecological site:* Loamy Lowland (pe35-42)  
*Land capability (nonirrigated):* 5w

#### *Typical Profile:*

H1—0 to 22 inches; silt loam  
 H2—22 to 35 inches; silt loam  
 H3—35 to 60 inches; silty clay loam

**Minor Components****McCune**

*Composition:* About 10 percent  
*Slope:* 0 to 1 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Loamy Lowland (pe35-42)

*Slope:* 1 to 3 percent

*Drainage class:* Somewhat poorly drained

*Ecological site:* Clay Upland (pe35-42)

## **Rn—Ringo silty clay, 3 to 9 percent slopes**

### **Map Unit Composition**

Ringo: 98 percent  
 Minor components: 2 percent

### **Component Descriptions**

**Ringo**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Escarpment on upland  
*Hillslope position:* Backslope  
*Parent material:* Residuum weathered from limestone  
*Slope:* 3 to 9 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:* Very high (About 9.9 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):* 4e

*Typical Profile:*

H1—0 to 10 inches; silty clay  
 H2—10 to 26 inches; silty clay  
 Cr—26 to 40 inches; weathered bedrock

**Minor Components****Clareson**

*Composition:* About 1 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:* Shallow Flats (pe35-42)

**Zaar**

*Composition:* About 1 percent  
*Geomorphic Position:* hillslope on upland

## **Ro—Ringo silty clay, 3 to 9 percent slopes, eroded**

### **Map Unit Composition**

Ringo: 100 percent

### **Component Descriptions**

**Ringo**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Upland, escarpment  
*Hillslope position:* Backslope  
*Parent material:* Residuum weathered from limestone  
*Slope:* 3 to 9 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 3.1 inches)  
*Shrink-swell potential:* Very high (About 9.9 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):* 4e

*Typical Profile:*

H1—0 to 4 inches; silty clay  
 H2—6 to 20 inches; silty clay  
 Cr—20 to 34 inches; weathered bedrock

## **Rp—Ringo complex, 9 to 15 percent slopes**

### **Map Unit Composition**

Ringo: 60 percent  
 Clareson: 30 percent

## Component Descriptions

### Ringo

*MLRA:* 112 - Cherokee Prairies

*Landform:* Escarpment on upland

*Hillslope position:* Backslope

*Parent material:* Residuum weathered from limestone

*Slope:* 9 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 3.1 inches)

*Shrink-swell potential:* Very high (About 9.9 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 4 inches; silty clay

H2—6 to 20 inches; silty clay

Cr—20 to 34 inches; weathered bedrock

### Clareson-Like

*MLRA:* 112 - Cherokee Prairies

*Landform:* Hillslope on upland

*Hillslope position:* Backslope

*Parent material:* Silty and clayey residuum weathered from limestone, unspecified

*Slope:* 5 to 12 percent

*Depth to restrictive feature:* 16 to 40 inches to bedrock (lithic)

*Drainage class:* Well drained

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

*Available water capacity:* Very low (About 1.9 inches)

*Shrink-swell potential:* High (About 8.1 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):* 6s

#### Typical Profile:

H1—0 to 4 inches; flaggy silty clay loam

H2—4 to 10 inches; flaggy silty clay loam

H3—10 to 18 inches; very flaggy silty clay

R—18 to 22 inches; unweathered bedrock

## SC—Shidler-Catoosa silt loams, 1 to 8 percent slopes

### Map Unit Composition

Shidler: 50 percent

Catoosa: 40 percent

Minor components: 10 percent

### Component Descriptions

#### Shidler

*MLRA:* 112 - Cherokee Prairies

*Landform:* Drainageway on upland

*Parent material:* Residuum weathered from limestone

*Slope:* 3 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 2.4 inches)

*Shrink-swell potential:* Low (About 1.7 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 12 inches; silt loam

R—12 to 14 inches; unweathered bedrock

#### Catoosa

*MLRA:* 112 - Cherokee Prairies

*Landform:* Ridge on upland

*Hillslope position:* Backslope

*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 5.3 inches)

*Shrink-swell potential:* Very high (About 9.3 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 10 inches; silt loam  
H2—10 to 31 inches; silty clay loam  
R—31 to 33 inches; unweathered bedrock

**Minor Components**

**Lebo**

*Composition:* About 5 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 8 to 15 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  
*Drainage class:* Well drained

**VA—Verdigris silt loam, occasionally flooded**

**Map Unit Composition**

Verdigris: 95 percent  
Minor components: 5 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:* Very high (About 12.4 inches)  
*Shrink-swell potential:* Low (About 2.2 LEP)  
*Flooding hazard:* Occasional  
*Depth to seasonal water saturation:* More than 6 feet  
*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 27 inches; silt loam  
H3—27 to 44 inches; silt loam  
H4—44 to 60 inches; silt loam

**Minor Components**

**Osage**

*Composition:* About 5 percent  
*Slope:* 0 to 2 percent  
*Drainage class:* Poorly drained  
*Ecological site:* Clay Lowland (pe35-42)

**VB—Verdigris silt loam, channeled**

**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:* Well drained  
*Slowest permeability:* Moderate (About 0.60 in/hr)  
*Available water capacity:* Very high (About 12.3 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 22 inches; silt loam  
H2—22 to 60 inches; silt loam

**Minor Components**

**Dennis**

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

**W—Water**

**Za—Zaar silty clay, 1 to 3 percent slopes****Map Unit Composition**

Zaar: 96 percent  
 Minor components: 4 percent

**Component Descriptions****Zaar**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Footslope  
*Parent material:* Ancient alluvium and/or clayey colluvium and/or residuum weathered from shale  
*Slope:* 1 to 3 percent  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Slow (About 0.06 in/hr)  
*Available water capacity:* Moderate (About 8.5 inches)  
*Shrink-swell potential:* Very high (About 11.5 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* About 14 to 22 inches  
*Runoff class:* High  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 3e

*Typical Profile:*

H1—0 to 16 inches; silty clay  
 H2—16 to 38 inches; silty clay  
 H3—38 to 53 inches; silty clay  
 H4—53 to 60 inches; silty clay

**Minor Components****Dennis**

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

**Parsons**

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

**Lula**

*Composition:* About 1 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* 40 to 60 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Ecological site:* Loamy Upland (pe35-42)

**Ringo**

*Composition:* About 1 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 3 to 9 percent  
*Depth to restrictive feature:* 20 to 40 inches to bedrock (paralithic)  
*Drainage class:* Moderately well drained  
*Ecological site:* Clay Upland (pe35-42)

**ZAA—Zaar silty clay, 0 to 2 percent slopes****Map Unit Composition**

Zaar: 90 percent  
 Minor components: 10 percent

**Component Descriptions****Zaar**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Footslope  
*Parent material:* Ancient alluvium and/or clayey colluvium and/or residuum weathered from 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 8.4 inches)  
*Shrink-swell potential:* Very high (About 11.5 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* About 12 to 24 inches  
*Runoff class:* Very high  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 3w

*Typical Profile:*

H1—0 to 15 inches; silty clay  
 H2—15 to 48 inches; silty clay  
 H3—48 to 60 inches; silty clay

**Minor Components****Kenoma**

*Composition:* About 10 percent  
*Geomorphic Position:* terrace on river valley divide on upland  
*Slope:* 1 to 3 percent  
*Drainage class:* Moderately well drained  
*Ecological site:* Clay Upland (pe35-42)



