

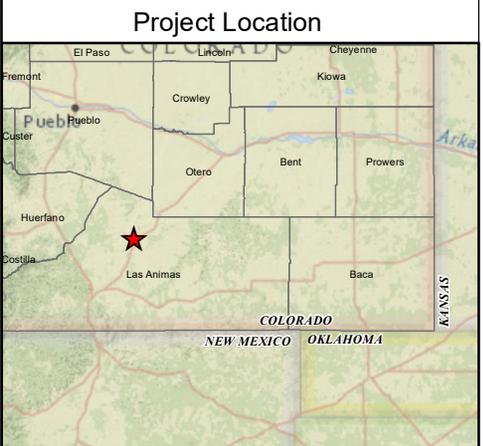
**Legend**

- Proposed Disturbance Area
- Proposed Working Pad Surface
- Proposed Access Road
- Proposed Pipeline

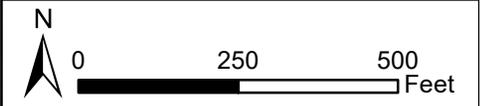
**Soil Types**

- WV

SOURCE: NRCS July 2020  
Date: 4/23/2022



**BNL (ENTERPRISE) INC.**  
**BOLLING 04 SESW 2960**  
**SEC 04 T29S R60W (SE/4 SE/4)**  
**LAS ANIMAS COUNTY, CO**  
**SOIL TYPES**



Prepared By: Redhawk GIS, LLC

## Las Animas County Area, Colorado, Parts of Huerfano and Las Animas Counties

### WV—Almagre-Villedry complex, 1 to 4 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2rgqf  
*Elevation:* 4,500 to 6,500 feet  
*Mean annual precipitation:* 12 to 14 inches  
*Mean annual air temperature:* 48 to 54 degrees F  
*Frost-free period:* 125 to 170 days  
*Farmland classification:* Prime farmland if irrigated

#### Map Unit Composition

*Almagre and similar soils:* 47 percent  
*Villedry and similar soils:* 35 percent  
*Minor components:* 18 percent  
*Estimates are based on observations, descriptions, and transects of  
the mapunit.*

#### Description of Almagre

##### Setting

*Landform:* Interfluves  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Loess over residuum weathered from sandstone

##### Typical profile

*A - 0 to 5 inches:* silt loam  
*BA - 5 to 9 inches:* silt loam  
*Bt - 9 to 23 inches:* silty clay loam  
*Btk - 23 to 30 inches:* silty clay loam  
*Bk1 - 30 to 40 inches:* silt loam  
*Bk2 - 40 to 50 inches:* loam  
*R - 50 to 79 inches:* bedrock

##### Properties and qualities

*Slope:* 1 to 4 percent  
*Depth to restrictive feature:* 40 to 59 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Low  
*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:* 40 percent  
*Gypsum, maximum content:* 4 percent

*Maximum salinity:* Nonsaline to slightly saline (1.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 6.0  
*Available water supply, 0 to 60 inches:* High (about 9.2 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 4c  
*Hydrologic Soil Group:* C  
*Ecological site:* R069XY006CO - Loamy Plains, LRU's A and B  
10-14 Inches, P.Z.  
*Forage suitability group:* Loamy (G069XW017CO)  
*Other vegetative classification:* Loamy Plains #6  
(069XY006CO\_2), Loamy (G069XW017CO)  
*Hydric soil rating:* No

#### **Description of Villedry**

##### **Setting**

*Landform:* Interfluves  
*Landform position (two-dimensional):* Shoulder, backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Loess over residuum weathered from sandstone

##### **Typical profile**

*A - 0 to 4 inches:* silt loam  
*BA - 4 to 7 inches:* silt loam  
*Bt - 7 to 15 inches:* silty clay loam  
*Btk - 15 to 25 inches:* silty clay loam  
*Bk1 - 25 to 33 inches:* clay loam  
*2Bk2 - 33 to 38 inches:* gravelly loam  
*R - 38 to 70 inches:* bedrock

##### **Properties and qualities**

*Slope:* 1 to 4 percent  
*Depth to restrictive feature:* 20 to 39 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 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:* 40 percent  
*Gypsum, maximum content:* 2 percent  
*Maximum salinity:* Nonsaline to very slightly saline (1.0 to 3.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 5.0  
*Available water supply, 0 to 60 inches:* Moderate (about 6.6 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 4c  
*Hydrologic Soil Group:* C  
*Ecological site:* R069XY006CO - Loamy Plains, LRU's A and B  
10-14 Inches, P.Z.  
*Forage suitability group:* Loamy (G069XW017CO)  
*Other vegetative classification:* Loamy Plains #6  
(069XY006CO\_2), Loamy (G069XW017CO)  
*Hydric soil rating:* No

### **Minor Components**

#### **Wilid**

*Percent of map unit:* 10 percent  
*Landform:* Interfluves  
*Landform position (two-dimensional):* Summit  
*Landform position (three-dimensional):* Interfluve  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* R069XY006CO - Loamy Plains, LRU's A and B  
10-14 Inches, P.Z.  
*Other vegetative classification:* Loamy Plains #6 (069XY006CO\_2),  
Loamy (G069XW017CO)  
*Hydric soil rating:* No

#### **Travessilla**

*Percent of map unit:* 6 percent  
*Landform:* Scarps  
*Landform position (two-dimensional):* Summit, shoulder  
*Landform position (three-dimensional):* Crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Ecological site:* R069XY053CO - Sandstone Breaks LRU's A and B  
*Other vegetative classification:* Needs Field Review  
(G069XW050CO), Sandstone Breaks #53 (069XY053CO\_2)  
*Hydric soil rating:* No

#### **Rock outcrop**

*Percent of map unit:* 2 percent  
*Landform:* Scarps  
*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Las Animas County Area, Colorado, Parts of Huerfano and Las Animas Counties

Survey Area Data: Version 24, Aug 31, 2021

Report — Rangeland Productivity and Plant Composition



Las Animas County Area, Colorado, Parts of Huerfano and Las Animas Counties



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>
WV—Almagre-Villedry complex, 1 to 4 percent slopes						
Almagre	R069XY006CO: Loamy Plains, LRU's A and B 10-14 Inches, P.Z.	1,200	800	500	Blue grama	35
					Western wheatgrass	20
					Galleta	10
					Green needlegrass	5
					Fourwing saltbush	5
					Threeawn	5
					Winterfat	5
					Plains pricklypear	3
					Tree cholla	2
Villedry	R069XY006CO: Loamy Plains, LRU's A and B 10-14 Inches, P.Z.	1,200	800	500	Blue grama	35
					Western wheatgrass	20
					Galleta	10
					Threeawn	5
					Winterfat	5
					Fourwing saltbush	5
					Green needlegrass	5
					Plains pricklypear	3
					Tree cholla	2