

Connell C04-31D  
T4N-R64W-Section 5, NENE

## 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

### 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