

# Map Unit Description

Weld County, Colorado, Southern Part

48 Olney fine sandy loam, 3 to 5 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: 3 to 5 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: 9 percent

### Vona

Percent of map unit: 6 percent

# Rangeland Productivity and Plant Composition

Weld County, Colorado, Southern Part

| Map symbol<br>and soil name | Ecological site | Total dry-weight production |                |                     | Characteristic vegetation | Rangeland<br>composition |
|-----------------------------|-----------------|-----------------------------|----------------|---------------------|---------------------------|--------------------------|
|                             |                 | Favorable<br>year           | Normal<br>year | Unfavorable<br>year |                           |                          |
|                             |                 | <i>Lb/Ac</i>                | <i>Lb/Ac</i>   | <i>Lb/Ac</i>        |                           | <i>Pct</i>               |
| 48:                         |                 |                             |                |                     |                           |                          |
| Olney                       | Sandy Plains    | 1,500                       | 1,100          | 600                 | Sideoats grama            | 20                       |
|                             |                 |                             |                |                     | Sand dropseed             | 10                       |
|                             |                 |                             |                |                     | Thickspike wheatgrass     | 10                       |
|                             |                 |                             |                |                     | Prairie sandreed          | 5                        |