

## Weld County, Colorado, Southern Part

### 73—Vona loamy sand, 3 to 5 percent slopes

#### Map Unit Setting

*National map unit symbol:* 363s  
*Elevation:* 4,600 to 5,200 feet  
*Mean annual precipitation:* 13 to 15 inches  
*Mean annual air temperature:* 48 to 55 degrees F  
*Frost-free period:* 130 to 160 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:* Terraces, plains  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium and/or eolian deposits

##### Typical profile

*H1 - 0 to 6 inches:* loamy sand  
*H2 - 6 to 28 inches:* fine sandy loam  
*H3 - 28 to 60 inches:* sandy loam

##### Properties and qualities

*Slope:* 3 to 5 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):* High (1.98 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:* 15 percent  
*Salinity, maximum in profile:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 6.5 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* A  
*Ecological site:* Sandy Plains (R067BY024CO)

### **Minor Components**

#### **Remmit**

*Percent of map unit:* 8 percent

#### **Valent**

*Percent of map unit:* 7 percent

## **Data Source Information**

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 14, Sep 22, 2015

## Weld County, Colorado, Southern Part

### 70—Valent sand, 3 to 9 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2tczf  
*Elevation:* 3,050 to 5,150 feet  
*Mean annual precipitation:* 12 to 18 inches  
*Mean annual air temperature:* 48 to 55 degrees F  
*Frost-free period:* 130 to 180 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Valent and similar soils:* 80 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Valent

##### Setting

*Landform:* Dunes, hills  
*Landform position (two-dimensional):* Shoulder, backslope, summit, footslope  
*Landform position (three-dimensional):* Crest, side slope, head slope, nose slope  
*Down-slope shape:* Linear, convex  
*Across-slope shape:* Linear, convex  
*Parent material:* Noncalcareous eolian sands

##### Typical profile

*A - 0 to 5 inches:* sand  
*AC - 5 to 12 inches:* sand  
*C1 - 12 to 30 inches:* sand  
*C2 - 30 to 80 inches:* sand

##### Properties and qualities

*Slope:* 3 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (6.00 to 39.96 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 1 percent  
*Salinity, maximum in profile:* Nonsaline (0.0 to 1.9 mmhos/cm)  
*Available water storage in profile:* Very low (about 2.4 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4e

Map unit symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable	Normal	Unfavorable		
70—Valent sand, 3 to 9 percent slopes						
Valent	Deep Sand; Sands (north) (pe 16-20)	3,000	2,000	1,200	Sand bluestem	25
					Prairie sandreed	15
					Switchgrass	10
					Sand dropseed	10
					Blue grama	10
					Yucca	5
					Little bluestem	5
					Sedge	5
					Needleandthread	5
					Plains pricklypear	5
Sand sagebrush	5					

Map unit symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable	Normal	Unfavorable		
73—Vona loamy sand, 3 to 5 percent slopes						
Vona	Sandy Plains	2,000	1,700	1,200	Prairie sandreed	20
					Switchgrass	10
					Sand bluestem	10
					Sand sagebrush	5
					Sideoats grama	5
					Little bluestem	5
					Needleandthread	5
					Western wheatgrass	5
					Blue grama	—