

## 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

## 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

**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

### 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