

Arapahoe County, Colorado

FoC—Fondis-Colby silt loams, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: 34yl
Elevation: 4,700 to 6,200 feet
Mean annual precipitation: 12 to 16 inches
Mean annual air temperature: 46 to 52 degrees F
Frost-free period: 150 to 170 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Fondis and similar soils: 65 percent
Colby and similar soils: 25 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Fondis

Setting

Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty and/or loamy

Typical profile

H1 - 0 to 5 inches: silt loam
H2 - 5 to 17 inches: clay
H3 - 17 to 60 inches: clay loam

Properties and qualities

Slope: 3 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
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: 15 percent
Available water capacity: High (about 10.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: C
Ecological site: R067XY202CO - LOAMY FOOTHILL
Hydric soil rating: No

Description of Colby

Setting

Landform: Ridges

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Fine-loamy eolian deposits and/or fine-silty eolian deposits

Typical profile

H1 - 0 to 4 inches: silt loam

H2 - 4 to 60 inches: silt loam, loam

H2 - 4 to 60 inches:

Properties and qualities

Slope: 3 to 5 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 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: 20 percent

Available water capacity: Very high (about 19.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3c

Hydrologic Soil Group: B

Ecological site: R067XY202CO - LOAMY FOOTHILL

Hydric soil rating: No

Minor Components

Weld

Percent of map unit: 6 percent

Hydric soil rating: No

Ft collins

Percent of map unit: 4 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Arapahoe County, Colorado

Survey Area Data: Version 16, Jun 4, 2020

Arapahoe County, Colorado



Map unit symbol and soil name	Ecological Site, Plant Association, or Habitat Type	Total dry-weight production			Characteristic rangeland or forest understory vegetation	Composition	Rangeland	Forest understory
		Favorable year	Normal year	Unfavorable year				
		<i>Lb/ac</i>	<i>Lb/ac</i>	<i>Lb/ac</i>		<i>Pct dry wt</i>	<i>Pct dry wt</i>	
FoC—Fondis-Colby silt loams, 3 to 5 percent slopes								
Fondis	LOAMY FOOTHILL (R067XY202CO)	1,500	1,200	700	western wheatgrass	35		
					green needlegrass	10		
					Kentucky bluegrass	5		
					slender wheatgrass	5		
					blue grama			
Colby	LOAMY FOOTHILL (R067XY202CO)	1,600	1,000	500	western wheatgrass	30		
					green needlegrass	20		
					needleandthread	10		
					sideoats grama	5		
					blue grama			

Arapahoe County, Colorado

WeB—Weld silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2x0hx
Elevation: 3,600 to 6,000 feet
Mean annual precipitation: 12 to 18 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 115 to 155 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

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

Description of Weld

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loess

Typical profile

Ap - 0 to 3 inches: silt loam
Bt1 - 3 to 11 inches: silty clay
Bt2 - 11 to 15 inches: silty clay
Btk - 15 to 21 inches: silty clay
Bk - 21 to 31 inches: silt loam
C - 31 to 80 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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: 14 percent
Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water capacity: High (about 11.7 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3c
Hydrologic Soil Group: C
Ecological site: R067BY002CO - Loamy Plains
Hydric soil rating: No

Minor Components

Colby

Percent of map unit: 7 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R067BY002CO - Loamy Plains
Hydric soil rating: No

Adena

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R067BY002CO - Loamy Plains
Hydric soil rating: No

Keith

Percent of map unit: 5 percent
Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY002CO - Loamy Plains
Hydric soil rating: No

Rago, rarely flooded

Percent of map unit: 2 percent
Landform: Drainageways
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R067BY036CO - Overflow
Hydric soil rating: No

Pleasant, ponded

Percent of map unit: 1 percent
Landform: Closed depressions, playas
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R067BY010CO - Closed Upland Depression

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Arapahoe County, Colorado
Survey Area Data: Version 16, Jun 4, 2020

Arapahoe County, Colorado



Map unit symbol and soil name	Ecological Site, Plant Association, or Habitat Type	Total dry-weight production			Characteristic rangeland or forest understory vegetation	Composition	Rangeland	Forest understory
		Favorable year	Normal year	Unfavorable year				
		<i>Lb/ac</i>	<i>Lb/ac</i>	<i>Lb/ac</i>		<i>Pct dry wt</i>	<i>Pct dry wt</i>	
WeB—Weld silt loam, 0 to 3 percent slopes								
Weld	Loamy Plains (R067BY002CO)	1,800	1,300	600	western wheatgrass	20		
					green needlegrass	10		
					prairie Junegrass	10		
					sideoats grama	10		
					buffalograss	5		
					needleandthread	5		
					blue grama			
					fourwing saltbush			
winterfat								

Arapahoe County, Colorado

RhD—Renohill-Buick loams, 3 to 9 percent slopes

Map Unit Setting

National map unit symbol: 34z0

Elevation: 3,600 to 6,200 feet

Mean annual precipitation: 11 to 16 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 100 to 170 days

Farmland classification: Not prime farmland

Map Unit Composition

Renohill and similar soils: 65 percent

Buick and similar soils: 25 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Renohill

Setting

Landform: Drainageways

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loam silty and clayey alluvium

Typical profile

H1 - 0 to 4 inches: loam

H2 - 4 to 18 inches: clay loam, clay

H2 - 4 to 18 inches: loam, clay loam

H3 - 18 to 30 inches: unweathered bedrock

H3 - 18 to 30 inches:

H4 - 30 to 34 inches:

Properties and qualities

Slope: 3 to 9 percent

Depth to restrictive feature: 20 to 40 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: Medium

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: 15 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R067BY002CO - Loamy Plains
Hydric soil rating: No

Description of Buick

Setting

Landform: Ridges
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 4 inches: loam
H2 - 4 to 20 inches: clay loam
H3 - 20 to 60 inches: sandy clay loam, clay loam
H3 - 20 to 60 inches:

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
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
Available water capacity: Very high (about 17.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: C
Ecological site: R067BY002CO - Loamy Plains
Hydric soil rating: No

Minor Components

Litle

Percent of map unit: 5 percent
Hydric soil rating: No

Fondis

Percent of map unit: 5 percent
Hydric soil rating: No

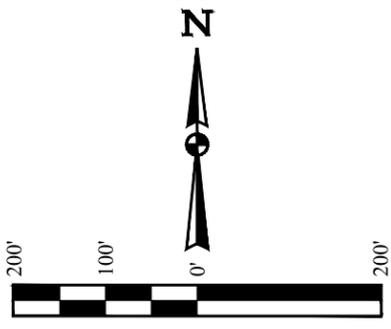
Data Source Information

Soil Survey Area: Arapahoe County, Colorado
Survey Area Data: Version 16, Jun 4, 2020

Arapahoe County, Colorado



Map unit symbol and soil name	Ecological Site, Plant Association, or Habitat Type	Total dry-weight production			Characteristic rangeland or forest understory vegetation	Composition	Rangeland	Forest understory
		Favorable year	Normal year	Unfavorable year				
		<i>Lb/ac</i>	<i>Lb/ac</i>	<i>Lb/ac</i>		<i>Pct dry wt</i>	<i>Pct dry wt</i>	
RhD—Renohill-Buick loams, 3 to 9 percent slopes								
Renohill	Loamy Plains (R067BY002CO)	1,400	1,100	800	western wheatgrass	10		
					other perennial grasses	5		
					blue grama			
Buick	Loamy Plains (R067BY002CO)	1,600	1,000	800	western wheatgrass	15		
					needleandthread	10		
					prairie Junegrass	10		
					blue grama			



LEGEND

- - - - - = OIL & GAS LOCATION
- _ _ _ _ _ = WORKING PAD SURFACE
- - - - - = PROPOSED ACCESS ROAD
- = WELD SILT LOAM, 0 TO 3 PERCENT SLOPES (8.578 ACRES)
- = ADENA-COLBY SILT LOAMS, 1 TO 5 PERCENT SLOPES (0.000 ACRES)
- = FONDIS-COLBY SILT LOAMS, 3 TO 5 PERCENT SLOPES (7.133 ACRES)
- = RENOHILL-BUICK LOAMS, 3 TO 9 PERCENT SLOPES (1.670 ACRES)



**CRESTONE PEAK
RESOURCES OPERATING, LLC**
 SKY RANCH 4-65 10-9 1BH, 2AH, 2BH, 3AH, 3BH, 4AH, 4BH
 & PROSPER FARMS 4-65 11-12 1BH, 2AH, 2BH, 4AH, 4BH
 NE 1/4 SE 1/4, SECTION 10, T4S, R65W, 6th P.M.
 ARAPAHOE COUNTY, COLORADO

SURVEYED BY	GREG WEIMER, O.R.	12-17-20	SCALE
DRAWN BY	C.C.	07-26-21	1" = 200'

SOILS SITE DIAGRAM



UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017