PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 13 2017
Describer: Yuri Plowden
NEON Plot ID: BLAN_001

Site ID: S2017VA043001

Pedon ID: S2017VA043001

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0780
Soil Name as Described/Sampled: Thurmont
Classification: Fine-loamy, mixed, active, mesic Oxyaquic Hapludults
Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils: Thurmont
Physiographic Division:
Physiographic Province:
Physiographic Section:

State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on footslope of base slope of meander belt on footslope of base slope of terrace
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 16 cm.
argillic horizon 53 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 21B -- Lakin loamy sand, 3 to 8 percent slopes
Pit Location: Orientation in relation to NEON plot: 5 m 50cm and 212 degrees from SW 20m x 20m marker. This pedon is for the NEON sampling project at the Casey Tree Farms in Winchester VA.
Quad Name:
Std Latitude: 39.0878200
Std Longitude: -77.9585700

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation: black cherry, black walnut, boxelder, common hackberry, pawpaw
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043001 **Pedon ID:** S2017VA043001

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
5.0	132.6	30						well		

Ap--0 to 16 centimeters (0.0 to 6.3 inches); dark brown (7.5YR 3/4) medium gravelly silt loam; 25 percent sand; 17 percent clay; weak medium subangular blocky parts to weak very fine subangular blocky structure; friable; very coarse roots throughout and fine roots throughout; 5 percent nonflat subangular very strongly cemented 76 to 250-millimeter Sandstone fragments and 25 percent nonflat subrounded very strongly cemented 5 to 20-millimeter Sandstone fragments; clear smooth boundary.

Bw1--16 to 34 centimeters (6.3 to 13.4 inches); brown (7.5YR 4/4) gravelly silt loam; 25 percent sand; 17 percent clay; weak medium subangular blocky structure; friable; very coarse roots throughout and fine roots throughout; 5 percent nonflat subangular very strongly cemented 76 to 250-millimeter Sandstone fragments and 25 percent nonflat subrounded very strongly cemented 20 to 76-millimeter Sandstone fragments; gradual wavy boundary.

Bw2--34 to 53 centimeters (13.4 to 20.9 inches); brown (7.5YR 4/4) gravelly loam; 40 percent sand; 17 percent clay; weak medium subangular blocky structure; friable; medium roots throughout and fine roots throughout; 10 percent nonflat subangular very strongly cemented 76 to 250-millimeter Sandstone fragments and 20 percent nonflat subrounded very strongly cemented 20 to 76-millimeter Sandstone fragments; clear wavy boundary.

2Bt--53 to 100 centimeters (20.9 to 39.4 inches); reddish brown (5YR 4/4) extremely cobbly loam; 40 percent sand; 21 percent clay; moderate coarse subangular blocky structure; friable; medium roots throughout; 15 percent clay films on surfaces along pores; 7.5YR 2.5/1) manganese masses On faces of peds and 7.5YR 2.5/1) jarosite masses On bottom of rock fragments; 30 percent nonflat subangular very strongly cemented 76 to 250-millimeter Sandstone fragments and 30 percent nonflat subrounded very strongly cemented 2 to 76-millimeter Sandstone fragments.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 14 2017
Describer: Yuri Plowden
NEON Plot ID: BLAN_002

Site ID: S2017VA043002

Pedon ID: S2017VA043002

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0781
Soil Name as Described/Sampled: Poplimento
Classification: Mixed, subactive, mesic Ultic Hapludalfs
Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: taxadjunct
Associated Soils: Poplimento Tax.
Physiographic Division:
Physiographic Province:
Physiographic Section:

State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of interfluve of valley on backslope of interfluve of hill
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 15 cm.
argillic horizon 15 to 90 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 38B -- Poplimento-Webbtown complex, 3 to 8 percent slopes
Pit Location: Orientation in relation to NEON plot: 3 m and 79 cm and 60 degrees from SW 40m x 40m marker to pit center. This pedon is for the NEON sampling project at the Casey Tree Farms in Winchester VA.
Quad Name:
Std Latitude: 39.0921500
Std Longitude: -77.9809800

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Tame pastureland
Existing Vegetation: fescue, ragweed, white clover
Parent Material: residuum weathered from limestone and shale
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043002 **Pedon ID:** S2017VA043002

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
10.0	143.6	349						well		

Ap--0 to 15 centimeters (0.0 to 5.9 inches); dark yellowish brown (10YR 4/4) silt loam; 19 percent clay; weak medium subangular blocky parts to weak very fine subangular blocky structure; friable; very fine roots throughout; 5 percent flat subangular 2 to 150-millimeter unspecified fragments; abrupt smooth boundary.

Bt1--15 to 35 centimeters (5.9 to 13.8 inches); strong brown (7.5YR 5/6) channery silty clay loam; 28 percent clay; weak coarse subangular blocky structure; friable; very fine roots throughout; 15 percent clay films on surfaces along pores; 16 percent flat subangular 2 to 150-millimeter unspecified fragments; clear smooth boundary.

Bt2--35 to 66 centimeters (13.8 to 26.0 inches); yellowish red (5YR 5/6) silty clay; 42 percent clay; weak very coarse subangular blocky structure; firm; very fine roots between peds; 30 percent clay films on surfaces along pores; 5 percent flat subangular 2 to 150-millimeter unspecified fragments; clear wavy boundary.

BCt--66 to 90 centimeters (26.0 to 35.4 inches); 80 percent strong brown (7.5YR 5/6) very channery clay loam; 32 percent clay; weak very coarse subangular blocky structure; friable; 40 percent clay films on surfaces along pores; 5 percent N 2/), moist, manganese masses On faces of peds; 45 percent flat subangular 2 to 150-millimeter unspecified fragments; clear wavy boundary. 15% varigated colors and pockets of less RF

Cr--90 to 100 centimeters (35.4 to 39.4 inches); 50 percent strong brown (7.5YR 5/6) and 25 percent strong brown (7.5YR 5/8) and 25 percent brownish yellow (10YR 6/8) channers; structureless massive; loose; 90 percent flat subangular 2 to 150-millimeter unspecified fragments.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 12 2017
Describer: Mike McDevitt
NEON Plot ID: BLAN_005

Site ID: S2017VA043005

Pedon ID: S2017VA043005

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0782
Soil Name as Described/Sampled: Monongahela
Classification: Fine-loamy, mixed, semiactive, mesic Typic Fragiudults

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils: Monongahela
Physiographic Division:
Physiographic Province:

Physiographic Section:

State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on footslope of side slope of terrace on footslope of side slope of valley
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 26 cm.
argillic horizon 26 to 100 cm.
fragipan 39 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 26C -- Monongahela-Braddock complex, 8 to 15 percent slopes
Pit Location: Orientation in relation to NEON plot: 8.07 m and 289 degrees from SE 40m x 40m marker to pit center. This pedon is for the NEON sampling project at the Casey Tree Farms in Winchester VA.
Quad Name:
Std Latitude: 39.0873056
Std Longitude: -77.9718611

Latitude: 39 degrees 5 minutes 14.30 seconds north
Longitude: 77 degrees 58 minutes 18.70 seconds west
Datum: WGS84
UTM Zone: 18
UTM Easting: 242954 meters
UTM Northing: 4330670 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation: black cherry, Nepalese browntop, red maple, tuliptree
Parent Material: alluvium derived from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
39	100	fragipan	

Cont. Site ID: S2017VA043005 **Pedon ID:** S2017VA043005

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
5.0	150.9	28						somewhat poorly		

A--0 to 8 centimeters (0.0 to 3.1 inches); very dark grayish brown (10YR 3/2) silt loam; 12 percent clay; weak medium subangular blocky structure; very friable, nonsticky, nonplastic; very fine roots and medium roots; clear irregular boundary.

AB--8 to 26 centimeters (3.1 to 10.2 inches); dark grayish brown (10YR 4/2) silt loam; 12 percent clay; weak medium subangular blocky structure; very friable, nonsticky, nonplastic; very fine roots and medium roots; 5 percent unspecified fragments; clear wavy boundary.

Bt--26 to 39 centimeters (10.2 to 15.4 inches); 85 percent yellowish brown (10YR 5/6) and 10 percent pale brown (10YR 6/3) and 5 percent yellowish red (5YR 4/6) silt loam; 22 percent clay; moderate very coarse subangular blocky structure; friable, slightly sticky, slightly plastic; very fine roots; 5 percent distinct clay films on all faces of peds; 5 percent unspecified fragments; gradual wavy boundary.

2Btx1--39 to 62 centimeters (15.4 to 24.4 inches); 45 percent yellowish brown (10YR 5/6) and 45 percent pale brown (10YR 6/3) and 5 percent light brownish gray (10YR 6/2) and 3 percent yellowish red (5YR 4/6) and 2 percent black (10YR 2/1) silty clay loam; 29 percent clay; moderate coarse prismatic, and moderate medium platy structure; firm, slightly sticky, nonplastic; very fine roots; 15 percent distinct clay films on all faces of peds; 5 percent unspecified fragments; gradual wavy boundary.

2Btx2--62 to 100 centimeters (24.4 to 39.4 inches); 45 percent yellowish brown (10YR 5/6) and 45 percent pale brown (10YR 6/3) and 5 percent light brownish gray (10YR 6/2) and 3 percent yellowish red (5YR 4/6) and 2 percent black (10YR 2/1) silty clay loam; 29 percent clay; moderate medium platy, and weak very coarse prismatic structure; firm, slightly sticky, nonplastic; 20 percent distinct clay films on all faces of peds; 5 percent unspecified fragments.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 15 2017
Describer: Mike McDevitt
NEON Plot ID: BLAN_006

Site ID: S2017VA043006

Pedon ID: S2017VA043006

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0783
Soil Name as Described/Sampled: Braddock
Classification: Fine, mixed, semiactive, mesic Typic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils: Monongahela
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of terrace on backslope of side slope of valley
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 24 cm.
argillic horizon 24 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 26C -- Monongahela-Braddock complex, 8 to 15 percent slopes
Pit Location: Orientation in relation to NEON plot: 257 cm and 63 degrees from SW 40m x 40m marker to pit center. This pedon is for the NEON sampling project at the Casey Tree Farms in Winchester VA.
Quad Name:
Std Latitude: 39.0838333
Std Longitude: -77.9640278

Latitude: 39 degrees 5 minutes 1.80 seconds north
Longitude: 77 degrees 57 minutes 50.50 seconds west
Datum: WGS84
UTM Zone: 18
UTM Easting: 243631 meters
UTM Northing: 4330262 meters

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Hayland
Existing Vegetation:
Parent Material: alluvium derived from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043006 **Pedon ID:** S2017VA043006

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
5.0	146.6	224						well		

Ap--0 to 24 centimeters (0.0 to 9.4 inches); brown (7.5YR 4/4) loam; 13 percent clay; weak medium subangular blocky structure; very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots; medium tubular and fine tubular pores; 2 percent nonflat subrounded very strongly cemented 2 to 75-millimeter Greenstone fragments; strongly acid, pH 5.2, pH indicator solutions.

Bt1--24 to 42 centimeters (9.4 to 16.5 inches); 98 percent brown (7.5YR 5/4) loam; 23 percent clay; moderate coarse subangular blocky structure; friable, nonsticky, nonplastic; very fine roots; medium tubular and fine tubular pores; 3 percent clay films on all faces of peds; 2 percent manganese masses On faces of peds; 2 percent nonflat subrounded very strongly cemented 2 to 75-millimeter Greenstone fragments; moderately acid, pH 6.0, pH indicator solutions.

Bt2--42 to 100 centimeters (16.5 to 39.4 inches); 75 percent red (2.5YR 4/6) and 20 percent brown (7.5YR 5/4) clay loam; 28 percent clay; moderate coarse subangular blocky structure; friable, slightly sticky, slightly plastic; medium tubular pores; 20 percent clay films on all faces of peds; 2 percent manganese masses On faces of peds; 1 percent nonflat subrounded very strongly cemented 2 to 75-millimeter Greenstone fragments; slightly acid, pH 6.4, pH indicator solutions.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 14 2017
Describer: Yuri Plowden
NEON Plot ID: BLAN_008

Site ID: S2017VA043008

Pedon ID: S2017VA043008

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0784
Soil Name as Described/Sampled: udult/udalf
Classification:
Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: taxadjunct
Associated Soils: Poplimento taxadjunct
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of nose slope of hills on backslope of nose slope of valley
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 10 cm.
argillic horizon 30 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 55D -- Udults-Udalfs association, 15 to 45 percent slopes
Pit Location: Orientation in relation to NEON plot: 3 m 83cm and 39 degrees from SW 40m x 40m marker to pit center. This pedon is for the NEON sampling project at the Casey Tree Farms in Winchester VA.

Quad Name:
Std Latitude: 39.9653608
Std Longitude: -77.9653600

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Hayland
Existing Vegetation:
Parent Material: residuum weathered from limestone and shale
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043008 **Pedon ID:** S2017VA043008

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
18.0	149.4	93						well		

Ap--0 to 10 centimeters (0.0 to 3.9 inches); dark brown (7.5YR 3/4) silt loam; 20 percent sand; 15 percent clay; weak medium subangular blocky parts to weak medium granular structure; very friable; very fine roots throughout; 3 percent nonflat subangular 2 to 76-millimeter unspecified fragments; abrupt smooth boundary.

BE--10 to 30 centimeters (3.9 to 11.8 inches); brown (7.5YR 4/4) silt loam; 20 percent sand; 22 percent clay; weak very thick platy parts to weak very coarse subangular blocky structure; friable; very fine roots throughout; 1 percent nonflat subangular 2 to 76-millimeter unspecified fragments; gradual smooth boundary. Soil is very firm in place- dry and compacted.

Bt1--30 to 55 centimeters (11.8 to 21.7 inches); 95 percent yellowish red (5YR 4/6) loam; 30 percent sand; 24 percent clay; moderate coarse subangular blocky structure; very friable; very fine roots in cracks; 7 percent clay films on surfaces along pores and 8 percent clay films on all faces of peds; 5 percent N 2/) manganese masses; gradual smooth boundary.

Bt2--55 to 80 centimeters (21.7 to 31.5 inches); 88 percent yellowish red (5YR 4/6) loam; 30 percent sand; 24 percent clay; moderate coarse subangular blocky structure; friable; 15 percent clay films on all faces of peds and 15 percent clay films on surfaces along pores; 12 percent N 2/) manganese masses; gradual smooth boundary.

Bt3--80 to 100 centimeters (31.5 to 39.4 inches); 85 percent yellowish red (5YR 4/6) clay loam; 30 percent sand; 29 percent clay; weak very coarse subangular blocky structure; friable; 20 percent clay films on all faces of peds and 20 percent clay films on surfaces along pores; 15 percent N 2/) manganese masses.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 14 2017
Describer: Mike McDevitt
NEON Plot ID: BLAN_010

Site ID: S2017VA043010

Pedon ID: S2017VA043010

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0785
Soil Name as Described/Sampled: Thurmont
Classification: Fine-loamy, mixed, active, mesic Oxyaquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: taxadjunct
Associated Soils: Thurmont- taxadjunct
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on footslope of side slope of valley
on footslope of side slope of hillslope
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 21 cm.
argillic horizon 21 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 50B -- Thurmont gravelly loam, 3 to 8 percent slopes
Pit Location: SW40 to pit center is 4.6m @ 26 degrees pit center to pit face is 0.3m @ 356 degrees
Quad Name:
Std Latitude: 39.0861944
Std Longitude: -77.9608333

Latitude: 39 degrees 5 minutes 10.30 seconds north
Longitude: 77 degrees 57 minutes 39.00 seconds west
Datum: WGS84
UTM Zone: 18
UTM Easting: 243904 meters
UTM Northing: 4330516 meters

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Hayland
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043010 **Pedon ID:** S2017VA043010

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
5.0	137.0	145						well		

Ap--0 to 21 centimeters (0.0 to 8.3 inches); dark brown (7.5YR 3/4) channery sandy loam; 10 percent clay; weak medium subangular blocky structure; very friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; 1 percent nonflat subrounded moderately cemented 75 to 250-millimeter Limestone fragments and 26 percent nonflat subrounded moderately cemented 2 to 75-millimeter Limestone fragments; slightly acid, pH 6.4; clear smooth boundary.

Bt1--21 to 51 centimeters (8.3 to 20.1 inches); strong brown (7.5YR 4/6) very channery loam; 23 percent clay; moderate medium subangular blocky structure; very friable, nonsticky, nonplastic; very fine roots throughout and fine roots throughout; 15 percent prominent clay films on all faces of peds; 12 percent nonflat subrounded moderately cemented 75 to 250-millimeter Limestone fragments and 28 percent nonflat subrounded moderately cemented 2 to 75-millimeter Limestone fragments; slightly acid, pH 6.4; clear smooth boundary.

Bt2--51 to 75 centimeters (20.1 to 29.5 inches); red (2.5YR 4/6) very channery clay loam; 37 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; fine roots throughout; 20 percent prominent clay films on all faces of peds; 15 percent nonflat subrounded moderately cemented 75 to 250-millimeter Limestone fragments and 35 percent nonflat subrounded moderately cemented 2 to 75-millimeter Limestone fragments; slightly acid, pH 6.2; clear wavy boundary.

Bt3--75 to 100 centimeters (29.5 to 39.4 inches); yellowish red (5YR 4/6) clay; 45 percent clay; moderate coarse subangular blocky structure; firm, slightly sticky, slightly plastic; 27 percent prominent clay films on all faces of peds; slightly acid, pH 6.2.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 12 2017
Describer: Yuri Plowden
NEON Plot ID: BLAN_011

Site ID: S2017VA043011

Pedon ID: S2017VA043011

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0786
Soil Name as Described/Sampled: Timberville
Classification: Fine, mixed, active, mesic Typic Hapludults
Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: taxadjunct
Associated Soils: Timberville-skeletal taxadjunct
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on footslope of side slope of valley on footslope of side slope of drainageway
Upslope Shape: concave
Cross Slope Shape: concave
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 51B -- Timberville silt loam, 0 to 7 percent slopes, frequently flooded
Pit Location: SW20 to pit center is 4m90cm @ 280 degrees pit center to pit face is 40cm @ 143 degrees
Quad Name:
Std Latitude: 39.0872900
Std Longitude: -77.9740200

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: old alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043011 **Pedon ID:** S2017VA043011

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
11.0	143.0	73						well		

A--0 to 13 centimeters (0.0 to 5.1 inches); dark brown (7.5YR 3/3) very channery silt loam; 12 percent clay; weak fine granular structure; very friable, slightly sticky, slightly plastic; 7 percent nonflat subrounded moderately cemented 2 to 75-millimeter Sandstone fragments and 10 percent nonflat rounded moderately cemented 2 to 75-millimeter Sandstone fragments and 20 percent nonflat rounded moderately cemented 75 to 250-millimeter Sandstone fragments; clear smooth boundary.

BA--13 to 33 centimeters (5.1 to 13.0 inches); dark reddish brown (5YR 3/4) very cobbly silt loam; 18 percent clay; weak fine subangular blocky structure; friable, slightly sticky, slightly plastic; 15 percent nonflat rounded 2 to 75-millimeter Sandstone fragments and 25 percent nonflat rounded 75 to 250-millimeter Sandstone fragments; clear wavy boundary.

Bw1--33 to 80 centimeters (13.0 to 31.5 inches); strong brown (7.5YR 4/6) very cobbly loam; 23 percent clay; 2 percent medium faint irregular (7.5YR 5/8) mottles; moderate medium single grain; friable; 5 percent faint clay bridges between sand grains; 25 percent nonflat rounded 2 to 75-millimeter Sandstone fragments and 30 percent nonflat rounded 75 to 250-millimeter Sandstone fragments; gradual smooth boundary.

2Bw2--80 to 100 centimeters (31.5 to 39.4 inches); strong brown (7.5YR 5/8) loam; 22 percent clay; moderate medium single grain; friable; 5 percent faint clay bridges between sand grains; 5 percent nonflat subrounded 2 to 75-millimeter Sandstone fragments and 5 percent nonflat subangular 75 to 250-millimeter Sandstone fragments.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 13 2017
Describer: Mike McDevitt
NEON Plot ID: BLAN_012

Site ID: S2017VA043012

Pedon ID: S2017VA043012

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0787
Soil Name as Described/Sampled: Thurmont
Classification: Fine-loamy, mixed, active, mesic Oxyaquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils: Thurmont
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on footslope of side slope of valley on footslope of side slope of terrace
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 20 cm.
argillic horizon 20 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 50B -- Thurmont gravelly loam, 3 to 8 percent slopes
Pit Location: SE20 to pit center 4.6m @ 108 degrees pit center to pit face is 0.4m @ 280 degrees
Quad Name:
Std Latitude: 39.0818611
Std Longitude: -77.9613333

Latitude: 39 degrees 4 minutes 54.70 seconds north
Longitude: 77 degrees 57 minutes 40.80 seconds west
Datum: WGS84
UTM Zone: 18
UTM Easting: 243845 meters
UTM Northing: 4330036 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: colluvium derived from quartzite and/or over limestone residuum weathered from limestone and dolomite
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043012 **Pedon ID:** S2017VA043012

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
5.0	136.0	120						well		

A--0 to 8 centimeters (0.0 to 3.1 inches); dark grayish brown (10YR 4/2) loam; 13 percent clay; weak medium subangular blocky structure; very friable, nonsticky, nonplastic; common very fine roots throughout and common very coarse roots throughout and common fine roots throughout and common coarse roots throughout; clear smooth boundary.

AE--8 to 20 centimeters (3.1 to 7.9 inches); yellowish brown (10YR 5/4) silt loam; 14 percent clay; moderate medium subangular blocky structure; very friable, nonsticky, nonplastic; 4 percent nonflat subangular strongly cemented 2 to 150-millimeter Quartzite fragments; gradual wavy boundary.

Bt1--20 to 54 centimeters (7.9 to 21.3 inches); strong brown (7.5YR 5/6) clay loam; 29 percent clay; moderate coarse subangular blocky structure; friable, nonsticky, slightly plastic; 15 percent distinct clay films on all faces of peds; 4 percent nonflat subangular strongly cemented 2 to 150-millimeter Quartzite fragments; clear wavy boundary.

Bt2--54 to 100 centimeters (21.3 to 39.4 inches); yellowish red (5YR 4/6) clay; 47 percent clay; moderate very coarse subangular blocky structure; friable, nonsticky, slightly plastic; 20 percent distinct clay films on all faces of peds.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 13 2017
Describer: Yuri Plowden
NEON Plot ID: BLAN_015

Site ID: S2017VA043015

Pedon ID: S2017VA043015
Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0788
Soil Name as Described/Sampled: Chagrin
Classification: Fine-loamy, mixed, active, mesic Dystric Fluventic Eutrudepts
Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils: Chagrin
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on footslope of side slope of terrace on footslope of side slope of alluvial plain
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 16 cm.
cambic horizon 16 to 48 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 10 -- Chagrin soils
Pit Location: SW20 to pit center is 8m @ 260 degrees pit center to pit face is 44cm @ 100 degrees
Quad Name:
Std Latitude: 39.0874300
Std Longitude: -77.9548000

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043015 **Pedon ID:** S2017VA043015

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0	132.0	80						well		

A--0 to 16 centimeters (0.0 to 6.3 inches); dark brown (7.5YR 3/2) fine sandy loam; 5 percent clay; moderate medium subangular blocky parts to moderate very fine subangular blocky structure; fine roots throughout and coarse roots throughout; clear smooth boundary.

Bw--16 to 48 centimeters (6.3 to 18.9 inches); dark brown (7.5YR 3/3) sandy loam; 5 percent clay; weak coarse subangular blocky parts to weak medium subangular blocky structure; fine roots throughout and coarse roots throughout; clear smooth boundary.

C--48 to 100 centimeters (18.9 to 39.4 inches); brown (7.5YR 4/2) loamy sand; structureless massive; loose; fine roots throughout; 1 percent nonflat subrounded weakly cemented 2 to 75-millimeter Limestone fragments.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 15 2017
Describer: Mike McDevitt
NEON Plot ID: BLAN_016

Site ID: S2017VA043016

Pedon ID: S2017VA043016

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0789
Soil Name as Described/Sampled: Thurmont
Classification: Fine-loamy, mixed, active, mesic Oxyaquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: taxadjunct
Associated Soils: Monongahela- taxadjunct
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of valley
on backslope of side slope of terrace
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 21 cm.
argillic horizon 21 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 49B -- Thurmont loam, 3 to 8 percent slopes
Pit Location: NW40 to pit center is 5.3m @ 125 degrees pit center to pit face is 0.3m @ 290 degrees
Quad Name:
Std Latitude: 39.0865833
Std Longitude: -77.9639444

Latitude: 39 degrees 5 minutes 11.70 seconds north
Longitude: 77 degrees 57 minutes 50.20 seconds west
Datum: WGS84
UTM Zone: 18
UTM Easting: 243636 meters
UTM Northing: 4330568 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: residuum
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043016 **Pedon ID:** S2017VA043016

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
4.0	126.0	50						well		

Ap--0 to 21 centimeters (0.0 to 8.3 inches); brown (7.5YR 4/3) loam; 16 percent clay; weak medium subangular blocky structure; very friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; fine low-continuity tubular pores; 1 percent nonflat subrounded moderately cemented 75 to 250-millimeter Limestone fragments and 2 percent nonflat subrounded moderately cemented 2 to 75-millimeter Limestone fragments; moderately acid, pH 5.6; abrupt smooth boundary.

Bt1--21 to 38 centimeters (8.3 to 15.0 inches); brown (7.5YR 4/4) loam; 22 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; fine roots throughout; fine low-continuity tubular pores; 2 percent distinct clay films on all faces of peds; 1 percent nonflat subrounded moderately cemented 75 to 250-millimeter Limestone fragments and 2 percent nonflat subrounded moderately cemented 2 to 75-millimeter Limestone fragments; moderately acid, pH 5.8; clear wavy boundary.

Bt2--38 to 60 centimeters (15.0 to 23.6 inches); yellowish red (5YR 4/6) sandy loam; 17 percent clay; moderate medium subangular blocky structure; friable, nonsticky, nonplastic; fine roots throughout; medium low-continuity tubular pores; 15 percent distinct clay films on all faces of peds; 5 percent fine distinct irregular weakly cemented manganese coatings with clear boundaries Between peds; 1 percent nonflat subrounded moderately cemented 75 to 250-millimeter Limestone fragments and 7 percent nonflat subrounded moderately cemented 2 to 75-millimeter Limestone fragments; slightly acid, pH 6.2; gradual wavy boundary.

Bt3--60 to 100 centimeters (23.6 to 39.4 inches); red (2.5YR 4/6) clay loam; 29 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; fine roots throughout; medium low-continuity tubular pores; 13 percent distinct clay films on all faces of peds; 10 percent fine prominent irregular weakly cemented manganese coatings with sharp boundaries Between peds; 1 percent nonflat subrounded moderately cemented 75 to 250-millimeter Limestone fragments and 9 percent nonflat subrounded moderately cemented 2 to 75-millimeter Limestone fragments; slightly acid, pH 6.2.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 12 2017
Describer: Mike Jones
NEON Plot ID: BLAN_017

Site ID: S2017VA043017

Pedon ID: S2017VA043017

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0790
Soil Name as Described/Sampled: udults
Classification:
Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hill on valley
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 29 cm.
argillic horizon 29 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 55D -- Udults-Udalfs association, 15 to 45 percent slopes
Pit Location: 8m 50cm, 257 degrees from NW20m to pit center. 255 degrees and 20cm from orange stake to pit face. Terrace position but not Monongahela (no pan nor redox). Not Braddock, not on greenstone. White oak, hickory, tulip poplar, japanese stiltgrass
Quad Name:
Std Latitude: 39.0864000
Std Longitude: -77.9712100

Latitude:
Longitude:
Datum: WGS84
UTM Zone: 18
UTM Easting: 243007 meters
UTM Northing: 4330568 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: old alluvium derived from sedimentary rock over residuum weathered from limestone and shale
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043017 **Pedon ID:** S2017VA043017

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
13.0	147.2	84						well		

A--0 to 8 centimeters (0.0 to 3.1 inches); dark brown (7.5YR 3/3) broken face silt loam; 8 percent clay; moderate fine granular parts to moderate very fine granular structure; very friable; very fine roots throughout; abrupt wavy boundary.

BA--8 to 29 centimeters (3.1 to 11.4 inches); brown (7.5YR 4/3) broken face silt loam; 21 percent clay; weak fine subangular blocky structure; very friable; medium roots throughout and coarse roots throughout; 2 percent nonflat rounded 2 to 5-millimeter Sandstone fragments; clear smooth boundary.

2Bt1--29 to 49 centimeters (11.4 to 19.3 inches); yellowish red (5YR 5/6) broken face silt loam; 26 percent clay; moderate medium subangular blocky structure; friable; very fine roots throughout and fine roots throughout; 60 percent pressure faces on bottom faces of peds; 2 percent nonflat rounded 2 to 5-millimeter Sandstone fragments; gradual smooth boundary.

2Bt2--49 to 76 centimeters (19.3 to 29.9 inches); red (2.5YR 4/8) broken face silty clay; 51 percent clay; moderate coarse subangular blocky structure; friable; medium roots throughout and fine roots throughout; 60 percent pressure faces on bottom faces of peds; clear smooth boundary.

2BCt--76 to 100 centimeters (29.9 to 39.4 inches); red (2.5YR 4/8) broken face silty clay; 48 percent clay; weak very coarse subangular blocky structure; friable; very fine roots throughout; strongly acid, pH 5.2, pH indicator solutions.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018

Description Date: Jun 14 2017

Describer: Mike McDevitt

NEON Plot ID: BLAN_019

Site ID: S2017VA043019

Pedon ID: S2017VA043019

Site Note:

Pedon Note:

Lab Source ID: KSSL

Lab Pedon #: 17N0791

Soil Name as Described/Sampled: Chagrin

Classification: Fine-loamy, mixed, active, mesic Dystric Fluventic Eutrudepts

Soil Name as Correlated:

Classification:

Pedon Type: undefined observation

Pedon Purpose: laboratory sampling site

Taxon Kind: series

Associated Soils: Chagrin

Physiographic Division:

Physiographic Province:

Physiographic Section:

State Physiographic Area:

Local Physiographic Area:

Geomorphic Setting: on footslope of base slope of valley on footslope of base slope of flood plain

Upslope Shape: linear

Cross Slope Shape: linear

Particle Size Control Section:

Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 17 cm.
cambic horizon 17 to 100 cm.

Country:

State: Virginia

County: Clarke

MLRA: 147 -- Northern Appalachian Ridges and Valleys

Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania

Map Unit: 10 -- Chagrin soils

Pit Location: SW40 to pit center is 4.4m @ 34 degrees Pit face is 36cm @ 190 degrees from pit center

Quad Name:

Std Latitude: 39.0876944

Std Longitude: -77.9662500

Latitude: 39 degrees 5 minutes 15.70 seconds north

Longitude: 77 degrees 57 minutes 58.50 seconds west

Datum: WGS84

UTM Zone: 18

UTM Easting: 243440 meters

UTM Northing: 4330682 meters

Primary Earth Cover: Grass/herbaceous cover

Secondary Earth Cover: Hayland

Existing Vegetation:

Parent Material: alluvium derived from sedimentary rock

Bedrock Kind:

Bedrock Depth:

Bedrock Hardness:

Bedrock Fracture Interval:

Surface Fragments:

Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043019 **Pedon ID:** S2017VA043019

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
3.0	109.7	31						well		

Ap--0 to 17 centimeters (0.0 to 6.7 inches); dark grayish brown (10YR 4/2) broken face silt loam; 12 percent clay; weak coarse subangular blocky structure; very friable, nonsticky, nonplastic; very fine roots throughout and fine roots throughout; medium tubular and fine tubular pores; slightly acid, pH 6.4, pH indicator solutions; abrupt wavy boundary.

Bw--17 to 100 centimeters (6.7 to 39.4 inches); dark brown (10YR 3/3) broken face silt loam; 24 percent clay; weak very coarse subangular blocky structure; very friable, nonsticky, nonplastic; fine roots throughout; medium tubular pores; 5 percent clay films on surfaces along pores; 2 percent flat subangular 2 to 150-millimeter Quartzite fragments and 3 percent flat subrounded 2 to 150-millimeter Quartzite fragments; slightly acid, pH 6.4, pH indicator solutions.

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 14 2017
Describer: Sara Saunders
NEON Plot ID: BLAN_020

Site ID: S2017VA043020

Pedon ID: S2017VA043020

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0792
Soil Name as Described/Sampled: Webbtown
Classification: Loamy-skeletal, mixed, semiactive, mesic Ruptic-Alfic Eutrudepts
Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils: Webbtown
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on shoulder of nose slope of valley
on shoulder of nose slope of hillslope
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section:

Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 10 cm.
argillic horizon 10 to 80 cm.
paralithic contact 80 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 39B -- Poplimento-Webbtown complex, rocky, 3 to 8 percent slopes
Pit Location: Grass field- 3m 30cm and 66 degrees from SW40m to pit center 150 degrees and 50c from orange stake to pit face.
Quad Name:
Std Latitude: 39.1007800
Std Longitude: -77.9806100

Latitude:
Longitude:
Datum: WGS84
UTM Zone:
UTM Easting:
UTM Northing:

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Tame pastureland
Existing Vegetation:
Parent Material: residuum weathered from siltstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 0.0 percent Limestone fragments
Description database: MLRA06_Morgantown

Cont. Site ID: S2017VA043020 **Pedon ID:** S2017VA043020

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
14.0	160.9	255						well		

Ap--0 to 10 centimeters (0.0 to 3.9 inches); dark yellowish brown (10YR 3/4) broken face channery silt loam; 12 percent clay; -- Error in Exists On -- structure; friable; very fine roots throughout; 17 percent flat subangular Limestone fragments; abrupt wavy boundary.

Bt--10 to 45 centimeters (3.9 to 17.7 inches); dark yellowish brown (10YR 4/4) broken face channery silt loam; 20 percent clay; weak coarse subangular blocky structure; friable; very fine roots throughout and fine roots throughout; 5 percent clay films on surfaces along pores and 30 percent silt coats on bottom faces of peds; 25 percent flat subangular 2 to 150-millimeter Limestone fragments; gradual smooth boundary.

BCt--45 to 80 centimeters (17.7 to 31.5 inches); brown (7.5YR 5/4) broken face very channery clay loam; 29 percent clay; weak coarse subangular blocky structure; friable; very fine roots around fragments; and 15 percent clay films on surfaces along pores; 10 percent manganese coatings Around rock fragments; 59 percent flat subangular 2 to 150-millimeter Limestone fragments; slightly alkaline, pH 7.4, pH indicator solutions.

Cr--80 to 100 centimeters (31.5 to 39.4 inches); light brown (7.5YR 6/4) broken face extremely channery silt loam; 22 percent clay; massive; loose; 10 percent manganese coatings Around rock fragments; 89 percent flat subangular weakly cemented 2 to 150-millimeter Limestone fragments; slightly alkaline, pH 7.4. bordering pararock

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 13 2017
Describer: Mike Jones
NEON Plot ID: BLAN_031

Site ID: S2017VA043031

Pedon ID: S2017VA043031

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0793
Soil Name as Described/Sampled: Poplimento
Classification: Fine, mixed, subactive, mesic Ultic Hapludalfs

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils: Poplimento
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of valley on backslope of side slope of hillslope
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 20 cm.
argillic horizon 48 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 35B -- Poplimento silt loam, 3 to 8 percent slopes
Pit Location: cut oat field was not marked at the SW40m corner. 39.058634, -78.070785 represents SW40m in phone conversation with Ty. We went NE of here.
Quad Name:
Std Latitude: 39.0586944
Std Longitude: -78.0707500

Latitude: 39 degrees 3 minutes 31.30 seconds north
Longitude: 78 degrees 4 minutes 14.70 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 753462 meters
UTM Northing: 4327375 meters

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Other grass/herbaceous cover
Existing Vegetation:
Parent Material: residuum weathered from limestone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2017VA043031 **Pedon ID:** S2017VA043031

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
6.0	175.9	162						well		

A--0 to 20 centimeters (0.0 to 7.9 inches); brown (7.5YR 4/3) broken face loam; 15 percent clay; very friable, nonsticky, nonplastic; slightly acid, pH 6.4, pH indicator solutions. Lab sample # 17N03954

EB--20 to 48 centimeters (7.9 to 18.9 inches); brown (7.5YR 5/4) broken face silt loam; 10 percent clay; friable, nonsticky, nonplastic; 3 percent nonflat subrounded Limestone fragments; neutral, pH 6.6, pH indicator solutions. Lab sample # 17N03955

Bt1--48 to 88 centimeters (18.9 to 34.6 inches); 27 percent strong brown (7.5YR 5/6) broken face clay loam; 28 percent clay; friable, nonsticky, slightly plastic; 7 percent nonflat subrounded Limestone fragments; neutral, pH 7.0, pH indicator solutions. Lab sample # 17N03956

Bt2--88 to 100 centimeters (34.6 to 39.4 inches); 90 percent yellowish red (5YR 5/8) broken face and 9 percent brown (7.5YR 5/4) broken face clay loam; 43 percent clay; friable, nonsticky, slightly plastic; 1 percent 10YR 2/1), moist, manganese coatings; 1 percent nonflat subrounded Limestone fragments; neutral, pH 7.2, pH indicator solutions. Lab sample # 17N03957

PEDON DESCRIPTION -- NEON Site BLAN

Print Date: Sep 16 2018
Description Date: Jun 13 2017
Describer: Mike Jones
NEON Plot ID: BLAN_032

Site ID: S2017VA043032

Pedon ID: S2017VA043032

Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 17N0794
Soil Name as Described/Sampled: Poplimento
Classification: Fine, mixed, subactive, mesic Ultic Hapludalfs

Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils: Poplimento
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of valley on backslope of side slope of hillslope
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 26 cm.
argillic horizon 58 to 100 cm.

Country:
State: Virginia
County: Clarke
MLRA: 147 -- Northern Appalachian Ridges and Valleys
Soil Survey Area: VA043 -- Clarke County, Virginia
6-MIL -- Mill Hall, Pennsylvania
Map Unit: 35B -- Poplimento silt loam, 3 to 8 percent slopes
Pit Location: 2.55m @ 51 degrees from NE20m corner
Quad Name:
Std Latitude: 39.0594722
Std Longitude: -78.0724722

Latitude: 39 degrees 3 minutes 34.10 seconds north
Longitude: 78 degrees 4 minutes 20.90 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 753310 meters
UTM Northing: 4327456 meters

Primary Earth Cover: Shrub cover
Secondary Earth Cover: Other shrub cover
Existing Vegetation:
Parent Material: residuum weathered from limestone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2017VA043032 **Pedon ID:** S2017VA043032

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
1.0	165.8	125						well		

A--0 to 26 centimeters (0.0 to 10.2 inches); strong brown (7.5YR 4/6) broken face silt loam; 15 percent clay; very friable, nonsticky, nonplastic; 1 percent nonflat subrounded Limestone fragments; neutral, pH 6.6, pH indicator solutions. Lab sample # 17N03958

AB--26 to 58 centimeters (10.2 to 22.8 inches); strong brown (7.5YR 5/6) broken face silt loam; 15 percent clay; very friable, nonsticky, nonplastic; 2 percent nonflat subrounded Limestone fragments; slightly acid, pH 6.4, pH indicator solutions. Lab sample # 17N03959

Bt1--58 to 82 centimeters (22.8 to 32.3 inches); 70 percent yellowish red (5YR 4/6) broken face and 27 percent brown (7.5YR 5/4) broken face and 3 percent yellow (2.5Y 7/6) broken face silt loam; 56 percent clay; firm, slightly sticky, slightly plastic; slightly acid, pH 6.2, pH indicator solutions. Lab sample # 17N03960

Bt2--82 to 100 centimeters (32.3 to 39.4 inches); 80 percent red (2.5YR 4/6) broken face and 16 percent reddish brown (5YR 5/4) broken face and 4 percent yellow (2.5Y 7/6) broken face silty clay; 56 percent clay; firm, slightly sticky, slightly plastic; slightly acid, pH 6.2, pH indicator solutions. Lab sample # 17N03961