






Legend

-  Proposed Access Road/Pipeline ROW
-  Proposed Disturbance Area
-  Proposed Working Pad Surface
-  One Mile Buffer

Soil Types

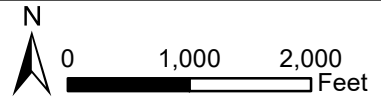
-  20, Keith-Ulysses silt loams

SOURCE: NRCS July 2020
Date: 9/9/2022

Project Location



WAVETECH ENERGY, INC.
UPRC 1 EIGER 14-11
SEC. 11 T12S R43W (SW/4 SW/4)
CHEYENNE COUNTY, COLORADO
SURFACE: FEE
SOILS



Prepared By: Redhawk GIS, LLC

Cheyenne County, Colorado

20—Keith-Ulysses silt loams, 1 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2tv5w

Elevation: 3,840 to 4,720 feet

Mean annual precipitation: 14 to 16 inches

Mean annual air temperature: 50 to 54 degrees F

Frost-free period: 130 to 170 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Keith and similar soils: 45 percent

Ulysses and similar soils: 30 percent

Minor components: 25 percent

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

Description of Keith

Setting

Landform: Plains

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loess

Typical profile

Ap - 0 to 6 inches: silt loam

Bt1 - 6 to 10 inches: silty clay loam

Bt2 - 10 to 25 inches: silty clay loam

C - 25 to 79 inches: silt loam

Properties and qualities

Slope: 1 to 2 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: 8 percent

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

Available water supply, 0 to 60 inches: Very high (about 12.6 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: R072XY100KS - Loamy Tableland
Hydric soil rating: No

Description of Ulysses

Setting

Landform: Hillslopes
Landform position (two-dimensional): Shoulder, backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loess

Typical profile

Ap - 0 to 3 inches: silt loam
Bw - 3 to 8 inches: silt loam
Bk - 8 to 13 inches: silt loam
C - 13 to 79 inches: silt loam

Properties and qualities

Slope: 2 to 4 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: 6 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0
mmhos/cm)
Available water supply, 0 to 60 inches: Very high (about 12.7
inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: R072XY100KS - Loamy Tableland
Hydric soil rating: No

Minor Components

Colby

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Nose slope

Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R072XY101KS - Limy Slopes
Hydric soil rating: No

Goshen

Percent of map unit: 5 percent
Landform: Swales
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R072XY117KS - Tableland Swale
Hydric soil rating: No

Richfield

Percent of map unit: 5 percent
Landform: Rises
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R072XY100KS - Loamy Tableland
Hydric soil rating: No

Wiley

Percent of map unit: 5 percent
Landform: Plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R072XY100KS - Loamy Tableland
Hydric soil rating: No

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>
20—Keith-Ulysses silt loams, 1 to 4 percent slopes						
Keith	R072XY100KS: Loamy Tableland	2,200	1,700	900	Miscellaneous perennial grasses	85
					Miscellaneous perennial forbs	10
					Miscellaneous shrubs	5
Ulysses	R072XY100KS: Loamy Tableland	2,200	1,700	900	Miscellaneous perennial grasses	85
					Miscellaneous perennial forbs	10
					Miscellaneous shrubs	5