

Soil Map—Adams County Area, Parts of Adams and Denver Counties, Colorado
(Overland resources LLC Handke Lease Soils Map)

104° 32' 29"

104° 31' 20"

39° 48' 19"

39° 48' 19"



39° 47' 43"

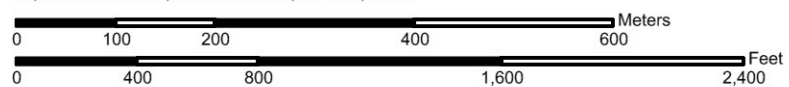
39° 47' 43"

104° 32' 29"

104° 31' 20"



Map Scale: 1:7,880 if printed on A size (8.5" x 11") sheet.



Map Unit Legend

Adams County Area, Parts of Adams and Denver Counties, Colorado (CO001)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AcC	Adena-Colby association, gently sloping	29.7	14.6%
StD	Stoneham loam, 3 to 9 percent slopes	47.3	23.2%
WmB	Weld loam, 1 to 3 percent slopes	95.2	46.8%
WrB	Weld-Deertrail complex, 0 to 3 percent slopes	31.2	15.4%
Totals for Area of Interest		203.3	100.0%

Map Unit Description

Adams County Area, Parts of Adams and Denver Counties, Colorado

AcC Adena-Colby association, gently sloping

Setting

Elevation: 4000 to 5600 feet
Mean annual precipitation: 12 to 17 inches
Mean annual air temperature: 48 to 55 degrees F
Frost-free period: 120 to 160 days

Composition

Adena and similar soils: 40 percent
Colby and similar soils: 30 percent
Minor components: 30 percent

Description of Adena

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from mixed

Properties and Qualities

Slope: 3 to 5 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 10.1 inches)

Interpretive Groups

Land capability classification (irrigated): 3e
Land capability (non irrigated): 4e
Ecological site: Loamy Plains (R067BY002CO)

Typical Profile

0 to 4 inches: loam
4 to 22 inches: silty clay loam
22 to 60 inches: silt loam

Description of Colby

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from mixed

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 (0.20 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: High (about 10.1 inches)

Interpretive Groups

Land capability classification (irrigated): 4e
Land capability (non irrigated): 4e
Ecological site: Loamy Plains (R067BY002CO)

Typical Profile

0 to 5 inches: loam
5 to 56 inches: loam

Map Unit Description

Adams County Area, Parts of Adams and Denver Counties, Colorado

56 to 60 inches: sandy clay loam

Minor Components

Wiley soils

Percent of map unit: 25 percent

Other vegetative classification: LOAMY PLAINS (067XY002CO_1)

Platner

Percent of map unit: 3 percent

Weld

Percent of map unit: 2 percent

Map Unit Description

Adams County Area, Parts of Adams and Denver Counties, Colorado

StD Stoneham loam, 3 to 9 percent slopes

Setting

Elevation: 4000 to 5600 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 120 to 155 days

Composition

Stoneham and similar soils: 80 percent
Minor components: 20 percent

Description of Stoneham

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from mixed

Properties and Qualities

Slope: 3 to 9 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.20 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 6.9 inches)

Interpretive Groups

Land capability (non irrigated): 6e
Ecological site: Loamy Plains (R067BY002CO)

Typical Profile

0 to 5 inches: loam
5 to 13 inches: sandy clay loam
13 to 20 inches: sandy loam
20 to 60 inches: gravelly sandy loam

Minor Components

Ascalon

Percent of map unit: 10 percent

Platner

Percent of map unit: 5 percent

Thedalund

Percent of map unit: 5 percent

Map Unit Description

Adams County Area, Parts of Adams and Denver Counties, Colorado

WmB Weld loam, 1 to 3 percent slopes

Setting

Landscape: Tablelands
Elevation: 4000 to 5600 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 125 to 155 days

Composition

Weld and similar soils: 80 percent
Minor components: 20 percent

Description of Weld

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from mixed

Properties and Qualities

Slope: 1 to 3 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 9.6 inches)

Interpretive Groups

Land capability classification (irrigated): 2e
Land capability (non irrigated): 3c
Ecological site: Loamy Plains (R067BY002CO)

Typical Profile

0 to 6 inches: loam
6 to 12 inches: clay
12 to 32 inches: loam
32 to 60 inches: silt loam

Minor Components

Adena

Percent of map unit: 7 percent

Colby

Percent of map unit: 5 percent

Satanta

Percent of map unit: 4 percent
Landform: Paleoterraces

Stoneham

Percent of map unit: 4 percent

Map Unit Description

Adams County Area, Parts of Adams and Denver Counties, Colorado

WrB Weld-Deertrail complex, 0 to 3 percent slopes

Setting

Elevation: 4000 to 5600 feet
Mean annual precipitation: 13 to 15 inches
Mean annual air temperature: 48 to 52 degrees F
Frost-free period: 125 to 155 days

Composition

Weld and similar soils: 60 percent
Deertrail and similar soils: 30 percent
Minor components: 10 percent

Description of Weld

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from mixed

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 0 percent
Available water capacity: High (about 9.6 inches)

Interpretive Groups

Land capability classification (irrigated): 2e
Land capability (non irrigated): 4e
Ecological site: Loamy Plains (R067BY002CO)

Typical Profile

0 to 6 inches: loam
6 to 12 inches: clay
12 to 32 inches: loam
32 to 60 inches: silt loam

Description of Deertrail

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from mixed

Properties and Qualities

Slope: 0 to 3 percent
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate maximum: 15 percent
Gypsum maximum: 2 percent
Sodium adsorption ratio maximum: 18.0
Available water capacity: Moderate (about 8.0 inches)

Interpretive Groups

Land capability classification (irrigated): 4s
Land capability (non irrigated): 4s
Ecological site: Alkaline Plains (R067BY047CO)

Typical Profile

Map Unit Description

Adams County Area, Parts of Adams and Denver Counties, Colorado

0 to 5 inches: fine sandy loam
5 to 9 inches: loam
9 to 21 inches: clay
21 to 32 inches: silty clay loam
32 to 60 inches: loam

Minor Components

Colby

Percent of map unit: 5 percent

Adena

Percent of map unit: 5 percent