PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 10 2016
Describer: J. Lene, C. Nichols, J. Velazquez
NEON Plot ID: TALL_002
Site ID: S2016AL007002
Pedon ID: S2016AL007002
Site Note: Neon Sampling site: Talladega National Forest; Bibb& Hale County, AL
Pedon Note: The sampling location was in a concave gully, that would not be representative of the area. the sampling location was offset by 1meter to give a better representation. site location # 2 was still mixed and variable. 1ME 1ME ..... 1MN . . . . 1 . 2 . 1ME . . . . 1MN . . SW21
Lab Source ID: KSSL
Lab Pedon #: 18N0181
Soil Name as Described/Sampled: Maubila
Classification: Fine, mixed, subactive, thermic Aquic Hapludults

Soil Name as Correlated:

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

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hillslope on backslope of side slope of coastal plain
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 32 to 82 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 13 cm.
argillic horizon 32 to 100 cm.

Country: United States
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: 7-TUS -- Tuskegee, Alabama
Map Unit:

Pit Location:

Quad Name: Payne Lake, Alabama

Std Latitude: 32.9220100
Std Longitude: -87.4291000

Latitude: 32 degrees 55 minutes 19.25 seconds north
Longitude: 87 degrees 25 minutes 44.89 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 459877 meters
UTM Northing: 3642723 meters

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

Cont. Site ID: S2016AL007002 **Pedon ID:** S2016AL007002

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
15.0	107.0		18.1			1,440	236			

A--0 to 13 centimeters (0.0 to 5.1 inches); dark grayish brown (10YR 4/2) fine sandy loam; weak fine subangular blocky structure; friable, nonsticky, nonplastic; common very fine roots and common medium roots and common fine roots; clear wavy boundary. Lab sample # 18N01316

BA--13 to 32 centimeters (5.1 to 12.6 inches); reddish yellow (7.5YR 6/8) clay; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; few medium roots and few fine roots; 1 percent fine distinct 10YR 5/2) and 10YR 7/1) iron depletions and 10 percent medium distinct 10YR 7/4) iron depletions; clear wavy boundary. Lab sample # 18N01317

Bt1--32 to 70 centimeters (12.6 to 27.6 inches); reddish yellow (7.5YR 6/8) clay; strong coarse subangular blocky structure; firm, slightly sticky, slightly plastic; few fine roots; 1 percent fine distinct 10R 3/6) masses of oxidized iron and 10 percent fine distinct 10YR 5/2) iron depletions and 15 percent medium distinct 10YR 7/1) and 10YR 7/4) iron depletions; clear smooth boundary. Lab sample # 18N01318

Bt2--70 to 100 centimeters (27.6 to 39.4 inches); 40 percent light gray (10YR 7/2) sandy clay; moderate coarse subangular blocky structure; firm, slightly sticky, slightly plastic; areas of reddish yellow are iron accumulations and areas of grayish brown, brownish gray and light gray are iron depletions. Lab sample # 18N01319

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 8 2016
Describer: Lene, Nichols, Velazquez
NEON Plot ID: TALL_004
Site ID: S2016AL007004
Pedon ID: S2016AL007004
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0182
Soil Name as Described/Sampled: Wadley
Classification: Loamy, siliceous, subactive, thermic Grossarenic Paleudults
Soil Name as Correlated:
Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on toeslope of side slope of drainageway on coastal plain
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 41 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:
Pit Location:
Quad Name:
Std Latitude: 32.9577200
Std Longitude: -87.4328000
Latitude: 32 degrees 57 minutes 27.79 seconds north
Longitude: 87 degrees 25 minutes 58.08 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 459550 meters
UTM Northing: 3646683 meters
Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: sandy marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007004 **Pedon ID:** S2016AL007004

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	97.0	170	16.9			1,488	229	somewhat excessively		

A--0 to 10 centimeters (0.0 to 3.9 inches); brown (10YR 4/3) broken face loamy fine sand; weak fine granular structure; soft, very friable, nonsticky, slightly plastic; many medium roots throughout and common fine roots throughout and many coarse roots throughout; noneffervescent, by HCl, 1 normal; abrupt smooth boundary. Lab sample # 18N01320

AE--10 to 41 centimeters (3.9 to 16.1 inches); dark yellowish brown (10YR 4/4) broken face loamy fine sand; weak fine granular structure; soft, very friable, nonsticky, slightly plastic; many medium roots throughout and many coarse roots throughout; noneffervescent, by HCl, 1 normal; gradual smooth boundary. Lab sample # 18N01321

E1--41 to 81 centimeters (16.1 to 31.9 inches); yellowish brown (10YR 5/6) broken face loamy fine sand; weak fine granular structure; soft, very friable, nonsticky, slightly plastic; noneffervescent, by HCl, 1 normal; pale brown (10YR 6/3) uncoated sand grains; gradual smooth boundary. Lab sample # 18N01322

E2--81 to 100 centimeters (31.9 to 39.4 inches); yellowish brown (10YR 5/4) broken face loamy fine sand; soft, very friable, nonsticky, slightly plastic; noneffervescent, by HCl, 1 normal. Lab sample # 18N01323

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 8 2016
Describer: Steve Depew, Alison Steglich, Alvin Perez
NEON Plot ID: TALL_005
Site ID: S2016AL007005
Pedon ID: S2016AL007005
Site Note: White oak - 50% Southern red oak - 10% loblolly pine - 10% Chestnut - 10% SCD; 1 meter sample plot sw corner located 1 m north and 1 m east of the sw 21 flag. This was a NNW facing aspect (10) on a 5% gradient. It is the lower one third headslope valley floor cantaining colluvial and alluvial valley fill. To minimize disturbance and future erosion potential on this slope, the south face of the pit near the SW corner was sampled. This pedon is a not representative of the a known series and would be considered a drainageway inclusion in an upland sideslope MU. This soil is representative, however, of the unique plant community that is present. (see additional note about veg) SCD 3/14/2016
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0183
Soil Name as Described/Sampled: Unknown
Classification: Fine-loamy, siliceous, semiactive, thermic Inceptic Hapludults
Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: miscellaneous area
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area: Colluvial/alluvial valley fill
Geomorphic Setting: microhigh on toeslope of head slope of coastal plain microhigh on toeslope of head slope of valley floor
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 8 to 28 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 8 cm.
argillic horizon 8 to 28 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:

Pit Location:

Quad Name: Payne Lake, Alabama
Std Latitude: 32.8969417
Std Longitude: -87.3975750

Latitude: 32 degrees 53 minutes 48.99 seconds north
Longitude: 87 degrees 23 minutes 51.27 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 462817 meters
UTM Northing: 3639932 meters

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

Cont. Site ID: S2016AL007005 **Pedon ID:** S2016AL007005

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		10						well		

A--0 to 8 centimeters (0.0 to 3.1 inches); very dark grayish brown (10YR 3/2) loam; weak fine subangular blocky structure; soft, friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout and coarse roots throughout; clear wavy boundary. Lab sample # 18N01324

Bt1--8 to 14 centimeters (3.1 to 5.5 inches); 90 percent brown (7.5YR 5/4) and 10 percent strong brown (7.5YR 5/8) clay loam; weak fine subangular blocky structure; soft, friable, slightly sticky, slightly plastic; medium roots throughout and fine roots throughout and coarse roots throughout; 10 percent distinct 10YR 2/2), moist, organic stains on surfaces along root channels and 10 percent faint 7.5YR 5/6), moist, clay films on all faces of peds; 1 percent very fine distinct platy mica flakes, muscovite with diffuse boundaries in matrix; clear wavy boundary. Lab sample # 18N01325

Bt2--14 to 28 centimeters (5.5 to 11.0 inches); strong brown (7.5YR 5/6) loam; weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; medium roots throughout and fine roots throughout; 10 percent distinct 10YR 2/2), moist, organic stains on surfaces along root channels and 10 percent faint 7.5YR 5/6), moist, clay films on all faces of peds; abrupt wavy boundary. Lab sample # 18N01326

Ab1--28 to 49 centimeters (11.0 to 19.3 inches); 80 percent brown (10YR 4/3) and 20 percent yellowish brown (10YR 5/8) fine sandy loam; weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; medium roots throughout and fine roots throughout; 10 percent distinct 10YR 2/2), moist, organic stains on surfaces along root channels; clear wavy boundary. Lab sample # 18N01327

Ab2--49 to 69 centimeters (19.3 to 27.2 inches); brown (10YR 5/3) loam; weak fine subangular blocky structure; soft, friable, nonsticky, nonplastic; fine roots throughout; clear wavy boundary. Lab sample # 18N01328

Ab3--69 to 100 centimeters (27.2 to 39.4 inches); brown (10YR 4/3) loam; weak fine subangular blocky structure; soft, friable, nonsticky, nonplastic; fine roots throughout; . Lab sample # 18N01329

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 9 2016
Describer: Burns, Hopkins, Moore
NEON Plot ID: TALL_006
Site ID: S2016AL007006
Pedon ID: S2016AL007006

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0184
Soil Name as Described/Sampled: Wadley
Classification: Loamy, siliceous, subactive, thermic Grossarenic Paleudults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hillslope
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 35 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit: MsD -- Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.8986944
Std Longitude: -87.4463333

Latitude: 32 degrees 53 minutes 55.30 seconds north
Longitude: 87 degrees 26 minutes 46.80 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 458258 meters
UTM Northing: 3640145 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: sandy marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007006 **Pedon ID:** S2016AL007006

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	97.0	170	16.9			1,488	229	somewhat excessively		

A--0 to 18 centimeters (0.0 to 7.1 inches); brown (10YR 4/3) loamy fine sand; weak fine granular structure; very friable; many medium roots throughout and common fine roots throughout and many coarse roots throughout; abrupt smooth boundary. Lab sample # 18N01330

AE--18 to 35 centimeters (7.1 to 13.8 inches); dark yellowish brown (10YR 4/4) loamy fine sand; weak fine granular structure; very friable; many medium roots throughout and many coarse roots throughout; gradual smooth boundary. Lab sample # 18N01331

E--35 to 100 centimeters (13.8 to 39.4 inches); yellowish brown (10YR 5/6) loamy fine sand; weak fine granular structure; very friable; pale brown (10YR 6/3) uncoated sand grains. Lab sample # 18N01332

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 10 2016
Describer: J. Lene, C. Nichols, J. Velazquez
NEON Plot ID: TALL_007
Site ID: S2016AL007007
Pedon ID: S2016AL007007
Site Note: Neon Sampling site: Talladega National Forest; Bibb& Hale County, AL
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0185
Soil Name as Described/Sampled: Maubila
Classification: Fine, mixed, subactive, thermic Aquic Hapludults

Soil Name as Correlated:

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

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hillslope on backslope of side slope of coastal plain
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 25 to 75 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 25 cm.
argillic horizon 25 to 86 cm.

Country: United States
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: 7-TUS -- Tuskegee, Alabama
Map Unit:

Pit Location:

Quad Name: Payne Lake, Alabama
Std Latitude: 32.9742722
Std Longitude: -87.4271639

Latitude: 32 degrees 58 minutes 27.38 seconds north
Longitude: 87 degrees 25 minutes 37.79 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 460084 meters
UTM Northing: 3648516 meters

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

Cont. Site ID: S2016AL007007 **Pedon ID:** S2016AL007007

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
15.0	107.0		18.1			1,440	236			

A--0 to 5 centimeters (0.0 to 2.0 inches); dark grayish brown (10YR 4/2) fine sandy loam; weak fine subangular blocky structure; soft, friable, nonsticky, nonplastic; common very fine roots and common medium roots and common fine roots; clear wavy boundary. Lab sample # 18N01333

AE--5 to 25 centimeters (2.0 to 9.8 inches); reddish yellow (7.5YR 6/8) fine sandy loam; moderate medium subangular blocky structure; soft, friable, nonsticky, nonplastic; few medium roots and few fine roots; 1 percent fine distinct 10YR 5/2) and 10YR 7/1) iron depletions and 10 percent medium distinct 10YR 7/4) iron depletions; clear wavy boundary. Lab sample # 18N01334

Bt1--25 to 60 centimeters (9.8 to 23.6 inches); reddish yellow (7.5YR 6/8) clay; strong coarse subangular blocky structure; moderately hard, firm, slightly sticky, slightly plastic; few fine roots; 1 percent fine distinct 10R 3/6) masses of oxidized iron and 10 percent fine distinct 10YR 5/2) iron depletions and 15 percent medium distinct 10YR 7/1) and 10YR 7/4) iron depletions; clear smooth boundary. Lab sample # 18N01335

Bt2--60 to 84 centimeters (23.6 to 33.1 inches); 40 percent light gray (10YR 7/2) sandy clay; moderate coarse subangular blocky structure; moderately hard, firm, slightly sticky, slightly plastic; areas of reddish yellow are iron accumulations and areas of grayish brown, brownish gray and light gray are iron depletions.; clear smooth boundary. Lab sample # 18N01336

C--84 to 100 centimeters (33.1 to 39.4 inches); brown (7.5YR 4/4) sandy loam; 5 percent (7.5YR 3/3) and 15 percent (10YR 6/6) mottles; massive; soft, friable, nonsticky, nonplastic; very fine roots; . Lab sample # 18N01337

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 9 2016
Describer: Steve Depew, Alison Steglich, Alvin Perez
NEON Plot ID: TALL_009
Site ID: S2016AL007009
Pedon ID: S2016AL007009
Site Note: Loblolly - 50% Green ash - 15% Southern red oak - 15% Chestnut - 5% SCD; 1 meter sample plot sw corner located 1 m north and 1 m east of the sw 21 flag. This was a WSW facing aspect (250) on a 21% gradient. It is the lower one third noseslope. To minimize disturbance and future erosion potential on this slope, the east face of the pit was sampled. This pedon is a representative of the Maubila series. This soil is representative of the plant community that is present. (see additional note about veg) SCD 3/14/2016
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0186
Soil Name as Described/Sampled: Maubila
Classification: Fine, mixed, subactive, thermic Aquic Hapludults

Soil Name as Correlated:

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

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of nose slope of coastal plain on backslope of nose slope of hillslope
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 21 to 52 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 21 cm.
argillic horizon 21 to 52 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:

Pit Location:

Quad Name: Payne Lake, Alabama
Std Latitude: 32.8996222
Std Longitude: -87.4068750

Latitude: 32 degrees 53 minutes 58.64 seconds north
Longitude: 87 degrees 24 minutes 24.75 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 461948 meters
UTM Northing: 3640233 meters

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

Cont. Site ID: S2016AL007009 **Pedon ID:** S2016AL007009

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
21.0		250						moderately well		

A--0 to 21 centimeters (0.0 to 8.3 inches); 80 percent very dark grayish brown (10YR 3/2) and 20 percent brown (10YR 5/3) very gravelly loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout and coarse roots throughout; 18 percent flat angular strongly cemented 150 to 380-millimeter Ironstone nodules and 25 percent nonflat subrounded strongly cemented 2 to 20-millimeter Quartz fragments; abrupt wavy boundary. Lab sample # 18N01338

Bt1--21 to 39 centimeters (8.3 to 15.4 inches); 80 percent strong brown (7.5YR 5/8) and 10 percent light brown (7.5YR 6/4) and 10 percent red (2.5YR 5/8) flaggy clay; weak coarse subangular blocky parts to moderate fine subangular blocky structure; hard, firm, very sticky, very plastic; very fine roots between peds and medium roots throughout and fine roots between peds and coarse roots throughout; 10 percent faint 7.5YR 5/6), moist, clay films on surfaces along pores; 2 percent nonflat subrounded indurated 2 to 5-millimeter Plinthite nodules and 18 percent flat angular strongly cemented 150 to 380-millimeter Ironstone nodules; clear wavy boundary. Lab sample # 18N01339

Bt2--39 to 52 centimeters (15.4 to 20.5 inches); 60 percent strong brown (7.5YR 5/8) and 10 percent light gray (7.5YR 7/1) and 10 percent red (10R 4/8) and 10 percent light brown (7.5YR 6/3) and 10 percent pinkish gray (7.5YR 6/2) gravelly clay; weak coarse subangular blocky parts to moderate fine subangular blocky structure; hard, firm, very sticky, very plastic; very fine roots between peds and medium roots throughout and fine roots between peds and coarse roots throughout; 10 percent faint 7.5YR 5/6), moist, clay films on surfaces along pores; 2 percent nonflat subrounded indurated 2 to 5-millimeter Plinthite nodules and 10 percent nonflat subangular strongly cemented 2 to 5-millimeter Ironstone nodules and 15 percent nonflat subrounded strongly cemented 2 to 5-millimeter Quartz fragments; clear wavy boundary. Lab sample # 18N01340

BC--52 to 75 centimeters (20.5 to 29.5 inches); 80 percent strong brown (7.5YR 5/6) and 10 percent pinkish gray (7.5YR 6/2) and 10 percent red (10R 4/8) clay; weak coarse prismatic parts to moderate medium subangular blocky structure; hard, firm, very sticky, very plastic; very fine roots between peds and medium roots throughout and fine roots between peds; 3 percent faint clay films on surfaces along pores; 10 percent fine distinct irregular 7.5YR 6/2), moist, iron depletions with clear boundaries Between peds; 3 percent nonflat subrounded indurated 2 to 5-millimeter Plinthite nodules; clear wavy boundary. Lab sample # 18N01341

C--75 to 100 centimeters (29.5 to 39.4 inches); 70 percent gray (7.5YR 6/1) and 20 percent red (10R 5/6) and 10 percent strong brown (7.5YR 5/8) clay; massive; hard, firm, moderately sticky, very plastic; 20 percent fine prominent irregular 10R 4/8), moist, masses of oxidized iron with clear boundaries In matrix. Lab sample # 18N01342

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 8 2016
Describer: J. Lene, C. Nichols, J. Velazquez
NEON Plot ID: TALL_010
Site ID: S2016AL007010
Pedon ID: S2016AL007010
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0187
Soil Name as Described/Sampled: Bonneau
Classification: Loamy, siliceous, subactive, thermic Arenic Paleudults

Soil Name as Correlated:

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

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of nose slope of hillslope on coastal plain
Upslope Shape: convex
Cross Slope Shape: convex
Particle Size Control Section: 83 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 14 cm.
cambic horizon 14 to 83 cm.
argillic horizon 83 to 100 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9266400
Std Longitude: -87.4189000

Latitude: 32 degrees 55 minutes 35.91 seconds north
Longitude: 87 degrees 25 minutes 8.04 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 460836 meters
UTM Northing: 3643232 meters

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

Cont. Site ID: S2016AL007010 **Pedon ID:** S2016AL007010

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
12.0		300	16.9			1,440	229	moderately well		

A--0 to 14 centimeters (0.0 to 5.5 inches); very dark grayish brown (10YR 3/2) loamy fine sand; single grain; soft, very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots and coarse roots; abrupt smooth boundary. Lab sample # 18N01343

Bw1--14 to 32 centimeters (5.5 to 12.6 inches); yellowish brown (10YR 5/4) loamy fine sand; single grain; soft, very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots and coarse roots; clear smooth boundary. Lab sample # 18N01344

Bw2--32 to 83 centimeters (12.6 to 32.7 inches); brown (7.5YR 5/4) loamy fine sand; single grain; soft, very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots and coarse roots; clear smooth boundary. Lab sample # 18N01345

Bt--83 to 100 centimeters (32.7 to 39.4 inches); reddish yellow (5YR 6/8) sandy loam; weak medium subangular blocky structure; slightly hard, very friable, nonsticky, nonplastic; fine roots and coarse roots; . Lab sample # 18N01346

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 9 2016
Describer: Ann J. Tan
NEON Plot ID: TALL_011
Site ID: S2016AL007011
Pedon ID: S2016AL007011
Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0188
Soil Name as Described/Sampled: Bibb
Classification: Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents
Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: None Assigned
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 13 cm.
redox concentrations 13 to 100 cm.

Country: United States
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit:
Pit Location: Site sampled 1 meter north and 1 meter east of SW_021. This area was representative of the plot.
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9561694
Std Longitude: -87.4103972

Latitude: 32 degrees 57 minutes 22.21 seconds north
Longitude: 87 degrees 24 minutes 37.43 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 461643 meters
UTM Northing: 3646503 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007011 **Pedon ID:** S2016AL007011

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								poorly		

A--0 to 13 centimeters (0.0 to 5.1 inches); brown (10YR 4/3) sandy loam; weak fine granular structure; friable, nonsticky, nonplastic; very fine roots and fine roots; abrupt smooth boundary. Lab sample # 18N01347

C1--13 to 30 centimeters (5.1 to 11.8 inches); brown (7.5YR 4/4) sandy loam; 5 percent (7.5YR 3/3) and 15 percent (10YR 6/6) mottles; massive; friable, nonsticky, nonplastic; very fine roots; clear smooth boundary. Lab sample # 18N01348

C2--30 to 100 centimeters (11.8 to 39.4 inches); sandy loam; 33 percent (7.5YR 4/4) and 33 percent (10YR 6/6) and 33 percent (7.5YR 3/3) mottles; massive; friable, nonsticky, nonplastic; . Lab sample # 18N01349

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 8 2016
Describer: Ann J. Tan
NEON Plot ID: TALL_012
Site ID: S2016AL007012
Pedon ID: S2016AL007012
Site Note:

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0189
Soil Name as Described/Sampled: Smithdale
Classification: Fine-loamy, siliceous, subactive, thermic Typic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on summit of None Assigned
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 50 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 50 cm.
argillic horizon 50 to 100 cm.

Country: United States
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit:
Pit Location: Site sampled 1 meter north and 1 meter east of SW_021. This area was representative of the plot.
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9188694
Std Longitude: -87.3977000

Latitude: 32 degrees 55 minutes 7.93 seconds north
Longitude: 87 degrees 23 minutes 51.72 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 462814 meters
UTM Northing: 3642363 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007012 **Pedon ID:** S2016AL007012

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		50						well		

A--0 to 17 centimeters (0.0 to 6.7 inches); dark grayish brown (10YR 4/2) fine sandy loam; weak fine granular structure; very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots and coarse roots; clear smooth boundary. Lab sample # 18N01350

E--17 to 50 centimeters (6.7 to 19.7 inches); yellowish brown (10YR 5/4) fine sandy loam; weak medium granular structure; very friable, nonsticky, nonplastic; very fine roots and very coarse roots and medium roots and fine roots and coarse roots; gradual wavy boundary. Lab sample # 18N01351

Bt--50 to 100 centimeters (19.7 to 39.4 inches); yellowish red (5YR 5/6) sandy clay loam; moderate medium subangular blocky structure; firm, slightly sticky, slightly plastic; fine roots and coarse roots; 30 percent faint clay films. Lab sample # 18N01352

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 9 2016
Describer: Burns, Hopkins, Moore
NEON Plot ID: TALL_013
Site ID: S2016AL007013
Pedon ID: S2016AL007013

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0190
Soil Name as Described/Sampled: Columbus
Classification: Fine-loamy, siliceous, semiactive, thermic Aquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on toeslope of side slope of hillslope
Upslope Shape: concave
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 85 cm.
umbric epipedon 0 to 36 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit: MsF -- Maubila-Smithdale complex, 15 to 35 percent slopes
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.8845833
Std Longitude: -87.4546389

Latitude: 32 degrees 53 minutes 4.50 seconds north
Longitude: 87 degrees 27 minutes 16.70 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 457474 meters
UTM Northing: 3638584 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: local alluvium and/or marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007013 **Pedon ID:** S2016AL007013

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	114.0	270	16.9			1,488	229	well		

A1--0 to 36 centimeters (0.0 to 14.2 inches); very dark grayish brown (10YR 3/2) fine sandy loam; 15 percent clay; moderate medium granular structure; friable; many very fine roots throughout and many fine roots throughout; Pale brown (10YR 5/3) uncoated sand grains; gradual wavy boundary. Lab sample # 18N01353

A2--36 to 85 centimeters (14.2 to 33.5 inches); 70 percent very dark grayish brown (10YR 3/2) and 30 percent yellowish brown (10YR 5/4) fine sandy loam; 15 percent clay; moderate medium granular structure; friable; many medium roots throughout and many fine roots throughout; clear smooth boundary. Lab sample # 18N01354

Bt--85 to 100 centimeters (33.5 to 39.4 inches); strong brown (7.5YR 5/6) sandy clay loam; 27 percent clay; weak medium subangular blocky structure; friable; . Lab sample # 18N01355

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 7 2016
Describer: Burns, Hopkins, Moore
NEON Plot ID: TALL_015
Site ID: S2016AL007015
Pedon ID: S2016AL007015

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0191
Soil Name as Described/Sampled: Maubila
Classification: Fine, mixed, subactive, thermic Aquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hillslope
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 40 to 65 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 20 cm.
argillic horizon 20 to 100 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit: MsF -- Maubila-Smithdale complex, 15 to 35 percent slopes
Pit Location:
Quad Name:
Std Latitude: 32.9102222
Std Longitude: -87.4210833

Latitude: 32 degrees 54 minutes 36.80 seconds north
Longitude: 87 degrees 25 minutes 15.90 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 460624 meters
UTM Northing: 3641413 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007015 **Pedon ID:** S2016AL007015

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
20.0	115.0	0	16.9			1,488	229	moderately well		

A--0 to 20 centimeters (0.0 to 7.9 inches); brown (10YR 4/3) crushed loamy fine sand; 8 percent clay; weak medium granular structure; very friable; many fine roots throughout and many coarse roots throughout; clear smooth boundary. Lab sample # 18N01356

E--20 to 40 centimeters (7.9 to 15.7 inches); yellowish brown (10YR 5/4) crushed fine sandy loam; 12 percent clay; moderate medium granular structure; very friable; many fine roots between peds and many coarse roots between peds; clear smooth boundary. Lab sample # 18N01357

Bt1--40 to 65 centimeters (15.7 to 25.6 inches); strong brown (7.5YR 4/6) exterior sandy loam; 16 percent clay; weak medium subangular blocky structure; friable; many fine roots between peds; faint clay bridges between sand grains; 5 percent flat angular indurated 100 to 200-millimeter Ironstone nodules; clear wavy boundary. Lab sample # 18N01358

Bt2--65 to 90 centimeters (25.6 to 35.4 inches); 60 percent strong brown (7.5YR 5/6) exterior and 40 percent yellowish brown (10YR 5/6) exterior flaggy sandy clay loam; 23 percent clay; weak medium subangular blocky structure; friable; very few fine roots between peds; faint clay bridges between sand grains; 10 percent medium distinct 10YR 6/3), moist, iron depletions with clear boundaries Between peds; 25 percent flat angular indurated 100 to 200-millimeter Ironstone nodules; abrupt smooth boundary. Lab sample # 18N01359

BC--90 to 100 centimeters (35.4 to 39.4 inches); 60 percent strong brown (7.5YR 5/6) exterior and 25 percent gray (10YR 6/1) exterior and 15 percent red (10R 4/6) exterior clay; 53 percent clay; moderate coarse subangular blocky structure; very firm; very few fine roots between peds; . Lab sample # 18N01360

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 10 2016
Describer: Burns, Hopkins, Moore
NEON Plot ID: TALL_016
Site ID: S2016AL007016
Pedon ID: S2016AL007016

Site Note:

Pedon Note: Toe slope position that has depostional material moving down from above that is about 8 to 12 cm thick.

Lab Source ID: KSSL
Lab Pedon #: 18N0192
Soil Name as Described/Sampled: Maubila
Classification: Fine, mixed, subactive, thermic Aquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on toeslope of side slope of hillslope
Upslope Shape: concave
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 50 cm.
argillic horizon 50 to 100 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit: WdE -- Wadley-Smithdale-Boykin complex, 5 to 20 percent slopes
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9702500
Std Longitude: -87.4152500

Latitude: 32 degrees 58 minutes 12.90 seconds north
Longitude: 87 degrees 24 minutes 54.90 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 461196 meters
UTM Northing: 3648065 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: marine deposits and/or slope alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007016 **Pedon ID:** S2016AL007016

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
23.0	97.0	180	16.9			1,488	229	well		

A--0 to 8 centimeters (0.0 to 3.1 inches); brownish yellow (10YR 6/6) fine sandy loam; 16 percent clay; weak medium granular structure; friable; many medium roots throughout and many fine roots throughout and common coarse roots throughout; clear wavy boundary. Lab sample # 18N01361

Ab--8 to 50 centimeters (3.1 to 19.7 inches); dark grayish brown (10YR 4/2) fine sandy loam; 14 percent clay; moderate medium granular structure; friable; many medium roots throughout and many fine roots throughout; 5 percent flat angular indurated 50 to 90-millimeter Ironstone nodules; clear smooth boundary. Lab sample # 18N01362

Bt1--50 to 72 centimeters (19.7 to 28.3 inches); reddish yellow (7.5YR 6/8) clay loam; 34 percent clay; weak medium subangular blocky structure; firm; very few fine roots between peds; 10 percent fine prominent 2.5YR 4/8), moist, masses of oxidized iron Between peds; 3 percent nonflat subrounded indurated 4 to 7-millimeter Quartzite fragments and 5 percent flat angular indurated 50 to 90-millimeter Ironstone nodules; gradual smooth boundary. Lab sample # 18N01363

Bt2--72 to 100 centimeters (28.3 to 39.4 inches); reddish yellow (7.5YR 6/8) clay loam; 36 percent clay; moderate medium subangular blocky structure; firm; 2 percent fine distinct 10YR 7/2), moist, masses of reduced iron and 10 percent medium prominent 10R 3/6), moist, masses of oxidized iron; 3 percent nonflat subrounded indurated 4 to 7-millimeter Quartzite fragments and 5 percent flat angular indurated 50 to 90-millimeter Ironstone nodules. Lab sample # 18N01364

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 8 2016
Describer: Burns, Moore
NEON Plot ID: TALL_017
Site ID: S2016AL007017
Pedon ID: S2016AL007017

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0193
Soil Name as Described/Sampled: Maubila
Classification: Fine, mixed, subactive, thermic Aquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hillslope
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 36 to 86 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 17 cm.
argillic horizon 36 to 100 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit: MsF -- Maubila-Smithdale complex, 15 to 35 percent slopes
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9099167
Std Longitude: -87.4089167

Latitude: 32 degrees 54 minutes 35.70 seconds north
Longitude: 87 degrees 24 minutes 32.10 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 461762 meters
UTM Northing: 3641375 meters

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

Cont. Site ID: S2016AL007017 **Pedon ID:** S2016AL007017

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
25.0	121.0	200	16.9			1,488	229	moderately well		

A--0 to 17 centimeters (0.0 to 6.7 inches); dark brown (10YR 3/3) crushed sandy loam; 14 percent clay; moderate medium granular structure; friable; many medium roots throughout and many fine roots throughout and very few coarse roots throughout; 10 percent flat angular indurated 70 to 350-millimeter Ironstone nodules; gradual wavy boundary. Lab sample # 18N01365

E--17 to 36 centimeters (6.7 to 14.2 inches); yellowish brown (10YR 5/4) crushed sandy loam; 14 percent clay; weak medium granular structure; friable; many medium roots throughout and many fine roots throughout; 10 percent flat angular indurated 70 to 350-millimeter Iron-manganese nodules; gradual wavy boundary. Lab sample # 18N01366

Bt1--36 to 56 centimeters (14.2 to 22.0 inches); yellowish red (5YR 5/8) exterior sandy clay; 37 percent clay; moderate medium subangular blocky structure; firm; very few fine roots between peds; clear smooth boundary. Lab sample # 18N01367

Bt2--56 to 70 centimeters (22.0 to 27.6 inches); yellowish red (5YR 5/6) exterior sandy clay; 38 percent clay; moderate medium subangular blocky structure; firm; 10 percent medium prominent 10R 4/6), moist, masses of oxidized iron with clear boundaries Between peds; clear smooth boundary. Lab sample # 18N01368

Bt3--70 to 100 centimeters (27.6 to 39.4 inches); reddish yellow (5YR 6/8) exterior clay; 55 percent clay; strong medium subangular blocky structure; firm; 5 percent medium prominent 5YR 5/8), moist, masses of oxidized iron with clear boundaries Between peds and 5 percent medium prominent 10YR 7/1), moist, masses of reduced iron with clear boundaries Between peds. Lab sample # 18N01369

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 10 2016
Describer: Ann J. Tan
NEON Plot ID: TALL_018
Site ID: S2016AL007018
Pedon ID: S2016AL007018
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0194
Soil Name as Described/Sampled: Maubila
Classification: Fine, mixed, subactive, thermic Aquic Hapludults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of None Assigned
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section: 23 to 73 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 23 cm.
argillic horizon 23 to 100 cm.
redox concentrations 23 to 100 cm.

Country: United States
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit:
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9161778
Std Longitude: -87.3900000

Latitude: 32 degrees 54 minutes 58.24 seconds north
Longitude: 87 degrees 23 minutes 24.00 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 463533 meters
UTM Northing: 3642062 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007018 **Pedon ID:** S2016AL007018

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

A--0 to 6 centimeters (0.0 to 2.4 inches); dark grayish brown (10YR 4/2) fine sandy loam; weak fine granular structure; very friable, nonsticky, nonplastic; very fine roots and fine roots; 10 percent Ironstone nodules; abrupt smooth boundary. Lab sample # 18N01370

E--6 to 23 centimeters (2.4 to 9.1 inches); brown (10YR 4/3) fine sandy loam; weak fine granular structure; very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots and coarse roots; 40 percent Ironstone nodules; abrupt smooth boundary. Lab sample # 18N01371

Bt1--23 to 63 centimeters (9.1 to 24.8 inches); brownish yellow (10YR 6/6) clay; 30 percent (7.5YR 5/8) mottles; moderate medium subangular blocky structure; firm, very sticky, very plastic; medium roots and fine roots and coarse roots; 60 percent clay films; 30 percent Ironstone nodules; clear wavy boundary. Lab sample # 18N01372

Bt2--63 to 100 centimeters (24.8 to 39.4 inches); yellow (2.5Y 7/8) clay; 10 percent (2.5Y 7/8) and 20 percent (5YR 5/6) and 20 percent (10YR 7/1) mottles; strong medium subangular blocky structure; firm, very sticky, very plastic; 60 percent clay films. Lab sample # 18N01373

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 7 2016
Describer: J. Lene, C. Nichols, J. Velazquez
NEON Plot ID: TALL_020
Site ID: S2016AL007020
Pedon ID: S2016AL007020
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0195
Soil Name as Described/Sampled: Smithdale
Classification: Fine-loamy, siliceous, subactive, thermic Typic Hapludults

Soil Name as Correlated:

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

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of coastal plain on backslope of side slope of hillslope
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 27 to 60 cm.

Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 27 cm.
argillic horizon 27 to 60 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9558400
Std Longitude: -87.4271000

Latitude: 32 degrees 57 minutes 21.03 seconds north
Longitude: 87 degrees 25 minutes 37.56 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 460082 meters
UTM Northing: 3646472 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: loamy marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 2.0 percent nonflat subangular strongly cemented 75- to 250-millimeter Ironstone nodules

Description database: KSSL

Cont. Site ID: S2016AL007020 **Pedon ID:** S2016AL007020

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
26.0	118.0	0	16.9			1,488	229	well		

A--0 to 10 centimeters (0.0 to 3.9 inches); 60 percent very dark grayish brown (10YR 3/2) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; clear wavy boundary. Lab sample # 18N01374

AE--10 to 27 centimeters (3.9 to 10.6 inches); 80 percent yellowish brown (10YR 5/6) and 10 percent dark yellowish brown (10YR 4/4) and 10 percent strong brown (7.5YR 4/6) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; 8 percent nonflat subrounded strongly cemented 2 to 8-millimeter Ironstone nodules; clear wavy boundary. Lab sample # 18N01375

Bt--27 to 60 centimeters (10.6 to 23.6 inches); 80 percent reddish yellow (7.5YR 6/6) and 20 percent strong brown (7.5YR 5/6) sandy clay loam; weak medium subangular blocky parts to moderate fine subangular blocky structure; soft, friable, nonsticky, nonplastic; medium roots and coarse roots; 3 percent faint clay films on all faces of peds; gradual smooth boundary. Lab sample # 18N01376

BC--60 to 100 centimeters (23.6 to 39.4 inches); strong brown (7.5YR 5/6) sandy loam; massive; soft, friable, nonsticky, nonplastic; . Lab sample # 18N01377

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 9 2016
Describer: Ann J. Tan
NEON Plot ID: TALL_021
Site ID: S2016AL007021
Pedon ID: S2016AL007021
Site Note:

Pedon Note: This is classified as Bonneau because it fits the family. However, the slope % and the rock frag % don't match, so it is technically a taxadjunct and will be reclassified once lab data is obtained.
Lab Source ID: KSSL
Lab Pedon #: 18N0196
Soil Name as Described/Sampled: Bonneau
Classification: Loamy, siliceous, subactive, thermic Arenic Paleudults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of None Assigned
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 53 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 53 cm.
argillic horizon 53 to 100 cm.

Country: United States
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit:
Pit Location: Site sampled 1 meter north and 1 meter east of SW_021. This area was representative of the plot.

Quad Name: Payne Lake, Alabama

Std Latitude: 32.9499500
Std Longitude: -87.4077972

Latitude: 32 degrees 56 minutes 59.82 seconds north
Longitude: 87 degrees 24 minutes 28.07 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 461884 meters
UTM Northing: 3645812 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007021 **Pedon ID:** S2016AL007021

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
60.0		220						well		

A--0 to 3 centimeters (0.0 to 1.2 inches); very dark grayish brown (10YR 3/2) loamy fine sand; single grain; very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots and coarse roots; 60 percent flat Ironstone nodules; abrupt smooth boundary. Lab sample # 18N01378

E1--3 to 24 centimeters (1.2 to 9.4 inches); yellowish brown (10YR 5/4) loamy fine sand; single grain; very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots and coarse roots; 65 percent flat Ironstone nodules; clear smooth boundary. Lab sample # 18N01379

E2--24 to 53 centimeters (9.4 to 20.9 inches); brown (7.5YR 5/4) loamy fine sand; single grain; very friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots and coarse roots; 65 percent flat Ironstone nodules; clear smooth boundary. Lab sample # 18N01380

Bt--53 to 100 centimeters (20.9 to 39.4 inches); reddish yellow (5YR 6/8) sandy loam; weak medium subangular blocky structure; very friable, nonsticky, nonplastic; fine roots and coarse roots; 11 percent flat Ironstone nodules. Lab sample # 18N01381

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 8 2016
Describer: J. Lene, C. Nichols, J. Velazquez
NEON Plot ID: TALL_023
Site ID: S2016AL007023
Pedon ID: S2016AL007023
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0197
Soil Name as Described/Sampled: Unknown
Classification: Fine-loamy, siliceous, semiactive, thermic Inceptic Hapludults
Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: miscellaneous area
Associated Soils:
Physiographic Division:
Physiographic Province:

Physiographic Section:
State Physiographic Area:
Local Physiographic Area: Colluvial/alluvial valley fill
Geomorphic Setting: microhigh on toeslope of head slope of coastal plain microhigh on toeslope of head slope of valley floor
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 11 to 48 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 11 cm.
argillic horizon 11 to 48 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9293700
Std Longitude: -87.4122000

Latitude: 32 degrees 55 minutes 45.73 seconds north
Longitude: 87 degrees 24 minutes 43.92 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 461463 meters
UTM Northing: 3643532 meters

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

Cont. Site ID: S2016AL007023 **Pedon ID:** S2016AL007023

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	129.0	10	16.9			1,488	229	well		

A--0 to 11 centimeters (0.0 to 4.3 inches); dark grayish brown (10YR 4/2) fine sandy loam; weak fine subangular blocky structure; soft, friable, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout and coarse roots throughout; clear wavy boundary. Lab sample # 18N01382

Bt--11 to 48 centimeters (4.3 to 18.9 inches); 90 percent brown (7.5YR 5/4) and 10 percent strong brown (7.5YR 5/8) sandy clay loam; weak fine subangular blocky structure; soft, friable, slightly sticky, slightly plastic; medium roots throughout and fine roots throughout and coarse roots throughout; 10 percent distinct 10YR 2/2), moist, organic stains on surfaces along root channels and 10 percent faint 7.5YR 5/6), moist, clay films on all faces of peds; 1 percent very fine distinct platy mica flakes, muscovite with diffuse boundaries in matrix; clear wavy boundary. Lab sample # 18N01383

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 7 2016
Describer: J. Lene, C. Nichols, J. Velazquez
NEON Plot ID: TALL_024
Site ID: S2016AL007024
Pedon ID: S2016AL007024
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0198
Soil Name as Described/Sampled: Smithdale
Classification: Fine-loamy, siliceous, subactive, thermic Typic Hapludults

Soil Name as Correlated:

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

Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hillslope on coastal plain
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 24 to 69 cm.

Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 24 cm.
argillic horizon 24 to 69 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9239300
Std Longitude: -87.4218000

Latitude: 32 degrees 55 minutes 26.15 seconds north
Longitude: 87 degrees 25 minutes 18.48 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 460563 meters
UTM Northing: 3642933 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Intermixed conifers and hardwoods
Existing Vegetation:
Parent Material: loamy marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 2.0 percent nonflat subangular strongly cemented 75- to 250-millimeter Ironstone nodules

Description database: KSSL

Cont. Site ID: S2016AL007024 **Pedon ID:** S2016AL007024

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
20.0	121.0	100	16.9			1,488	229	well		

A--0 to 10 centimeters (0.0 to 3.9 inches); 60 percent very dark grayish brown (10YR 3/2) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; clear wavy boundary. Lab sample # 18N01384

AB--10 to 24 centimeters (3.9 to 9.4 inches); 80 percent yellowish brown (10YR 5/6) and 10 percent dark yellowish brown (10YR 4/4) and 10 percent strong brown (7.5YR 4/6) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; 8 percent nonflat subrounded strongly cemented 2 to 8-millimeter Ironstone nodules; clear wavy boundary. Lab sample # 18N01385

Bt--24 to 69 centimeters (9.4 to 27.2 inches); 80 percent reddish yellow (7.5YR 6/6) and 20 percent strong brown (7.5YR 5/6) sandy clay loam; weak medium subangular blocky parts to moderate fine subangular blocky structure; soft, friable, nonsticky, nonplastic; medium roots and coarse roots; 3 percent faint clay films on all faces of peds; gradual smooth boundary. Lab sample # 18N01386

BC--69 to 100 centimeters (27.2 to 39.4 inches); strong brown (7.5YR 5/6) sandy loam; massive; soft, friable, nonsticky, nonplastic; . Lab sample # 18N01387

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019

Description Date: Mar 8 2016

Describer: Steve Depew, Alison Steglich, Alvin Perez

NEON Plot ID: TALL_025

Site ID: S2016AL007025

Pedon ID: S2016AL007025

Site Note: Longleaf pine Southern red oak Green ash White oak Bamboo SCD; 1 meter sample plot sw corner located 1 m north and 1 m east of the sw 21 flag. This was a WNW facing aspect (300) on a 12% gradient. It is the lower one third noseslope. To minimize disturbance and future erosion potential on this steep slope, the east face of the pit near the SE corner was sampled. This pedon is a good representative of the Boykin series and also representative of this MU and site. SCD 3/14/2016

Pedon Note:

Lab Source ID: KSSL

Lab Pedon #: 18N0199

Soil Name as Described/Sampled: Boykin

Classification: Loamy, siliceous, active, thermic Arenic Paleudults

Soil Name as Correlated:

Classification:

Pedon Type: undefined observation

Pedon Purpose: research site

Taxon Kind: series

Associated Soils:

Physiographic Division:

Physiographic Province:

Physiographic Section:

State Physiographic Area:

Local Physiographic Area:

Geomorphic Setting: on backslope of nose slope of coastal plain on backslope of nose slope of hillslope

Upslope Shape: convex

Cross Slope Shape: convex

Particle Size Control Section: 50 to 100 cm.

Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 10 cm.
argillic horizon 50 to 100 cm.

Country:

State: Alabama

County: Bibb

MLRA: 133A -- Southern Coastal Plain

Soil Survey Area: AL007 -- Bibb County, Alabama

Map Unit:

Pit Location:

Quad Name: Payne Lake, Alabama

Std Latitude: 32.8993389

Std Longitude: -87.3965667

Latitude: 32 degrees 53 minutes 57.62 seconds north

Longitude: 87 degrees 23 minutes 47.64 seconds west

Datum: WGS84

UTM Zone: 16

UTM Easting: 462912 meters

UTM Northing: 3640198 meters

Primary Earth Cover: Tree cover

Secondary Earth Cover: Intermixed conifers and hardwoods

Existing Vegetation:

Parent Material:

Bedrock Kind:

Bedrock Depth:

Bedrock Hardness:

Bedrock Fracture Interval:

Surface Fragments:

Description database: KSSL

Cont. Site ID: S2016AL007025 **Pedon ID:** S2016AL007025

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
12.0		300						moderately well		

A--0 to 10 centimeters (0.0 to 3.9 inches); 90 percent very dark brown (10YR 2/2) and 10 percent light brown (7.5YR 6/4) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; clear wavy boundary. Lab sample # 18N01388

E1--10 to 28 centimeters (3.9 to 11.0 inches); 90 percent dark grayish brown (10YR 4/2) and 10 percent yellowish brown (10YR 5/6) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; gradual wavy boundary. Lab sample # 18N01389

E2--28 to 50 centimeters (11.0 to 19.7 inches); dark yellowish brown (10YR 4/4) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very coarse roots throughout and medium roots throughout and fine roots throughout; 2 percent faint organic stains between sand grains; 2 percent nonflat subrounded strongly cemented 2 to 10-millimeter Ironstone nodules; gradual wavy boundary. Lab sample # 18N01390

Bt1--50 to 78 centimeters (19.7 to 30.7 inches); yellowish brown (10YR 5/6) sandy clay loam; weak medium subangular blocky structure; soft, friable, nonsticky, slightly plastic; fine roots throughout; 2 percent faint 10YR 5/8), moist, clay films on surfaces along root channels; 1 percent nonflat subrounded indurated 2 to 5-millimeter Plinthite nodules and 2 percent nonflat subrounded strongly cemented 2 to 10-millimeter Ironstone nodules; gradual wavy boundary. Lab sample # 18N01391

Bt2--78 to 100 centimeters (30.7 to 39.4 inches); 60 percent yellowish brown (10YR 5/6) and 20 percent grayish brown (10YR 5/2) and 10 percent brownish yellow (10YR 6/6) and 10 percent light brown (7.5YR 6/4) sandy clay loam; weak medium subangular blocky structure; soft, friable, nonsticky, slightly plastic; 2 percent faint 10YR 5/8), moist, clay films on surfaces along root channels; 20 percent medium distinct irregular 10YR 5/2), moist, iron depletions with clear boundaries In matrix; 1 percent nonflat subrounded strongly cemented 2 to 10-millimeter Ironstone nodules and 1 percent nonflat subrounded indurated 2 to 5-millimeter Plinthite nodules. Lab sample # 18N01392

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 9 2016
Describer: Burns, Hopkins, Moore
NEON Plot ID: TALL_026
Site ID: S2016AL007026
Pedon ID: S2016AL007026

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0200
Soil Name as Described/Sampled: Boykin
Classification: Loamy, siliceous, active, thermic Arenic Paleudults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hillslope
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 40 cm.
argillic horizon 60 to 100 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit: MsD -- Maubila-Smithdale-Boykin complex, 5 to 20 percent slopes
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.8997500
Std Longitude: -87.4492500

Latitude: 32 degrees 53 minutes 59.10 seconds north
Longitude: 87 degrees 26 minutes 57.30 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 457985 meters
UTM Northing: 3640263 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007026 **Pedon ID:** S2016AL007026

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	97.0	210	16.9			1,488	229	somewhat excessively		

A--0 to 20 centimeters (0.0 to 7.9 inches); very dark grayish brown (10YR 3/2) loamy fine sand; 7 percent clay; weak fine granular structure; very friable; many medium roots throughout and many fine roots throughout and very few coarse roots throughout; 5 percent flat angular indurated 50 to 100-millimeter Ironstone nodules; clear wavy boundary. Lab sample # 18N01393

AE--20 to 40 centimeters (7.9 to 15.7 inches); yellowish brown (10YR 5/4) loamy fine sand; 7 percent clay; weak fine granular structure; very friable; many medium roots throughout and many fine roots throughout and very few coarse roots throughout; 5 percent flat angular indurated 50 to 100-millimeter Ironstone nodules; clear wavy boundary. Lab sample # 18N01394

E--40 to 60 centimeters (15.7 to 23.6 inches); light yellowish brown (10YR 6/4) loamy fine sand; 7 percent clay; weak fine granular structure; very friable; very few fine roots throughout; Pale brown (10YR 6/3) uncoated sand grains; and brown (10YR 4/3) organic stains; gradual wavy boundary. Lab sample # 18N01395

Bt--60 to 100 centimeters (23.6 to 39.4 inches); yellowish red (5YR 4/6) sandy clay loam; 21 percent clay; weak medium subangular blocky structure; friable; distinct clay bridges between sand grains; brownish-yellow (10YR 6/6) sand coats. Lab sample # 18N01396

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 9 2016
Describer: Steve Depew, Alison Steglich, Alvin Perez
NEON Plot ID: TALL_027
Site ID: S2016AL007027
Pedon ID: S2016AL007027
Site Note: 1 meter sample plot sw corner located 1 m north and 1 m east of the sw 21 flag. This was a W facing aspect (270) on a 1% gradient. It is the small backswamp area of a small intermittent drain. To minimize disturbance the SW corner of the pit was sampled in a small 40 x 40 cm pit. Water table was at 20 cm so excavation was shallow. This pedon is a good representative of the Bibb series and also representative of this MU and and the bottomland hardwood partion of this site. SCD 3/14/2016; Longleaf pine Southern red oak Green ash White oak Bamboo SCD
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0201
Soil Name as Described/Sampled: Bibb
Classification: Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents
Soil Name as Correlated:

Classification:
Pedon Type: undefined observation
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on talf coastal plain
on talf flood plain
Upslope Shape: concave
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 52 cm.
aquic conditions 0 to 52 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:

Pit Location:

Quad Name: Payne Lake, Alabama
Std Latitude: 32.8911806
Std Longitude: -87.4315444

Latitude: 32 degrees 53 minutes 28.25 seconds north
Longitude: 87 degrees 25 minutes 53.56 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 459637 meters
UTM Northing: 3639306 meters

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

Cont. Site ID: S2016AL007027 **Pedon ID:** S2016AL007027

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		270						poorly		

A--0 to 20 centimeters (0.0 to 7.9 inches); dark grayish brown (10YR 4/2) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout and coarse roots throughout; 10 percent very fine distinct irregular 10YR 5/6), moist, masses of oxidized iron In matrix; clear smooth boundary. Lab sample # 18N01397

Ag--20 to 52 centimeters (7.9 to 20.5 inches); dark gray (2.5Y 4/1) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout and coarse roots throughout; 10 percent very fine distinct irregular 10YR 5/6), moist, masses of oxidized iron In matrix; 3 percent nonflat subrounded strongly cemented 2 to 5-millimeter Chert fragments. Lab sample # 18N01398

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 10 2016
Describer: Steve Depew, Alison Steglich, Alvin Perez
NEON Plot ID: TALL_029
Site ID: s2016AL007029
Pedon ID: S2016AL007029
Site Note: Longleaf pine Some mixed grasses and forbs controlled by burn. SCD; 1 meter sample plot sw corner located 1 m north and 1 m east of the sw 21 flag. This was a S facing aspect (182) on a 15% gradient. It is the upper one third backslope. To minimize disturbance and future erosion potential on this steep slope, the north face of the pit near the NW corner was sampled. This pedon is a good representative of the Wadley series and also representative of inclusions in this MU and site. SCD 3/14/2016
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0202
Soil Name as Described/Sampled: Wadley
Classification: Loamy, siliceous, subactive, thermic Grossarenic Paleudults
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of coastal plain on backslope of side slope of hillslope
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 14 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area: AL007 -- Bibb County, Alabama
Map Unit:
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9014167
Std Longitude: -87.4322889
Latitude: 32 degrees 54 minutes 5.10 seconds north
Longitude: 87 degrees 25 minutes 56.24 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 459572 meters
UTM Northing: 3640441 meters
Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material:
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: s2016AL007029 **Pedon ID:** S2016AL007029

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
15.0		182						well		

A--0 to 14 centimeters (0.0 to 5.5 inches); dark grayish brown (10YR 4/2) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; clear wavy boundary. Lab sample # 18N01399

E1--14 to 42 centimeters (5.5 to 16.5 inches); brown (10YR 5/3) loamy sand; 2 percent very fine distinct irregular (10YR 5/8) and 10 percent very fine faint irregular (10YR 3/2) mottles; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; clear wavy boundary. Lab sample # 18N01400

E2--42 to 60 centimeters (16.5 to 23.6 inches); 60 percent pale brown (10YR 6/3) and 40 percent brown (10YR 5/3) loamy sand; 20 percent fine distinct irregular (10Y 5/8) mottles; single grain; loose, loose, nonsticky, nonplastic; medium roots throughout and fine roots throughout; clear wavy boundary. Lab sample # 18N01401

E3--60 to 100 centimeters (23.6 to 39.4 inches); brown (10YR 5/3) loamy sand; 10 percent very fine faint irregular (10YR 6/2) and 20 percent fine distinct irregular (7.5YR 5/8) mottles; single grain; loose, loose, nonsticky, nonplastic; medium roots throughout and fine roots throughout; 2 percent nonflat subangular strongly cemented 2 to 5-millimeter Ironstone nodules and 2 percent nonflat subrounded indurated 2 to 5-millimeter Plinthite nodules. Lab sample # 18N01402

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 8 2016
Describer: Ann J. Tan
NEON Plot ID: TALL_030
Site ID: S2016AL007030
Pedon ID: S2016AL007030
Site Note:

Pedon Note: This is classified as Bibb but redox do not occur until 77 cm here. However, it is a seep area and does not represent the area. It is technically a taxadjunct and will be reclassified once lab data is obtained.
Lab Source ID: KSSL
Lab Pedon #: 18N0203
Soil Name as Described/Sampled: Bibb
Classification: Coarse-loamy, siliceous, active, acid, thermic Typic Fluvaquents
Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on toeslope of None Assigned
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 77 cm.
redox concentrations 77 to 100 cm.

Country: United States
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit:
Pit Location: Site sampled 1 meter north and 1 meter east of S. This area was not representative of the plot.

Quad Name: Payne Lake, Alabama

Std Latitude: 32.9543000
Std Longitude: -87.4035972

Latitude: 32 degrees 57 minutes 15.48 seconds north
Longitude: 87 degrees 24 minutes 12.95 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 462278 meters
UTM Northing: 3646293 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007030 **Pedon ID:** S2016AL007030

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		0						poorly		

O--0 to 10 centimeters (0.0 to 3.9 inches); very dark brown (10YR 2/2) loam; weak medium granular structure; very friable, nonsticky, nonplastic; very fine roots and very coarse roots and medium roots and fine roots and coarse roots; abrupt smooth boundary. Lab sample # 18N01403

A1--10 to 41 centimeters (3.9 to 16.1 inches); black (10YR 2/1) loam; weak medium granular structure; friable, nonsticky, nonplastic; very fine roots and very coarse roots and medium roots and fine roots and coarse roots; clear smooth boundary. Lab sample # 18N01404

A2--41 to 77 centimeters (16.1 to 30.3 inches); very dark gray (10YR 3/1) sandy loam; weak medium granular structure; friable, nonsticky, nonplastic; very fine roots and very coarse roots and medium roots and fine roots and coarse roots; clear smooth boundary. Lab sample # 18N01405

Cg--77 to 100 centimeters (30.3 to 39.4 inches); gray (10YR 6/1) sandy loam; 5 percent medium (10YR 5/6) and 5 percent medium (7.5YR 5/6) and 25 percent coarse (10YR 5/2) mottles; massive; friable, nonsticky, nonplastic; fine roots; 5 percent rounded Quartz fragments. Lab sample # 18N01406

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019

Description Date: Mar 7 2016

Describer: Steve Depew, Alison Steglich, Alvin Perez

NEON Plot ID: TALL_031

Site ID: S2016AL007031

Pedon ID: S2016AL007031

Site Note: Longleaf pine Loblolly pine Green ash White oak SCD; 1 meter sample plot sw corner located 1 m north and 1 m east of the sw 21 flag. This was a north facing aspect (0) on a 26% gradient. It is the middle one third backslope. To minimize disturbance and future erosion potential on this steep slope, the south face of the pit was sampled. This pedon is a good representative of the Smithcale series and also representative of this MU and site. SCD 3/14/2016

Pedon Note:

Lab Source ID: KSSL

Lab Pedon #: 18N0204

Soil Name as Described/Sampled: Smithdale

Classification: Fine-loamy, siliceous, subactive, thermic Typic Hapludults

Soil Name as Correlated:

Classification:

Pedon Type: undefined observation

Pedon Purpose: research site

Taxon Kind: series

Associated Soils:

Physiographic Division:

Physiographic Province:

Physiographic Section:

State Physiographic Area:

Local Physiographic Area:

Geomorphic Setting: on backslope of side slope of coastal plain
on backslope of side slope of hillslope

Upslope Shape: convex

Cross Slope Shape: linear

Particle Size Control Section: 33 to 83 cm.

Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 9 cm.
argillic horizon 33 to 85 cm.

Country:

State: Alabama

County: Bibb

MLRA: 133A -- Southern Coastal Plain

Soil Survey Area: AL007 -- Bibb County, Alabama

Map Unit:

Pit Location:

Quad Name: Payne Lake, Alabama

Std Latitude: 32.8991222

Std Longitude: -87.3892861

Latitude: 32 degrees 53 minutes 56.84 seconds north

Longitude: 87 degrees 23 minutes 21.43 seconds west

Datum: WGS84

UTM Zone: 16

UTM Easting: 463593 meters

UTM Northing: 3640171 meters

Primary Earth Cover: Tree cover

Secondary Earth Cover: Intermixed conifers and hardwoods

Existing Vegetation:

Parent Material:

Bedrock Kind:

Bedrock Depth:

Bedrock Hardness:

Bedrock Fracture Interval:

Surface Fragments: 2.0 percent nonflat subangular strongly cemented 75- to 250-millimeter Ironstone nodules

Description database: KSSL

Cont. Site ID: S2016AL007031 **Pedon ID:** S2016AL007031

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
26.0	129.0	0						well		

A--0 to 9 centimeters (0.0 to 3.5 inches); 60 percent very dark grayish brown (10YR 3/2) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; clear wavy boundary. Lab sample # 18N01407

E--9 to 33 centimeters (3.5 to 13.0 inches); 80 percent yellowish brown (10YR 5/6) and 10 percent dark yellowish brown (10YR 4/4) and 10 percent strong brown (7.5YR 4/6) loamy sand; single grain; loose, loose, nonsticky, nonplastic; very fine roots throughout and medium roots throughout and fine roots throughout; 8 percent nonflat subrounded strongly cemented 2 to 8-millimeter Ironstone nodules; clear wavy boundary. Lab sample # 18N01408

Bt1--33 to 58 centimeters (13.0 to 22.8 inches); 80 percent reddish yellow (7.5YR 6/6) and 20 percent strong brown (7.5YR 5/6) sandy clay loam; weak medium subangular blocky parts to moderate fine subangular blocky structure; soft, friable, nonsticky, nonplastic; medium roots and coarse roots; 3 percent faint clay films on all faces of peds; gradual smooth boundary. Lab sample # 18N01409

Bt2--58 to 85 centimeters (22.8 to 33.5 inches); strong brown (7.5YR 5/6) sandy loam; moderate medium subangular blocky structure; soft, friable, nonsticky, nonplastic; medium roots throughout and coarse roots throughout; gradual smooth boundary. Lab sample # 18N01410

BC--85 to 100 centimeters (33.5 to 39.4 inches); strong brown (7.5YR 5/6) sandy loam; massive; soft, friable, nonsticky, nonplastic; . Lab sample # 18N01411

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 8 2016
Describer: Burns, Hopkins, Moore
NEON Plot ID: TALL_032
Site ID: S2016AL007032
Pedon ID: S2016AL007032

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 18N0205
Soil Name as Described/Sampled: Wadley
Classification: Loamy, siliceous, subactive, thermic Grossarenic Paleudults

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of hillslope
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS

Diagnostic Features: ochric epipedon 0 to 13 cm.

Country:
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit: MsF -- Maubila-Smithdale complex, 15 to 35 percent slopes
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9104722
Std Longitude: -87.4210556

Latitude: 32 degrees 54 minutes 37.70 seconds north
Longitude: 87 degrees 25 minutes 15.80 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 460627 meters
UTM Northing: 3641441 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: sandy marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007032 **Pedon ID:** S2016AL007032

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
27.0	115.0	330	16.9			1,488	229	somewhat excessively		

A--0 to 13 centimeters (0.0 to 5.1 inches); very dark grayish brown (10YR 3/2) crushed loamy fine sand; weak fine granular structure; very friable; many medium roots throughout and many fine roots throughout and very few coarse roots throughout; abrupt smooth boundary. Lab sample # 18N01412

E1--13 to 28 centimeters (5.1 to 11.0 inches); yellowish brown (10YR 5/4) crushed loamy sand; weak fine granular structure; very friable; many fine roots throughout and many fine roots throughout; Common, medium, distinct dark brown (10YR 3/3) organic coats; clear smooth boundary. Lab sample # 18N01413

E2--28 to 100 centimeters (11.0 to 39.4 inches); yellowish brown (10YR 5/6) crushed loamy sand; weak fine granular structure; very friable; very few medium roots throughout and many fine roots throughout; pale brown (10YR 6/3) uncoated sand grains; Common, medium, distinct dark brown (10YR 3/3) organic coats. Lab sample # 18N01414

PEDON DESCRIPTION -- NEON Site TALL

Print Date: Nov 4 2019
Description Date: Mar 7 2016
Describer: Ann J. Tan
NEON Plot ID: TALL_044
Site ID: S2016AL007044
Pedon ID: S2016AL007044
Site Note:
Pedon Note: This is classified as Maubila because of its high ironstone content. However, redox features don't occur until 91 cm, so it is technically a taxadjunct and will be reclassified once lab data is obtained.
Lab Source ID: KSSL
Lab Pedon #: 18N0206
Soil Name as Described/Sampled: Maubila
Classification: Fine, mixed, subactive, thermic Aquic Hapludults
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division:
Physiographic Province:
Physiographic Section:
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of None Assigned
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 69 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 29 cm.
argillic horizon 69 to 100 cm.
lithologic discontinuity 91 to 100 cm.
redox concentrations 91 to 100 cm.

Country: United States
State: Alabama
County: Bibb
MLRA: 133A -- Southern Coastal Plain
Soil Survey Area:
Map Unit:
Pit Location:
Quad Name: Payne Lake, Alabama
Std Latitude: 32.9527500
Std Longitude: -87.3977667
Latitude: 32 degrees 57 minutes 9.90 seconds north
Longitude: 87 degrees 23 minutes 51.96 seconds west
Datum: WGS84
UTM Zone: 16
UTM Easting: 462822 meters
UTM Northing: 3646119 meters
Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: marine deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016AL007044 **Pedon ID:** S2016AL007044

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
20.0		270						well		

A--0 to 6 centimeters (0.0 to 2.4 inches); fine sandy loam; weak fine granular structure; friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots; 20 percent flat Sandstone fragments. Lab sample # 18N01415

E--6 to 29 centimeters (2.4 to 11.4 inches); fine sandy loam; weak fine granular structure; friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots; 26 percent flat Sandstone fragments. Lab sample # 18N01416

BE--29 to 69 centimeters (11.4 to 27.2 inches); sandy loam; weak fine subangular blocky, and weak medium subangular blocky structure; friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots; 20 percent flat Sandstone fragments. Lab sample # 18N01417

Bt--69 to 91 centimeters (27.2 to 35.8 inches); sandy loam; weak fine subangular blocky, and weak medium subangular blocky structure; friable, nonsticky, nonplastic; very fine roots and medium roots and fine roots; 16 percent flat Ironstone nodules. Lab sample # 18N01418

2Bt--91 to 100 centimeters (35.8 to 39.4 inches); clay; 10 percent (5YR 4/6) mottles; moderate medium subangular blocky structure; firm, moderately sticky, moderately plastic; medium roots and coarse roots; 16 percent Ironstone nodules. Lab sample # 18N01419