PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 19 2021
Describer: Andrew Brown & Cathy Wang
NEON Plot ID: TEAK_023
Site ID: S2021CA019001
Site Note:

Pedon ID: S2021CA019001
Pedon Note:

Lab Source ID: KSSL
Lab Pedon #: 22N0141
User Transect ID:
Soil Name as Described/Sampled: Lackey
Classification: Sandy-skeletal, isotic, frigid Vitrandic Xerorthents
Soil Name as Correlated: Sirretta
Classification: Sandy-skeletal, isotic, frigid Vitrandic Xerorthents
Pedon Type:
Pedon Purpose:
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on footslope of mountaintop of mountains on footslope of mountaintop of outwash plain
Upslope Shape: linear
Cross Slope Shape: linear

Particle Size Control Section: 27 to 61 cm.

Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 6 cm.
lithologic discontinuity 12 to 12 cm.
lithic contact 61 to 200 cm.

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 147 -- Rock outcrop
Quad Name: Courtright Reservoir, California
Std Latitude: 37.0734367
Std Longitude: -118.9935074

Primary Earth Cover: Tree cover
Secondary Earth Cover: Conifers
Vegetation: leptosiphon, spikerush
Parent Material:
Bedrock Kind: Granodiorite
Bedrock Depth: 61 centimeters
Bedrock Hardness: indurated
Bedrock Fracture Interval: 45 to less than 100 centimeters
Surface Fragments: 5.0 percent nonflat subangular indurated 2- to 75-millimeter Granodiorite fragments and 10.0 percent nonflat subangular indurated 75- to 250-millimeter Granodiorite fragments and 5.0 percent nonflat subangular indurated 250- to 600-millimeter Granodiorite fragments and 4.0 percent nonflat subangular indurated 600- to 3000-millimeter Granodiorite fragments
Description database: KSSL

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
61	200	bedrock, lithic	Indurated

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	2,725.0	350						well		

Oi--0 to 2 centimeters (0.0 to 0.8 inches); black (7.5YR 2.5/1) broken face slightly decomposed plant material, black (7.5YR 2.5/1) broken face, dry; loose, loose, noncoherent; 2 percent nonflat angular indurated 2 to 5-millimeter Granodiorite fragments and 5 percent nonflat angular noncoherent cemented 2 to 75-millimeter Wood fragments; noneffervescent; abrupt smooth boundary. Lab sample # 22N00751

A/C--2 to 6 centimeters (0.8 to 2.4 inches); very dark brown (10YR 2/2) broken face loamy sand, very dark grayish brown (10YR 3/2) broken face, dry; 85 percent sand; 5 percent clay; structureless single grain; loose, loose, noncoherent, nonsticky, nonplastic; many very fine roots throughout and common medium roots throughout and common fine roots throughout; many very fine interstitial pores; 3 percent nonflat angular indurated 2 to 5-millimeter Granodiorite fragments and 5 percent nonflat subangular indurated 5 to 75-millimeter Granodiorite fragments; noneffervescent; abrupt irregular boundary. Lab sample # 22N00752

C--6 to 12 centimeters (2.4 to 4.7 inches); very dark grayish brown (10YR 3/2) broken face very cobbly loamy sand, pale brown (10YR 6/3) broken face, dry; 82 percent sand; 6 percent clay; structureless single grain; loose, loose, noncoherent, nonsticky, nonplastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; many very fine interstitial pores; 15 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments and 25 percent nonflat subangular indurated 75 to 250-millimeter Granodiorite fragments; noneffervescent; clear wavy boundary. Lab sample # 22N00753

BC--12 to 61 centimeters (4.7 to 24.0 inches); dark yellowish brown (10YR 3/6) broken face extremely cobbly loamy sand, yellowish brown (10YR 5/6) broken face, dry; 86 percent sand; 4 percent clay; weak fine subangular blocky structure; soft, very friable, noncoherent, nonsticky, nonplastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; common very fine interstitial pores; 30 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments and 35 percent nonflat subangular indurated 75 to 250-millimeter Granodiorite fragments; noneffervescent; abrupt smooth boundary. Lab sample # 22N00754

R--61 to 200 centimeters (24.0 to 78.7 inches); indurated Granodiorite bedrock, fractured at intervals of 45 to less than 100 centimeters; Indurated; noneffervescent.

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 19 2021
Describer: Cathy Scott, Raphael Ortiz
NEON Plot ID: TEAK_030
Site ID: S2021CA019002
Site Note:

Pedon ID: S2021CA019002

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0142
User Transect ID:
Soil Name as Described/Sampled: Windowpeak
Classification: Sandy-skeletal, isotic, frigid Vitrandic Humixerepts
Soil Name as Correlated:
Classification:
Pedon Type: not classified to current taxon name
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of mountainflank of mountains on backslope of mountainflank of mountain slope
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 164 -- Stecum family-Rock outcrop complex, 5 to 45 percent slopes
Quad Name:
Std Latitude: 37.0594902
Std Longitude: -118.9813843

Primary Earth Cover:
Secondary Earth Cover:
Vegetation:
Parent Material: colluvium derived from quartz-monzonite
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
40.0	2,620.0	122						somewhat excessively		

A1--0 to 5 centimeters (0.0 to 2.0 inches); very dark gray (10YR 3/1) extremely cobbly coarse sand, black (10YR 2/1), moist; single grain; loose, loose, nonsticky, nonplastic; many very fine roots throughout; many fine interstitial pores; 15 percent nonflat subrounded indurated 250 to 600-millimeter Quartz-monzonite fragments and 20 percent nonflat subrounded indurated 2 to 75-millimeter Quartz-monzonite fragments and 30 percent nonflat subrounded indurated 75 to 250-millimeter Quartz-monzonite fragments; noneffervescent; moderately acid, pH 5.8; abrupt wavy boundary. Lab sample # 22N00756

A2--5 to 24 centimeters (2.0 to 9.4 inches); brown (10YR 4/3) extremely cobbly sand, very dark brown (10YR 2/2), moist; weak fine subangular blocky parts to weak fine granular structure; soft, very friable, nonsticky, nonplastic; many very fine roots throughout and many fine roots throughout; many fine irregular pores; 15 percent nonflat subrounded indurated 250 to 600-millimeter Quartz-monzonite fragments and 20 percent nonflat subrounded indurated 2 to 75-millimeter Quartz-monzonite fragments and 30 percent nonflat subrounded indurated 75 to 250-millimeter Quartz-monzonite fragments; noneffervescent; very strongly acid, pH 4.7; clear wavy boundary. Lab sample # 22N00757

A3--24 to 44 centimeters (9.4 to 17.3 inches); brown (10YR 4/3) extremely cobbly sand, very dark brown (10YR 2/2), moist; weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; many very fine roots throughout and common very coarse roots throughout and many fine roots throughout; many fine irregular pores; 15 percent nonflat subrounded indurated 2 to 75-millimeter Quartz-monzonite fragments and 15 percent nonflat subrounded indurated 250 to 600-millimeter Quartz-monzonite fragments and 30 percent nonflat subrounded indurated 75 to 250-millimeter Quartz-monzonite fragments; noneffervescent; very strongly acid, pH 4.5; clear wavy boundary. Lab sample # 22N00758

C1--44 to 64 centimeters (17.3 to 25.2 inches); brown (10YR 4/3) extremely cobbly sand, dark brown (10YR 3/3), moist; massive; 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 irregular pores; 15 percent nonflat subrounded indurated 2 to 75-millimeter Quartz-monzonite fragments and 20 percent nonflat subrounded indurated 250 to 600-millimeter Quartz-monzonite fragments and 30 percent nonflat subrounded indurated 75 to 250-millimeter Quartz-monzonite fragments; noneffervescent; very strongly acid, pH 4.5; clear wavy boundary. Lab sample # 22N00759

C2--64 to 100 centimeters (25.2 to 39.4 inches); brown (10YR 4/3) extremely stony sand, dark brown (10YR 3/3), moist; massive; moderately hard, firm, nonsticky, nonplastic; common medium roots throughout and common fine roots throughout; common fine irregular and common fine tubular pores; 15 percent nonflat subrounded indurated 2 to 75-millimeter Quartz-monzonite fragments and 15 percent nonflat subrounded indurated 75 to 250-millimeter Quartz-monzonite fragments and 40 percent nonflat subrounded indurated 250 to 600-millimeter Quartz-monzonite fragments; noneffervescent; very strongly acid, pH 4.6. Lab sample # 22N00760

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 19 2021
Describer: Andrew Brown & Cathy Wang
NEON Plot ID: TEAK_005
Site ID: S2021CA019003
Site Note:

Pedon ID: S2021CA019003

Pedon Note:

Lab Source ID: KSSL
Lab Pedon #: 22N0143
User Transect ID:
Soil Name as Described/Sampled: Lackey
Classification: Sandy-skeletal, isotic, frigid Vitrandic Xerorthents
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils: Lackey
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of mountaintop of mountains on backslope of mountaintop of moraine
Upslope Shape: concave
Cross Slope Shape: linear
Particle Size Control Section: 26 to 101 cm.

Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 14 cm.

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 162 -- Stecum family, 3 to 35 percent slopes
Quad Name: Courtright Reservoir, California
Std Latitude: 37.0582008
Std Longitude: -118.9886856

Primary Earth Cover: Tree cover
Secondary Earth Cover: Conifers
Vegetation: pinemat manzanita, rockcress
Parent Material:
Bedrock Kind: Granodiorite
Bedrock Depth:
Bedrock Hardness: indurated
Bedrock Fracture Interval:
Surface Fragments: 1.0 percent nonflat subangular indurated 2- to 75-millimeter Granodiorite fragments and 10.0 percent nonflat subangular indurated 75- to 250-millimeter Granodiorite fragments and 20.0 percent nonflat subangular indurated 250- to 600-millimeter Granodiorite fragments and 3.0 percent nonflat subangular indurated 600- to 3000-millimeter Granodiorite fragments

Description database: KSSL

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	2,715.0	22						somewhat excessively		

Oi--0 to 1 centimeters (0.0 to 0.4 inches); black (7.5YR 2.5/1) broken face slightly decomposed plant material, black (7.5YR 2.5/1) broken face, dry; loose, loose, noncoherent, nonsticky, nonplastic; 5 percent nonflat subangular indurated 75 to 250-millimeter Granodiorite fragments and 10 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments; noneffervescent; abrupt broken boundary. Lab sample # 22N00761

A--1 to 14 centimeters (0.4 to 5.5 inches); black (10YR 2/1) broken face cobbly loamy sand, very dark brown (10YR 2/2) broken face, dry; 85 percent sand; 8 percent clay; soft, very friable, noncoherent, nonsticky, nonplastic; common very fine roots throughout; common fine interstitial pores; 10 percent nonflat subangular indurated 75 to 250-millimeter Granodiorite fragments and 10 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments; noneffervescent; abrupt irregular boundary. Lab sample # 22N00762

C1--14 to 46 centimeters (5.5 to 18.1 inches); olive brown (2.5Y 4/4) broken face extremely stony loamy sand, light yellowish brown (2.5Y 6/4) broken face, dry; 88 percent sand; 6 percent clay; loose, loose, noncoherent, nonsticky, nonplastic; few medium roots throughout and common fine roots throughout; common fine interstitial pores; 15 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments and 25 percent nonflat subangular indurated 75 to 250-millimeter Granodiorite fragments and 40 percent nonflat subangular indurated 250 to 600-millimeter Granodiorite fragments; noneffervescent; clear wavy boundary. Lab sample # 22N00763

C2--46 to 100 centimeters (18.1 to 39.4 inches); dark yellowish brown (10YR 4/4) broken face extremely stony loamy sand, yellowish brown (10YR 5/4) broken face, dry; 88 percent sand; 6 percent clay; loose, loose, noncoherent, nonsticky, nonplastic; few medium roots throughout and common fine roots throughout; common fine interstitial pores; 15 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments and 30 percent nonflat subangular indurated 75 to 250-millimeter Granodiorite fragments and 40 percent nonflat subangular indurated 250 to 600-millimeter Granodiorite fragments; noneffervescent. Lab sample # 22N00764

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 19 2021
Describer: Cathy Scott, Raphael Ortiz
NEON Plot ID: TEAK_028
Site ID: S2021CA019004
Site Note:

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit:
Quad Name:
Std Latitude: 37.0551567
Std Longitude: -118.9822617

Pedon ID: S2021CA019004
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0144
User Transect ID:
Soil Name as Described/Sampled: Windowpeak
Classification: Sandy-skeletal, isotic, frigid Vitrandic Humixerepts
Soil Name as Correlated:
Classification:
Pedon Type: not classified to current taxon name
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of mountainflank, upper third of mountains
on backslope of mountainflank, upper third of mountain slope
Upslope Shape: convex
Cross Slope Shape: concave
Particle Size Control Section: 25 to 100 cm.
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Primary Earth Cover: Shrub cover
Secondary Earth Cover: Native shrubs
Vegetation:
Parent Material: colluvium derived from granodiorite
Bedrock Kind:

Bedrock Depth:

Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
50.0		131						somewhat excessively		

Oi--0 to 5 centimeters (0.0 to 2.0 inches); dark brown (7.5YR 3/3) slightly decomposed plant material, dark brown (7.5YR 3/2), moist; strongly acid, pH 5.4; clear wavy boundary. Lab sample # 22N00765

A1--5 to 29 centimeters (2.0 to 11.4 inches); very dark brown (10YR 2/2) sand, black (10YR 2/1), moist; weak fine subangular blocky, and weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; common very fine roots throughout and common fine roots throughout; many very fine dendritic tubular and many fine dendritic tubular pores; 5 percent nonflat subrounded indurated 250 to 600-millimeter Granodiorite fragments and 8 percent nonflat subrounded indurated 2 to 75-millimeter Granodiorite fragments; noneffervescent; strongly acid, pH 5.4; clear wavy boundary. Lab sample # 22N00766

A2--29 to 62 centimeters (11.4 to 24.4 inches); brown (10YR 4/3) cobbly sand, dark brown (10YR 3/3), moist; weak fine subangular blocky parts to massive; soft, very friable, nonsticky, nonplastic; few very fine roots throughout and very few medium roots throughout and few fine roots throughout; many very fine dendritic tubular and many fine dendritic tubular pores; 5 percent nonflat subrounded indurated 75 to 250-millimeter Granodiorite fragments and 7 percent nonflat subrounded indurated 2 to 75-millimeter Granodiorite fragments and 8 percent nonflat subrounded indurated 250 to 600-millimeter Granodiorite fragments; noneffervescent; strongly acid, pH 5.2; clear wavy boundary. Lab sample # 22N00767

C--62 to 100 centimeters (24.4 to 39.4 inches); brown (7.5YR 4/3) very stony sand, dark brown (7.5YR 3/3), moist; massive; soft, very friable, nonsticky, nonplastic; very few very fine roots throughout and very few medium roots throughout and few fine roots throughout; many very fine dendritic tubular and common fine dendritic tubular pores; 15 percent nonflat subrounded indurated 2 to 75-millimeter Granodiorite fragments and 15 percent nonflat subrounded indurated 250 to 600-millimeter Granodiorite fragments and 20 percent nonflat subrounded indurated 75 to 250-millimeter Granodiorite fragments; noneffervescent; strongly acid, pH 5.2. Lab sample # 22N00768

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 20 2021
Describer: Andrew Brown & Rafael Ortiz-Vasquez
NEON Plot ID: TEAK_016
Site ID: S2021CA019005
Site Note:

Pedon ID: S2021CA019005

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0145
User Transect ID:
Soil Name as Described/Sampled: Hockett
Classification: Sandy, isotic, frigid Vitrandic Humixerepts
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils: Hockett, Windowpeak
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada

State Physiographic Area:
Local Physiographic Area:
Geomorphic Setting: on backslope of mountainflank, center third of structural bench on mountain slope
on backslope of mountainflank, center third of mountains
Upslope Shape: convex
Cross Slope Shape: concave

Particle Size Control Section: 25 to 96 cm.

Description origin: NASIS
Diagnostic Features: umbric epipedon 0 to 96 cm.
lithic contact 96 to 200 cm.

Top Depth (cm)	Bottom Depth (cm)	Restriction Kind	Restriction Hardness
96	200	bedrock, lithic	Indurated

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 159 -- Sirretta family-Rock outcrop complex, 15 to 45 percent slopes
Quad Name: Nelson Mountain, California
Std Latitude: 37.0301857
Std Longitude: -119.0063934

Primary Earth Cover: Tree cover
Secondary Earth Cover: Conifers
Vegetation: buckwheat, chinquapin, Grass family, groundsmoke, rockcress, stickseed
Parent Material:
Bedrock Kind: Granodiorite

Bedrock Depth: 96 centimeters

Bedrock Hardness: indurated
Bedrock Fracture Interval: 45 to less than 100 centimeters
Surface Fragments: 15.0 percent nonflat subangular indurated 2- to 75-millimeter Granodiorite fragments and 1.0 percent nonflat subangular indurated 75- to 250-millimeter Granodiorite fragments and 3.0 percent nonflat subangular indurated 250- to 600-millimeter Granodiorite fragments and 1.0 percent nonflat subangular indurated 600- to 3000-millimeter Granodiorite fragments
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
41.0	2,524.0	292						well		

A--0 to 23 centimeters (0.0 to 9.1 inches); dark grayish brown (10YR 4/2) broken face sand, black (10YR 2/1) broken face, moist; 93 percent sand; 5 percent clay; soft, very friable, noncoherent, nonsticky, nonplastic; many very fine roots throughout; common very fine interstitial and few medium tubular pores; 1 percent nonflat subangular indurated 2 to 5-millimeter Granitoid fragments and 5 percent nonflat subangular indurated 5 to 75-millimeter Granitoid fragments; noneffervescent; very strongly acid, pH 4.5, pH indicator solutions; clear wavy boundary. Lab sample # 22N00769

C1--23 to 54 centimeters (9.1 to 21.3 inches); dark grayish brown (10YR 4/2) broken face cobbly sand, black (10YR 2/1) broken face, moist; 93 percent sand; 5 percent clay; soft, very friable, noncoherent, nonsticky, nonplastic; common very fine roots throughout and common medium roots throughout and common coarse roots throughout; common very fine interstitial and common fine tubular pores; 2 percent nonflat subangular indurated 2 to 5-millimeter Granitoid fragments and 9 percent nonflat subangular indurated 5 to 75-millimeter Granitoid fragments and 12 percent nonflat subangular indurated 75 to 250-millimeter Granitoid fragments; noneffervescent; very strongly acid, pH 5.0, pH indicator solutions; gradual smooth boundary. Lab sample # 22N00770

C2--54 to 96 centimeters (21.3 to 37.8 inches); grayish brown (10YR 5/2) broken face cobbly sand, black (10YR 2/1) broken face, moist; 95 percent sand; 5 percent clay; soft, very friable, noncoherent, nonsticky, nonplastic; common very fine roots throughout and common very fine roots throughout and common medium roots throughout and common coarse roots throughout; common very fine tubular and many very fine interstitial pores; 2 percent nonflat subangular indurated 2 to 5-millimeter Granitoid fragments and 7 percent nonflat subangular indurated 5 to 75-millimeter Granitoid fragments and 18 percent nonflat subangular indurated 75 to 250-millimeter Granitoid fragments; noneffervescent; moderately acid, pH 5.6, pH indicator solutions; abrupt irregular boundary. Lab sample # 22N00771

R--96 to 100 centimeters (37.8 to 39.4 inches); indurated Granodiorite bedrock, fractured at intervals of 45 to less than 100 centimeters; Indurated; .

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 20 2021
Describer: Theresa Kunch, Nate Roe
NEON Plot ID: TEAK_010
Site ID: S2021CA019006
Site Note:

Pedon ID: S2021CA019006

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0146
User Transect ID:
Soil Name as Described/Sampled: Cannell
Classification: Coarse-loamy, isotic, superactive, frigid Vitrandic Dystroxerepts
Soil Name as Correlated:
Classification:
Pedon Type: not classified to current taxon name
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on shoulder of mountains
on shoulder of mountain slope
Upslope Shape: concave
Cross Slope Shape: concave
Particle Size Control Section: 27 to 102 cm.
Description origin: NASIS
Diagnostic Features: umbric epipedon 2 to 20 cm.
cambic horizon 16 to 87 cm.

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 111 -- Cagwin family, 25 to 60 percent slopes
Quad Name:
Std Latitude: 37.0142593
Std Longitude: -119.0491486

Primary Earth Cover: Tree cover
Secondary Earth Cover: Conifers
Vegetation:
Parent Material: colluvium and outwash derived from granodiorite
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
9.0	2,212.0	272						well		

Oe--0 to 2 centimeters (0.0 to 0.8 inches); dark brown (7.5YR 3/2) moderately decomposed plant material, black (7.5YR 2.5/1), moist; neutral, pH 6.6, pH indicator solutions; abrupt wavy boundary. Lab sample # 22N00773

A--2 to 16 centimeters (0.8 to 6.3 inches); brown (10YR 4/3) loamy sand, dark brown (10YR 3/3), moist; 76 percent sand; 5 percent clay; weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; many very fine roots throughout and many fine roots throughout; many very fine tubular and common fine tubular pores; 1 percent nonflat subrounded very strongly coherent cemented 2 to 10-millimeter Granodiorite fragments; slightly acid, pH 6.4, pH indicator solutions; clear wavy boundary. Lab sample # 22N00774

Bw--16 to 87 centimeters (6.3 to 34.3 inches); yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 3/4), moist; 75 percent sand; 7 percent clay; moderate medium subangular blocky parts to weak fine subangular blocky, and moderate medium subangular blocky parts to weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; very few very coarse roots throughout and few medium roots throughout and very few fine roots throughout and very few coarse roots throughout; many very fine tubular and many fine tubular pores; 3 percent nonflat subrounded very strongly coherent cemented 2 to 10-millimeter Granodiorite fragments; moderately acid, pH 5.8, pH indicator solutions; clear wavy boundary. Lab sample # 22N00775

CB--87 to 100 centimeters (34.3 to 39.4 inches); yellowish brown (10YR 5/4) sandy loam, dark yellowish brown (10YR 4/4), moist; 73 percent sand; 8 percent clay; moderate medium subangular blocky parts to moderate fine subangular blocky, and moderate medium subangular blocky parts to moderate medium subangular blocky, and moderate coarse subangular blocky parts to moderate fine subangular blocky, and moderate coarse subangular blocky parts to moderate medium subangular blocky structure; moderately hard, friable, nonsticky, nonplastic; common medium roots throughout and common fine roots throughout; many very fine tubular and many fine tubular pores; 2 percent nonflat subrounded very strongly coherent cemented 2 to 20-millimeter Granodiorite fragments and 2 percent nonflat subrounded very strongly coherent cemented 20 to 75-millimeter Granodiorite fragments; moderately acid, pH 6.0, pH indicator solutions. Lab sample # 22N00776

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 19 2021
Describer: Randy Riddle, Theresa Kunch
NEON Plot ID: TEAK_029
Site ID: S2021CA019007
Site Note:

Pedon ID: S2021CA019007

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0147
User Transect ID:
Soil Name as Described/Sampled: Hockett
Classification: Sandy, isotic, frigid Vitrandic Humixerepts
Soil Name as Correlated:
Classification:
Pedon Type: not classified to current taxon name
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on footslope of side slope of mountains on footslope of side slope of mountain slope
Upslope Shape: concave

Cross Slope Shape: convex
Particle Size Control Section:
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 158 -- Sirretta family, 25 to 50 percent slopes
Quad Name:
Std Latitude: 37.0135117
Std Longitude: -119.0313492

Primary Earth Cover: Tree cover
Secondary Earth Cover: Conifers
Vegetation:
Parent Material: colluvium and outwash derived from granodiorite over residuum weathered from granodiorite
Bedrock Kind: Granodiorite
Bedrock Depth: 83 centimeters
Bedrock Hardness: moderately coherent cemented
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
24.0	2,226.0	78						well		

Oe--0 to 4 centimeters (0.0 to 1.6 inches); moderately decomposed plant material; moderately acid, pH 5.6, pH indicator solutions; abrupt wavy boundary. Lab sample # 22N00777

A--4 to 17 centimeters (1.6 to 6.7 inches); sandy loam; 75 percent sand; 6 percent clay; moderate medium subangular blocky parts to moderate fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; common very fine roots throughout and very few fine roots throughout; many very fine tubular pores; 1 percent nonflat subrounded very strongly coherent cemented 5 to 20-millimeter Granodiorite fragments and 4 percent nonflat subrounded very strongly coherent cemented 2 to 5-millimeter Granodiorite fragments; noneffervescent; moderately acid, pH 5.6, pH indicator solutions; clear wavy boundary. Lab sample # 22N00778

Bw--17 to 52 centimeters (6.7 to 20.5 inches); sandy loam; 75 percent sand; 5 percent clay; weak medium subangular blocky parts to moderate fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; many medium roots throughout and few fine roots throughout; many very fine tubular pores; 3 percent nonflat subrounded very strongly coherent cemented 5 to 20-millimeter Granodiorite fragments and 5 percent nonflat subrounded very strongly coherent cemented 2 to 5-millimeter Granodiorite fragments; noneffervescent; moderately acid, pH 5.8, pH indicator solutions; clear wavy boundary. Lab sample # 22N00779

CB--52 to 83 centimeters (20.5 to 32.7 inches); loamy sand; 80 percent sand; 4 percent clay; weak medium subangular blocky parts to weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; common medium roots throughout and few fine roots throughout; common very fine tubular pores; 2 percent nonflat subangular very strongly coherent cemented 75 to 250-millimeter Granodiorite fragments and 5 percent nonflat subrounded very strongly coherent cemented 2 to 5-millimeter Granodiorite fragments and 5 percent nonflat subrounded very strongly coherent cemented 5 to 20-millimeter Granodiorite fragments; noneffervescent; moderately acid, pH 5.8, pH indicator solutions; abrupt smooth boundary. Lab sample # 22N00780

Cr--83 to 100 centimeters (32.7 to 39.4 inches); noneffervescent.

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 19 2021
Describer: Theresa Kunch, Randy Riddle
NEON Plot ID: TEAK_044
Site ID: S2021CA019008
Site Note:

Pedon ID: S2021CA019008

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0148
User Transect ID:
Soil Name as Described/Sampled: Beetlerock
Classification: Coarse-loamy, isotic, frigid Vitrandic Humixerepts
Soil Name as Correlated:
Classification:
Pedon Type: not classified to current taxon name
Pedon Purpose: research site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of mountainflank of mountains on backslope of mountainflank of mountain slope
Upslope Shape: linear
Cross Slope Shape: linear
Particle Size Control Section: 33 to 108 cm.
Description origin: NASIS
Diagnostic Features: umbric epipedon 8 to 50 cm.
cambic horizon 20 to 100 cm.

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 161 -- Sirretta family and Umpa family, wet, 2 to 25 percent slopes
Quad Name:
Std Latitude: 37.0030899
Std Longitude: -119.0102005

Primary Earth Cover: Tree cover
Secondary Earth Cover: Conifers
Vegetation:
Parent Material: colluvium and outwash derived from granodiorite
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

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	2,081.0	60						well		

Oe--0 to 8 centimeters (0.0 to 3.1 inches); dark brown (7.5YR 3/2) moderately decomposed plant material, very dark brown (7.5YR 2.5/2), moist; moderately acid, pH 5.6, pH indicator solutions; abrupt wavy boundary. Lab sample # 22N00781

A--8 to 20 centimeters (3.1 to 7.9 inches); brown (10YR 4/3) sandy loam, dark brown (10YR 3/3), moist; 72 percent sand; 8 percent clay; moderate fine subangular blocky, and moderate medium subangular blocky structure; soft, very friable, nonsticky, nonplastic; common fine roots throughout and common fine roots throughout; many very fine tubular pores; 3 percent nonflat subrounded very strongly coherent cemented 2 to 75-millimeter Granodiorite fragments; strongly acid, pH 5.4, pH indicator solutions; clear wavy boundary. Lab sample # 22N00782

Bw--20 to 50 centimeters (7.9 to 19.7 inches); brown (10YR 4/3) sandy loam, dark brown (10YR 3/3), moist; 72 percent sand; 8 percent clay; weak fine subangular blocky, and weak medium subangular blocky structure; soft, very friable, nonsticky, nonplastic; few medium roots throughout and very few fine roots throughout; common very fine tubular pores; 4 percent nonflat subrounded very strongly coherent cemented 2 to 50-millimeter Granodiorite fragments; strongly acid, pH 5.4, pH indicator solutions. Lab sample # 22N00783

BC--50 to 100 centimeters (19.7 to 39.4 inches); brown (10YR 5/3) sandy loam, dark yellowish brown (10YR 3/4), moist; 72 percent sand; 8 percent clay; weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; very few medium roots throughout and very few fine roots throughout; 5 percent nonflat subrounded very strongly coherent cemented 2 to 25-millimeter Granodiorite fragments; strongly acid, pH 5.2, pH indicator solutions. Lab sample # 22N00784

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 19 2021
Describer: Julie Baker, Nathan Roe
NEON Plot ID: TEAK_021
Site ID: S2021CA019009
Site Note:

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit:
Quad Name:
Std Latitude: 36.9942589
Std Longitude: -119.0373306

Pedon ID: S2021CA019009
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0149
User Transect ID:
Soil Name as Described/Sampled: Dorst
Classification: Mixed, frigid Lithic Xeropsamments
Soil Name as Correlated:
Classification:
Pedon Type: not classified to current taxon name
Pedon Purpose: laboratory sampling site
Taxon Kind: taxadjunct
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of mountainflank, upper third of mountains
on backslope of mountainflank, upper third of mountain slope
Upslope Shape: convex
Cross Slope Shape: convex

Particle Size Control Section: 2 to 9 cm.
Description origin: NASIS
Diagnostic Features: ochric epipedon 0 to 9 cm.
lithic contact 9 to 200 cm.

Primary Earth Cover: Shrub cover
Secondary Earth Cover: Native shrubs
Vegetation:
Parent Material: slope alluvium derived from granodiorite over residuum weathered from granodiorite
Bedrock Kind: Granodiorite

Bedrock Depth: 9 centimeters

Bedrock Hardness: indurated
Bedrock Fracture Interval: 200 centimeters or more
Surface Fragments:
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
42.0	2,227.0	274						somewhat excessively		

Oi--0 to 2 centimeters (0.0 to 0.8 inches); very dark grayish brown (10YR 3/2) slightly decomposed plant material; noneffervescent; strongly acid, pH 5.2, pH indicator solutions; abrupt smooth boundary. Lab sample # 22N00785

A--2 to 9 centimeters (0.8 to 3.5 inches); very dark brown (10YR 2/2) loamy sand, dark grayish brown (10YR 4/2), dry; 77 percent sand; 4 percent clay; weak coarse subangular blocky structure; soft, very friable, nonsticky, nonplastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; common very fine irregular and common fine irregular pores; nonflat subangular very strongly coherent cemented 2 to 75-millimeter Granodiorite fragments; noneffervescent; very strongly acid, pH 5.0, pH indicator solutions; very abrupt smooth boundary. Lab sample # 22N00786

R--9 to 200 centimeters (3.5 to 78.7 inches); indurated Granodiorite bedrock, fractured at intervals of 200 centimeters or more; common very fine roots top of horizon and common medium roots top of horizon and common fine roots top of horizon and common coarse roots top of horizon and ; .

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 19 2021
Describer: Julie Baker, Nathan Roe
NEON Plot ID: TEAK_024
Site ID: S2021CA019010
Site Note:
Pedon ID: S2021CA019010
Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0150
User Transect ID:
Soil Name as Described/Sampled: Halstead
Classification: Sandy-skeletal, isotic, frigid Vitrandic Humixerepts
Soil Name as Correlated:
Classification:
Pedon Type: not classified to current taxon name
Pedon Purpose: laboratory sampling site
Taxon Kind: series
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on shoulder of mountainflank, upper third of mountains
on shoulder of mountainflank, upper third of mountain slope
Upslope Shape: convex

Cross Slope Shape: convex

Particle Size Control Section: 25 to 79 cm.

Description origin: NASIS
Diagnostic Features: umbric epipedon 0 to 48 cm.
lithic contact 79 to 200 cm.

Country:
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area:
Map Unit:
Quad Name:
Std Latitude: 36.9929810
Std Longitude: -119.0337677

Primary Earth Cover: Shrub cover
Secondary Earth Cover: Native shrubs
Vegetation:
Parent Material: slope alluvium derived from granodiorite over residuum weathered from granodiorite
Bedrock Kind: Granodiorite

Bedrock Depth: 79 centimeters

Bedrock Hardness: very strongly coherent cemented
Bedrock Fracture Interval: 200 centimeters or more
Surface Fragments: 35.0 percent nonflat subangular very strongly coherent cemented 2- to 75-millimeter Granodiorite fragments
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
38.0	2,319.0	38						somewhat excessively		

A1--0 to 11 centimeters (0.0 to 4.3 inches); very dark gray (10YR 3/1) very gravelly loamy sand, dark grayish brown (10YR 4/2), moist; 83 percent sand; 2 percent clay; weak very fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout and common coarse roots throughout; common very fine interstitial and common fine interstitial pores; 45 percent nonflat subangular very strongly coherent cemented 2 to 75-millimeter Granodiorite fragments; noneffervescent; very strongly acid, pH 4.8, pH indicator solutions; clear wavy boundary. Lab sample # 22N00787

A2--11 to 25 centimeters (4.3 to 9.8 inches); very dark gray (10YR 3/1) gravelly loamy sand, brown (10YR 4/3), moist; 84 percent sand; 2 percent clay; structureless single grain, and weak coarse subangular blocky; loose, loose, nonsticky, nonplastic; common very fine roots throughout and few fine roots throughout and common coarse roots throughout; common very fine interstitial and common fine interstitial pores; 20 percent nonflat subangular very strongly coherent cemented 2 to 75-millimeter Granodiorite fragments; noneffervescent; very strongly acid, pH 5.0, pH indicator solutions; clear smooth boundary. Lab sample # 22N00788

Bw--25 to 48 centimeters (9.8 to 18.9 inches); very dark brown (10YR 2/2) very gravelly loamy sand, brown (10YR 4/3), moist; 82 percent sand; 3 percent clay; weak medium subangular blocky structure; soft, friable, nonsticky, nonplastic; common very fine roots throughout and few medium roots throughout and common fine roots throughout; common very fine interstitial and common very fine irregular and common fine irregular pores; 37 percent nonflat subangular very strongly coherent cemented 2 to 75-millimeter Granodiorite fragments; noneffervescent; strongly acid, pH 5.2, pH indicator solutions; clear wavy boundary. Lab sample # 22N00789

C--48 to 79 centimeters (18.9 to 31.1 inches); very dark grayish brown (10YR 3/2) very cobbly loamy coarse sand, brown (10YR 5/3), moist; 83 percent sand; 2 percent clay; weak fine subangular blocky structure; soft, very friable, nonsticky, nonplastic; common very fine roots throughout and common fine roots throughout; common very fine irregular and common very fine interstitial and common fine interstitial pores; 5 percent nonflat subangular strongly coherent cemented 250 to 600-millimeter Granodiorite fragments and 20 percent nonflat subangular strongly coherent cemented 75 to 250-millimeter Granodiorite fragments and 29 percent nonflat subangular very strongly coherent cemented 2 to 75-millimeter Granodiorite fragments; noneffervescent; moderately acid, pH 5.6, pH indicator solutions; abrupt wavy boundary. Lab sample # 22N00790

R--79 to 100 centimeters (31.1 to 39.4 inches); very strongly coherent cemented Granodiorite bedrock, fractured at intervals of 200 centimeters or more; .

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 20 2021
Describer: Julie Baker, Cathy Scott
NEON Plot ID: TEAK_006
Site ID: S2021CA019011
Site Note:

Pedon ID: S2021CA019011

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0151
User Transect ID:
Soil Name as Described/Sampled: Hockett
Classification: Sandy, isotic, frigid Vitrandic Humixerepts
Soil Name as Correlated:
Classification:
Pedon Type:
Pedon Purpose:
Taxon Kind: series
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of mountainflank of mountains on backslope of mountainflank of mountain slope
Upslope Shape: convex

Cross Slope Shape: convex

Particle Size Control Section: 25 to 89 cm.

Description origin: NASIS
Diagnostic Features: umbric epipedon 0 to 22 cm.

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 111 -- Cagwin family, 25 to 60 percent slopes
Quad Name:
Std Latitude: 36.9754982
Std Longitude: -119.0572968

Primary Earth Cover: Tree cover
Secondary Earth Cover: Conifers
Vegetation:
Parent Material: colluvium and till derived from granodiorite over residuum weathered from granodiorite
Bedrock Kind: Granodiorite
Bedrock Depth: 89 centimeters
Bedrock Hardness: very strongly coherent cemented
Bedrock Fracture Interval: 200 centimeters or more
Surface Fragments: 1.0 percent nonflat subrounded indurated 2- to 75-millimeter Quartz-monzonite fragments and 1.0 percent nonflat subrounded indurated 75- to 250-millimeter Quartz-monzonite fragments and 1.0 percent nonflat subrounded indurated 250- to 600-millimeter Quartz-monzonite fragments
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
19.0	2,483.0	282						well		

A1--0 to 11 centimeters (0.0 to 4.3 inches); very dark brown (7.5YR 2.5/3) loamy sand, very dark brown (7.5YR 2.5/2), moist; 81 percent sand; 3 percent clay; weak thick platy structure; soft, very friable, slightly sticky, nonplastic; many very fine roots throughout and common fine roots throughout; common very fine irregular and common medium irregular and common fine irregular pores; 5 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments; noneffervescent; slightly acid, pH 6.4, pH indicator solutions; clear smooth boundary. Lab sample # 22N00791

A2--11 to 22 centimeters (4.3 to 8.7 inches); brown (7.5YR 5/3) loamy sand, dark brown (7.5YR 3/3), moist; 81 percent sand; 3 percent clay; weak fine subangular blocky, and weak medium subangular blocky structure; slightly hard, friable, nonsticky, nonplastic; common very fine roots throughout and few medium roots throughout; common very fine irregular and common fine irregular pores; 10 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments; noneffervescent; slightly acid, pH 6.2, pH indicator solutions; clear smooth boundary. Lab sample # 22N00792

Bw1--22 to 48 centimeters (8.7 to 18.9 inches); brown (7.5YR 5/4) loamy sand, dark brown (7.5YR 3/4), moist; 77 percent sand; 7 percent clay; moderate fine subangular blocky, and moderate medium subangular blocky structure; slightly hard, friable, slightly sticky, nonplastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout; common very fine irregular and common fine irregular pores; 10 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments; noneffervescent; slightly acid, pH 6.2, pH indicator solutions; clear wavy boundary. Lab sample # 22N00793

Bw2--48 to 89 centimeters (18.9 to 35.0 inches); brown (7.5YR 4/4) very cobbly loamy sand, dark brown (7.5YR 3/3), moist; 80 percent sand; 5 percent clay; moderate medium subangular blocky structure; moderately hard, firm, nonsticky, nonplastic; common very fine roots throughout and common medium roots throughout and common fine roots throughout; common very fine irregular and common fine irregular pores; 15 percent nonflat subangular indurated 75 to 250-millimeter Granodiorite fragments and 20 percent nonflat subangular indurated 2 to 75-millimeter Granodiorite fragments; noneffervescent; slightly acid, pH 6.2, pH indicator solutions; abrupt wavy boundary. Lab sample # 22N00794

R--89 to 100 centimeters (35.0 to 39.4 inches); common medium roots top of horizon and common coarse roots top of horizon; .

PEDON DESCRIPTION -- NEON Site TEAK

Print Date: Apr 28 2022
Description Date: Oct 20 2021
Describer: Randy Riddle, Cathy Wang
NEON Plot ID: TEAK_019
Site ID: S2021CA019012
Site Note:

Pedon ID: S2021CA019012

Pedon Note:
Lab Source ID: KSSL
Lab Pedon #: 22N0152
User Transect ID:
Soil Name as Described/Sampled: Badgerpass
Classification: Sandy, isotic, frigid Humic Dystroxerepts
Soil Name as Correlated:
Classification:
Pedon Type: not classified to current taxon name
Pedon Purpose: research site
Taxon Kind: series
Associated Soils:
Physiographic Division: Pacific Mountain
Physiographic Province: Cascade-Sierra Mountains
Physiographic Section: Sierra Nevada
State Physiographic Area:

Local Physiographic Area:
Geomorphic Setting: on backslope of mountainflank of mountains on backslope of mountainflank of mountain slope
Upslope Shape: linear
Cross Slope Shape: concave
Particle Size Control Section: 36 to 111 cm.
Description origin: NASIS
Diagnostic Features: ? to ? cm.

Country: United States
State: California
County: Fresno

MLRA: 22A -- Sierra Nevada Mountains
Soil Survey Area: CA750 -- Sierra National Forest Area Parts of Fresno, California
2-SON -- Sonora, California
Map Unit: 159 -- Sirretta family-Rock outcrop complex, 15 to 45 percent slopes
Quad Name:
Std Latitude: 36.9737015
Std Longitude: -119.0093765

Primary Earth Cover: Tree cover
Secondary Earth Cover: Conifers
Vegetation:
Parent Material: colluvium derived from quartz-monzonite
Bedrock Kind:
Bedrock Depth:
Bedrock Hardness:
Bedrock Fracture Interval:
Surface Fragments:
Description database: KSSL

Slope (%)	Elevation (meters)	Aspect (deg)	MAAT (C)	MSAT (C)	MWAT (C)	MAP (mm)	Frost-Free Days	Drainage Class	Slope Length (meters)	Upslope Length (meters)
31.0	2,028.0	222						well		

Oi--0 to 5 centimeters (0.0 to 2.0 inches); very dark grayish brown (10YR 3/2) slightly decomposed plant material, very dark brown (10YR 2/2), moist; strongly acid, pH 5.5; abrupt smooth boundary. Lab sample # 22N00795

Oe--5 to 11 centimeters (2.0 to 4.3 inches); very dark grayish brown (10YR 3/2) moderately decomposed plant material, very dark brown (10YR 2/2), moist; strongly acid, pH 5.5; abrupt smooth boundary. Lab sample # 22N00796

A--11 to 19 centimeters (4.3 to 7.5 inches); brown (10YR 4/3) loamy sand, dark brown (10YR 3/3), moist; moderate medium subangular blocky structure; soft, very friable, nonsticky, nonplastic; few very fine roots throughout and common very coarse roots throughout and common medium roots throughout and many fine roots throughout and few coarse roots throughout; many fine tubular pores; 5 percent nonflat subangular very strongly coherent cemented 2 to 5-millimeter Quartz-monzonite fragments and 5 percent nonflat subangular very strongly coherent cemented 5 to 75-millimeter Quartz-monzonite fragments; slightly acid, pH 6.2; clear wavy boundary. Lab sample # 22N00797

Bw--19 to 65 centimeters (7.5 to 25.6 inches); dark yellowish brown (10YR 4/4) loamy sand, brown (10YR 4/3), moist; weak medium subangular blocky parts to weak fine subangular blocky structure; slightly hard, very friable, nonsticky, nonplastic; few very coarse roots throughout and many medium roots throughout and few fine roots throughout; common tubular pores; 5 percent nonflat subangular very strongly coherent cemented 2 to 5-millimeter Quartz-monzonite fragments and 5 percent nonflat subangular very strongly coherent cemented 5 to 75-millimeter Quartz-monzonite fragments; moderately acid, pH 6.0; clear wavy boundary. Lab sample # 22N00798

BC--65 to 100 centimeters (25.6 to 39.4 inches); light olive brown (2.5Y 5/4) loamy sand, olive brown (2.5Y 4/3), moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky, nonplastic; common medium roots throughout and few fine roots throughout and very few coarse roots throughout; few tubular pores; 2 percent nonflat subangular very strongly coherent cemented 75 to 250-millimeter Quartz-monzonite fragments and 4 percent nonflat subangular very strongly coherent cemented 2 to 5-millimeter Quartz-monzonite fragments and 4 percent nonflat subangular very strongly coherent cemented 5 to 75-millimeter Quartz-monzonite fragments; moderately acid, pH 5.8. Lab sample # 22N00799