PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 26 2016
Describer: Stephen Crome
NEON Plot ID: MOAB_015
Site ID: S2016UT037001

Pedon ID: S2016UT037001

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0824
Soil Name as Described/Sampled: Windwhistle
Classification: Coarse-loamy, mixed, superactive, mesic Ustic Haplargids

Soil Name as Correlated: Windwhistle

Classification: Coarse-loamy, mixed, superactive, mesic Ustic Haplargids
Pedon Type:
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on summit of interfluve of pediment
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 5 to 44 cm.
Description origin: NASIS
Diagnostic Features: argillic horizon 5 to 44 cm.

Country: United States
State: Utah
County: San Juan
MLRA: 35 -- Colorado Plateau
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties 8-RIC -- Richfield, Utah
Map Unit: 41 -- Ignacio-Leanto fine sandy loams, 2 to 6 percent slopes
Pit Location:
Quad Name:
Std Latitude: 38.2544389
Std Longitude: -109.4274500

Latitude: 38 degrees 15 minutes 15.98 seconds north
Longitude: 109 degrees 25 minutes 38.82 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 637567 meters
UTM Northing: 4235215 meters

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Shrubby rangeland
Existing Vegetation:
Parent Material: eolian deposits
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
61	71	bedrock, paralithic	Strongly cemented

Cont. Site ID: S2016UT037001 **Pedon ID:** S2016UT037001

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	1,755.0	188	11.0			305	150	well		

A--0 to 5 centimeters (0.0 to 2.0 inches); yellowish red (5YR 4/6) very fine sandy loam, reddish brown (5YR 4/4), moist; 70 percent sand; 15 percent silt; 15 percent clay; weak thin platy parts to structureless single grain; loose, very friable, nonsticky, nonplastic; common very fine roots and common fine roots; many very fine irregular pores; noneffervescent, by HCl, 1 normal; neutral, pH 7.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N03669

Bt1--5 to 32 centimeters (2.0 to 12.6 inches); loam, reddish brown (2.5YR 4/4), moist; 40 percent sand; 43 percent silt; 17 percent clay; moderate fine subangular blocky structure; soft, friable, slightly sticky, nonplastic; common very fine roots and common medium roots and common fine roots; common fine tubular pores; 10 percent distinct 2.5YR 3/6), moist, clay films on all faces of peds; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N03670

Bt2--32 to 44 centimeters (12.6 to 17.3 inches); sandy loam, yellowish red (5YR 4/6), moist; 60 percent sand; 20 percent silt; 20 percent clay; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; common very fine roots and common medium roots and common fine roots; common fine tubular pores; 15 percent distinct 2.5YR 3/6), moist, clay films on all faces of peds; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N03671

BC--44 to 61 centimeters (17.3 to 24.0 inches); sandy loam, yellowish red (5YR 5/6), moist; 60 percent sand; 22 percent silt; 18 percent clay; weak medium subangular blocky structure; slightly hard, friable, slightly sticky, nonplastic; common very fine roots and common fine roots; few fine irregular pores; 5 percent flat subangular strongly cemented 2 to 150-millimeter Sandstone fragments; violent effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions. Lab sample # 16N03672

Cr--61 to 71 centimeters (24.0 to 28.0 inches); bedrock; .

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 16 2016
Describer: Vic Parslow
NEON Plot ID: MOAB_011
Site ID: S2016UT037002
Pedon ID: S2016UT037002
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0825
Soil Name as Described/Sampled: Mivida
Classification: Coarse-loamy, mixed, superactive, mesic Aridic Calciustepts
Soil Name as Correlated: Mivida
Classification: Coarse-loamy, mixed, superactive, mesic Aridic Calciustepts
Pedon Type: taxadjunct to the series
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of fan remnant on structural bench
on backslope of side slope of plateau
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 10 cm.
cambic horizon 10 to 35 cm.
calcic horizon 35 to 100 cm.

Country: United States
State: Utah
County: San Juan
MLRA: 35 -- Colorado Plateau
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties
8-RIC -- Richfield, Utah
Map Unit: 8 -- Begay fine sandy loam, moist, 2 to 6 percent slopes
Pit Location:
Quad Name: La Sal Junction, Utah
Std Latitude: 38.2653000
Std Longitude: -109.4120000
Latitude: 38 degrees 15 minutes 55.08 seconds north
Longitude: 109 degrees 24 minutes 43.20 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 638924 meters
UTM Northing: 4236440 meters
Primary Earth Cover: Shrub cover
Secondary Earth Cover: Shrubby rangeland
Existing Vegetation:
Parent Material: alluvium derived from sandstone and siltstone and/or eolian deposits derived from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 1.0 percent nonflat angular indurated 2- to 75-millimeter Chert fragments and 4.0 percent nonflat subrounded strongly cemented 2- to 75-millimeter Sandstone fragments
Description database: KSSL

Cont. Site ID: S2016UT037002 **Pedon ID:** S2016UT037002

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	1,815.0	352	9.0			330	140	well		

A--0 to 10 centimeters (0.0 to 3.9 inches); yellowish red (5YR 4/6) fine sandy loam, reddish brown (5YR 4/4), moist; 70 percent sand; 6 percent clay; weak medium platy structure; soft, friable, nonsticky, nonplastic; common very fine roots throughout and common fine roots throughout; common very fine tubular and common fine tubular pores; 3 percent nonflat subrounded strongly cemented 2 to 20-millimeter Sandstone fragments; noneffervescent, by HCl, 1 normal; slightly alkaline, pH 7.6, pH indicator solutions; gradual smooth boundary. Lab sample # 16N03673

Bw--10 to 35 centimeters (3.9 to 13.8 inches); yellowish red (5YR 5/6) very fine sandy loam, yellowish red (5YR 4/6), moist; 68 percent sand; 12 percent clay; weak medium subangular blocky structure; soft, very friable, nonsticky, nonplastic; common very fine roots throughout and common fine roots throughout and common coarse roots throughout; common very fine tubular and common fine tubular pores; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N03674

Bk--35 to 49 centimeters (13.8 to 19.3 inches); light reddish brown (5YR 6/4) fine sandy loam, reddish brown (5YR 5/4), moist; 75 percent sand; 12 percent clay; weak fine subangular blocky structure; hard, friable, nonsticky, nonplastic; common very fine roots throughout; common very fine tubular pores; 5 percent prominent carbonate coats on rock fragments; 5 percent fine spherical carbonate masses throughout; 5 percent nonflat subrounded strongly cemented 2 to 75-millimeter Sandstone fragments; strong effervescence, by HCl, 1 normal; strongly alkaline, pH 8.6, pH indicator solutions; abrupt smooth boundary. Lab sample # 16N03675

Bkk--49 to 68 centimeters (19.3 to 26.8 inches); pink (5YR 8/3) loam, pink (5YR 7/4), moist; 35 percent sand; 10 percent clay; weak medium subangular blocky structure; very hard, very firm, nonsticky, nonplastic; common fine roots throughout; common very fine tubular pores; 5 percent prominent carbonate coats on rock fragments; 30 percent medium distinct spherical weakly cemented carbonate nodules throughout; 5 percent nonflat subrounded strongly cemented 2 to 75-millimeter Sandstone fragments; violent effervescence, by HCl, 1 normal; strongly alkaline, pH 8.8, pH indicator solutions; clear smooth boundary. Lab sample # 16N03676

BCkk--68 to 100 centimeters (26.8 to 39.4 inches); pink (5YR 8/3) loam, pink (5YR 7/4), moist; 35 percent sand; 10 percent clay; massive; very hard, very firm, nonsticky, nonplastic; common fine roots throughout; common very fine tubular pores; 5 percent prominent carbonate coats on rock fragments; 30 percent medium distinct spherical weakly cemented carbonate nodules throughout; 5 percent nonflat subrounded strongly cemented 2 to 75-millimeter Sandstone fragments; violent effervescence, by HCl, 1 normal; strongly alkaline, pH 8.8, pH indicator solutions. Lab sample # 16N03677

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 26 2016
Describer: Stephen Cromer
NEON Plot ID: MOAB_006
Site ID: S2016UT037003

Pedon ID: S2016UT037003

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0826
Soil Name as Described/Sampled: Windwhistle
Classification: Coarse-loamy, mixed, superactive, mesic Ustic Calciargids

Soil Name as Correlated: Windwhistle

Classification: Coarse-loamy, mixed, superactive, mesic Ustic Calciargids
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils: Sazi
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on tread of pediment
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: argillic horizon 38 to 76 cm.
calcic horizon 76 to 96 cm.

Country:
State: Utah
County: San Juan
MLRA: 35 -- Colorado Plateau
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties
8-RIC -- Richfield, Utah
Map Unit: 10 -- Begay-Rock outcrop-Mido complex, 2 to 35 percent slopes
Pit Location:
Quad Name:
Std Latitude: 38.2362083
Std Longitude: -109.4064472

Latitude: 38 degrees 14 minutes 10.35 seconds north
Longitude: 109 degrees 24 minutes 23.21 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 639464 meters
UTM Northing: 4233224 meters

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Shrubby rangeland
Existing Vegetation:
Parent Material: eolian deposits
Bedrock Kind:
Bedrock Depth: 96 centimeters
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
96	121	bedrock, lithic	Indurated

Cont. Site ID: S2016UT037003 **Pedon ID:** S2016UT037003

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
2.0	1,757.0	200	11.0			305	150	well		

A--0 to 10 centimeters (0.0 to 3.9 inches); yellowish red (5YR 5/6) loamy fine sand, reddish brown (5YR 4/4), moist; 6 percent clay; structureless single grain; nonsticky, nonplastic; noneffervescent, by HCl, 1 normal; slightly alkaline, pH 7.6, pH indicator solutions; clear smooth boundary. Lab sample # 16N03678

Bw--10 to 38 centimeters (3.9 to 15.0 inches); yellowish red (5YR 5/6) loamy fine sand, reddish brown (5YR 4/4), moist; 8 percent clay; weak fine subangular blocky structure; nonsticky, nonplastic; slight effervescence, by HCl, 1 normal; slightly alkaline, pH 7.6, pH indicator solutions; gradual smooth boundary. Lab sample # 16N03679

Bt1--38 to 59 centimeters (15.0 to 23.2 inches); fine sandy loam, reddish brown (5YR 5/4), moist; 12 percent clay; weak medium subangular blocky structure; nonsticky, nonplastic; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; gradual smooth boundary. Lab sample # 16N03680

Bt2--59 to 76 centimeters (23.2 to 29.9 inches); fine sandy loam, reddish brown (5YR 5/4), moist; 14 percent clay; weak fine subangular blocky structure; nonsticky, nonplastic; 5 percent nonflat subangular indurated 2 to 75-millimeter Sedimentary rock fragments; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.4, pH indicator solutions; gradual smooth boundary. Lab sample # 16N03681

Bk--76 to 96 centimeters (29.9 to 37.8 inches); gravelly loam, light reddish brown (5YR 6/4), moist; 15 percent clay; structureless massive; nonsticky, nonplastic; 5 percent nonflat subangular indurated 75 to 250-millimeter Sedimentary rock fragments and 10 percent nonflat subangular indurated 2 to 75-millimeter Sedimentary rock fragments; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; abrupt smooth boundary. Lab sample # 16N03682

R--96 to 121 centimeters (37.8 to 47.6 inches); bedrock; .

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 27 2016
Describer: Keith Crossland
NEON Plot ID: MOAB_028

Site ID: S2016UT037004

Pedon ID: S2016UT037004

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0827
Soil Name as Described/Sampled: Aridic Lithic Haplustepts
Classification: Clayey, mixed, superactive, mesic Aridic Lithic Haplustepts

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of tread of structural bench
Upslope Shape: convex
Cross Slope Shape: linear
Particle Size Control Section: 0 to 35 cm.

Description origin: NASIS
Diagnostic Features: lithic contact 35 to 60 cm.

Country: United States
State: Utah
County: San Juan
MLRA: 36 -- Southwestern Plateaus, Mesas, and Foothills
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties 4-GRA -- Grand Junction, Colorado
Map Unit: 70 -- Rizno-Rock outcrop complex, 3 to 15 percent slopes
Pit Location:
Quad Name:
Std Latitude: 38.2701611
Std Longitude: -109.3500944

Latitude: 38 degrees 16 minutes 12.58 seconds north
Longitude: 109 degrees 21 minutes 0.34 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 644329 meters
UTM Northing: 4237078 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: residuum weathered from mudstone
Bedrock Kind:
Bedrock Depth: 35 centimeters
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 50.0 percent nonflat indurated 2- to 75-millimeter Sedimentary rock fragments

Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
35	60	bedrock, lithic	Indurated

Cont. Site ID: S2016UT037004 **Pedon ID:** S2016UT037004

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	2,006.0	324	8.9			356	130	moderately well		

A--0 to 9 centimeters (0.0 to 3.5 inches); silty clay loam, dark reddish brown (2.5YR 3/4), moist; 36 percent clay; moderate very fine granular structure; soft, very friable, moderately sticky, very plastic; common very fine roots and common fine roots; carbonate, finely disseminated; 10 percent nonflat subrounded indurated 2 to 25-millimeter Sedimentary rock fragments; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N03683

Bk--9 to 28 centimeters (3.5 to 11.0 inches); silty clay loam, reddish brown (2.5YR 4/4), moist; 38 percent clay; moderate fine angular blocky structure; moderately hard, friable, moderately sticky, very plastic; common very fine roots and common medium roots and common fine roots; carbonate, finely disseminated and 3 percent very fine carbonate masses on faces of peds; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions; gradual smooth boundary. Lab sample # 16N03684

Cr--28 to 35 centimeters (11.0 to 13.8 inches); parachanners; 95 percent flat angular weakly cemented 2 to 150-millimeter Shale fragments.

R--35 to 60 centimeters (13.8 to 23.6 inches); bedrock; .

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 27 2016
Describer: Keith Crossland
NEON Plot ID: MOAB_025
Site ID: S2016UT037005
Pedon ID: S2016UT037005
Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0828
Soil Name as Described/Sampled: Cahona
Classification: Fine-loamy, mixed, superactive, mesic Calcidic Haplustalfs
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: family
Associated Soils:
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on shoulder of tread of structural bench
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 24 to 74 cm.
Description origin: NASIS
Diagnostic Features: calcic horizon 7 to 81 cm.
argillic horizon 24 to 81 cm.

Country: United States
State: Utah
County: San Juan
MLRA: 36 -- Southwestern Plateaus, Mesas, and Foothills
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties 4-GRA -- Grand Junction, Colorado
Map Unit: 70 -- Rizno-Rock outcrop complex, 3 to 15 percent slopes
Pit Location:
Quad Name:
Std Latitude: 38.2694694
Std Longitude: -109.3476861
Latitude: 38 degrees 16 minutes 10.09 seconds north
Longitude: 109 degrees 20 minutes 51.67 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 644541 meters
UTM Northing: 4237005 meters
Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: eolian deposits derived from sandstone over residuum weathered from mudstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 15.0 percent nonflat indurated 2- to 75-millimeter Sedimentary rock fragments and 2.0 percent nonflat indurated 75- to 250-millimeter Sedimentary rock fragments and 2.0 percent nonflat indurated 250- to 600-millimeter Sedimentary rock fragments
Description database: KSSL

Cont. Site ID: S2016UT037005 **Pedon ID:** S2016UT037005

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	2,042.0	180	8.9			356	130	well		

A--0 to 7 centimeters (0.0 to 2.8 inches); light brown (7.5YR 6/4) gravelly loam, brown (7.5YR 5/4), moist; 16 percent clay; weak very fine granular structure; soft, very friable, slightly sticky, slightly plastic; many very fine roots and common fine roots; 15 percent distinct carbonate coats on bottom of rock fragments; carbonate, finely disseminated; 15 percent nonflat subangular indurated 2 to 75-millimeter Sedimentary rock fragments; strong effervescence, by HCl, 1 normal; slightly alkaline, pH 7.8, pH indicator solutions; clear smooth boundary. Lab sample # 16N03685

Bk--7 to 24 centimeters (2.8 to 9.4 inches); light reddish brown (5YR 6/4) silt loam, reddish brown (5YR 5/4), moist; 20 percent clay; moderate fine subangular blocky structure; soft, very friable, slightly sticky, moderately plastic; many very fine roots and common fine roots and common coarse roots; 15 percent very fine carbonate masses in matrix; violent effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N03686

Btk1--24 to 48 centimeters (9.4 to 18.9 inches); pink (5YR 7/4) silt loam, yellowish red (5YR 5/6), moist; 25 percent clay; strong fine angular blocky structure; moderately hard, firm, moderately sticky, moderately plastic; common very fine roots and common medium roots and common fine roots; 5 percent faint clay films on all faces of peds; 18 percent very fine carbonate masses in matrix; violent effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions; gradual smooth boundary. Lab sample # 16N03687

Btk2--48 to 81 centimeters (18.9 to 31.9 inches); pink (5YR 7/4) silty clay loam, yellowish red (5YR 5/6), moist; 35 percent clay; strong fine angular blocky structure; moderately hard, firm, moderately sticky, very plastic; common very fine roots and common medium roots and common fine roots; 5 percent faint clay films on all faces of peds; 5 percent very fine carbonate masses in matrix; violent effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions. Lab sample # 16N03688

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 27 2016
Describer: Keith Crossland
NEON Plot ID: MOAB_003

Site ID: S2016UT037006

Pedon ID: S2016UT037006

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0829
Soil Name as Described/Sampled: Aridic Lithic Haplustepts
Classification: Loamy, mixed, superactive, mesic Aridic Lithic Haplustepts

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: taxon above family
Associated Soils:
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on summit of tread of structural bench
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 0 to 46 cm.
Description origin: NASIS
Diagnostic Features: lithic contact 46 to 71 cm.

Country: United States
State: Utah
County: San Juan
MLRA: 36 -- Southwestern Plateaus, Mesas, and Foothills
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties 4-GRA -- Grand Junction, Colorado
Map Unit: 70 -- Rizno-Rock outcrop complex, 3 to 15 percent slopes
Pit Location:
Quad Name:
Std Latitude: 38.2614083
Std Longitude: -109.3492972

Latitude: 38 degrees 15 minutes 41.07 seconds north
Longitude: 109 degrees 20 minutes 57.47 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 644416 meters
UTM Northing: 4236108 meters

Primary Earth Cover: Tree cover
Secondary Earth Cover: Shrubby rangeland
Existing Vegetation:
Parent Material: residuum
Bedrock Kind:
Bedrock Depth: 46 centimeters
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
46	71	bedrock, lithic	Indurated

Cont. Site ID: S2016UT037006 **Pedon ID:** S2016UT037006

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	2,019.0	200	8.9			356	130	well		

A--0 to 11 centimeters (0.0 to 4.3 inches); light red (2.5YR 6/6) loam, dark red (2.5YR 3/6), moist; 22 percent clay; weak fine subangular blocky parts to weak very fine granular structure; soft, very friable, moderately sticky, moderately plastic; common very fine roots and common fine roots; carbonate, finely disseminated; 5 percent nonflat indurated 2 to 75-millimeter Sedimentary rock fragments; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N03689

BC--11 to 31 centimeters (4.3 to 12.2 inches); parachannery clay loam, dark red (2.5YR 3/6), moist; 31 percent clay; moderate very fine granular structure; soft, friable, moderately sticky, moderately plastic; many very fine roots and common medium roots and common fine roots and common coarse roots; carbonate, finely disseminated; 20 percent flat subangular moderately cemented 2 to 150-millimeter Mudstone fragments; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions; gradual smooth boundary. Lab sample # 16N03690

Cr--31 to 46 centimeters (12.2 to 18.1 inches); parachanners; 95 percent flat angular weakly cemented 2 to 150-millimeter Sandstone fragments.

R--46 to 71 centimeters (18.1 to 28.0 inches); bedrock; .

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 27 2016
Describer: James Harrigan
NEON Plot ID: MOAB_013
Site ID: S2016UT037007

Pedon ID: S2016UT037007

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0830
Soil Name as Described/Sampled: Windwhistle
Classification: Fine-loamy, mixed, superactive, mesic, shallow Ustic Calciargids
Soil Name as Correlated: Windwhistle

Classification: Fine-loamy, mixed, superactive, mesic, shallow Ustic Calciargids
Pedon Type:
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils: Sazi
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau

Physiographic Section: Canyon Lands
State Physiographic Area:
Local Physiographic Area: Dry Valley
Geomorphic Setting: on footslope of base slope of swale
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section: 9 to 49 cm.
Description origin: NASIS
Diagnostic Features: argillic horizon 9 to 49 cm.
calcic horizon 21 to 49 cm.
paralithic contact 49 to 66 cm.

Country:
State: Utah
County: San Juan
MLRA: 35 -- Colorado Plateau
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties
8-RIC -- Richfield, Utah
Map Unit: 104 -- Windwhistle-Sazi very fine sandy loams, 1 to 3 percent slopes
Pit Location:
Quad Name:
Std Latitude: 38.2339194
Std Longitude: -109.3933944

Latitude: 38 degrees 14 minutes 2.11 seconds north
Longitude: 109 degrees 23 minutes 36.22 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 640635 meters
UTM Northing: 4232990 meters

Primary Earth Cover: Shrub cover
Secondary Earth Cover: Other grass/herbaceous cover
Existing Vegetation:
Parent Material: eolian deposits over alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
49	66	bedrock, paralithic	Strongly cemented

Cont. Site ID: S2016UT037007 **Pedon ID:** S2016UT037007

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	1,771.0	180	11.0			305	150	well		

A--0 to 9 centimeters (0.0 to 3.5 inches); reddish brown (5YR 5/4) fine sandy loam, reddish brown (5YR 4/4), moist; 70 percent sand; 18 percent silt; 12 percent clay; very friable, nonsticky, nonplastic; common very fine roots; many very fine irregular pores; noneffervescent, by HCl, 1 normal; slightly alkaline, pH 7.6, pH indicator solutions; clear smooth boundary. Lab sample # 16N03691

Bt--9 to 21 centimeters (3.5 to 8.3 inches); fine sandy loam, yellowish red (5YR 4/6), moist; 60 percent sand; 24 percent silt; 16 percent clay; very friable, nonsticky, nonplastic; common very fine roots and common fine roots; common very fine tubular pores; noneffervescent, by HCl, 1 normal; slightly alkaline, pH 7.8, pH indicator solutions; gradual smooth boundary. Lab sample # 16N03692

Btk--21 to 49 centimeters (8.3 to 19.3 inches); fine sandy loam, yellowish red (5YR 4/6), moist; 55 percent sand; 25 percent silt; 20 percent clay; friable, slightly sticky, slightly plastic; common very fine roots and common fine roots; common very fine tubular pores; 10 percent carbonate coats on rock fragments; 2 percent nonflat subangular strongly cemented 2 to 75-millimeter Sedimentary rock fragments; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions; clear smooth boundary. Lab sample # 16N03693

Cr--49 to 66 centimeters (19.3 to 26.0 inches); paragravel; 95 percent nonflat angular weakly cemented 2 to 75-millimeter Sandstone fragments.

R--66 to 91 centimeters (26.0 to 35.8 inches); bedrock; .

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 27 2016
Describer: Stephen Cromer
NEON Plot ID: MOAB_016
Site ID: S2016UT037008

Pedon ID: S2016UT037008

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0831
Soil Name as Described/Sampled: Barx
Classification: Fine-loamy, mixed, superactive, mesic Ustic Calciargids

Soil Name as Correlated: Barx

Classification: Fine-loamy, mixed, superactive, mesic Ustic Calciargids
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils: Mivida
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:
Local Physiographic Area: Dry Valley
Geomorphic Setting: on tread of pediment
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section:

Description origin: NASIS

Diagnostic Features: argillic horizon 7 to 73 cm.
calcic horizon 52 to 100 cm.

Country:
State: Utah
County: San Juan
MLRA: 35 -- Colorado Plateau
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties
8-RIC -- Richfield, Utah
Map Unit: 52 -- Mivida fine sandy loam, 2 to 8 percent slopes
Pit Location:
Quad Name:
Std Latitude: 38.2064722
Std Longitude: -109.4074722

Latitude: 38 degrees 12 minutes 23.30 seconds north
Longitude: 109 degrees 24 minutes 26.90 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 639433 meters
UTM Northing: 4229924 meters

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Shrubby rangeland
Existing Vegetation:
Parent Material: eolian deposits over alluvium
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments: 2.0 percent nonflat indurated 2- to 75-millimeter Sedimentary rock fragments

Description database: KSSL

Cont. Site ID: S2016UT037008 **Pedon ID:** S2016UT037008

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	1,771.0	335	11.0			305	150	well		

A--0 to 7 centimeters (0.0 to 2.8 inches); yellowish red (5YR 5/6) fine sandy loam, dark reddish brown (5YR 3/4), moist; 65 percent sand; 24 percent silt; 11 percent clay; weak fine granular structure; very friable, nonsticky, nonplastic; common very fine roots and common medium roots; noneffervescent, by HCl, 1 normal; slightly alkaline, pH 7.8, pH indicator solutions; clear smooth boundary. Lab sample # 16N03694

Bt1--7 to 22 centimeters (2.8 to 8.7 inches); loam, yellowish red (5YR 4/6), moist; 50 percent sand; 27 percent silt; 23 percent clay; weak medium subangular blocky structure; friable, slightly sticky, slightly plastic; common very fine roots and common medium roots; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; clear smooth boundary. Lab sample # 16N03695

Bt2--22 to 52 centimeters (8.7 to 20.5 inches); loam, yellowish red (5YR 4/6), moist; 48 percent sand; 28 percent silt; 24 percent clay; moderate medium subangular blocky structure; friable, slightly sticky, slightly plastic; common very fine roots and common medium roots; 30 percent distinct clay films on all faces of peds; violent effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; gradual wavy boundary. Lab sample # 16N03696

Bk1--52 to 73 centimeters (20.5 to 28.7 inches); loam, light reddish brown (5YR 6/4), moist; 45 percent sand; 30 percent silt; 25 percent clay; structureless massive; friable, slightly sticky, slightly plastic; common very fine roots; 20 percent fine spherical carbonate masses; violent effervescence, by HCl, 1 normal; moderately alkaline, pH 8.4, pH indicator solutions; gradual wavy boundary. Lab sample # 16N03697

Bk2--73 to 100 centimeters (28.7 to 39.4 inches); sandy loam, yellowish red (5YR 5/6), moist; 55 percent sand; 25 percent silt; 20 percent clay; structureless massive; friable, slightly sticky, slightly plastic; few very fine roots; 10 percent fine spherical carbonate masses; violent effervescence, by HCl, 1 normal; moderately alkaline, pH 8.4, pH indicator solutions. Lab sample # 16N03698

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 27 2016
Describer: J. Harrigan
NEON Plot ID: MOAB_002
Site ID: S2016UT037009

Pedon ID: S2016UT037009

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0832
Soil Name as Described/Sampled: Begay
Classification: Coarse-loamy, mixed, superactive, mesic Ustic Haplocambids
Soil Name as Correlated: Begay

Classification: Coarse-loamy, mixed, superactive, mesic Ustic Haplocambids
Pedon Type: correlates to named soil
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of side slope of plateau on backslope of side slope of structural bench
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Country: United States
State: Utah
County: San Juan
MLRA: 35 -- Colorado Plateau
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties 8-RIC -- Richfield, Utah
Map Unit: 7 -- Begay fine sandy loam, 2 to 6 percent slopes
Pit Location:
Quad Name: Hatch Rock, Utah
Std Latitude: 38.2109000
Std Longitude: -109.4149000

Latitude: 38 degrees 12 minutes 39.24 seconds north
Longitude: 109 degrees 24 minutes 53.64 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 638769 meters
UTM Northing: 4230405 meters

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Grassland rangeland
Existing Vegetation:
Parent Material: eolian deposits derived from sandstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016UT037009 **Pedon ID:** S2016UT037009

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	1,776.0	56	11.0			305	150	well		

A--0 to 7 centimeters (0.0 to 2.8 inches); loamy fine sand, reddish brown (5YR 5/4), moist; 84 percent sand; 8 percent clay; weak thin platy structure; soft, very friable, nonsticky, nonplastic; common very fine roots throughout and common fine roots throughout; common fine interstitial pores; noneffervescent, by HCl, 1 normal; slightly alkaline, pH 7.6, pH indicator solutions; clear smooth boundary. Lab sample # 16N03699

Bw1--7 to 23 centimeters (2.8 to 9.1 inches); fine sandy loam, reddish brown (5YR 5/4), moist; 60 percent sand; 11 percent clay; weak medium subangular blocky structure; soft, friable, slightly sticky, slightly plastic; many very fine roots throughout and common medium roots throughout and many fine roots throughout; medium tubular and common fine interstitial pores; very slight effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; gradual wavy boundary. Lab sample # 16N03700

Bw2--23 to 52 centimeters (9.1 to 20.5 inches); fine sandy loam, reddish brown (5YR 5/4), moist; 55 percent sand; 15 percent clay; weak medium subangular blocky parts to weak fine subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout; common medium tubular and common fine interstitial pores; strong effervescence, by HCl, 1 normal; strongly alkaline, pH 8.6, pH indicator solutions; gradual wavy boundary. Lab sample # 16N03701

Bk1--52 to 71 centimeters (20.5 to 28.0 inches); loam, yellowish red (5YR 5/6), moist; 50 percent sand; 21 percent clay; weak medium subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout; common medium tubular and common fine interstitial pores; 7 percent fine irregular carbonate masses on faces of peds; violent effervescence, by HCl, 1 normal; strongly alkaline, pH 8.6, pH indicator solutions; gradual wavy boundary. Lab sample # 16N03702

Bk2--71 to 100 centimeters (28.0 to 39.4 inches); sandy clay loam, light reddish brown (5YR 6/4), moist; 57 percent sand; 20 percent clay; weak medium subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; common very fine roots throughout and common fine roots throughout; common medium tubular and common fine interstitial pores; 25 percent fine irregular carbonate masses throughout; violent effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions. Lab sample # 16N03703

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 28 2016
Describer: J. Harrigan
NEON Plot ID: MOAB_010
Site ID: S2016UT037010

Pedon ID: S2016UT037010

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0833
Soil Name as Described/Sampled: Begay
Classification: Coarse-loamy, mixed, superactive, mesic Ustic Haplocambids
Soil Name as Correlated: Begay

Classification: Coarse-loamy, mixed, superactive, mesic Ustic Haplocambids
Pedon Type: correlates to named soil
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on summit of interfluve of fan remnant on structural bench
on summit of interfluve of canyonlands
Upslope Shape: linear
Cross Slope Shape: convex
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 6 cm.
cambic horizon 6 to 41 cm.

Country: United States
State: Utah
County: San Juan
MLRA: 35 -- Colorado Plateau
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties
8-RIC -- Richfield, Utah
Map Unit: 7 -- Begay fine sandy loam, 2 to 6 percent slopes
Pit Location:
Quad Name: La Sal Junction, Utah
Std Latitude: 38.2553000
Std Longitude: -109.3783000

Latitude: 38 degrees 15 minutes 19.08 seconds north
Longitude: 109 degrees 22 minutes 41.88 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 641891 meters
UTM Northing: 4235386 meters

Primary Earth Cover: Grass/herbaceous cover
Secondary Earth Cover: Grassland rangeland
Existing Vegetation:
Parent Material: eolian deposits derived from sandstone and/or slope alluvium derived from sandstone and siltstone
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Cont. Site ID: S2016UT037010 **Pedon ID:** S2016UT037010

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	1,815.0	107	11.0			305	150	well		

A--0 to 6 centimeters (0.0 to 2.4 inches); fine sandy loam, reddish brown (5YR 4/3), moist; 75 percent sand; 13 percent clay; weak fine granular structure; soft, very friable, nonsticky, nonplastic; common very fine roots throughout and common fine roots throughout; common very fine irregular and common fine tubular pores; noneffervescent, by HCl, 1 normal; slightly alkaline, pH 7.6, pH indicator solutions; clear smooth boundary. Lab sample # 16N03704

Bw1--6 to 23 centimeters (2.4 to 9.1 inches); fine sandy loam, reddish brown (5YR 4/4), moist; 77 percent sand; 12 percent clay; weak fine subangular blocky structure; soft, friable, nonsticky, nonplastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout; common very fine tubular and common fine tubular pores; slight effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions; clear wavy boundary. Lab sample # 16N03705

Bw2--23 to 41 centimeters (9.1 to 16.1 inches); fine sandy loam, reddish brown (5YR 4/4), moist; 55 percent sand; 17 percent clay; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky, slightly plastic; common very fine roots throughout and common fine roots throughout; common very fine tubular and common fine tubular pores; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions; abrupt wavy boundary. Lab sample # 16N03706

Bk--41 to 77 centimeters (16.1 to 30.3 inches); loamy fine sand, yellowish red (5YR 5/6), moist; 85 percent sand; 7 percent clay; weak medium subangular blocky structure; slightly hard, friable, nonsticky, nonplastic; common very fine roots throughout and common fine roots throughout; common very fine tubular pores; 5 percent fine irregular carbonate masses throughout; 3 percent nonflat subrounded strongly cemented 2 to 5-millimeter Sandstone fragments; strong effervescence, by HCl, 1 normal; moderately alkaline, pH 8.4, pH indicator solutions; clear wavy boundary. Lab sample # 16N03707

C--77 to 100 centimeters (30.3 to 39.4 inches); fine sandy loam, yellowish red (5YR 5/6), moist; 76 percent sand; 5 percent clay; massive; slightly hard, friable, nonsticky, nonplastic; common fine roots throughout; common very fine tubular and common fine tubular pores; 5 percent fine irregular carbonate masses throughout; 1 percent nonflat subangular weakly cemented 2 to 75-millimeter Sandstone fragments; slight effervescence, by HCl, 1 normal; moderately alkaline, pH 8.0, pH indicator solutions. Lab sample # 16N03708

PEDON DESCRIPTION -- NEON Site MOAB

Print Date: Dec 10 2018
Description Date: Apr 28 2016
Describer: Keith Crossland
NEON Plot ID: MOAB_046
Site ID: S2016UT037011

Pedon ID: S2016UT037011

Site Note:
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 16N0834
Soil Name as Described/Sampled: Sazi
Classification: Coarse-loamy, mixed, superactive, mesic Ustic Haplocalcids

Soil Name as Correlated:

Classification:
Pedon Type:
Pedon Purpose: research site
Taxon Kind: series
Associated Soils: Windwhistle
Physiographic Division: Intermontane Plateaus
Physiographic Province: Colorado Plateau
Physiographic Section: Canyon Lands
State Physiographic Area:

Local Physiographic Area: Dry Valley
Geomorphic Setting: on tread of pediment
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 25 to 92 cm.

Description origin: NASIS

Diagnostic Features: calcic horizon 37 to 92 cm.

Country: United States
State: Utah
County: San Juan
MLRA: 35 -- Colorado Plateau
Soil Survey Area: UT633 -- Canyonlands Area, Utah - Parts of Grand and San Juan Counties
8-RIC -- Richfield, Utah
Map Unit: 104 -- Windwhistle-Sazi very fine sandy loams, 1 to 3 percent slopes
Pit Location:
Quad Name:
Std Latitude: 38.2481944
Std Longitude: -109.3925417

Latitude: 38 degrees 14 minutes 53.50 seconds north
Longitude: 109 degrees 23 minutes 33.15 seconds west
Datum: WGS84
UTM Zone: 12
UTM Easting: 640658 meters
UTM Northing: 4234575 meters

Primary Earth Cover:
Secondary Earth Cover:
Existing Vegetation:
Parent Material: eolian deposits derived from sandstone over alluvium
Bedrock Kind: Sandstone
Bedrock Depth: 92 centimeters
Bedrock Hardness: very strongly cemented
Bedrock Fracture Interval:
Surface Fragments: 2.0 percent nonflat subrounded indurated 2- to 75-millimeter Sedimentary rock fragments

Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
92	100	bedrock, paralithic	Strongly cemented

Cont. Site ID: S2016UT037011 **Pedon ID:** S2016UT037011

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	1,784.0	255	11.0			305	150	well		

A--0 to 8 centimeters (0.0 to 3.1 inches); fine sandy loam, reddish brown (5YR 4/4), moist; 66 percent sand; 19 percent silt; 15 percent clay; soft, very friable, nonsticky, slightly plastic; noneffervescent, by HCl, 1 normal; slightly alkaline, pH 7.6, pH indicator solutions. Lab sample # 16N03709

Bw--8 to 37 centimeters (3.1 to 14.6 inches); fine sandy loam, yellowish red (5YR 4/6), moist; 63 percent sand; 21 percent silt; 16 percent clay; slightly hard, very friable, nonsticky, slightly plastic; carbonate, finely disseminated; slight effervescence, by HCl, 1 normal; moderately alkaline, pH 8.2, pH indicator solutions. Lab sample # 16N03710

Bk1--37 to 68 centimeters (14.6 to 26.8 inches); loam, yellowish red (5YR 5/6), moist; 43 percent sand; 40 percent silt; 17 percent clay; slightly hard, friable, slightly sticky, slightly plastic; 50 percent carbonate coats on rock fragments; carbonate, finely disseminated; 8 percent nonflat subrounded indurated 2 to 75-millimeter Sedimentary rock fragments; strong effervescence, by HCl, 1 normal; strongly alkaline, pH 8.6, pH indicator solutions. Lab sample # 16N03711

Bk2--68 to 92 centimeters (26.8 to 36.2 inches); loam, yellowish red (5YR 5/6), moist; 50 percent sand; 35 percent silt; 15 percent clay; soft, very friable, slightly sticky, slightly plastic; carbonate, finely disseminated; 5 percent flat subangular strongly cemented 2 to 150-millimeter Sedimentary rock fragments; strong effervescence, by HCl, 1 normal; strongly alkaline, pH 8.6, pH indicator solutions. Lab sample # 16N03712

Cr--92 to 100 centimeters (36.2 to 39.4 inches); very strongly cemented Sandstone bedrock; .