

## Map Unit Description

Weld County, Colorado, Southern Part

### 47 Olney fine sandy loam, 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 (0.57 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 7.0 inches)

##### Interpretive Groups

Land capability classification (irrigated): 3e  
Land capability (non irrigated): 4c  
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

## Map Unit Description

Weld County, Colorado, Southern Part

### 56 Renohill clay loam, 0 to 3 percent slopes

#### Setting

Elevation: 4850 to 5200 feet  
Mean annual precipitation: 11 to 16 inches  
Mean annual air temperature: 46 to 48 degrees F  
Frost-free period: 100 to 160 days

#### Composition

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

#### Description of Renohill

##### Setting

Landform: Plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Residuum weathered from shale

##### Properties and Qualities

Slope: 0 to 3 percent  
Depth to restrictive feature: 20 to 40 inches to Paralithic bedrock  
Drainage class: Well drained  
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 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: Clayey Plains (R067BY042CO)

##### Typical Profile

0 to 9 inches: clay loam  
9 to 32 inches: clay loam  
32 to 36 inches: unweathered bedrock

#### Minor Components

##### Ulm

Percent of map unit: 10 percent

##### Shingle

Percent of map unit: 5 percent

## Map Unit Description

Weld County, Colorado, Southern Part

### 64 Thedalund loam, 1 to 3 percent slopes

#### Setting

Elevation: 4900 to 5250 feet  
Mean annual precipitation: 13 to 15 inches  
Mean annual air temperature: 46 to 48 degrees F  
Frost-free period: 130 to 160 days

#### Composition

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

#### Description of Thedalund

##### Setting

Landform: Plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Residuum weathered from shale

##### Properties and Qualities

Slope: 1 to 3 percent  
Depth to restrictive feature: 20 to 40 inches to Paralithic bedrock  
Drainage class: Well drained  
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or high (0.06 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: Low (about 4.9 inches)

##### Interpretive Groups

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

##### Typical Profile

0 to 8 inches: loam  
8 to 29 inches: loam  
29 to 33 inches: weathered bedrock

#### Minor Components

##### Ulm

Percent of map unit: 10 percent