

Lincoln County, Colorado

206—Vonid-Karval-Midway complex, 5 to 25 percent slopes

Map Unit Setting

National map unit symbol: 3jkc
Elevation: 4,400 to 6,000 feet
Mean annual precipitation: 11 to 16 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 135 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Vonid and similar soils: 35 percent
Karval and similar soils: 30 percent
Midway and similar soils: 20 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Vonid

Setting

Landform: Hills
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits

Typical profile

A - 0 to 6 inches: sandy loam
Bt - 6 to 34 inches: sandy loam
Bk1 - 34 to 52 inches: sandy loam
Bk2 - 52 to 60 inches: sandy loam

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively 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: 15 percent
Available water storage in profile: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A

Ecological site: Sandy Plains LRU's A & B (R069XY026CO)
Hydric soil rating: No

Description of Karval

Setting

Landform: Hills
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 5 inches: gravelly loamy sand
Bk - 5 to 40 inches: gravelly coarse sand
C - 40 to 60 inches: sand

Properties and qualities

Slope: 10 to 25 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 19.99 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Very low (about 2.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: A
Ecological site: Gravel Breaks LRU's A & B (R069XY064CO)
Hydric soil rating: No

Description of Midway

Setting

Landform: Hills
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Slope alluvium derived from shale over residuum weathered from shale

Typical profile

A - 0 to 4 inches: clay loam
By - 4 to 15 inches: clay loam
Cr - 15 to 25 inches: weathered bedrock

Properties and qualities

Slope: 10 to 25 percent
Depth to restrictive feature: 6 to 20 inches to paralithic bedrock
Natural drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 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
Gypsum, maximum in profile: 15 percent
Salinity, maximum in profile: Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 15.0
Available water storage in profile: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: Shaly Plains LRU's A & B (R069XY046CO)
Hydric soil rating: No

Minor Components

Olney

Percent of map unit: 5 percent
Landform: Hills
Landform position (three-dimensional): Side slope
Ecological site: Sandy Plains LRU's A & B (R069XY026CO)
Other vegetative classification: Sandy Plains (069XY026CO_1)
Hydric soil rating: No

Razor

Percent of map unit: 5 percent
Landform: Hills
Landform position (three-dimensional): Side slope
Ecological site: Alkaline Plains LRU's A & B (R069XY047CO)
Other vegetative classification: ALKALINE PLAINS
(069XY047CO_1)
Hydric soil rating: No

Valent

Percent of map unit: 2 percent
Landform: Dunes
Ecological site: Deep Sand LRU's A & B (R069XY019CO)
Other vegetative classification: DEEP SANDS (067XY015CO_2)
Hydric soil rating: No

Rock outcrop

Percent of map unit: 2 percent
Landform: Scarps

Hydric soil rating: No

Gravel pits

Percent of map unit: 1 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Lincoln County, Colorado

Survey Area Data: Version 14, Sep 22, 2016