

Legend

-  Proposed Access Road/Pipeline ROW
-  Proposed Oil and Gas Location
-  One Mile Buffer

Soil Types

-  38, Satanta loam, 0 to 3 percent slopes
-  39, Satanta-Colby complex

SOURCE: NRCS July 2020

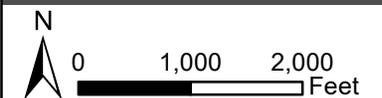
Date: 10/11/2022

Project Location



WAVETECH ENERGY, INC.
 1 WAVETECH FPI BURLINGTON FARMS 32-11
 SEC. 11 T12S R43W (SW/4 NE/4)
 CHEYENNE COUNTY, COLORADO
 SURFACE: FEE

SOILS



Prepared By: Redhawk GIS, LLC

Cheyenne County, Colorado

38—Satanta loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 354t
Elevation: 3,000 to 6,500 feet
Mean annual precipitation: 15 to 25 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 130 to 200 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Satanta and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Satanta

Setting

Landform: Paleoterraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 8 inches: loam
Bt - 8 to 16 inches: clay loam
Bk - 16 to 60 inches: 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 (0.60 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: 10 percent
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

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

Minor Components

Ascalon

Percent of map unit: 5 percent

Kim

Percent of map unit: 5 percent

Data Source Information

Soil Survey Area: Cheyenne County, Colorado

Survey Area Data: Version 23, Aug 31, 2021



Cheyenne County, Colorado



Map unit symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		<i>Lb/ac</i>	<i>Lb/ac</i>	<i>Lb/ac</i>		<i>Pct</i>
38—Satanta loam, 0 to 3 percent slopes						
Satanta	R067BY002CO: Loamy Plains	1,600	1,200	800	Western wheatgrass	15
					Needleandthread	10
					Green needlegrass	10
					Prairie sandreed	5
					Miscellaneous perennial forbs	5
					Blue grama	—

Cheyenne County, Colorado

39—Satanta-Colby complex, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: 354v
Elevation: 3,000 to 6,500 feet
Mean annual precipitation: 12 to 25 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 130 to 200 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Satanta and similar soils: 50 percent
Colby and similar soils: 20 percent
Minor components: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Satanta

Setting

Landform: Paleoterraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

A - 0 to 8 inches: loam
Bt - 8 to 16 inches: clay loam
Bk - 16 to 60 inches: 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 high to high (0.60 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: 10 percent
Available water supply, 0 to 60 inches: High (about 9.8 inches)

Interpretive groups

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

Description of Colby

Setting

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

Typical profile

A - 0 to 3 inches: silt loam
C - 3 to 60 inches: silt 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 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
Available water supply, 0 to 60 inches: High (about 10.8 inches)

Interpretive groups

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

Minor Components

Manter

Percent of map unit: 15 percent

Sampson

Percent of map unit: 15 percent

Data Source Information

Soil Survey Area: Cheyenne County, Colorado
Survey Area Data: Version 23, Aug 31, 2021



Cheyenne County, Colorado



Map unit symbol and soil name	Ecological site	Total dry-weight production			Characteristic vegetation	Rangeland composition
		Favorable year	Normal year	Unfavorable year		
		<i>Lb/ac</i>	<i>Lb/ac</i>	<i>Lb/ac</i>		<i>Pct</i>
39—Satanta-Colby complex, 3 to 5 percent slopes						
Satanta	R067BY002CO: Loamy Plains	1,600	1,200	800	Western wheatgrass	15
					Needleandthread	10
					Green needlegrass	10
					Miscellaneous perennial forbs	5
					Prairie sandreed	5
					Blue grama	—
Colby	R067BY002CO: Loamy Plains	1,600	1,100	600	Western wheatgrass	25
					Sideoats grama	10
					Green needlegrass	10
					Little bluestem	5
					Sand dropseed	5
					Needleandthread	5
					Blue grama	—