

LD12 Production Facility  
T9N-R58W  
Section 12  
N/2 NW/4  
Weld Co, CO

Map Unit Description: Thedalund-Keota loams, 0 to 3 percent slopes---Weld County, Colorado,  
Northern Part

## Weld County, Colorado, Northern Part

### 66—Thedalund-Keota loams, 0 to 3 percent slopes

#### Map Unit Setting

Elevation: 3,500 to 6,500 feet  
Mean annual precipitation: 13 to 17 inches  
Mean annual air temperature: 46 to 48 degrees F  
Frost-free period: 130 to 160 days

#### Map Unit Composition

Thedalund and similar soils: 45 percent  
Keota and similar soils: 30 percent  
Minor components: 25 percent

#### Description of Thedalund

##### Setting

Landform: Ridges, alluvial fans, plains  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Calcareous loamy residuum weathered from sandstone and shale and/or residuum weathered from siltstone

##### 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 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 content: 15 percent  
Maximum salinity: Nonsaline to slightly saline (0.0 to 8.0 mmhos/cm)  
Available water capacity: Low (about 4.3 inches)

##### Interpretive groups

Farmland classification: Not prime farmland  
Land capability classification (irrigated): 4s  
Land capability (nonirrigated): 4e  
Hydrologic Soil Group: C  
Ecological site: Loamy Plains (R067BY002CO)

##### Typical profile

0 to 3 inches: Loam  
3 to 25 inches: Loam  
25 to 29 inches: Weathered bedrock

#### Description of Keota

##### Setting

Landform: Alluvial fans, plains, ridges

#### Associated Wells:

Elway State LD01-74-1AHN, 74HN,  
75-1AHN, 75-1BHN, 75HN, 76-1BHN  
McGaffrey State LD12-74-1AHN,  
74HN, 75-1AHN, 75-1BHN, 75HN,  
76-1BHN  
Morton State LD01-78-1AHN, 78HN,  
79-1AHN, 79-1BHN, 79HN  
Griffith State LD12-71-1AHN, 71HN  
Nalen State LD12-78-1BHN, 76-1AHN,  
76HN, 77-1AHN, 77-1BHN, 77HN  
Atwater State LD01-76-1AHN, 76HN,  
77-1AHN, 77-1BHN, 77HN, 78-1BHN  
Smith State LD12-72-1AHN, 72HN,  
73-1AHN, 73-1BHN, 73HN, 74-1BHN,  
Mecklenburg State LD01-72-1AHN, 72HN,  
73-1AHN, 73-1BHN, 73HN, 74-1BHN

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Calcareous loamy residuum weathered from  
siltstone

#### **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 to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 10 percent  
*Maximum salinity:* Nonsaline (0.0 to 2.0 mmhos/cm)  
*Available water capacity:* Low (about 5.3 inches)

#### **Interpretive groups**

*Farmland classification:* Not prime farmland  
*Land capability classification (irrigated):* 4s  
*Land capability (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* Siltstone Plains (R067BY009CO)

#### **Typical profile**

*0 to 4 inches:* Loam  
*4 to 35 inches:* Silt loam  
*35 to 39 inches:* Unweathered bedrock

#### **Minor Components**

##### **Epping**

*Percent of map unit:* 10 percent

##### **Shingle**

*Percent of map unit:* 5 percent

##### **Mitchell**

*Percent of map unit:* 5 percent

##### **Kim**

*Percent of map unit:* 5 percent

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Northern Part  
Survey Area Data: Version 8, Apr 30, 2009

LD12 Production Facility  
T9N R58W  
Section 12  
N/2 NW/4

Map Unit Description: Kim-Mitchell complex, 0 to 6 percent slopes---Weld County, Colorado,  
Northern Part

Weld Co, CO

## Weld County, Colorado, Northern Part

### 31—Kim-Mitchell complex, 0 to 6 percent slopes

#### Map Unit Setting

Elevation: 3,500 to 6,500 feet  
Mean annual precipitation: 11 to 17 inches  
Mean annual air temperature: 46 to 54 degrees F  
Frost-free period: 120 to 160 days

#### Map Unit Composition

Kim and similar soils: 45 percent  
Mitchell and similar soils: 40 percent  
Minor components: 15 percent

#### Description of Kim

##### Setting

Landform: Plains, alluvial fans  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Calcareous loamy alluvium

##### Properties and qualities

Slope: 0 to 6 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 (0.20 to 0.60 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 to very slightly saline (0.0 to 4.0 mmhos/  
cm)  
Available water capacity: High (about 9.7 inches)

##### Interpretive groups

Farmland classification: Farmland of statewide importance  
Land capability classification (irrigated): 4e  
Land capability (nonirrigated): 4e  
Hydrologic Soil Group: B  
Ecological site: Loamy Plains (R067BY002CO)

##### Typical profile

0 to 3 inches: Loam  
3 to 7 inches: Clay loam  
7 to 60 inches: Loam

#### Description of Mitchell

##### Setting

Landform: Alluvial fans, plains

#### Associated Wells:

Elway State LD01-74-1AHN,  
74HN, 75-1AHN, 75-1BHN,  
75HN, 76-1BHN,

McCaffrey State LD12-74-1AHN,  
74HN, 75-1AHN, 75-1BHN,  
75HN, 76-1BHN,

Morton State LD01-78-1AHN,  
78HN, 79-1AHN, 79-1BHN,  
79HN,

Griffith State LD12-79-1AHN, 79HN,

Nalen State LD12-78-1BHN,  
76-1AHN, 76HN, 77-1AHN,  
77-1BHN, 77HN

Atwater State LD01-76-1AHN,  
76HN, 77-1AHN, 77-1BHN, 77HN,  
78-1BHN

Smith State LD12-72-1AHN,  
72HN, 73-1AHN, 73-1BHN,  
73HN, 74-1BHN

Mecklenburg State LD01-72-1AHN,  
72HN, 73-1AHN, 73-1BHN,  
73HN, 74-1BHN

*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Calcareous loamy alluvium

#### **Properties and qualities**

*Slope:* 0 to 6 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 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Available water capacity:* High (about 10.8 inches)

#### **Interpretive groups**

*Farmland classification:* Farmland of statewide importance  
*Land capability classification (irrigated):* 4e  
*Land capability (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* Siltstone Plains (R067BY009CO)

#### **Typical profile**

*0 to 7 inches:* Silt loam  
*7 to 60 inches:* Silt loam

#### **Minor Components**

##### **Haverson**

*Percent of map unit:* 5 percent

##### **Thedalund**

*Percent of map unit:* 5 percent

##### **Keota**

*Percent of map unit:* 5 percent

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Northern Part  
Survey Area Data: Version 8, Apr 30, 2009