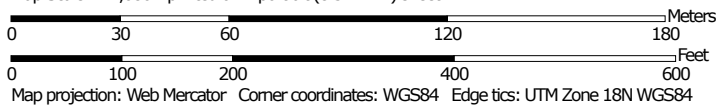
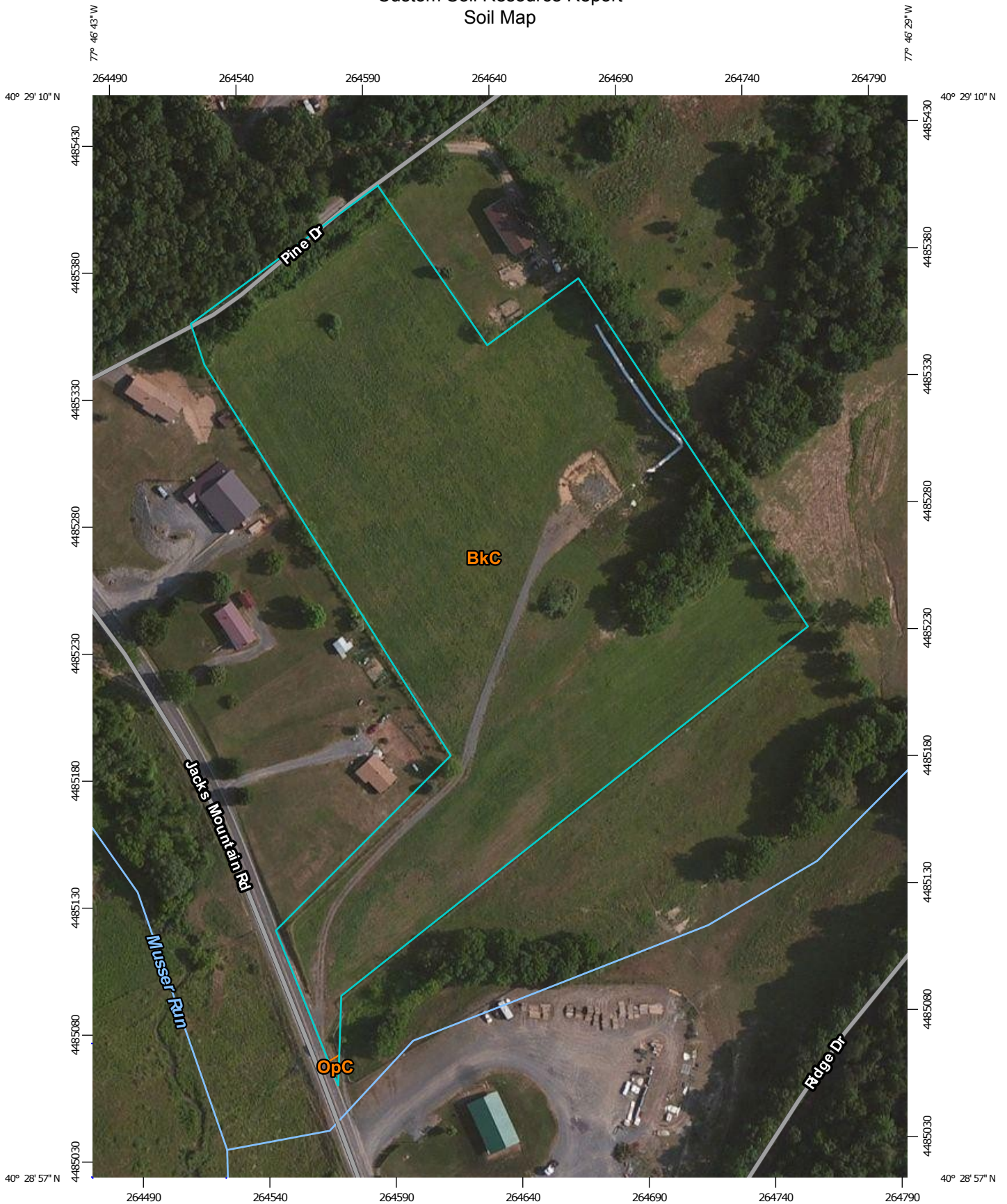


# Custom Soil Resource Report Soil Map



## Map Unit Legend

Juniata and Mifflin Counties, Pennsylvania (PA605)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BkC	Berks shaly silt loam, 8 to 15 percent slopes	8.9	99.9%
OpC	Opequon silty clay loam, 8 to 15 percent slopes	0.0	0.1%
<b>Totals for Area of Interest</b>		<b>8.9</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If

## Juniata and Mifflin Counties, Pennsylvania

### BkC—Berks shaly silt loam, 8 to 15 percent slopes

#### Map Unit Setting

*National map unit symbol:* 191f

*Elevation:* 300 to 3,000 feet

*Mean annual precipitation:* 30 to 65 inches

*Mean annual air temperature:* 46 to 59 degrees F

*Frost-free period:* 120 to 214 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Berks and similar soils:* 85 percent

*Minor components:* 15 percent

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

#### Description of Berks

##### Setting

*Landform:* Hillslopes

*Landform position (two-dimensional):* Shoulder

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Linear, convex

*Across-slope shape:* Convex, linear

*Parent material:* Acid silty residuum weathered from shale and siltstone

##### Typical profile

*H1 - 0 to 7 inches:* channery silt loam

*H2 - 7 to 29 inches:* very channery silt loam

*H3 - 29 to 34 inches:* extremely channery silt loam

*H4 - 34 to 38 inches:* bedrock

##### Properties and qualities

*Slope:* 8 to 15 percent

*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Low

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

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 2.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* C

#### Minor Components

##### Bedington

*Percent of map unit:* 5 percent

## Custom Soil Resource Report

- Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
- Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

*Capability subclasses* are soil groups within one class. They are designated by adding a small letter, *e*, *w*, *s*, or *c*, to the class numeral, for example, 2e. The letter *e* shows that the main hazard is the risk of erosion unless close-growing plant cover is maintained; *w* shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); *s* shows that the soil is limited mainly because it is shallow, droughty, or stony; and *c*, used in only some parts of the United States, shows that the chief limitation is climate that is very cold or very dry.

In class 1 there are no subclasses because the soils of this class have few limitations. Class 5 contains only the subclasses indicated by *w*, *s*, or *c* because the soils in class 5 are subject to little or no erosion.

*Capability units* are soil groups within a subclass. The soils in a capability unit are enough alike to be suited to the same crops and pasture plants, to require similar management, and to have similar productivity. Capability units are generally designated by adding an Arabic numeral to the subclass symbol, for example, 2e-4 and 3e-6. These units are not given in all soil surveys.

Reference:

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

### Report—Nonirrigated Yields by Map Unit

Nonirrigated Yields by Map Unit—Juniata and Mifflin Counties, Pennsylvania						
Map symbol and soil name	Land capability	Alfalfa hay	Corn	Grass-legume hay	Pasture	Wheat
		<i>Tons</i>	<i>Bu</i>	<i>Tons</i>	<i>AUM</i>	<i>Bu</i>
BkC—Berks shaly silt loam, 8 to 15 percent slopes		3.00	75	2.50	5.5	35
Berks	3e					
OpC—Opequon silty clay loam, 8 to 15 percent slopes		—	—	—	—	—
Opequon	4s					