

# Map Unit Description

Weld County, Colorado, Southern Part

## 72 Vona loamy sand, 0 to 3 percent slopes

### Setting

Elevation: 4600 to 5200 feet  
Mean annual precipitation: 13 to 15 inches  
Mean annual air temperature: 48 to 55 degrees F  
Frost-free period: 130 to 160 days

### Composition

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

### Description of Vona

#### Setting

Landform: Terraces, plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Alluvium and/or eolian deposits

#### Properties and Qualities

Slope: 0 to 3 percent  
Drainage class: Well drained  
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 6.00 in/hr)  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 15 percent  
Gypsum maximum: 0 percent  
Available water capacity: Moderate (about 6.5 inches)

#### Interpretive Groups

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

#### Typical Profile

0 to 6 inches: loamy sand  
6 to 28 inches: fine sandy loam  
28 to 60 inches: sandy loam

### Minor Components

#### Remmit

Percent of map unit: 10 percent

#### Valent

Percent of map unit: 5 percent

# Map Unit Description

Weld County, Colorado, Southern Part

## 70 Valent sand, 3 to 9 percent slopes

### Setting

Elevation: 4650 to 5100 feet  
Mean annual precipitation: 13 to 19 inches  
Mean annual air temperature: 48 to 52 degrees F  
Frost-free period: 130 to 180 days

### Composition

Valent and similar soils: 95 percent  
Minor components: 5 percent

### Description of Valent

#### Setting

Landform: Plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Eolian deposits

#### Properties and Qualities

Slope: 3 to 9 percent  
Drainage class: Excessively drained  
Capacity of the most limiting layer to transmit water (Ksat): High or very high (5.95 to 19.98 in/hr)  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 0 percent  
Gypsum maximum: 0 percent  
Available water capacity: Very low (about 2.6 inches)

#### Interpretive Groups

Land capability classification (irrigated): 4e  
Land capability (non irrigated): 6e  
Ecological site: Deep Sand (R067BY015CO)

#### Typical Profile

0 to 8 inches: fine sand  
8 to 60 inches: sand

### Minor Components

#### Osgood

Percent of map unit: 5 percent

# Map Unit Description

Weld County, Colorado, Southern Part

## 44 Olney loamy sand, 1 to 3 percent slopes

### Setting

Elevation: 4600 to 5200 feet  
Mean annual precipitation: 11 to 15 inches  
Mean annual air temperature: 46 to 54 degrees F  
Frost-free period: 125 to 175 days

### Composition

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

### Description of Olney

#### Setting

Landform: Plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Mixed deposit 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 (0.60 to 2.00 in/hr)  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 15 percent  
Gypsum maximum: 0 percent  
Available water capacity: Moderate (about 6.5 inches)

#### Interpretive Groups

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

#### Typical Profile

0 to 10 inches: loamy sand  
10 to 20 inches: sandy clay loam  
20 to 25 inches: sandy clay loam  
25 to 60 inches: fine sandy loam

### Minor Components

#### Vona

Percent of map unit: 8 percent

#### Zigweid

Percent of map unit: 7 percent