PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 16 2018
Describer: Jennifer Mason
NEON Plot ID: MLBS_001

Site ID: S2018VA071001
Pedon ID: S2018VA071001

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N1996
Soil Name as Described/Sampled: Hazleton
Classification: Loamy-skeletal, mesic Typic Dystrudepts

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on mountaintop of mountains on mountain
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 65 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 10 cm.
cambic horizon 30 to 65 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
Map Unit: 27C -- Lily-Bailegap complex, very stony, 2 to 15 percent slopes
Pit Location:
Quad Name: Eggleston, Virginia
Std Latitude: 37.3605555
Std Longitude: -80.5251944

Latitude: 37 degrees 21 minutes 38.00 seconds north
Longitude: 80 degrees 31 minutes 30.70 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 542046 meters
UTM Northing: 4334977 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: skeletal loamy residuum weathered from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2018VA071001 **Pedon ID:** S2018VA071001

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
8.0	1,310.0	70						well		

A--0 to 10 centimeters (0.0 to 3.9 inches); black (7.5YR 2.5/1) broken face very gravelly loam; weak medium granular, and weak fine subangular blocky structure; very friable; many very fine roots throughout and many fine roots throughout; 5 percent nonflat subangular indurated 2 to 5-millimeter Sandstone fragments and 15 percent nonflat subangular indurated 20 to 76-millimeter Sandstone fragments and 30 percent nonflat subangular indurated 5 to 20-millimeter Sandstone fragments; very strongly acid, pH 5.0, pH indicator solutions; gradual smooth boundary. Lab sample # 18N06031

BA--10 to 30 centimeters (3.9 to 11.8 inches); dark brown (7.5YR 3/4) broken face very gravelly loam; weak medium subangular blocky structure; very friable; common very fine roots throughout and few medium roots throughout and common fine roots throughout and common coarse roots throughout; many medium moderate-continuity tubular pores; 5 percent nonflat subangular indurated 2 to 5-millimeter Sandstone fragments and 15 percent nonflat subangular indurated 20 to 76-millimeter Sandstone fragments and 30 percent nonflat subangular indurated 5 to 20-millimeter Sandstone fragments; very strongly acid, pH 5.0, pH indicator solutions; gradual smooth boundary. Lab sample # 18N06032

Bw1--30 to 50 centimeters (11.8 to 19.7 inches); brown (7.5YR 4/4) broken face extremely gravelly loam; weak fine subangular blocky structure; friable; few very fine roots throughout and common medium roots throughout and few fine roots throughout; common very fine moderate-continuity tubular and common very fine moderate-continuity tubular pores; 10 percent nonflat subangular indurated 2 to 5-millimeter Sandstone fragments and 20 percent nonflat subangular indurated 5 to 20-millimeter Sandstone fragments and 40 percent nonflat subangular indurated 20 to 76-millimeter Sandstone fragments; very strongly acid, pH 4.5, pH indicator solutions; gradual smooth boundary. Lab sample # 18N06033

Bw2--50 to 65 centimeters (19.7 to 25.6 inches); brown (7.5YR 4/3) broken face extremely gravelly sandy loam; weak fine subangular blocky structure; friable; few medium roots throughout; 40 percent nonflat subangular indurated 20 to 76-millimeter Sandstone fragments; very strongly acid, pH 4.5, pH indicator solutions; gradual smooth boundary. Lab sample # 18N06034

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 16 2018
Describer: Scott Aldridge
NEON Plot ID: MLBS_004

Site ID: S2018VA071004

Pedon ID: S2018VA071004

Site Note:

Pedon Note: The soil survey staff entered the classification to the highest level we could in the field due to lack of data. Without mineralogy we cannot classify the pedon to the series level which is the reason taxon above the family was selected. The activity class can be populated once the lab analysis are conducted.

Lab Source ID: KSSL
Lab Pedon #: 18N1993
Soil Name as Described/Sampled: Series Not Desiganted
Classification: Loamy-skeletal, mesic Typic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on mountainbase of mountains on mountain slope
Upslope Shape: concave
Cross Slope Shape: linear
Particle Size Control Section: 27 to 72 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 2 to 13 cm.
argillic horizon 27 to 72 cm.
lithic contact 72 to 97 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
VA606 -- Jefferson National Forest, Virginia
Map Unit: 59D -- Gilpin channery silt loam, 15 to 35 percent slopes
Pit Location:

Quad Name: Interior, Virginia

Std Latitude: 37.4292777
Std Longitude: -80.5120000

Latitude: 37 degrees 25 minutes 45.40 seconds north
Longitude: 80 degrees 30 minutes 43.20 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 543175 meters
UTM Northing: 4142607 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: colluvium derived from interbedded sedimentary rock
Bedrock Kind: Sandstone
Bedrock Depth: 72 centimeters
Bedrock Hardness: indurated
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
72	97	bedrock, lithic	Indurated

Cont. Site ID: S2018VA071004 **Pedon ID:** S2018VA071004

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	913.0	18						well		

Oi--0 to 1 centimeters (0.0 to 0.4 inches); slightly decomposed plant material; .

Oa--1 to 2 centimeters (0.4 to 0.8 inches); highly decomposed plant material; .

A--2 to 13 centimeters (0.8 to 5.1 inches); dark yellowish brown (10YR 4/4) broken face gravelly silt loam; moderate medium granular structure; very friable; many medium roots throughout and many fine roots throughout and few coarse roots throughout; 15 percent nonflat rounded indurated 5 to 20-millimeter Sandstone fragments and 20 percent nonflat rounded indurated 2 to 5-millimeter Sandstone fragments; abrupt smooth boundary. Lab sample # 18N06016

BA--13 to 27 centimeters (5.1 to 10.6 inches); yellowish brown (10YR 5/4) broken face silt loam; weak fine subangular blocky structure; friable; 5 percent nonflat rounded indurated 2 to 5-millimeter Sandstone fragments; clear smooth boundary. Lab sample # 18N06017

Bt1--27 to 44 centimeters (10.6 to 17.3 inches); 85 percent yellowish brown (10YR 5/6) broken face very gravelly silt loam; 15 percent medium distinct irregular (10YR 6/8) mottles; weak medium subangular blocky structure; friable; many medium roots throughout and many fine roots throughout and many coarse roots throughout; 20 percent nonflat rounded indurated 2 to 5-millimeter Sandstone fragments and 20 percent nonflat rounded indurated 5 to 20-millimeter Sandstone fragments; gradual smooth boundary. Lab sample # 18N06018. Fragment and root content prohibited the samping team from sampling clods.

Bt2--44 to 72 centimeters (17.3 to 28.3 inches); 70 percent yellowish brown (10YR 5/6) broken face very gravelly clay loam; 5 percent medium distinct irregular (5YR 4/6) and 25 percent medium distinct irregular (10YR 6/8) mottles; weak medium subangular blocky structure; friable; few medium roots throughout and few fine roots throughout; abrupt wavy boundary. Lab sample # 18N06019

R--72 to 97 centimeters (28.3 to 38.2 inches); indurated Sandstone bedrock; . Indurated sandtone bedrock (R) at 72cm.

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 15 2018
Describer: Scott Aldridge
NEON Plot ID: MLBS_006

Site ID: S2018VA071006

Pedon ID: S2018VA071006

Site Note:

Pedon Note: The soil survey staff entered the classification to the highest level we could in the field due to lack of data. Without mineralogy we cannot classify the pedon to the series level which is the reason taxon above the family was selected. The activity class can be populated once the lab analysis are conducted. The pscs is 25-48 cm, however it should be 25-100 cm but description stops at 48 cm due to water table. Could not manually override the taxonomic classification. It classified as Fine-loamy, mesic Oxyaquic udepts. Could not classify further due to reason described above.

Lab Source ID: KSSL
Lab Pedon #: 18N1991
Soil Name as Described/Sampled: Series Not Designated
Classification: Fine-loamy, mesic Udepts

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils: Jefferson, Shelocta
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on tread of mountains on terrace
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 48 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 19 cm.
cambic horizon 19 to 48 cm.
redox depletions with chroma 2 or less 19 to 48 cm.
reduced matrix 30 to 48 cm.
aquic conditions 30 to 48 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
VA606 -- Jefferson National Forest, Virginia
Map Unit: 26C -- Jefferson loam, 3 to 15 percent slopes
Pit Location:

Quad Name: Interior, Virginia

Std Latitude: 37.4266111
Std Longitude: -80.5642500

Latitude: 37 degrees 25 minutes 35.80 seconds north
Longitude: 80 degrees 33 minutes 51.30 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 538554 meters
UTM Northing: 4142289 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: fine-silty alluvium derived from shale and siltstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2018VA071006 **Pedon ID:** S2018VA071006

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	774.0	210						somewhat poorly		

A--0 to 19 centimeters (0.0 to 7.5 inches); dark yellowish brown (10YR 3/4) broken face silt loam; weak fine granular structure; very friable; many medium roots throughout and many fine roots throughout; clear wavy boundary. Lab sample # 18N06010

Bw--19 to 30 centimeters (7.5 to 11.8 inches); yellowish brown (10YR 5/6) broken face silt loam; weak fine subangular blocky structure; very friable; common medium roots throughout and common fine roots throughout; 5 percent fine faint irregular 10YR 6/2), moist, iron depletions with diffuse boundaries Throughout and 10 percent medium distinct irregular 10YR 5/2), moist, iron depletions with clear boundaries Throughout; abrupt wavy boundary. Lab sample # 18N06011

Bwg--30 to 48 centimeters (11.8 to 18.9 inches); grayish brown (10YR 5/2) broken face silty clay loam; weak coarse subangular blocky structure; very friable; few fine roots throughout; 20 percent medium prominent irregular 7.5YR 5/6), moist, masses of oxidized iron with sharp boundaries Throughout. Lab sample # 18N06012. This site was somewhat poorly drained. A water table was encountered at 48cm and the hole could not be described beyond 48cm due to water filling the pit.

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 14 2018
Describer: David Moore
NEON Plot ID: MLBS_009

Site ID: S2018VA071009
Pedon ID: S2018VA071009
Site Note:
Pedon Note: The soil survey staff entered the classification to the highest level we could in the field due to lack of data. Without mineralogy we cannot classify the pedon to the series level which is the reason taxon above the family was selected. The activity class can be populated once the lab analysis are conducted.
Lab Source ID: KSSL
Lab Pedon #: 18N1995
Soil Name as Described/Sampled: Series Not Designated
Classification: Fine-loamy, mesic Oxyaquic Hapludults
Soil Name as Correlated:
Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on mountainflank, center third of mountains on saddle
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 42 to 92 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 7 cm.
argillic horizon 12 to 120 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
Map Unit: 12 -- Fluvaquents, nearly level
Pit Location:
Quad Name: Eggleston, Virginia
Std Latitude: 37.3742222
Std Longitude: -80.5186944
Latitude: 37 degrees 22 minutes 27.20 seconds north
Longitude: 80 degrees 31 minutes 7.30 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 542614 meters
UTM Northing: 4136496 meters
Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: fine-loamy colluvium derived from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2018VA071009 **Pedon ID:** S2018VA071009

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
7.0	1,187.0	35						well		

A--0 to 7 centimeters (0.0 to 2.8 inches); 10YR 2/3 (10YR 2/3) broken face channery loam; weak fine granular structure; very friable; many very fine roots throughout and many fine roots throughout; many very fine moderate-continuity irregular and many fine moderate-continuity irregular pores; flat subangular indurated 2 to 150-millimeter Sandstone fragments; very strongly acid, pH 5.0; clear smooth boundary. Lab sample # 18N06026

BA--7 to 12 centimeters (2.8 to 4.7 inches); 85 percent dark brown (7.5YR 3/3) broken face channery loam; 15 percent medium faint irregular (7.5YR 2.5/2) mottles; weak fine subangular blocky structure; friable; common very fine roots throughout and common fine roots throughout and few coarse roots throughout; many very fine moderate-continuity irregular and many fine moderate-continuity irregular pores; flat subangular indurated 2 to 150-millimeter Sandstone fragments and nonflat subrounded indurated 5 to 20-millimeter Sandstone fragments; very strongly acid, pH 5.0; clear smooth boundary. Lab sample # 18N06027

Bt1--12 to 42 centimeters (4.7 to 16.5 inches); dark brown (7.5YR 3/4) broken face very channery clay loam; weak medium subangular blocky structure; friable; few very fine roots throughout; common very fine moderate-continuity irregular and common fine moderate-continuity irregular pores; 30 percent distinct 7.5YR 3/6), moist, clay films on all faces of peds; flat subangular indurated 2 to 150-millimeter Sandstone fragments and nonflat subrounded indurated 5 to 20-millimeter Sandstone fragments; strongly acid, pH 5.5; gradual smooth boundary. Lab sample # 18N06028

Bt2--42 to 85 centimeters (16.5 to 33.5 inches); reddish brown (5YR 4/4) broken face very channery clay loam; moderate medium subangular blocky structure; friable; common very fine moderate-continuity irregular pores; 35 percent distinct 5YR 4/6), moist, clay films on all faces of peds; 15 percent fine prominent spherical weakly cemented iron-manganese nodules with sharp boundaries Throughout; nonflat subrounded indurated 5 to 20-millimeter Sandstone fragments and flat subangular indurated 2 to 150-millimeter Sandstone fragments and flat subangular noncemented 5 to 20-millimeter Charcoal fragments; strongly acid, pH 5.5; diffuse smooth boundary. Lab sample # 18N06029

Bt3--85 to 100 centimeters (33.5 to 39.4 inches); 85 percent yellowish red (5YR 4/6) broken face channery clay loam; 15 percent medium distinct irregular (2.5YR 5/8) mottles; moderate medium subangular blocky structure; friable; 40 percent distinct 5YR 4/4), moist, clay films on all faces of peds; flat subangular indurated 2 to 150-millimeter Calcareous sandstone fragments; strongly acid, pH 5.5; diffuse smooth boundary. Lab sample # 18N06030

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 15 2018
Describer: Scott Aldridge
NEON Plot ID: MLBS_013

Site ID: S2018VA071013

Pedon ID: S2018VA071013

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N1990
Soil Name as Described/Sampled: Series Not Designated
Classification: Fine-loamy, mesic Lithic Dystrudepts

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on mountainflank, lower third of mountains on mountain slope
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 20 to 41 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 2 to 11 cm.
cambic horizon 11 to 40 cm.
lithic contact 40 to 65 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
VA606 -- Jefferson National Forest, Virginia
Map Unit: 41D -- Berks-Weikert complex, 15 to 35 percent slopes
Pit Location:
Quad Name: Interior, Virginia
Std Latitude: 37.4323330
Std Longitude: -80.5597500

Latitude: 37 degrees 25 minutes 56.40 seconds north
Longitude: 80 degrees 33 minutes 35.10 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 538949 meters
UTM Northing: 4142929 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: colluvium derived from chert and/or residuum weathered from chert
Bedrock Kind: Chert
Bedrock Depth: 40 centimeters
Bedrock Hardness: indurated
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
40	65	bedrock, lithic	Indurated

Cont. Site ID: S2018VA071013 **Pedon ID:** S2018VA071013

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
16.0	807.0	171						well		

Oi--0 to 1 centimeters (0.0 to 0.4 inches); slightly decomposed plant material; .

Oa--1 to 2 centimeters (0.4 to 0.8 inches); highly decomposed plant material; .

A--2 to 11 centimeters (0.8 to 4.3 inches); dark brown (10YR 3/3) broken face gravelly loam; weak fine granular structure; very friable; many medium roots throughout and many fine roots throughout; 10 percent nonflat angular indurated 2 to 5-millimeter Chert fragments and 10 percent nonflat angular indurated 5 to 20-millimeter Chert fragments; abrupt wavy boundary. Lab sample # 18N06007

Bw1--11 to 27 centimeters (4.3 to 10.6 inches); light yellowish brown (10YR 6/4) broken face silt loam; friable; common medium roots throughout and common fine roots throughout and few coarse roots throughout; 5 percent nonflat angular indurated 2 to 5-millimeter Chert fragments; abrupt smooth boundary. Lab sample # 18N06008

Bw2--27 to 40 centimeters (10.6 to 15.7 inches); yellowish brown (10YR 5/4) broken face silt loam; moderate medium subangular blocky structure; friable; few medium roots throughout and few fine roots throughout and few coarse roots throughout; 5 percent nonflat angular indurated 2 to 5-millimeter Chert fragments; abrupt smooth boundary. Lab sample # 18N06009

R--40 to 65 centimeters (15.7 to 25.6 inches); indurated Chert bedrock; .

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 15 2018
Describer: David Moore
NEON Plot ID: MLBS_014

Site ID: S2018VA071014

Pedon ID: S2018VA071014

Site Note:

Pedon Note: The soil survey staff entered the classification to the highest level we could in the field due to lack of data. Without mineralogy we cannot classify the pedon to the series level which is the reason taxon above the family was selected. The activity class can be populated once the lab analysis are conducted. This is a field classification without mineralogy and lab data it is difficult to determine the full taxonomic classification. This pedon fits loosely into the Grimsely Soil Series.

Lab Source ID: KSSL
Lab Pedon #: 18N1997
Soil Name as Described/Sampled: Grimsley
Classification: Loamy-skeletal, mesic Typic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on mountainbase of mountains on mountain slope
Upslope Shape: concave
Cross Slope Shape: linear
Particle Size Control Section: 19 to 69 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 12 cm.
argillic horizon 12 to 62 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
VA606 -- Jefferson National Forest, Virginia
Map Unit: 26C -- Jefferson loam, 3 to 15 percent slopes
Pit Location:

Quad Name: Interior, Virginia

Std Latitude: 37.4169444
Std Longitude: -80.5576944

Latitude: 37 degrees 25 minutes 1.00 seconds north
Longitude: 80 degrees 33 minutes 27.70 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 539139 meters
UTM Northing: 4141219 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: colluvium derived from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2018VA071014 **Pedon ID:** S2018VA071014

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	800.0	8						well		

Oe--0 to 1 centimeters (0.0 to 0.4 inches); 85 percent dark brown (7.5YR 3/3) broken face moderately decomposed plant material; 15 percent medium faint irregular (7.5YR 2.5/2) mottles; . Lab sample # 18N06035

A--1 to 6 centimeters (0.4 to 2.4 inches); very channery loam; weak fine granular structure; very friable; many very fine roots throughout and many fine roots throughout; flat subangular indurated 2 to 150-millimeter Sandstone fragments; very strongly acid, pH 5.0, pH indicator solutions; gradual smooth boundary. Lab sample # 18N06036

BA--6 to 19 centimeters (2.4 to 7.5 inches); extremely channery loam; moderate medium granular, and weak fine subangular blocky structure; friable; few very fine roots throughout and few medium roots throughout and common medium roots throughout; common very fine moderate-continuity irregular and common fine moderate-continuity irregular pores; flat subangular indurated 2 to 150-millimeter Sandstone fragments; very strongly acid, pH 5.0, pH indicator solutions; gradual smooth boundary. Lab sample # 18N06037

Bt1--19 to 36 centimeters (7.5 to 14.2 inches); very channery clay loam; moderate medium subangular blocky structure; friable; few very fine roots throughout and few medium roots throughout and few fine roots throughout; many very fine moderate-continuity irregular pores; 15 percent distinct clay films on all faces of peds; flat subangular indurated 2 to 150-millimeter Sandstone fragments; very strongly acid, pH 5.0, pH indicator solutions; diffuse smooth boundary. Lab sample # 18N06038

Bt2--36 to 69 centimeters (14.2 to 27.2 inches); extremely flaggy clay loam; strong medium subangular blocky, and strong coarse subangular blocky structure; friable; few very fine roots throughout and few medium roots throughout and few fine roots throughout and common coarse roots throughout; common very fine moderate-continuity irregular and common fine moderate-continuity irregular pores; flat subangular indurated 2 to 150-millimeter Sandstone fragments and flat subangular indurated 150 to 380-millimeter Sandstone fragments; very strongly acid, pH 5.0, pH indicator solutions; diffuse smooth boundary. Lab sample # 18N06039

Bt3--69 to 100 centimeters (27.2 to 39.4 inches); extremely flaggy clay loam; strong coarse subangular blocky structure; friable; few very fine roots throughout; 15 percent distinct 5YR 4/6), moist, clay films on all faces of peds; flat subangular indurated 2 to 150-millimeter Sandstone fragments and flat subangular indurated 150 to 380-millimeter Sandstone fragments; very strongly acid, pH 5.0, pH indicator solutions; diffuse boundary. Lab sample # 18N06040

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 18 2018
Describer: Scott Aldridge
NEON Plot ID: MLBS_019

Site ID: S2018VA071019

Pedon ID: S2018VA071019

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N1992
Soil Name as Described/Sampled: Series Not Designated
Classification: Fine-loamy, mesic Typic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on mountainbase of mountains on mountain slope
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section: 26 to 61 cm.
Description origin: NASIS

Diagnostic Features: ochric epipedon 4 to 9 cm.
argillic horizon 26 to 61 cm.
lithic contact 61 to 86 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
VA606 -- Jefferson National Forest, Virginia
Map Unit: 28C -- Shelocta channery silt loam, 3 to 15 percent slopes
Pit Location:
Quad Name: Interior, Virginia
Std Latitude: 37.4242220
Std Longitude: -80.5513888

Latitude: 37 degrees 25 minutes 27.20 seconds north
Longitude: 80 degrees 33 minutes 5.00 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 539693 meters
UTM Northing: 4142029 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: colluvium derived from interbedded sedimentary rock
Bedrock Kind: Sandstone
Bedrock Depth: 61 centimeters
Bedrock Hardness: indurated
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
61	86	bedrock, lithic	Indurated

Cont. Site ID: S2018VA071019 **Pedon ID:** S2018VA071019

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
7.0	796.0	337						well		

Oi--0 to 2 centimeters (0.0 to 0.8 inches); slightly decomposed plant material; .

Oa--2 to 4 centimeters (0.8 to 1.6 inches); highly decomposed plant material; .

A--4 to 9 centimeters (1.6 to 3.5 inches); dark yellowish brown (10YR 4/4) broken face silt loam; moderate medium granular structure; very friable; many medium roots throughout and many fine roots throughout and few coarse roots throughout; abrupt smooth boundary. Lab sample # 18N06013

BA--9 to 26 centimeters (3.5 to 10.2 inches); dark yellowish brown (10YR 4/6) broken face loam; weak fine subangular blocky structure; friable; common medium roots throughout and common fine roots throughout; clear smooth boundary. Lab sample # 18N06014

Bt--26 to 61 centimeters (10.2 to 24.0 inches); 98 percent yellowish brown (10YR 5/6) broken face clay loam; 2 percent medium distinct irregular (10YR 6/8) mottles; moderate medium subangular blocky structure; friable; few medium roots throughout and few fine roots throughout; 2 percent distinct clay films on vertical faces of peds; abrupt irregular boundary. Lab sample # 18N06015

R--61 to 86 centimeters (24.0 to 33.9 inches); indurated Sandstone bedrock; . Indurated sandstone bedrock at 61cm.

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 15 2018
Describer: Jennifer Mason
NEON Plot ID: MLBS_030

Site ID: S2018VA071030

Pedon ID: S2018VA071030

Site Note:

Pedon Note: The soil survey staff entered the classification to the highest level we could in the field due to lack of data. Without mineralogy we cannot classify the pedon to the series level which is the reason taxon above the family was selected. The activity class can be populated once the lab analysis are conducted. This is a field classification without mineralogy and lab data it is difficult to determine the full taxonomic classification. This pedon fits loosely into the Grimsley Soil Series.

Lab Source ID: KSSL
Lab Pedon #: 18N1994
Soil Name as Described/Sampled: Grimsley
Classification: Loamy-skeletal, mesic Typic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on mountainflank, center third of mountains on mountain slope
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 20 to 70 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 20 cm.
argillic horizon 20 to 43 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
VA606 -- Jefferson National Forest, Virginia
Map Unit: 28D -- Shelocta channery silt loam, 15 to 35 percent slopes
Pit Location:

Quad Name: Interior, Virginia

Std Latitude: 37.4302777
Std Longitude: -80.5083888

Latitude: 37 degrees 25 minutes 49.00 seconds north
Longitude: 80 degrees 30 minutes 30.20 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 543494 meters
UTM Northing: 4142720 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: fine-loamy colluvium derived from interbedded sedimentary rock
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2018VA071030 **Pedon ID:** S2018VA071030

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	884.0	10						well		

Oe--0 to 2 centimeters (0.0 to 0.8 inches); moderately decomposed plant material; . Lab sample # 18N06020

Ap1--2 to 11 centimeters (0.8 to 4.3 inches); dusky red (7.5R 3/3) broken face very gravelly loam; weak fine granular structure; very friable; common very fine roots throughout and few fine roots throughout and few coarse roots throughout; strongly acid, pH 5.5, pH indicator solutions; gradual smooth boundary. Lab sample # 18N06021

Ap2--11 to 20 centimeters (4.3 to 7.9 inches); dusky red (7.5R 3/4) broken face very gravelly loam; weak fine granular, and weak medium granular structure; very friable; common very fine roots throughout and few medium roots throughout and common fine roots throughout and few coarse roots throughout; common very fine moderate-continuity irregular pores; strongly acid, pH 5.5, pH indicator solutions; gradual smooth boundary. Lab sample # 18N06022

Bt1--20 to 37 centimeters (7.9 to 14.6 inches); strong brown (7.5YR 4/6) broken face very channery loam; weak fine subangular blocky, and weak medium subangular blocky structure; friable; common very fine roots throughout and few medium roots throughout and common fine roots throughout and few coarse roots throughout; common very fine moderate-continuity irregular and common fine moderate-continuity irregular pores; strongly acid, pH 5.5, pH indicator solutions; diffuse smooth boundary. Lab sample # 18N06023

Bt2--37 to 53 centimeters (14.6 to 20.9 inches); yellowish red (5YR 4/6) broken face extremely channery clay loam; weak fine subangular blocky, and moderate medium subangular blocky structure; friable; few very fine roots throughout and few medium roots throughout and few fine roots throughout; common very fine moderate-continuity irregular and common fine moderate-continuity irregular pores; very strongly acid, pH 5.0, pH indicator solutions; diffuse smooth boundary. Lab sample # 18N06024

Bt3--53 to 100 centimeters (20.9 to 39.4 inches); yellowish red (5YR 5/6) broken face very channery clay loam; friable; few very fine roots throughout and few medium roots throughout and few fine roots throughout; many very fine moderate-continuity irregular pores; very strongly acid, pH 5.0, pH indicator solutions. Lab sample # 18N06025

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 8 2018
Describer: Scott Aldridge
NEON Plot ID: MLBS_061

Site ID: S2018VA071061
Pedon ID: S2018VA071061
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N1988
Soil Name as Described/Sampled: Series Not Designated
Classification: Fine-loamy, mesic Fluvaquentic Dystrudepts

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils: Bailegap, Cotaco, Lily
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on mountainflank, center third of mountains on saddle
Upslope Shape: concave
Cross Slope Shape: linear
Particle Size Control Section: 25 to 91 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 6 to 14 cm.
cambic horizon 14 to 36 cm.
argillic horizon 36 to 91 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
Map Unit: 12 -- Fluvaquents, nearly level
Pit Location:
Quad Name: Interior, Virginia
Std Latitude: 37.3764722
Std Longitude: -80.5200000

Latitude: 37 degrees 22 minutes 35.30 seconds north
Longitude: 80 degrees 31 minutes 12.00 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 542497 meters
UTM Northing: 4136745 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: fine-loamy colluvium derived from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2018VA071061 **Pedon ID:** S2018VA071061

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	1,233.0	20						well		

Oe--0 to 2 centimeters (0.0 to 0.8 inches); slightly decomposed plant material; .

Oa--2 to 6 centimeters (0.8 to 2.4 inches); highly decomposed plant material; .

A--6 to 14 centimeters (2.4 to 5.5 inches); black (10YR 2/1) broken face mucky fine sandy loam; moderate medium granular structure; very friable; common medium roots throughout and common fine roots throughout; . Lab sample # 18N05999

AB--14 to 21 centimeters (5.5 to 8.3 inches); very dark grayish brown (10YR 3/2) broken face fine sandy loam; weak medium granular structure; very friable; few medium roots throughout and few fine roots throughout; . Lab sample # 18N06000

Bw1--21 to 30 centimeters (8.3 to 11.8 inches); brown (10YR 4/3) broken face loam; weak fine subangular blocky structure; friable; few fine roots throughout; . Lab sample # 18N06001

Bw2--30 to 36 centimeters (11.8 to 14.2 inches); yellowish brown (10YR 5/4) broken face loam; moderate fine subangular blocky structure; friable; few fine roots throughout; . Lab sample # 18N06002

Bt1--36 to 91 centimeters (14.2 to 35.8 inches); 60 percent yellowish brown (10YR 5/4) broken face clay loam; 10 percent medium faint irregular (10YR 4/4) and 10 percent fine faint irregular (10YR 6/3) and 20 percent medium prominent irregular (7.5YR 5/6) mottles; moderate fine subangular blocky structure; friable; common medium roots throughout and common coarse roots throughout; . Lab sample # 18N06003. Upon boring with a bucket auger, the soils team encountered a high rock fragment content at 91cm and could not bore past this depth.

PEDON DESCRIPTION -- NEON Site MLBS

Print Date: Jan 22 2019
Description Date: May 14 2018
Describer: Scott Aldridge
NEON Plot ID: MLBS_064

Site ID: S2018VA071064
Pedon ID: S2018VA071064
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N1989
Soil Name as Described/Sampled: Series Not Designated
Classification: Fine-loamy, mesic Typic Dystrudepts

Soil Name as Correlated:

Classification:
Pedon Type: confirmation description
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils: Bailegap, Cotaco, Lily
Physiographic Division: Appalachian Highlands
Physiographic Province: Valley and Ridge Province
Physiographic Section: Middle section
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on mountainflank, center third of mountains on saddle
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 94 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 8 to 11 cm.
cambic horizon 20 to 94 cm.

Country: United States
State: Virginia
County: Giles
MLRA: 128 -- Southern Appalachian Ridges and Valleys
Soil Survey Area: 6-CLI -- Clinton, Tennessee
Map Unit: 12 -- Fluvaquents, nearly level
Pit Location:
Quad Name: Interior, Virginia
Std Latitude: 37.3753888
Std Longitude: -80.5206111

Latitude: 37 degrees 22 minutes 31.40 seconds north
Longitude: 80 degrees 31 minutes 14.20 seconds west
Datum: WGS84
UTM Zone: 17
UTM Easting: 542444 meters
UTM Northing: 4136625 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Hardwoods
Existing Vegetation:
Parent Material: coarse-loamy colluvium derived from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2018VA071064 **Pedon ID:** S2018VA071064

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	1,205.0	350						well		

Oe--0 to 3 centimeters (0.0 to 1.2 inches); moderately decomposed plant material; .

Oa--3 to 8 centimeters (1.2 to 3.1 inches); highly decomposed plant material; .

A--8 to 11 centimeters (3.1 to 4.3 inches); very dark grayish brown (10YR 3/2) broken face fine sandy loam; weak medium granular structure; very friable, nonsticky, nonplastic; 5 percent nonflat angular indurated 2 to 5-millimeter Quartzite fragments; abrupt smooth boundary. Lab sample # 18N06004

AB--11 to 20 centimeters (4.3 to 7.9 inches); dark yellowish brown (10YR 4/4) broken face fine sandy loam; weak fine subangular blocky structure; friable, nonsticky, nonplastic; 5 percent nonflat angular indurated 2 to 5-millimeter Quartzite fragments; abrupt smooth boundary. Lab sample # 18N06005

Bw--20 to 94 centimeters (7.9 to 37.0 inches); 85 percent brown (7.5YR 4/4) broken face fine sandy loam; 15 percent medium distinct irregular (5YR 5/8) mottles; weak fine subangular blocky structure; friable, nonsticky, nonplastic; 12 percent nonflat angular indurated 10 to 12-millimeter Quartzite fragments; clear smooth boundary. Lab sample # 18N06006