

## Map Unit Description

Weld County, Colorado, Southern Part

### 2 Altvan loam, 1 to 3 percent slopes

#### Setting

Elevation: 4500 to 4900 feet  
Mean annual precipitation: 14 to 16 inches  
Mean annual air temperature: 46 to 48 degrees F  
Frost-free period: 130 to 150 days

#### Composition

Altvan and similar soils: 90 percent  
Minor components: 10 percent

#### Description of Altvan

##### Setting

Landform: Terraces  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Old alluvium

##### 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 (0.20 to 2.00 in/hr)  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 5 percent  
Gypsum maximum: 0 percent  
Available water capacity: Low (about 5.6 inches)

##### Interpretive Groups

Land capability classification (irrigated): 3e  
Land capability (non irrigated): 4e  
Ecological site: Loamy Plains (R067BY002CO)

##### Typical Profile

0 to 10 inches: loam  
10 to 24 inches: sandy clay loam  
24 to 60 inches: gravelly sand

#### Minor Components

##### Cascajo

Percent of map unit: 9 percent

##### Aquic haplustolls

Percent of map unit: 1 percent  
Landform: Swales

## Map Unit Description

Weld County, Colorado, Southern Part

### 32 Kim loam, 1 to 3 percent slopes

#### Setting

Elevation: 4900 to 5250 feet  
Mean annual precipitation: 13 to 17 inches  
Mean annual air temperature: 46 to 52 degrees F  
Frost-free period: 125 to 150 days

#### Composition

Kim and similar soils: 90 percent  
Minor components: 10 percent

#### Description of Kim

##### Setting

Landform: Alluvial fans, plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Mixed eolian deposits derived from sedimentary rock

##### 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: 15 percent  
Gypsum maximum: 0 percent  
Available water capacity: Moderate (about 9.0 inches)

##### Interpretive Groups

Land capability classification (irrigated): 3e  
Land capability (non irrigated): 4e  
Ecological site: Loamy Plains (R067BY002CO)

##### Typical Profile

0 to 12 inches: loam  
12 to 40 inches: loam  
40 to 60 inches: fine sandy loam

#### Minor Components

##### Otero

Percent of map unit: 10 percent

## 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