



**NRCS SOILS KEY:**

MAP SYMBOL	SERIES NAME
3	Arvada loam (1-6% slopes)
4	Arvada loam (6-20% slopes)
34	Ildefonso stony loam (25-45%)
51	Olney loam, (6-12% slopes)
55	Potts loam (3-6% slopes)
56	Potts loam (6-12% slopes)
58	Potts-Ildefonso complex (12-25%)
65	Torrifluvents (nearly level)
72	Wann sandy loam (1-3% slopes)
73	Wann sandy loam (3-6% slopes)

Notes / Comments:



**Ursa** | OPERATING COMPANY

**Form 2A - Attachment H**  
NRCS Soils Map  
**BMC B**

39.43894 -108.04647  
Section 18, Township 7 South, Range 95 West

- Approx. Center
- Proposed Development
- Proposed Access
- County Roads
- Local Roads



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## Attachment H – NRCS Soil Survey, Rifle Area

<b>Map Symbol 4 – Arvada loam (6-20% slopes)</b>	
Deep, well drained, sloping soils found on fans and high terraces.	
<b>Elevation</b>	5,100 to 6,200 feet
<b>Average Annual Precipitation</b>	Approximately 12 inches
<b>Average Annual Air Temp</b>	Approximately 48 degrees F
<b>Frost Free Days</b>	Approximately 120 days
<b>Permeability</b>	Very Slow
<b>Available Water Capacity</b>	High
<b>Effective Rooting Depth</b>	60+ inches
<b>Surface Runoff</b>	Moderately Rapid
<b>Erosion Hazard</b>	Severe
<b>Native Vegetation:</b> Mainly sagebrush, greasewood, and wheatgrass.	
Development is limited by the high shrink-swell potential, salinity, and steep slopes. This soil is in capability subclass VII <sub>s</sub> , nonirrigated.	

## Rifle Area, Colorado, Parts of Garfield and Mesa Counties

### 4—Arvada loam, 6 to 20 percent slopes

#### Map Unit Setting

*National map unit symbol:* jny6

*Elevation:* 5,100 to 6,200 feet

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Arvada and similar soils:* 85 percent

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

#### Description of Arvada

##### Setting

*Landform:* Terraces, fans

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex, linear

*Parent material:* Highly saline alluvium derived from sandstone and shale

##### Typical profile

*H1 - 0 to 3 inches:* loam

*H2 - 3 to 17 inches:* silty clay loam

*H3 - 17 to 60 inches:* silty clay loam

##### Properties and qualities

*Slope:* 6 to 20 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Very 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:* Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)

*Sodium adsorption ratio, maximum in profile:* 30.0

*Available water storage in profile:* Moderate (about 8.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 7s

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* C

*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Rifle Area, Colorado, Parts of Garfield and Mesa Counties  
Survey Area Data: Version 9, Sep 22, 2015