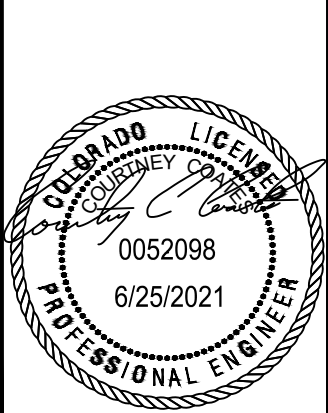
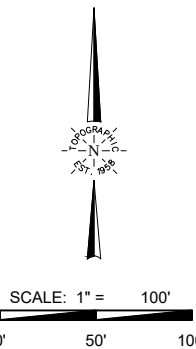


NCRS MAP UNIT DESCRIPTION
PEANUT 3403
VERDAD



DATE:	03/19/21
DRAWN BY:	TJM
REVIEWED BY:	CCC
SCALE:	1" = 100'
SHEET:	1 OF 1
REVISION:	
	TJM 04/12/21
	XXX XXX/XX
	XXX XXX/XX

	CASCAJO GRAVELLY SANDY LOAM (5-20% SLOPE) HYDROLOGIC SOIL GROUP A
	BUSHMAN FINE SANDY LOAM (3-9% SLOPE) HYDROLOGIC SOIL GROUP A
	KIM MITCHELL COMPLEX (0-6% SLOPE) HYDROLOGIC SOIL GROUP C
	SITE BOUNDARY



Weld County, Colorado, Northern Part

18—Bushman fine sandy loam, 3 to 9 percent slopes

Map Unit Setting

National map unit symbol: 35z0

Elevation: 5,000 to 6,000 feet

Mean annual precipitation: 11 to 15 inches

Mean annual air temperature: 45 to 46 degrees F

Frost-free period: 130 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Bushman and similar soils: 90 percent

Minor components: 10 percent

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

Description of Bushman

Setting

Landform: Fans, alluvial fans

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous loamy alluvium and/or colluvium

Typical profile

H1 - 0 to 6 inches: fine sandy loam

H2 - 6 to 60 inches: sandy loam

Properties and qualities

Slope: 3 to 9 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): 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 content: 15 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0
mmhos/cm)

Available water capacity: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: A

Ecological site: R067BY024CO - Sandy Plains

Hydric soil rating: No

Minor Components

Wages

Percent of map unit: 6 percent

Hydric soil rating: No

Cushman

Percent of map unit: 4 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part

Survey Area Data: Version 15, Jun 5, 2020

Weld County, Colorado, Northern Part

31—Kim-Mitchell complex, 0 to 6 percent slopes

Map Unit Setting

National map unit symbol: 35zh

Elevation: 3,500 to 6,500 feet

Mean annual precipitation: 11 to 17 inches

Mean annual air temperature: 46 to 54 degrees F

Frost-free period: 120 to 160 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Kim and similar soils: 45 percent

Mitchell and similar soils: 40 percent

Minor components: 15 percent

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

Description of Kim

Setting

Landform: Alluvial fans, plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous loamy alluvium

Typical profile

H1 - 0 to 3 inches: loam

H2 - 3 to 7 inches: clay loam

H3 - 7 to 60 inches: loam

Properties and qualities

Slope: 0 to 6 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 (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

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

Available water capacity: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: R067BY002CO - Loamy Plains

Hydric soil rating: No

Description of Mitchell

Setting

Landform: Alluvial fans, plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous loamy alluvium

Typical profile

H1 - 0 to 7 inches: silt loam

H2 - 7 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 6 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Very low

*Capacity of the most limiting layer to transmit water
(Ksat):* Moderately high to high (0.57 to 5.95 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): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

Ecological site: R067BY009CO - Siltstone Plains

Hydric soil rating: No

Minor Components

Haverson

Percent of map unit: 5 percent

Hydric soil rating: No

Keota

Percent of map unit: 5 percent

Hydric soil rating: No

Thedalund

Percent of map unit: 5 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part

Survey Area Data: Version 15, Jun 5, 2020

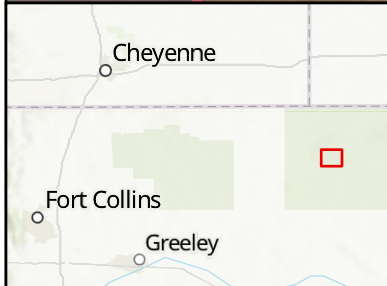
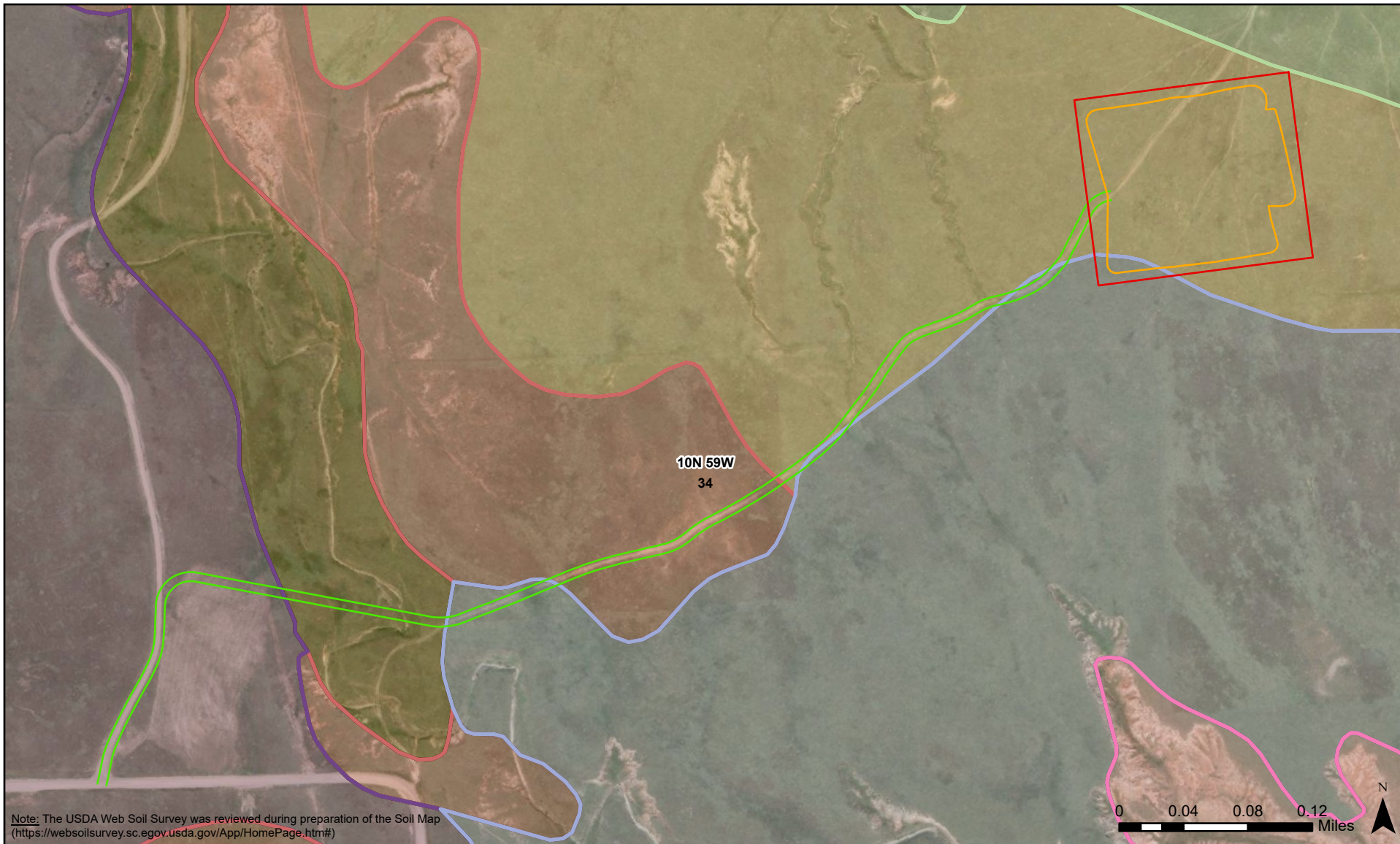


Figure 2. Peanut Fed - Soil Map

Client: Verdad Resources LLC

- | | |
|--------------------------------------|---|
| Working Pad Surface | Cascajo Gravelly Sandy Loam; 5-20% slopes |
| Maximum Disturbance Area | Epping Silt Loam; 0-9% slopes |
| Access Road | Otero Sandy Loam; 3-9% slopes |
| Bushman Fine Sandy Loam; 3-9% slopes | Haverson Loam; 0-3% slopes |
| Kim-Mitchell Complex; 0-6% slopes | Badland |

Author: Clara Jenck Date: 08/12/2021

Section 34, Township 10 North, Range 59 West



Weld County, Colorado, Northern Part

27—Epping silt loam, 0 to 9 percent slopes

Map Unit Setting

National map unit symbol: 35zb
Elevation: 3,600 to 5,500 feet
Mean annual precipitation: 12 to 17 inches
Mean annual air temperature: 45 to 52 degrees F
Frost-free period: 120 to 150 days
Farmland classification: Not prime farmland

Map Unit Composition

Epping and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Epping

Setting

Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Calcareous loamy residuum weathered from siltstone

Typical profile

H1 - 0 to 3 inches: silt loam
H2 - 3 to 17 inches: silt loam
H3 - 17 to 20 inches: weathered bedrock

Properties and qualities

Slope: 0 to 9 percent
Depth to restrictive feature: 10 to 20 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
Available water supply, 0 to 60 inches: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: R067BY039CO - Shallow Siltstone
Hydric soil rating: No

Minor Components

Keota

Percent of map unit: 5 percent

Hydric soil rating: No

Thedalund

Percent of map unit: 4 percent

Hydric soil rating: No

Mitchell

Percent of map unit: 3 percent

Hydric soil rating: No

Kim

Percent of map unit: 3 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part

Survey Area Data: Version 15, Jun 5, 2020

Weld County, Colorado, Northern Part

11—Badland

Map Unit Composition

Badland: 80 percent

Minor components: 20 percent

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

Description of Badland

Setting

Landform: Channels

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Soft claystone and/or calcareous, soft sandstone and siltstone

Minor Components

Other soils

Percent of map unit: 6 percent

Hydric soil rating: No

Mitchell

Percent of map unit: 5 percent

Hydric soil rating: No

Kim

Percent of map unit: 5 percent

Hydric soil rating: No

Thedalund

Percent of map unit: 2 percent

Hydric soil rating: No

Keota

Percent of map unit: 2 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part

Survey Area Data: Version 15, Jun 5, 2020

Weld County, Colorado, Northern Part

29—Haverson loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 35zd

Elevation: 3,500 to 6,000 feet

Mean annual precipitation: 12 to 17 inches

Mean annual air temperature: 46 to 54 degrees F

Frost-free period: 125 to 180 days

Farmland classification: Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season

Map Unit Composition

Haverson and similar soils: 90 percent

Minor components: 10 percent

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

Description of Haverson

Setting

Landform: Stream terraces, flood plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Stratified, calcareous loamy alluvium

Typical profile

H1 - 0 to 12 inches: loam

H2 - 12 to 60 inches: stratified sandy loam to loam

Properties and qualities

Slope: 0 to 3 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: 15 percent

Gypsum, maximum content: 1 percent

Maximum salinity: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)

Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4c

Hydrologic Soil Group: B

Ecological site: R067BY036CO - Overflow
Other vegetative classification: OVERFLOW (067BY036CO)
Hydric soil rating: No

Minor Components

Nunn

Percent of map unit: 6 percent
Hydric soil rating: No

Fluvaquentic haplustolls

Percent of map unit: 4 percent
Landform: Terraces
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part
Survey Area Data: Version 15, Jun 5, 2020

Weld County, Colorado, Northern Part

47—Otero sandy loam, 3 to 9 percent slopes

Map Unit Setting

National map unit symbol: 3601

Elevation: 4,500 to 5,500 feet

Mean annual precipitation: 12 to 15 inches

Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 130 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Otero and similar soils: 85 percent

Minor components: 15 percent

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

Description of Otero

Setting

Landform: Plains, fans

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous loamy alluvium and/or colluvium

Typical profile

H1 - 0 to 5 inches: sandy loam

H2 - 5 to 60 inches: fine sandy loam, sandy loam

H2 - 5 to 60 inches:

Properties and qualities

Slope: 3 to 9 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 5.95 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 14.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: A

Ecological site: R067BY024CO - Sandy Plains

Hydric soil rating: No

Minor Components

Stoneham

Percent of map unit: 7 percent

Hydric soil rating: No

Bushman

Percent of map unit: 3 percent

Hydric soil rating: No

Kim

Percent of map unit: 3 percent

Hydric soil rating: No

Mitchell

Percent of map unit: 2 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Northern Part

Survey Area Data: Version 15, Jun 5, 2020