

## Map Unit Description

Weld County, Colorado, Southern Part

51 Otero sandy loam, 1 to 3 percent slopes

### Setting

Elevation: 4700 to 5250 feet  
Mean annual precipitation: 12 to 15 inches  
Mean annual air temperature: 48 to 52 degrees F  
Frost-free period: 130 to 180 days

### Composition

Otero and similar soils: 85 percent  
Minor components: 15 percent

### Description of Otero

#### Setting

Landform: Plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Eolian deposits and/or mixed outwash

#### Properties and Qualities

Slope: 1 to 3 percent  
Drainage class: Well drained  
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.57 to 5.95 in/hr)  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 10 percent  
Gypsum maximum: 0 percent  
Available water capacity: Moderate (about 7.7 inches)

#### Interpretive Groups

Land capability classification (irrigated): 3e  
Land capability (non irrigated): 4e  
Ecological site: Sandy Plains (R067BY024CO)

#### Typical Profile

0 to 12 inches: sandy loam  
12 to 60 inches: fine sandy loam

### Minor Components

#### Kim

Percent of map unit: 10 percent

#### Vona

Percent of map unit: 5 percent

Shoemaker A12-23D

Shoemaker AA07-63 HN

Shoemaker AA07-6S HN

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6th P.M. Section 12:

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## Map Unit Description

Weld County, Colorado, Southern Part

### 35 Loup-Boel loamy sands, 0 to 3 percent slopes

#### Setting

Elevation: 4550 to 4750 feet  
Mean annual precipitation: 11 to 15 inches  
Mean annual air temperature: 46 to 52 degrees F  
Frost-free period: 130 to 180 days

#### Composition

Loup and similar soils: 55 percent  
Boel and similar soils: 35 percent  
Minor components: 10 percent

#### Description of Loup

##### Setting

Landform: Swales, drainageways, streams  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Sandy alluvium

##### Properties and Qualities

Slope: 0 to 3 percent  
Drainage class: Poorly drained  
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)  
Depth to water table: About 0 to 18 inches  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 5 percent  
Gypsum maximum: 0 percent  
Available water capacity: Low (about 5.2 inches)

##### Interpretive Groups

Land capability classification (irrigated): 4w  
Land capability (non irrigated): 6w  
Ecological site: Sandy Meadow (R067BY029CO)

##### Typical Profile

0 to 16 inches: loamy sand  
16 to 40 inches: loamy sand  
40 to 60 inches: sandy loam

#### Description of Boel

##### Setting

Landform: Drainageways, streams, swales  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Stratified sandy alluvium

##### Properties and Qualities

Slope: 0 to 3 percent  
Drainage class: Somewhat poorly drained  
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)  
Depth to water table: About 18 to 36 inches  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 5 percent  
Gypsum maximum: 0 percent  
Available water capacity: Low (about 4.2 inches)

##### Interpretive Groups

Land capability classification (irrigated): 4w  
Land capability (non irrigated): 6w  
Ecological site: Sandy Meadow (R067BY029CO)

##### Typical Profile

Shoemaker A12-23 D

Shoemaker AA 07-63 HN

Shoemaker AA 07-65 HN

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## Map Unit Description

Weld County, Colorado, Southern Part

0 to 14 inches: loamy sand  
14 to 60 inches: loamy sand

### Minor Components

#### Osgood

Percent of map unit: 5 percent

#### Valent

Percent of map unit: 5 percent

Shoe Marker A12-23D  
Shoe marker AA07-63 HN  
Shoemaker AA07-65 HN  
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