

# Map Unit Description

Weld County, Colorado, Southern Part

## 52 Otero sandy loam, 3 to 5 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: 3 to 5 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: 12 percent

#### Vona

Percent of map unit: 3 percent

## Map Unit Description

Weld County, Colorado, Southern Part

### 38 Nelson fine sandy loam, 3 to 9 percent slopes

#### Setting

Elevation: 4800 to 5050 feet  
Mean annual precipitation: 13 to 15 inches  
Mean annual air temperature: 48 to 57 degrees F  
Frost-free period: 145 to 190 days

#### Composition

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

#### Description of Nelson

##### Setting

Landform: Plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Residuum weathered from sandstone

##### Properties and Qualities

Slope: 3 to 9 percent  
Depth to restrictive feature: 20 to 40 inches to Paralithic bedrock  
Drainage class: Well drained  
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or high (0.06 to 2.00 in/hr)  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 10 percent  
Gypsum maximum: 0 percent  
Available water capacity: Low (about 3.7 inches)

##### Interpretive Groups

Land capability classification (irrigated): 4e  
Land capability (non irrigated): 6e  
Ecological site: Sandy Plains (R067BY024CO)

##### Typical Profile

0 to 9 inches: fine sandy loam  
9 to 30 inches: fine sandy loam  
30 to 34 inches: weathered bedrock

#### Minor Components

##### Thedalund

Percent of map unit: 10 percent

##### Terry

Percent of map unit: 5 percent