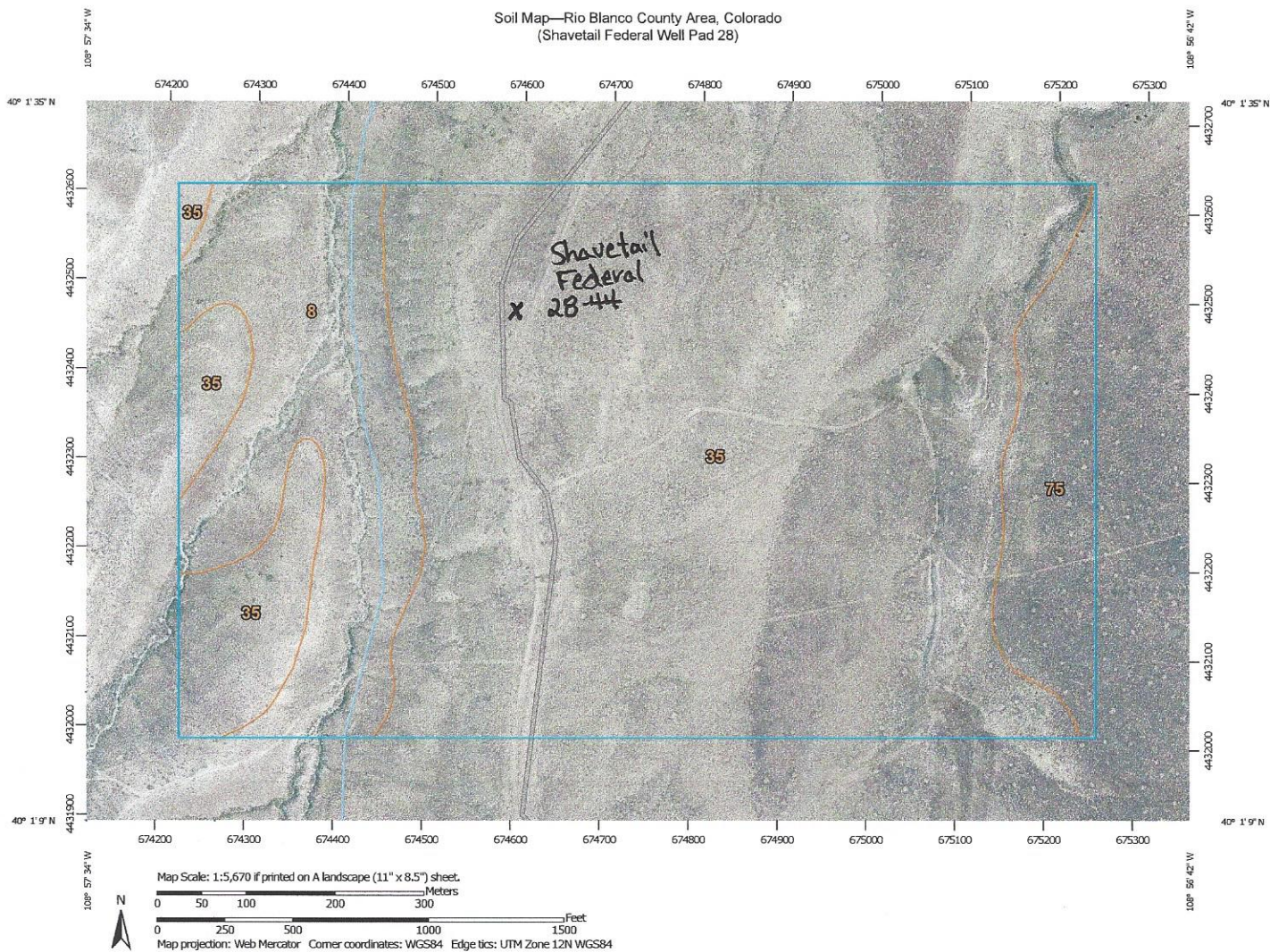


Soil Map—Rio Blanco County Area, Colorado
(Shavetail Federal Well Pad 28)



Soil Map—Rio Blanco County Area, Colorado
(Shavetail Federal Well Pad 28)

MAP LEGEND

Area of Interest (AOI)		Spoil Area
Area of Interest (AOI)		Stony Spot
Soils		Very Stony Spot
Soil Map Unit Polygons		Wet Spot
Soil Map Unit Lines		Other
Soil Map Unit Points		Special Line Features
Special Point Features		Water Features
Blowout		Streams and Canals
Borrow Pit		Transportation
Clay Spot		Rails
Closed Depression		Interstate Highways
Gravel Pit		US Routes
Gravelly Spot		Major Roads
Landfill		Local Roads
Lava Flow		Background
Marsh or swamp		Aerial Photography
Mine or Quarry		
Miscellaneous Water		
Perennial Water		
Rock Outcrop		
Saline Spot		
Sandy Spot		
Severely Eroded Spot		
Sinkhole		
Slide or Slip		
Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rio Blanco County Area, Colorado
Survey Area Data: Version 10, Sep 22, 2014

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 27, 2010—Jun 28, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Rio Blanco County Area, Colorado (CO685)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8	Billings-Torrifluvents complex, gullied, 0 to 5 percent slopes	27.2	17.1%
35	Gaynor-Midway silty clay loams, dry, 2 to 25 percent slopes	119.7	75.3%
75	Rentsac-Piceance complex, 2 to 30 percent slopes	12.0	7.6%
Totals for Area of Interest		158.8	100.0%

Custom Soil Resource Report

Landform position (three-dimensional): Dip, rise, tal

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous, mixed alluvium derived from shale

Typical profile

H1 - 0 to 5 inches: loam

H2 - 5 to 60 inches: stratified sandy loam to silty clay loam

Properties and qualities

Slope: 0 to 5 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.20 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent

Gypsum, maximum in profile: 2 percent

Salinity, maximum in profile: Very slightly saline to slightly saline (4.0 to 8.0 mmhos/cm)

Available water storage in profile: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7e

Hydrologic Soil Group: A

35—Gaynor-Midway silty clay loams, dry, 2 to 25 percent slopes

Map Unit Setting

National map unit symbol: jp4s

Elevation: 5,200 to 5,800 feet

Mean annual precipitation: 10 to 13 inches

Mean annual air temperature: 46 to 50 degrees F

Frost-free period: 105 to 130 days

Farmland classification: Not prime farmland

Map Unit Composition

Gaynor and similar soils: 50 percent

Midway and similar soils: 35 percent

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

Description of Gaynor

Setting

Landform: Ridges, hills, knolls

Landform position (three-dimensional): Base slope, side slope, nose slope, head slope

Custom Soil Resource Report

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous residuum weathered from shale

Typical profile

H1 - 0 to 2 inches: silty clay loam

H2 - 2 to 29 inches: silty clay loam, silty clay, clay

H2 - 2 to 29 inches: weathered bedrock

H2 - 2 to 29 inches:

H3 - 29 to 33 inches:

Properties and qualities

Slope: 2 to 15 percent

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

Natural drainage class: Well drained

Runoff class: High

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 in profile: 10 percent

Gypsum, maximum in profile: 2 percent

Salinity, maximum in profile: Nonsaline to slightly saline (0.0 to 8.0 mmhos/cm)

Sodium adsorption ratio, maximum in profile: 1.0

Available water storage in profile: Very high (about 12.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: D

Ecological site: Silty salt desert (R034XY410CO)

Description of Midway

Setting

Landform: Hills

Landform position (three-dimensional): Head slope, nose slope, side slope, base slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous residuum weathered from shale

Typical profile

H1 - 0 to 4 inches: silty clay loam

H2 - 4 to 13 inches: clay, clay loam, silty clay loam

H2 - 4 to 13 inches: weathered bedrock

H2 - 4 to 13 inches:

H3 - 13 to 17 inches:

Properties and qualities

Slope: 2 to 25 percent

Depth to restrictive feature: 6 to 20 inches to paralithic bedrock

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Custom Soil Resource Report

Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Gypsum, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to slightly saline (2.0 to 8.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 15.0
Available water storage in profile: Low (about 5.0 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D

75—Rentsac-Piceance complex, 2 to 30 percent slopes

Map Unit Setting

National map unit symbol: jp66
Elevation: 6,000 to 7,600 feet
Mean annual precipitation: 14 to 18 inches
Mean annual air temperature: 42 to 45 degrees F
Frost-free period: 80 to 105 days
Farmland classification: Not prime farmland

Map Unit Composition

Rentsac and similar soils: 60 percent
Piceance and similar soils: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rentsac

Setting

Landform: Ridges
Landform position (three-dimensional): Upper third of mountainflank
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Residuum weathered from sandstone

Typical profile

H1 - 0 to 5 inches: channery loam
H2 - 5 to 16 inches: extremely channery loam, extremely gravelly sandy loam, very flaggy loam
H2 - 5 to 16 inches: unweathered bedrock
H2 - 5 to 16 inches:
H3 - 16 to 20 inches:

Properties and qualities

Slope: 8 to 30 percent
Depth to restrictive feature: 10 to 20 inches to lithic bedrock
Natural drainage class: Well drained
Runoff class: Very high