

## Weld County, Colorado, Southern Part

### 47—Olney fine sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*Elevation:* 4,600 to 5,200 feet

*Mean annual precipitation:* 11 to 15 inches

*Mean annual air temperature:* 46 to 54 degrees F

*Frost-free period:* 125 to 175 days

#### Map Unit 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

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately high to high (0.57 to 2.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 15 percent

*Maximum salinity:* Nonsaline (0.0 to 2.0 mmhos/cm)

*Available water capacity:* Moderate (about 7.0 inches)

##### Interpretive groups

*Farmland classification:* Prime farmland if irrigated and the product of  
I (soil erodibility) x C (climate factor) does not exceed 60

*Land capability classification (irrigated):* 3e

*Land capability (nonirrigated):* 4c

*Hydrologic Soil Group:* B

*Ecological site:* Sandy Plains (R067BY024CO)

##### Typical profile

*0 to 10 inches:* Fine sandy loam

*10 to 20 inches:* Sandy clay loam

*20 to 25 inches:* Sandy clay loam

*25 to 60 inches:* Fine sandy loam

#### Minor Components

##### Zigweid

*Percent of map unit:* 10 percent

**Vona**

*Percent of map unit: 5 percent*

**Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 12, Jan 3, 2014

## 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