

## Weld County, Colorado, Northern Part

### 4—Ascalon fine sandy loam, 0 to 6 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2tlp5

*Elevation:* 4,550 to 6,050 feet

*Mean annual precipitation:* 12 to 17 inches

*Mean annual air temperature:* 46 to 54 degrees F

*Frost-free period:* 135 to 160 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Ascalon and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Ascalon

##### Setting

*Landform:* Interfluves

*Landform position (two-dimensional):* Backslope, summit

*Landform position (three-dimensional):* Interfluve

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Wind-reworked alluvium and/or calcareous sandy eolian deposits

##### Typical profile

*Ap - 0 to 7 inches:* fine sandy loam

*Bt1 - 7 to 13 inches:* sandy clay loam

*Bt2 - 13 to 18 inches:* sandy clay loam

*Bk - 18 to 48 inches:* sandy loam

*C - 48 to 80 inches:* sandy loam

##### Properties and qualities

*Slope:* 0 to 6 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):*

Moderately high to high (0.60 to 6.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline (0.1 to 1.9 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 1.0

*Available water storage in profile:* Moderate (about 6.8 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

### **Minor Components**

#### **Olnest**

*Percent of map unit:* 8 percent  
*Landform:* Interfluves  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

#### **Otero**

*Percent of map unit:* 7 percent  
*Landform:* Interfluves  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Base slope  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Northern Part  
Survey Area Data: Version 12, Oct 10, 2017

## Weld County, Colorado, Northern Part

### 46—Otero sandy loam, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 3600

*Elevation:* 4,500 to 5,500 feet

*Mean annual precipitation:* 12 to 15 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 130 to 180 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Otero and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Otero

##### Setting

*Landform:* Alluvial fans, plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Calcareous loamy alluvium

##### Typical profile

*H1 - 0 to 5 inches:* sandy loam

*H2 - 5 to 60 inches:* sandy loam, fine sandy loam

*H2 - 5 to 60 inches:*

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):*

Moderately high to high (0.57 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

*Available water storage in profile:* Very high (about 14.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* Sandy Plains (R067BY024CO)

*Hydric soil rating:* No

### **Minor Components**

#### **Stoneham**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### **Bushman**

*Percent of map unit:* 4 percent

*Hydric soil rating:* No

#### **Kim**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

#### **Mitchell**

*Percent of map unit:* 3 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Northern Part

Survey Area Data: Version 12, Oct 10, 2017

## Weld County, Colorado, Northern Part

### 60—Shingle clay loam, 0 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* 360j  
*Elevation:* 3,600 to 5,500 feet  
*Mean annual precipitation:* 10 to 13 inches  
*Mean annual air temperature:* 46 to 48 degrees F  
*Frost-free period:* 110 to 140 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Shingle and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Shingle

##### Setting

*Landform:* Plains, breaks, ridges  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Calcareous, clayey loamy residuum weathered from shale

##### Typical profile

*H1 - 0 to 4 inches:* clay loam  
*H2 - 4 to 11 inches:* clay loam  
*H3 - 11 to 15 inches:* unweathered bedrock

##### Properties and qualities

*Slope:* 0 to 9 percent  
*Depth to restrictive feature:* 10 to 20 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Very low (about 2.1 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* D  
*Ecological site:* Shaly Plains (R067BY045CO)

*Hydric soil rating:* No

**Minor Components**

**Reno Hill**

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

**Thedalund**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

**Keota**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

**Data Source Information**

Soil Survey Area: Weld County, Colorado, Northern Part  
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