

## Weld County, Colorado, Northern Part

### 44—Olney fine sandy loam, 0 to 6 percent slopes

#### Map Unit Setting

*National map unit symbol:* 35zy

*Elevation:* 3,500 to 5,800 feet

*Mean annual precipitation:* 11 to 15 inches

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

*Frost-free period:* 125 to 175 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Olney and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Olney

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Calcareous loamy alluvium

##### Typical profile

*H1 - 0 to 6 inches:* fine sandy loam

*H2 - 6 to 18 inches:* sandy clay loam

*H3 - 18 to 60 inches:* sandy loam

*H4 - 60 to 64 inches:* sandy loam

##### Properties and qualities

*Slope:* 0 to 6 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*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 in profile:* 15 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 8.1 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4c

*Hydrologic Soil Group:* B

*Ecological site:* Loamy Plains (R067BY002CO)

*Hydric soil rating:* No

#### **Minor Components**

##### **Stoneham**

*Percent of map unit:* 9 percent

*Hydric soil rating:* No

##### **Ascalon**

*Percent of map unit:* 6 percent

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Northern Part

Survey Area Data: Version 14, Sep 13, 2019

## Weld County, Colorado, Northern Part

### 72—Vona loamy sand, 3 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2x0j7

*Elevation:* 4,000 to 5,600 feet

*Mean annual precipitation:* 12 to 17 inches

*Mean annual air temperature:* 46 to 52 degrees F

*Frost-free period:* 130 to 155 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Vona and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Vona

##### Setting

*Landform:* Hillslopes, hills

*Landform position (two-dimensional):* Backslope, footslope

*Landform position (three-dimensional):* Side slope, base slope

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex, linear

*Parent material:* Eolian sands

##### Typical profile

*A - 0 to 7 inches:* loamy sand

*Bt1 - 7 to 14 inches:* sandy loam

*Bt2 - 14 to 20 inches:* sandy loam

*Bk - 20 to 45 inches:* sandy loam

*C - 45 to 80 inches:* loamy sand

##### Properties and qualities

*Slope:* 3 to 9 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High  
(2.00 to 6.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline (0.1 to 1.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 6.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 6e

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* A  
*Ecological site:* Deep Sand (R067BY015CO)  
*Hydric soil rating:* No

### Minor Components

#### Manter

*Percent of map unit:* 5 percent  
*Landform:* Interfluves, hills  
*Landform position (two-dimensional):* Backslope, footslope  
*Landform position (three-dimensional):* Interfluve, side slope, base slope  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

#### Ascalon

*Percent of map unit:* 5 percent  
*Landform:* Interfluves  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

#### Olneet

*Percent of map unit:* 3 percent  
*Landform:* Interfluves, hills  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Interfluve, base slope  
*Down-slope shape:* Linear, concave  
*Across-slope shape:* Linear, concave  
*Ecological site:* Sandy Plains (R067BY024CO)  
*Hydric soil rating:* No

#### Valent

*Percent of map unit:* 2 percent  
*Landform:* Dunes  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Crest, side slope, nose slope  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Ecological site:* Deep Sand (R067BY015CO)  
*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part  
Survey Area Data: Version 14, Sep 13, 2019