

## 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)

#### 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)

## 125BF—Bates-Collinsville complex, 1 to 4 percent slopes

### Map Unit Composition

Bates: 50 percent  
Collinsville: 40 percent  
Minor components: 10 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:* 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 3.0 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):* 4e

*Typical Profile:*

H1—0 to 9 inches; loam  
 H2—9 to 15 inches; loam  
 H3—15 to 31 inches; clay loam  
 Cr—31 to 35 inches; weathered bedrock

**Collinsville**

*MLRA:* 112 - Cherokee Prairies

*Landform:* Ridge on upland

*Hillslope position:* Backslope

*Parent material:* Sandstone residuum

*Slope:* 1 to 4 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 2.1 inches)

*Shrink-swell potential:* Low (About 1.6 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):* 6e

*Typical Profile:*

H1—0 to 11 inches; fine sandy loam  
 H2—11 to 17 inches; fine sandy loam  
 R—17 to 21 inches; unweathered bedrock

**Minor Components****Eram**

*Composition:* About 5 percent

*Geomorphic Position:* ridge on upland

*Slope:* 1 to 4 percent

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

*Drainage class:* Moderately well drained

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

**Talihina**

*Composition:* About 5 percent

*Geomorphic Position:* upland

ridge

*Slope:* 6 to 20 percent

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

*Drainage class:* Well drained

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

**Ae—Apperson silty clay loam, 1 to 3 percent slopes****Map Unit Composition**

Apperson: 85 percent

Minor components: 15 percent

**Component Descriptions****Apperson**

*MLRA:* 112 - Cherokee Prairies

*Landform:* Ridge on upland

*Hillslope position:* Summit

*Parent material:* Residuum weathered from limestone

*Slope:* 1 to 3 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 8.1 inches)

*Shrink-swell potential:* Very high (About 10.4 LEP)

*Flooding hazard:* None

*Depth to seasonal water saturation:* About 12 to 18 inches

*Runoff class:* Medium

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

*Land capability (nonirrigated):* 2e

*Typical Profile:*

H1—0 to 7 inches; silty clay loam  
 H2—7 to 13 inches; silty clay loam  
 H3—13 to 24 inches; silty clay  
 H4—24 to 49 inches; silty clay  
 R—49 to 53 inches; unweathered bedrock

**Minor Components****Catoosa**

*Composition:* About 10 percent

*Geomorphic Position:* ridge on upland

*Slope:* 1 to 2 percent

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

*Drainage class:* Well drained

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

**Shidler**

*Composition:* About 5 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 1 to 8 percent

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

*Drainage class:* Well drained

*Ecological site:* Shallow Limy (pe35-42)

**AED—Arents, Earthen Dam****Be—Bates loam, 1 to 3 percent slopes****Map Unit Composition**

Bates: 85 percent  
 Minor components: 15 percent

**Component Descriptions****Bates**

*MLRA:* 112 - Cherokee Prairies

*Landform:* Hillslope on upland

*Hillslope position:* Summit

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

silty residuum weathered from sandstone-shale

*Slope:* 1 to 3 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 4.8 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):* 2e

**Typical Profile:**

H1—0 to 9 inches; loam

H2—9 to 16 inches; loam

H3—16 to 30 inches; clay loam

Cr—30 to 34 inches; weathered bedrock

**Minor Components****Collinsville**

*Composition:* About 10 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 4 to 15 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 5 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 1 to 3 percent

*Drainage class:* Moderately well drained

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

**Bf—Bates loam, 3 to 7 percent slopes****Map Unit Composition**

Bates: 85 percent  
 Minor components: 15 percent

**Component Descriptions****Bates**

*MLRA:* 112 - Cherokee Prairies

*Landform:* Hillslope on upland

*Hillslope position:* Backslope

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

silty residuum weathered from sandstone-shale

*Slope:* 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 4.1 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 7 inches; loam

H2—7 to 12 inches; loam

H3—12 to 26 inches; clay loam

Cr—26 to 30 inches; weathered bedrock

**Minor Components****Collinsville**

*Composition:* About 10 percent

*Geomorphic Position:* hillslope on upland

*Slope:* 4 to 15 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 5 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 1 to 3 percent  
*Drainage class:* Moderately well drained  
*Ecological site:* Loamy Upland (pe35-42)

### **Bm—Bates-Collinsville complex, 4 to 15 percent slopes**

#### **Map Unit Composition**

Bates: 50 percent  
 Collinsville: 35 percent  
 Minor components: 15 percent

#### **Component Descriptions**

##### **Bates**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-shale  
*Slope:* 4 to 8 percent  
*Depth to restrictive feature:* 20 to 40 inches to bedrock (paralithic)  
*Drainage class:* Well drained  
*Slowest permeability:* Moderately slow (About 0.20 in/hr)  
*Available water capacity:* Low (About 4.2 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):* 6e

##### *Typical Profile:*

H1—0 to 8 inches; loam  
 H2—8 to 12 inches; loam  
 H3—12 to 27 inches; clay loam  
 Cr—27 to 31 inches; unweathered bedrock

##### **Collinsville**

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

*Parent material:* Sandstone residuum  
*Slope:* 4 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 1.7 inches)  
*Shrink-swell potential:* Low (About 1.7 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* Low  
*Ecological site:* Shallow Sandstone (pe35-42)  
*Land capability (nonirrigated):* 6e

##### *Typical Profile:*

H1—0 to 8 inches; fine sandy loam  
 H2—8 to 13 inches; fine sandy loam  
 R—13 to 17 inches; unweathered bedrock

#### **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)

##### **Eram**

*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:* Moderately well drained  
*Ecological site:* Clay Upland (pe35-42)

### **Bo—Bolivar-Hector fine sandy loams, 4 to 20 percent slopes**

#### **Map Unit Composition**

Bolivar: 65 percent  
 Hector: 25 percent  
 Minor components: 10 percent

#### **Component Descriptions**

##### **Bolivar**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Ridge on upland  
*Hillslope position:* Summit  
*Parent material:* Residuum weathered from sandstone

*Slope:* 4 to 20 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 3.3 inches)  
*Shrink-swell potential:* Moderate (About 4.7 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* Medium  
*Ecological site:* Savannah (pe35-42)  
*Land capability (nonirrigated):* 6e

*Typical Profile:*

H1—0 to 5 inches; fine sandy loam  
 H2—5 to 12 inches; fine sandy loam  
 H3—12 to 27 inches; clay loam  
 Cr—27 to 41 inches;  
 R—41 to 45 inches; unweathered bedrock

**Hector**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Ridge on upland  
*Hillslope position:* Backslope  
*Parent material:* Residuum weathered from sandstone  
*Slope:* 4 to 20 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 1.5 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 Savannah (pe35-42)  
*Land capability (nonirrigated):* 7e

*Typical Profile:*

H1—0 to 3 inches; fine sandy loam  
 H2—3 to 8 inches; fine sandy loam  
 H3—8 to 15 inches; fine sandy loam  
 R—15 to 19 inches; unweathered bedrock

**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)

**Br—Brazilton silty clay loam, 1 to 4 percent slopes**

**Map Unit Composition**

Brazilton: 100 percent

**Component Descriptions**

**Brazilton**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Mine spoil or earthy fill  
*Slope:* 1 to 4 percent  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Very slow (About 0.00 in/hr)  
*Available water capacity:* Moderate (About 7.0 inches)  
*Shrink-swell potential:* Moderate (About 5.9 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* Very high  
*Land capability (nonirrigated):* 3e

*Typical Profile:*

H1—0 to 15 inches; silty clay loam  
 H2—15 to 42 inches; silty clay  
 H3—42 to 60 inches; very gravelly silty clay loam, very channery silty clay loam

**Cd—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:* 1 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 6.0 inches)  
*Shrink-swell potential:* High (About 7.4 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* Medium  
*Ecological site:* Loamy Upland (pe35-42)  
*Land capability (nonirrigated):* 2e

*Typical Profile:*

H1—0 to 12 inches; silty clay loam  
 H2—12 to 38 inches; silty clay loam  
 R—38 to 42 inches; unweathered bedrock

**Minor Components**

**Apperson**

*Composition:* About 2 percent  
*Geomorphic Position:* ridge on upland  
*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* 40 to 60 inches to bedrock (lithic)  
*Drainage class:* Moderately well drained  
*Ecological site:* Loamy Upland (pe35-42)

**Rock outcrop**

*Composition:* About 2 percent

**Kenoma**

*Composition:* About 2 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 1 to 3 percent  
*Drainage class:* Moderately well drained  
*Ecological site:* Clay Upland (pe35-42)

**Shidler**

*Composition:* About 2 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* 4 to 20 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Ecological site:* Shallow Limy (pe35-42)

**Zaar**

*Composition:* About 2 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

**Ch—Cherokee silt loam, 0 to 1 percent slopes**

**Map Unit Composition**

Cherokee: 100 percent

**Component Descriptions**

**Cherokee**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Paleoterrace on upland  
*Hillslope position:* Summit  
*Parent material:* Loess over ancient clayey alluvium  
*Slope:* 0 to 1 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 10.8 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* About 6 to 18 inches  
*Runoff class:* Medium  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 2s

*Typical Profile:*

H1—0 to 7 inches; silt loam  
 H2—7 to 13 inches; silt loam  
 H3—13 to 43 inches; clay  
 H4—43 to 60 inches; silty clay loam

**De—Dennis silt loam, 1 to 3 percent slopes**

**Map Unit Composition**

Dennis: 90 percent  
 Minor components: 10 percent

**Component Descriptions**

**Dennis**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on 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:* Slow (About 0.06 in/hr)  
*Available water capacity:* High (About 9.7 inches)  
*Shrink-swell potential:* Very high (About 9.4 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 28 inches; silty clay  
 H4—28 to 60 inches; silty clay

**Minor Components**

**Bates**

*Composition:* About 10 percent  
*Geomorphic Position:* hillslope 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)

**Ef—Eram silty clay loam, 1 to 3 percent slopes**

**Map Unit Composition**

Eram: 85 percent  
 Minor components: 15 percent

**Component Descriptions**

**Eram**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Silty and clayey residuum weathered from shale, unspecified  
*Slope:* 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 3.4 inches)  
*Shrink-swell potential:* High (About 7.4 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 8 inches; silty clay loam  
 H2—8 to 18 inches; clay  
 H3—18 to 26 inches; clay  
 Cr—26 to 30 inches; weathered bedrock

**Minor Components**

**Bates**

*Composition:* About 10 percent  
*Geomorphic Position:* hillslope 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)

**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)

**Eh—Eram silty clay loam, 3 to 7 percent slopes**

**Map Unit Composition**

Eram: 88 percent  
 Minor components: 12 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 3.6 inches)  
*Shrink-swell potential:* High (About 7.1 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; silty clay loam  
 H2—7 to 28 inches; clay  
 Cr—28 to 32 inches; weathered bedrock

**Minor Components****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)

**Lebo**

*Composition:* About 4 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)

**Zaar**

*Composition:* About 3 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

**Eo—Eram-Lebo silty clay loams, 4 to 20 percent slopes****Map Unit Composition**

Eram: 60 percent  
 Lebo: 20 percent  
 Minor components: 20 percent

**Component Descriptions****Eram**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Silty and clayey residuum weathered from shale, unspecified  
*Slope:* 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 3.7 inches)  
*Shrink-swell potential:* High (About 7.1 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 28 inches; silty clay  
 Cr—28 to 32 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:* Moderate (About 0.60 in/hr)  
*Available water capacity:* Low (About 4.3 inches)  
*Shrink-swell potential:* Moderate (About 4.7 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 9 inches; silty clay loam  
 H2—9 to 15 inches; silty clay loam  
 H3—15 to 22 inches; channery silty clay loam  
 H4—22 to 32 inches; extremely channery silty clay loam  
 Cr—32 to 36 inches; weathered bedrock

**Minor Components****Zaar**

*Composition:* About 10 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

**Collinsville**

*Composition:* About 10 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 4 to 15 percent  
*Depth to restrictive feature:* 4 to 20 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Ecological site:* Shallow Sandstone (pe35-42)



## Es—Eram-Nowata complex, 2 to 7 percent slopes

### Map Unit Composition

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

### Component Descriptions

#### Eram

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Silty and clayey residuum weathered from shale, unspecified  
*Slope:* 2 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 3.6 inches)  
*Shrink-swell potential:* High (About 7.1 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; silty clay loam  
H2—7 to 28 inches; clay  
Cr—28 to 32 inches; weathered bedrock

#### Nowata

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Ridge on upland  
*Hillslope position:* Backslope  
*Parent material:* Residuum weathered from limestone  
*Slope:* 2 to 7 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 4.3 inches)  
*Shrink-swell potential:* Moderate (About 5.2 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 8 inches; silt loam  
H2—8 to 13 inches; gravelly silty clay loam  
H3—13 to 36 inches; very channery silty clay loam  
R—36 to 40 inches; unweathered bedrock

### Minor Components

#### Apperson

*Composition:* About 8 percent  
*Geomorphic Position:* ridge on upland  
*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* 40 to 60 inches to bedrock (lithic)  
*Drainage class:* Moderately well drained  
*Ecological site:* Loamy Upland (pe35-42)

#### Dennis

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

#### Shidler

*Composition:* About 6 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* 4 to 20 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Ecological site:* Shallow Limy (pe35-42)

## He—Hepler silt loam, occasionally flooded

### Map Unit Composition

Hepler: 95 percent  
Minor components: 5 percent

### Component Descriptions

#### Hepler

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Flood plain on river valley  
*Parent material:* Silty alluvium  
*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Slowest permeability:* Moderately slow (About 0.20 in/hr)  
*Available water capacity:* High (About 11.7 inches)  
*Shrink-swell potential:* Moderate (About 3.2 LEP)

*Flooding hazard:* Occasional  
*Depth to seasonal water saturation:* About 12 to 36 inches  
*Runoff class:* Low  
*Ecological site:* Loamy Lowland (pe35-42)  
*Land capability (nonirrigated):* 2w

*Typical Profile:*

H1—0 to 9 inches; silt loam  
 H2—9 to 24 inches; silt loam  
 H3—24 to 44 inches; silty clay loam  
 H4—44 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)

**HF—Hepler silt loam, frequently flooded**

**Map Unit Composition**

Hepler: 95 percent  
 Minor components: 5 percent

**Component Descriptions**

**Hepler**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Flood plain on river valley  
*Parent material:* Silty alluvium  
*Slope:* 0 to 3 percent  
*Drainage class:* Somewhat poorly drained  
*Slowest permeability:* Moderately slow (About 0.20 in/hr)  
*Available water capacity:* Very high (About 12.4 inches)  
*Shrink-swell potential:* Moderate (About 4.5 LEP)  
*Flooding hazard:* Frequent  
*Depth to seasonal water saturation:* About 12 to 36 inches  
*Runoff class:* Low  
*Ecological site:* Loamy Lowland (pe35-42)  
*Land capability (nonirrigated):* 5w

*Typical Profile:*

H1—0 to 10 inches; silt loam  
 H2—10 to 30 inches; silt loam  
 H3—30 to 60 inches; silty clay loam

**Minor Components**

**Osage**

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

**Ka—Kanima silty clay loam, 3 to 7 percent slopes**

**Map Unit Composition**

Kanima: 100 percent

**Component Descriptions**

**Kanima**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Mine spoil or earthy fill  
*Slope:* 3 to 7 percent  
*Drainage class:* Well drained  
*Slowest permeability:* Moderate (About 0.60 in/hr)  
*Available water capacity:* Low (About 4.5 inches)  
*Shrink-swell potential:* Moderate (About 3.1 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* Medium  
*Land capability (nonirrigated):* 6s

*Typical Profile:*

H1—0 to 6 inches; silty clay loam  
 H2—6 to 60 inches; very channery silty clay loam

**Kb—Kanima silty clay loam, 10 to 30 percent slopes**

**Map Unit Composition**

Kanima: 95 percent  
 Minor components: 5 percent

**Component Descriptions**

**Kanima**

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

*Hillslope position:* Backslope  
*Parent material:* Mine spoil or earthy fill  
*Slope:* 10 to 30 percent  
*Drainage class:* Well drained  
*Slowest permeability:* Moderate (About 0.60 in/hr)  
*Available water capacity:* Low (About 4.5 inches)  
*Shrink-swell potential:* Moderate (About 3.1 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; silty clay loam  
 H2—6 to 60 inches; very channery silty clay loam

#### **Minor Components**

##### **Miscellaneous Water**

*Composition:* About 5 percent

*Land capability (nonirrigated):* 3e

#### *Typical Profile:*

H1—0 to 6 inches; silt loam  
 H2—6 to 13 inches; silt loam  
 H3—13 to 26 inches; silty clay  
 H4—26 to 49 inches; silty clay  
 H5—49 to 60 inches; silty clay loam

#### **Minor Components**

##### **Catoosa**

*Composition:* About 10 percent  
*Geomorphic Position:* ridge on upland  
*Slope:* 1 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 5 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

### **Ke—Kenoma silt loam, 1 to 3 percent slopes**

#### **Map Unit Composition**

Kenoma: 85 percent  
 Minor components: 15 percent

#### **Component Descriptions**

##### **Kenoma**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*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:* Very slow (About 0.00 in/hr)  
*Available water capacity:* High (About 9.7 inches)  
*Shrink-swell potential:* Very high (About 9.6 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* About 6 to 18 inches  
*Runoff class:* High  
*Ecological site:* Clay Upland (pe35-42)

### **Ln—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 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 5.4 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 8 inches; silt loam

H2—8 to 37 inches; silty clay loam  
H3—37 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)

## M-W—Miscellaneous Water

### Od—Olpe-Dennis silt loams, 3 to 7 percent slopes

#### Map Unit Composition

Olpe: 50 percent  
Dennis: 35 percent  
Minor components: 15 percent

#### Component Descriptions

##### Olpe

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Paleoterrace on upland  
*Hillslope position:* Backslope  
*Parent material:* Ancient clayey alluvium  
*Slope:* 3 to 7 percent  
*Drainage class:* Well drained  
*Slowest permeability:* Slow (About 0.06 in/hr)  
*Available water capacity:* Low (About 3.8 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:* Loamy Upland (pe35-42)  
*Land capability (nonirrigated):* 4e

##### Typical Profile:

H1—0 to 7 inches; silt loam  
H2—7 to 13 inches; gravelly silt loam  
H3—13 to 30 inches; very gravelly silty clay loam  
H4—30 to 44 inches; very gravelly silty clay  
H5—44 to 60 inches; silty clay

##### 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:* Slow (About 0.06 in/hr)  
*Available water capacity:* High (About 9.8 inches)  
*Shrink-swell potential:* Very high (About 9.4 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 10 inches; silt loam  
H2—10 to 15 inches; silty clay loam  
H3—15 to 30 inches; silty clay  
H4—30 to 60 inches; silty clay

### Minor Components

#### Eram

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

#### Shidler

*Composition:* About 5 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 1 to 8 percent  
*Depth to restrictive feature:* 4 to 20 inches to bedrock (lithic)  
*Drainage class:* Well drained  
*Ecological site:* Shallow Limy (pe35-42)

## Or—Orthents, Clayey

#### Map Unit Composition

Orthents: 100 percent

#### Component Descriptions

##### Orthents

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope on upland  
*Hillslope position:* Backslope  
*Parent material:* Mine spoil or earthy fill  
*Slope:* 1 to 3 percent  
*Drainage class:* Well drained  
*Slowest permeability:* Very slow (About 0.00 in/hr)

*Available water capacity:* Low (About 5.6 inches)  
*Shrink-swell potential:* High (About 7.5 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet

*Runoff class:* High  
*Land capability (nonirrigated):* 4e

*Typical Profile:*

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

## **Os—Osage silty clay, occasionally flooded**

### **Map Unit Composition**

Osage: 93 percent  
Minor components: 7 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 8.1 inches)  
*Shrink-swell potential:* Very high (About 14.5 LEP)  
*Flooding hazard:* Occasional  
*Ponding hazard:* Occasional  
*Depth to seasonal water saturation:* About 0 to 12 inches  
*Runoff class:* High  
*Ecological site:* Clay Lowland (pe35-42)  
*Land capability (nonirrigated):* 3w

*Typical Profile:*

H1—0 to 12 inches; silty clay  
H2—12 to 17 inches; silty clay  
H3—17 to 30 inches; clay  
H4—30 to 60 inches; clay

#### **Minor Components**

##### **Hepler**

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

#### **Lanton**

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

#### **Verdigris**

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

## **Pe—Parsons silt loam, 0 to 2 percent slopes**

### **Map Unit Composition**

Parsons: 91 percent  
Minor components: 9 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 2 percent  
*Drainage class:* Somewhat poorly drained  
*Slowest permeability:* Slow (About 0.06 in/hr)  
*Available water capacity:* High (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:* High  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 2s

*Typical Profile:*

H1—0 to 8 inches; silt loam  
H2—8 to 13 inches; silt loam  
H3—13 to 36 inches; silty clay  
H4—36 to 60 inches; silty clay

#### **Minor Components**

##### **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)

**Zaar**

*Composition:* About 4 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

**Pt—Pits, Quarries**

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

**Sd—Shidler-Catoosa silt loams, 1 to 8 percent slopes****Map Unit Composition**

Shidler: 50 percent  
 Catoosa: 35 percent  
 Minor components: 15 percent

**Component Descriptions****Shidler**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Hillslope 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 2.4 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 Limy (pe35-42)  
*Land capability (nonirrigated):* 6e

*Typical Profile:*

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

**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 6.0 inches)  
*Shrink-swell potential:* High (About 7.4 LEP)  
*Flooding hazard:* None  
*Depth to seasonal water saturation:* More than 6 feet  
*Runoff class:* Medium  
*Ecological site:* Loamy Upland (pe35-42)  
*Land capability (nonirrigated):* 3e

*Typical Profile:*

H1—0 to 12 inches; silty clay loam  
 H2—12 to 38 inches; clay  
 R—38 to 42 inches; unweathered bedrock

**Minor Components****Eram**

*Composition:* About 15 percent  
*Geomorphic Position:* 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)

**Vc—Verdigris silt loam, frequently flooded****Map Unit Composition**

Verdigris: 85 percent  
 Minor components: 15 percent

**Component Descriptions****Verdigris**

*MLRA:* 112 - Cherokee Prairies  
*Landform:* Flood plain on river valley  
*Parent material:* Silty alluvium  
*Slope:* 0 to 2 percent  
*Drainage class:* Moderately well drained  
*Slowest permeability:* Moderate (About 0.60 in/hr)  
*Available water capacity:* High (About 12.0 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 11 inches; silt loam  
 H2—11 to 34 inches; silt loam  
 H3—34 to 43 inches; silt loam  
 H4—43 to 60 inches; silty clay loam

### Minor Components

#### Zaar

*Composition:* About 10 percent  
*Geomorphic Position:* hillslope on upland  
*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

#### Eram

*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:* Moderately well drained  
*Ecological site:* Clay Upland (pe35-42)

## Vf—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:* Moderate (About 0.60 in/hr)  
*Available water capacity:* Very high (About 12.5 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 34 inches; silt loam  
 H2—34 to 60 inches; silt loam

### Minor Components

#### Osage

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

## W—Water

## Zb—Zaar silty clay, 0 to 2 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:* 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 8.7 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:* Medium  
*Ecological site:* Clay Upland (pe35-42)  
*Land capability (nonirrigated):* 3w

*Typical Profile:*

H1—0 to 7 inches; silty clay  
 H2—7 to 17 inches; silty clay  
 H3—17 to 54 inches; silty clay  
 H4—54 to 60 inches; silty clay

### Minor Components

#### Parsons

*Composition:* About 10 percent  
*Geomorphic Position:* paleoterrace on  
 upland  
*Slope:* 0 to 2 percent  
*Drainage class:* Somewhat poorly drained  
*Ecological site:* Clay Upland (pe35-42)

**Verdigris**

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