

## Weld County, Colorado, Southern Part

### 51—Otero sandy loam, 1 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 3630

*Elevation:* 4,700 to 5,250 feet

*Mean annual precipitation:* 12 to 15 inches

*Mean annual air temperature:* 48 to 52 degrees F

*Frost-free period:* 130 to 180 days

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

#### Map Unit Composition

*Otero and similar soils:* 85 percent

*Minor components:* 15 percent

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

#### Description of Otero

##### Setting

*Landform:* Plains

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Eolian deposits and/or mixed outwash

##### Typical profile

*H1 - 0 to 12 inches:* sandy loam

*H2 - 12 to 60 inches:* fine sandy loam

##### Properties and qualities

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):*

Moderately high to high (0.57 to 5.95 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 to slightly saline (0.0 to 4.0  
mmhos/cm)

*Available water storage in profile:* Moderate (about 7.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* Sandy Plains (R067BY024CO)

*Hydric soil rating:* No

### Minor Components

#### Kim

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

#### Vona

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 15, Sep 22, 2016

## Weld County, Colorado, Southern Part

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

#### Map Unit Setting

*National map unit symbol:* 363g  
*Elevation:* 4,900 to 5,250 feet  
*Mean annual precipitation:* 13 to 15 inches  
*Mean annual air temperature:* 46 to 48 degrees F  
*Frost-free period:* 130 to 160 days  
*Farmland classification:* Farmland of local importance

#### Map Unit Composition

*Thedalund and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Thedalund

##### Setting

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

##### Typical profile

*H1 - 0 to 8 inches:* loam  
*H2 - 8 to 29 inches:* loam  
*H3 - 29 to 33 inches:* weathered bedrock

##### Properties and qualities

*Slope:* 1 to 3 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):*  
Moderately low to high (0.06 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 moderately saline (0.0 to 8.0 mmhos/cm)  
*Available water storage in profile:* Low (about 4.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4s  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* Loamy Plains (R067BY002CO)  
*Hydric soil rating:* No

A21-13 Pad  
Township 6 North, Range 64 West  
Section 21: SW/4SW/4  
Weld County, CO

### Minor Components

#### Ulm

*Percent of map unit:* 10 percent

*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 15, Sep 22, 2016