

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 1
DATE: 3/21/2019
ELEVATION: 981.0
LOGGED BY: D. M. He

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126009.4 EASTING 162086.9
COUNTY / STATE: Burnett Cty Wis

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Shoulder
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 5"	ML	Silt loam	10YR 3/1	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM COESS BEDROCK
<p>DILATANCY: NONE / SLOW / RAPID PLASTICITY: NONPLASTIC / LOW / MEDIUM / HIGH MOISTURE: DRY / SLIGH. MOIST / MOIST / VERY MOIST / WET CONSISTENCY: VERY SOFT / SOFT / FIRM / HARD / VERY HARD</p> <p>GRADE: WEAK / MODERATE / STRONG STRUCTURE: STRUCTURELESS / WEAK / MODERATE / STRONG SIZE: VERY FINE / FINE / MEDIUM / COARSE / VERY COARSE TYPE: PLATY / GRANULAR / CRUMB / ANGULAR LOCATION: SUBANGULAR / COLUMNAR / PRISMATIC / SINGLE GRAIN</p> <p>% BOULDERS: >12" <u>0</u> % COBBLE: 3" to 12" <u>0</u> % FINES: < #200 <u>70-90</u></p> <p>BOUNDARY: _____ DISTINCTIVENESS: ABRUPT / CLEAR / GRADUAL / DIFFUSE TOPOGRAPHY: SMOOTH / WAVY / IRREGULAR / BROKEN</p> <p>NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes</u></p>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
5" / 10"	Ch	loam to silt loam	5YR 4/4	98	10YR 3/2	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM COESS BEDROCK
<p>DILATANCY: NONE / SLOW / RAPID PLASTICITY: NONPLASTIC / LOW / MEDIUM / HIGH MOISTURE: DRY / SLIGH. MOIST / MOIST / VERY MOIST / WET CONSISTENCY: VERY SOFT / SOFT / FIRM / HARD / VERY HARD</p> <p>GRADE: WEAK / MODERATE / STRONG STRUCTURE: STRUCTURELESS / WEAK / MODERATE / STRONG SIZE: VERY FINE / FINE / MEDIUM / COARSE / VERY COARSE TYPE: PLATY / GRANULAR / CRUMB / ANGULAR LOCATION: SUBANGULAR / COLUMNAR / PRISMATIC / SINGLE GRAIN</p> <p>% BOULDERS: >12" <u>0</u> % COBBLE: 3" to 12" <u>0</u> % FINES: < #200 <u>60-80</u></p> <p>BOUNDARY: _____ DISTINCTIVENESS: ABRUPT / CLEAR / GRADUAL / DIFFUSE TOPOGRAPHY: SMOOTH / WAVY / IRREGULAR / BROKEN</p> <p>NOTES: <u>This layer was also frozen, looks like the real till but has a silt feel to it</u></p>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
10" / 17"	ML	Silt loam	10YR 8/1	90	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM COESS BEDROCK
<p>DILATANCY: NONE / SLOW / RAPID PLASTICITY: NONPLASTIC / LOW / MEDIUM / HIGH MOISTURE: DRY / SLIGH. MOIST / MOIST / VERY MOIST / WET CONSISTENCY: VERY SOFT / SOFT / FIRM / HARD / VERY HARD</p> <p>GRADE: WEAK / MODERATE / STRONG STRUCTURE: STRUCTURELESS / WEAK / MODERATE / STRONG SIZE: VERY FINE / FINE / MEDIUM / COARSE / VERY COARSE TYPE: PLATY / GRANULAR / CRUMB / ANGULAR LOCATION: SUBANGULAR / COLUMNAR / PRISMATIC / SINGLE GRAIN</p> <p>% BOULDERS: >12" <u>0</u> % COBBLE: 3" to 12" <u>0</u> % FINES: < #200 <u>70-90</u></p> <p>BOUNDARY: _____ DISTINCTIVENESS: ABRUPT / CLEAR / GRADUAL / DIFFUSE TOPOGRAPHY: SMOOTH / WAVY / IRREGULAR / BROKEN</p> <p>NOTES: <u>This is the original top soil layer was frozen</u></p>											

OVERALL NOTES: This was frozen to 24 inches plus, observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. no material was wet or saturable no seeps observed. Material above 12 inches was disturbed and must have been brought in.

SAMPLES TAKEN: YES / NO
WATER OBSERVED: YES / NO
BEDROCK: YES / NO

SAMPLE ID: JS 1.1 7-9ft TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK: 12ft
OR HOLE EXTENT: No Bedrock
El. 969.0

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
17" / 75"	ML	Silt loam	10YR 5/3	80	5YR 3/4	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
			10YR 5/6	20		FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	HOMOGENEOUS		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	GRADE			SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	STRUCTURELESS WEAK MODERATE STRONG			VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% FINES	
DISTINCTIVENESS TOPOGRAPHY NOTES:											3" to 12"	< #200
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
75" / 117"	CL	loam	5YR 4/3	100	5YR 4/6	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
			2.5Y 3/1			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	HOMOGENEOUS		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	GRADE			SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	STRUCTURELESS WEAK MODERATE STRONG			VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% FINES	
DISTINCTIVENESS TOPOGRAPHY NOTES: a very good CL material, darker in color, no gravels - clean. Has the black mottles also											3" to 12"	< #200
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
117" / 18'	CL to SC	Loam	10YR 4/3	100	7.5 YR 5/6	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
			10YR 4/4			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	HOMOGENEOUS		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	GRADE			SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	STRUCTURELESS WEAK MODERATE STRONG			VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% FINES	
DISTINCTIVENESS TOPOGRAPHY NOTES: Material is like what was in SB 9											3" to 12"	< #200
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	HOMOGENEOUS		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	GRADE			SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	STRUCTURELESS WEAK MODERATE STRONG			VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% FINES	
DISTINCTIVENESS TOPOGRAPHY NOTES: This material is slightly different than any observed in previous test pits - is a good CL											3" to 12"	< #200
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	HOMOGENEOUS		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	GRADE			SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	STRUCTURELESS WEAK MODERATE STRONG			VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% FINES	
DISTINCTIVENESS TOPOGRAPHY NOTES:											3" to 12"	< #200
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 2
DATE: 3/21/2019
ELEVATION: 979.9
LOGGED BY: D. Mite

SITE LOCATION: ADDRESS
C 12884 State Hwy 48, Grantsburg
NORTHING 126180.7 EASTING 162045.1
COUNTY / STATE: Burnett Co, WI

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Toe slope
LANDSCAPE GEOMETRY: Concave

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0/12	ML	Silt 10cm	10YR 2/2	100	—	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE		% BOULDERS	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG		>12" 0 1/4" to 3" 0	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
12/19	ML	Silt 10cm	10YR 4/4	80	10YR 6/3	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE		% BOULDERS	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG		>12" 0 1/4" to 3" 0	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>layer was frozen, notes are from small sample</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
19/57	ML	Silt 10cm	10YR 4/4	50	10YR 6/3	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE		% BOULDERS	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG		>12" 0 1/4" to 3" 1/3	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>has a little small fine gravel stone mixed in, under 3/8" in size also has some mottling</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

OVERALL NOTES:
frozen to 32 inches plus observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch, no material was wet or saturated, no seeps observed.

SAMPLES TAKEN: YES/NO <u>NO</u>	WATER OBSERVED: YES/NO <u>NO</u>	BEDROCK: YES/NO <u>NO</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>7.1'</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>E1.962.8</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
57" 17.1'	CL	10cm	7.5YR 4/4	70	7.5YR 5/6	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
			7.5YR 6/3	20		ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE HOMOGENEOUS	GEOLOGY OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	% BOULDERS	% GRAVEL	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12" 0	1/4" to 3" <1	
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY NOTES: <i>has some small gravels up to 3" to 12" 0 < #200 5060</i> <i>1/2 inch in size, no larger</i> <i>Color is mostly a reddish/brown but</i>											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	GEOLOGY OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	% BOULDERS	% GRAVEL	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12" _____	1/4" to 3" _____	
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY NOTES: <i>there are areas of a pinkish/gray</i> <i>Do not see any of the black mottles</i>											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	GEOLOGY OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	% BOULDERS	% GRAVEL	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12" _____	1/4" to 3" _____	
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY NOTES: _____											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	GEOLOGY OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	% BOULDERS	% GRAVEL	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12" _____	1/4" to 3" _____	
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY NOTES: _____											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	GEOLOGY OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	% BOULDERS	% GRAVEL	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12" _____	1/4" to 3" _____	
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY NOTES: _____											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 3
DATE: 3/21/2019
ELEVATION: 980.2
LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS

12884 State Hwy 48 Grantsburg
NORTHING 126140.2 EASTING 162164.5
COUNTY / STATE: Burnett City WI

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
LANDSCAPE POSITION: Backslope
LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 15"	ML	Silt 10cm	10YR 2/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM
<p>DILATANCY NONE SLOW RAPID PLASTICITY NONPLASTIC LOW MEDIUM HIGH MOISTURE DRY SLIGH. MOIST MOIST VERY MOIST WET CONSISTENCY VERY SOFT SOFT FIRM HARD VERY HARD GRADE STRUCTURELESS WEAK MODERATE STRONG STRUCTURE SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE TYPE PLATY GRANULAR CRUMB ANGULAR LOCATION SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % BOULDERS >12" 0 % COBBLE 3" to 12" 0 % FINES < #200 70-80</p>											
<p>BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: This layer was frozen notes are from small sample brought back to office for notes</p>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
15" / 23"	ML	Silt 10cm	10YR 5/3 7.5YR 4/6	90	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM
<p>DILATANCY NONE SLOW RAPID PLASTICITY NONPLASTIC LOW MEDIUM HIGH MOISTURE DRY SLIGH. MOIST MOIST VERY MOIST WET CONSISTENCY VERY SOFT SOFT FIRM HARD VERY HARD GRADE STRUCTURELESS WEAK MODERATE STRONG STRUCTURE SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE TYPE PLATY GRANULAR CRUMB ANGULAR LOCATION SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % BOULDERS >12" 0 % COBBLE 3" to 12" 0 % FINES < #200 50</p>											
<p>BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: layer was frozen, notes are from small sample</p>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
23" / 67"	ML	Silt 10cm	7.5YR 7/6 10YR 5/3	80	5YR 3/2	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM
<p>DILATANCY NONE SLOW RAPID PLASTICITY NONPLASTIC LOW MEDIUM HIGH MOISTURE DRY SLIGH. MOIST MOIST VERY MOIST WET CONSISTENCY VERY SOFT SOFT FIRM HARD VERY HARD GRADE STRUCTURELESS WEAK MODERATE STRONG STRUCTURE SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE TYPE PLATY GRANULAR CRUMB ANGULAR LOCATION SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % BOULDERS >12" 0 % COBBLE 3" to 12" 0 % FINES < #200 80</p>											
<p>BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: less a few gravel stones under 3/8" in size</p>											

OVERALL NOTES: This was frozen to 32 inches plus observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch, no material was wet or saturated, no seeps observed.

SAMPLES TAKEN: YES (NO)
WATER OBSERVED: YES (NO)
BEDROCK: YES (NO)
DEPTH OF BEDROCK OR HOLE EXTENT: 14'-4"
No Bedrock
El. 965.9

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
67" 14.4"	Ch	loam	7.5YR 4/4	98	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED <u>HOMOGENEOUS</u>	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY						STRUCTURE					
NONE LOW RAPID						GRADE STRUCTURELESS WEAK MODERATE STRONG					
PLASTICITY						SIZE					
NONPLASTIC LOW MEDIUM HIGH						VERY FINE FINE MEDIUM COARSE VERY COARSE					
MOISTURE						TYPE					
DRY SLIGH. MOIST MOIST VERY MOIST WET						PLATY GRANULAR CRUMB ANGULAR					
CONSISTENCY						LOCATION					
VERY SOFT SOFT FIRM HARD VERY HARD						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
ABRUPT CLEAR GRADUAL DIFFUSE						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
TOPOGRAPHY						% GRAVEL					
SMOOTH WAVY IRREGULAR BROKEN						>12" <u>0</u> 1/4" to 3" <u>0</u>					
NOTES:						% FINES					
<u>a few areas of slightly different colors to a table listed, not mottled</u>						3" to 12" <u>0</u> < #200 <u>5000</u>					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY						STRUCTURE					
NONE LOW RAPID						GRADE STRUCTURELESS WEAK MODERATE STRONG					
PLASTICITY						SIZE					
NONPLASTIC LOW MEDIUM HIGH						VERY FINE FINE MEDIUM COARSE VERY COARSE					
MOISTURE						TYPE					
DRY SLIGH. MOIST MOIST VERY MOIST WET						PLATY GRANULAR CRUMB ANGULAR					
CONSISTENCY						LOCATION					
VERY SOFT SOFT FIRM HARD VERY HARD						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
ABRUPT CLEAR GRADUAL DIFFUSE						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
TOPOGRAPHY						% GRAVEL					
SMOOTH WAVY IRREGULAR BROKEN						>12" _____ 1/4" to 3" _____					
NOTES:						% FINES					
						3" to 12" _____ < #200 _____					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY						STRUCTURE					
NONE LOW RAPID						GRADE STRUCTURELESS WEAK MODERATE STRONG					
PLASTICITY						SIZE					
NONPLASTIC LOW MEDIUM HIGH						VERY FINE FINE MEDIUM COARSE VERY COARSE					
MOISTURE						TYPE					
DRY SLIGH. MOIST MOIST VERY MOIST WET						PLATY GRANULAR CRUMB ANGULAR					
CONSISTENCY						LOCATION					
VERY SOFT SOFT FIRM HARD VERY HARD						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
ABRUPT CLEAR GRADUAL DIFFUSE						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
TOPOGRAPHY						% GRAVEL					
SMOOTH WAVY IRREGULAR BROKEN						>12" _____ 1/4" to 3" _____					
NOTES:						% FINES					
						3" to 12" _____ < #200 _____					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY						STRUCTURE					
NONE LOW RAPID						GRADE STRUCTURELESS WEAK MODERATE STRONG					
PLASTICITY						SIZE					
NONPLASTIC LOW MEDIUM HIGH						VERY FINE FINE MEDIUM COARSE VERY COARSE					
MOISTURE						TYPE					
DRY SLIGH. MOIST MOIST VERY MOIST WET						PLATY GRANULAR CRUMB ANGULAR					
CONSISTENCY						LOCATION					
VERY SOFT SOFT FIRM HARD VERY HARD						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
ABRUPT CLEAR GRADUAL DIFFUSE						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
TOPOGRAPHY						% GRAVEL					
SMOOTH WAVY IRREGULAR BROKEN						>12" _____ 1/4" to 3" _____					
NOTES:						% FINES					
						3" to 12" _____ < #200 _____					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY						STRUCTURE					
NONE LOW RAPID						GRADE STRUCTURELESS WEAK MODERATE STRONG					
PLASTICITY						SIZE					
NONPLASTIC LOW MEDIUM HIGH						VERY FINE FINE MEDIUM COARSE VERY COARSE					
MOISTURE						TYPE					
DRY SLIGH. MOIST MOIST VERY MOIST WET						PLATY GRANULAR CRUMB ANGULAR					
CONSISTENCY						LOCATION					
VERY SOFT SOFT FIRM HARD VERY HARD						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
ABRUPT CLEAR GRADUAL DIFFUSE						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
TOPOGRAPHY						% GRAVEL					
SMOOTH WAVY IRREGULAR BROKEN						>12" _____ 1/4" to 3" _____					
NOTES:						% FINES					
						3" to 12" _____ < #200 _____					

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 4
DATE: 3/21/2019
ELEVATION: 982.0
LOGGED BY: D. Mithe

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126041.4 EASTING 162274.1
COUNTY / STATE: Burnett Cty WI

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Back slope
LANDSCAPE GEOMETRY: uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
0 / 15"	ML	Silt loam	10YR 3/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLOUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG	STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes</u>						
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
15 / 14.4"	CL	loam	10YR 4/4	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLOUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG	STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>is like the material in SIB #9, could be a very good SC but feels like a CL for all of the depth</u>						
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLOUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG	STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES:						
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

OVERALL NOTES:
frozen to 32 inches plus.
observed material as it was excavated, all material below the frozen material was slightly moist to moist by feel and visual inspection. no material was wet or saturated, no seeps observed.

SAMPLES TAKEN: YES/NO NO
WATER OBSERVED: YES/NO NO
BEDROCK: YES/NO NO
DEPTH OF BEDROCK OR HOLE EXTENT: 14'-4"
SAMPLE ID: _____ TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____
No Bedrock
El. 967.7

OWNER: _____

TEST PIT / BORING NUMBER: _____

DATE: _____

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES
BOUNDARY											3" to 12" _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
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BOUNDARY											3" to 12" _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES
BOUNDARY											3" to 12" _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
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BOUNDARY											3" to 12" _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
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BOUNDARY											3" to 12" _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 5
DATE: 3/21/19
ELEVATION: 981.3
LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS
@ 12834 State Hwy 48 Grantsburg
NORTHING 126168.3 EASTING 162280.8
COUNTY / STATE: Burnett Cty WI

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Backslope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 15"	ML	Silt CLAY	10YR 3/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	LOESS BEDROCK
DILATANCY		PLASTICITY		MOISTURE		CONSISTENCY		GRADE		STRUCTURE	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH		DRY SLIGH. MOIST MOIST VERY MOIST WET		VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE	
								TYPE		% BOULDERS	
								PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
										14" to 3"	
										% COBBLE	
										3" to 12"	
										< #200	
										70-90	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes.</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
15" / 5'-6"	CL	10am	5YR 3/4	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	LOESS BEDROCK
DILATANCY		PLASTICITY		MOISTURE		CONSISTENCY		GRADE		STRUCTURE	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH		DRY SLIGH. MOIST MOIST VERY MOIST WET		VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE	
								TYPE		% BOULDERS	
								PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
										14" to 3"	
										% COBBLE	
										3" to 12"	
										< #200	
										50-60	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>like layer 3 in 588</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
5'-6" / 9'-10"	CL	Clay 10am	5YR 3/4	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	LOESS BEDROCK
DILATANCY		PLASTICITY		MOISTURE		CONSISTENCY		GRADE		STRUCTURE	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH		DRY SLIGH. MOIST MOIST VERY MOIST WET		VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE	
								TYPE		% BOULDERS	
								PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
										14" to 3"	
										% COBBLE	
										3" to 12"	
										< #200	
										60-70	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>like in 588 material gets a lot harder to excavate, color stays the same.</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

OVERALL NOTES: This was frozen to 24 inches plus, observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection, no material was wet or saturated, no seeps observed. No black mottles seen. This Hole is very similar to 588

SAMPLES TAKEN: YES/NO NO WATER OBSERVED: YES/NO NO BEDROCK: YES/NO NO
DEPTH OF BEDROCK OR HOLE EXTENT: 14' 6"
E1. 966.8
No Bedrock

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
9-10ft 14'6"	CL	loam	7.5YR	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
			4/4			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED <u>HOMOGENEOUS</u>	OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES: <i>material feels to me to be Ch, could be a very good SC</i>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OWNER: Jeff Sever
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 6
DATE: 3/21/2019
ELEVATION: 982.7
LOGGED BY: D. M. He

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126102.1 EASTING 162350.2
COUNTY / STATE: Burnett Cty Wi

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Back slope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
<u>0/9"</u>	<u>ML</u>	<u>Silt loam</u>	<u>10YR 3R</u>	<u>100</u>	<u>-</u>	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
<u>NONE</u>		<u>NONPLASTIC</u>	<u>DRY</u>	<u>VERY SOFT</u>		<u>WEAK</u>	<u>STRUCTURELESS</u>	<u>VERY FINE</u>	<u>PLATY</u>	<u>SUBANGULAR</u>	<u>>12"</u>	<u>1/4" to 3"</u>
<u>SLOW</u>		<u>LOW</u>	<u>SLIGH. MOIST</u>	<u>SOFT</u>		<u>MODERATE</u>	<u>FINE</u>	<u>ANGULAR</u>	<u>CRUMB</u>	<u>COLUMNAR</u>	<u>0</u>	<u>0</u>
<u>RAPID</u>		<u>MEDIUM</u>	<u>MOIST</u>	<u>FIRM</u>		<u>STRONG</u>	<u>MEDIUM</u>	<u>COARSE</u>	<u>ANGULAR</u>	<u>PRISMATIC</u>	<u>0</u>	<u>0</u>
<u>HIGH</u>		<u>HIGH</u>	<u>VERY MOIST</u>	<u>VERY HARD</u>			<u>COARSE</u>	<u>VERY COARSE</u>		<u>SINGLE GRAIN</u>	<u>0</u>	<u>0</u>
<u>WET</u>			<u>WET</u>								<u>0</u>	<u>0</u>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes</u>								
<u>ABRUPT</u>		<u>SMOOTH</u>										
<u>CLEAR</u>		<u>WAVY</u>										
<u>GRADUAL</u>		<u>IRREGULAR</u>										
<u>DIFFUSE</u>		<u>BROKEN</u>										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
<u>9/15"</u>	<u>Mh</u>	<u>Silt loam</u>	<u>10YR 4/3</u>	<u>100</u>	<u>-</u>	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
<u>NONE</u>		<u>NONPLASTIC</u>	<u>DRY</u>	<u>VERY SOFT</u>		<u>WEAK</u>	<u>STRUCTURELESS</u>	<u>VERY FINE</u>	<u>PLATY</u>	<u>SUBANGULAR</u>	<u>>12"</u>	<u>1/4" to 3"</u>
<u>SLOW</u>		<u>LOW</u>	<u>SLIGH. MOIST</u>	<u>SOFT</u>		<u>MODERATE</u>	<u>FINE</u>	<u>ANGULAR</u>	<u>CRUMB</u>	<u>COLUMNAR</u>	<u>0</u>	<u>0</u>
<u>RAPID</u>		<u>MEDIUM</u>	<u>MOIST</u>	<u>FIRM</u>		<u>STRONG</u>	<u>MEDIUM</u>	<u>COARSE</u>	<u>ANGULAR</u>	<u>PRISMATIC</u>	<u>0</u>	<u>0</u>
<u>HIGH</u>		<u>HIGH</u>	<u>VERY MOIST</u>	<u>VERY HARD</u>			<u>COARSE</u>	<u>VERY COARSE</u>		<u>SINGLE GRAIN</u>	<u>0</u>	<u>0</u>
<u>WET</u>			<u>WET</u>								<u>0</u>	<u>0</u>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>like above, layer was frozen, notes are from sample</u>								
<u>ABRUPT</u>		<u>SMOOTH</u>										
<u>CLEAR</u>		<u>WAVY</u>										
<u>GRADUAL</u>		<u>IRREGULAR</u>										
<u>DIFFUSE</u>		<u>BROKEN</u>										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
<u>15/13.0"</u>	<u>Ch</u>	<u>loam</u>	<u>5YR 3/4</u>	<u>100</u>	<u>-</u>	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
<u>NONE</u>		<u>NONPLASTIC</u>	<u>DRY</u>	<u>VERY SOFT</u>		<u>WEAK</u>	<u>STRUCTURELESS</u>	<u>VERY FINE</u>	<u>PLATY</u>	<u>SUBANGULAR</u>	<u>>12"</u>	<u>1/4" to 3"</u>
<u>SLOW</u>		<u>LOW</u>	<u>SLIGH. MOIST</u>	<u>SOFT</u>		<u>MODERATE</u>	<u>FINE</u>	<u>ANGULAR</u>	<u>CRUMB</u>	<u>COLUMNAR</u>	<u>0</u>	<u><1</u>
<u>RAPID</u>		<u>MEDIUM</u>	<u>MOIST</u>	<u>FIRM</u>		<u>STRONG</u>	<u>MEDIUM</u>	<u>COARSE</u>	<u>ANGULAR</u>	<u>PRISMATIC</u>	<u>0</u>	<u>0</u>
<u>HIGH</u>		<u>HIGH</u>	<u>VERY MOIST</u>	<u>VERY HARD</u>			<u>COARSE</u>	<u>VERY COARSE</u>		<u>SINGLE GRAIN</u>	<u>0</u>	<u>0</u>
<u>WET</u>			<u>WET</u>								<u>0</u>	<u>0</u>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Material starts as 5YR 3/4 and slowly turns to 7.5 YR 4/4, Has small gravel up to 3/8" size, If not Ch is a very good SC by touch</u>								
<u>ABRUPT</u>		<u>SMOOTH</u>										
<u>CLEAR</u>		<u>WAVY</u>										
<u>GRADUAL</u>		<u>IRREGULAR</u>										
<u>DIFFUSE</u>		<u>BROKEN</u>										

OVERALL NOTES: This was frozen to 30 inches plus. observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. no material was wet or saturated, no seeps observed. do not see the black mottles.

SAMPLES TAKEN: <u>YES/NO</u>	WATER OBSERVED: <u>YES/NO</u>	BEDROCK: <u>YES/NO</u>
SAMPLE ID: <u>JS 6.1 2-3 ft.</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK: <u>13.0"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	OR HOLE EXTENT: <u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>Ch % 9.7</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES	
DISTINCTIVENESS											3" to 12"	< #200	
ABRUPT		SMOOTH		NOTES:									
CLEAR		WAVY											
GRADUAL		IRREGULAR											
DIFFUSE		BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES	
DISTINCTIVENESS											3" to 12"	< #200	
ABRUPT		SMOOTH		NOTES:									
CLEAR		WAVY											
GRADUAL		IRREGULAR											
DIFFUSE		BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES	
DISTINCTIVENESS											3" to 12"	< #200	
ABRUPT		SMOOTH		NOTES:									
CLEAR		WAVY											
GRADUAL		IRREGULAR											
DIFFUSE		BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES	
DISTINCTIVENESS											3" to 12"	< #200	
ABRUPT		SMOOTH		NOTES:									
CLEAR		WAVY											
GRADUAL		IRREGULAR											
DIFFUSE		BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES	
DISTINCTIVENESS											3" to 12"	< #200	
ABRUPT		SMOOTH		NOTES:									
CLEAR		WAVY											
GRADUAL		IRREGULAR											
DIFFUSE		BROKEN											

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 7
DATE: 3/21/2019
ELEVATION: 983.0
LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126031.9 EASTING 162472.2
COUNTY / STATE: Burnett Cty Wi

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Backslope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0 12"	ML	Silt 10cm	10YR 3/2	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This Backhoe Pit is identical to SB6 done just before this pit</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
12" 19"	ML	Silt 10cm	10YR 4/3	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>like above, layer was frozen notes are from sample</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
19" 14.9"	Ch	10cm	5YR 3/4	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>1/1</u>
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>exactly like material in SB6</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OVERALL NOTES: This was frozen to 24 inches plus, observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. no material was wet or saturated, no seeps observed.

SAMPLES TAKEN: YES/NO	WATER OBSERVED: YES/NO	BEDROCK: YES/NO
SAMPLE ID: <u>J.S. 7.1 12-19 inches</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>14.9"</u>
SAMPLE ID: <u>JS 7.2 12-14 ft.</u>	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 968.85</u>

OWNER: _____

TEST PIT / BORING NUMBER: _____

DATE: _____

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

OWNER: Jeff Sever
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 8
DATE: 3/21/2019
ELEVATION: 981.2
LOGGED BY: D.M.H.

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126147.5 EASTING 162469.7
COUNTY / STATE: Burnett Cty Wis

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Backslope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0 12"	ML	Silt 10cm	10YR 3/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
12" 19"	ML	Silt 10cm	10YR 4/4	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>like above, layer was frozen notes are from sample</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
19" 5'6"	Ch	10cm	5M 3/4	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>1</u>
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>a good Ch - has a few small gravel stones up to 3/8" in size</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OVERALL NOTES:
This was frozen to 24 inches plus. observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. no material was wet or saturated, no seeps observed. no black mottles seen

SAMPLES TAKEN YES/NO	WATER OBSERVED: YES/NO	BEDROCK: YES/NO
SAMPLE ID: <u>JS 8.1 6 1/2-8 1/2 ft</u> TYPE: _____ DEPTH: _____		DEPTH OF BEDROCK OR HOLE EXTENT: <u>13'-1"</u>
SAMPLE ID: <u>JS 8.2 12-13 ft</u> TYPE: _____ DEPTH: _____		<u>El. 968.1</u>
SAMPLE ID: _____ TYPE: _____ DEPTH: _____		<u>No Bedrock</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
5'-6" / 9'-6"	CL	clay loam	5YR 3/4	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL	
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED <u>HOMOGENEOUS</u>	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	STRUCTURE			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	0	1/4" to 3"	0	0
BOUNDARY												
DISTINCTIVENESS	TOPOGRAPHY	NOTES: <i>The material stays the same color but material stronger CL, it was a lot harder to excavate by backhoe</i>										
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
9'-6" / 13'-6"	CL	loam	7.5YR 100	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL	
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED <u>HOMOGENEOUS</u>	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	STRUCTURE			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	0	1/4" to 3"	0	<1
BOUNDARY												
DISTINCTIVENESS	TOPOGRAPHY	NOTES: <i>material is like in bottom of SB-6, 7 - if its not a CL its a very good SC, but to me it feels CL</i>										
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL	
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED <u>HOMOGENEOUS</u>	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	STRUCTURE			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	0	1/4" to 3"	0	0
BOUNDARY												
DISTINCTIVENESS	TOPOGRAPHY	NOTES:										
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL	
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED <u>HOMOGENEOUS</u>	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	STRUCTURE			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	0	1/4" to 3"	0	0
BOUNDARY												
DISTINCTIVENESS	TOPOGRAPHY	NOTES:										
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL	
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED <u>HOMOGENEOUS</u>	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	STRUCTURE			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	0	1/4" to 3"	0	0
BOUNDARY												
DISTINCTIVENESS	TOPOGRAPHY	NOTES:										
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN											

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 9
DATE: 3/21/2019
ELEVATION: 983.2
LOGGED BY: D. Mithe

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48 Grantsburg

NORTHING 126304.9 EASTING 161940.9

COUNTY / STATE: Burnett Cty Wis

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO (NO)

LANDSCAPE POSITION: Summit

LANDSCAPE GEOMETRY: Slightly Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
0 9"	ML	5.1H 10cm	10YR 3/2	100	—	FEW COMMON MANY	MINIMUM COARSE	FAINT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes, no structure observed because frozen</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
9" 17.9"	CL to SC	Heavy 10cm to 4/4	10YR 4/3 to 4/4	100	7.5YR 5/6	FEW COMMON MANY	MINIMUM COARSE	FAINT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Material starts as a strong CL and slowly turns to a very good SC as material starts to increase in fine to coarse sand</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	MINIMUM COARSE	FAINT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>noticed mottles from sample taken</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

OVERALL NOTES:

frozen to 30 inches plus.
observed material as it was excavated all material below the frozen material was slightly moist to moist by feel and visual inspection, no material was wet or saturated, no seeps observed

SAMPLES TAKEN: YES/NO <u>(YES)</u>	WATER OBSERVED: YES/NO <u>(NO)</u>	BEDROCK: YES/NO <u>(NO)</u>
SAMPLE ID: <u>JS 9.1 8 to 10ft</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK: <u>17'-9"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>965.45 E1</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>

OWNER: _____

TEST PIT / BORING NUMBER: _____

DATE: _____

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" _____	1/4" to 3" _____	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS TOPOGRAPHY NOTES:											3" to 12" _____	< #200 _____
ABRUPT _____ CLEAR _____ GRADUAL _____ DIFFUSE _____											SMOOTH _____ WAVY _____ IRREGULAR _____ BROKEN _____	

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" _____	1/4" to 3" _____	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS TOPOGRAPHY NOTES:											3" to 12" _____	< #200 _____
ABRUPT _____ CLEAR _____ GRADUAL _____ DIFFUSE _____											SMOOTH _____ WAVY _____ IRREGULAR _____ BROKEN _____	

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" _____	1/4" to 3" _____	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS TOPOGRAPHY NOTES:											3" to 12" _____	< #200 _____
ABRUPT _____ CLEAR _____ GRADUAL _____ DIFFUSE _____											SMOOTH _____ WAVY _____ IRREGULAR _____ BROKEN _____	

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" _____	1/4" to 3" _____	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS TOPOGRAPHY NOTES:											3" to 12" _____	< #200 _____
ABRUPT _____ CLEAR _____ GRADUAL _____ DIFFUSE _____											SMOOTH _____ WAVY _____ IRREGULAR _____ BROKEN _____	

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" _____	1/4" to 3" _____	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS TOPOGRAPHY NOTES:											3" to 12" _____	< #200 _____
ABRUPT _____ CLEAR _____ GRADUAL _____ DIFFUSE _____											SMOOTH _____ WAVY _____ IRREGULAR _____ BROKEN _____	

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 10
DATE: 3/25/19
ELEVATION: 981.8
LOGGED BY: D. Mittle

SITE LOCATION: ADDRESS

© 12884 State Rd 48, Grantsburg
NORTHING 126373.2 EASTING 162069.2
COUNTY / STATE: Burnett Co. WI

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Back slope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
0" / 9"	ML	Silt 100cm	10YR2.5/2	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes, no structure observed because frozen</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
9" / 18"	ML	Silt 100cm	7.5YR 4/4	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>like layer above, notes from small sample as layer was frozen</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
18" / 22"	ML	Silt 100cm	2.5Y 7/3 7.5YR 4/4	90 10	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>like layer above, notes from small sample as layer was frozen</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

OVERALL NOTES:

frozen to 30 inches plus, observed material as it was excavated, all material below the frozen material was slightly moist to moist by feel, no material was wet or saturated, no seeps observed.

SAMPLES TAKEN: YES/NO <u>NO</u>	WATER OBSERVED: YES/NO <u>NO</u>	BEDROCK: YES/NO <u>NO</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>17.8"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>964.1 El.</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
<u>20" / 43"</u>	<u>CL</u>	<u>Heavy loam</u>	<u>2.5YR 4/4</u>	<u>9.5 2.5Y 3/1</u>	<u>FEW COMMON MANY</u>	<u>FINE MINIMUM COARSE</u>	<u>FAINT DISTINCT PROMINENT</u>	<u>PED SURFACE IN-MATRIX ROOT HAIR</u>	<u>STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS</u>	<u>ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK</u>		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY	GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG		STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Has very small black mottles in it, also is a very good, strong ch material</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
<u>43" / N.B.</u>	<u>CL</u>	<u>Loam</u>	<u>2.5YR 4/4</u>	<u>9.5 2.5Y 3/1</u>	<u>FEW COMMON MANY</u>	<u>FINE MINIMUM COARSE</u>	<u>FAINT DISTINCT PROMINENT</u>	<u>PED SURFACE IN-MATRIX ROOT HAIR</u>	<u>STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS</u>	<u>ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK</u>		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY	GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG		STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>2-3</u>
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>the black mottles are still present and are very small, less than 1/16" in size, have red and some orange mottles</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
					<u>FEW COMMON MANY</u>	<u>FINE MINIMUM COARSE</u>	<u>FAINT DISTINCT PROMINENT</u>	<u>PED SURFACE IN-MATRIX ROOT HAIR</u>	<u>STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS</u>	<u>ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK</u>		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY	GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG		STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Not are different than the black mottles. Mottles seem to end around 9 ft.</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
					<u>FEW COMMON MANY</u>	<u>FINE MINIMUM COARSE</u>	<u>FAINT DISTINCT PROMINENT</u>	<u>PED SURFACE IN-MATRIX ROOT HAIR</u>	<u>STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS</u>	<u>ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK</u>		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY	GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG		STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>have small gravels mixed in up to maybe half inch in size, no larger</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
					<u>FEW COMMON MANY</u>	<u>FINE MINIMUM COARSE</u>	<u>FAINT DISTINCT PROMINENT</u>	<u>PED SURFACE IN-MATRIX ROOT HAIR</u>	<u>STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS</u>	<u>ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK</u>		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY	GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	WEAK MODERATE STRONG		STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>0</u>	1/4" to 3" <u>0</u>
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>After @ 9ft have spots that the till has a greenish color also 5/5/3 about 25%</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

OWNER: Jeff Sever
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 11
DATE: 3/22/2019
ELEVATION: 979.5
LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48 Grantsburg
NORTHING 126424.7 EASTING 162161.8
COUNTY / STATE: Burnett Cty WI

ANY KARST FEATURES WITHIN 1000 FEET: YES NO
LANDSCAPE POSITION: Backslope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
0 / 16"	ML	Silt loam	10YR 3/140	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE		NONPLASTIC	DRY	VERY SOFT		WEAK		STRUCTURELESS	PLATY	SUBANGULAR	>12" 0	1/4" to 3" 0
SLOW		LOW	SLIGH. MOIST	SOFT		MODERATE		FINE	GRANULAR	COLUMNAR		
RAPID		MEDIUM	MOIST	FIRM		STRONG		MEDIUM COARSE	CRUMB	PRISMATIC		
		HIGH	VERY MOIST	VERY HARD				VERY COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
BOUNDARY			WET								3" to 12" 0	< #200 70-80
DISTINCTIVENESS		TOPOGRAPHY		NOTES:		This layer was frozen, notes are from small sample brought back to office						
ABRUPT		SMOOTH										
CLEAR		WAVY										
GRADUAL		IRREGULAR										
DIFFUSE		BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
16" / 38"	ML	Silt loam	10YR 5/3	90	5YR 4/4	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE		NONPLASTIC	DRY	VERY SOFT		WEAK		STRUCTURELESS	PLATY	SUBANGULAR	>12" 0	1/4" to 3" 0
SLOW		LOW	SLIGH. MOIST	SOFT		MODERATE		FINE	GRANULAR	COLUMNAR		
RAPID		MEDIUM	MOIST	FIRM		STRONG		MEDIUM COARSE	CRUMB	PRISMATIC		
		HIGH	VERY MOIST	VERY HARD				VERY COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
BOUNDARY			WET								3" to 12" 0	< #200 60-70
DISTINCTIVENESS		TOPOGRAPHY		NOTES:								
ABRUPT		SMOOTH										
CLEAR		WAVY										
GRADUAL		IRREGULAR										
DIFFUSE		BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
38" / 18.6"	CL	loam	10YR 5/3	30	2.5Y 3/1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE		NONPLASTIC	DRY	VERY SOFT		WEAK		STRUCTURELESS	PLATY	SUBANGULAR	>12" 0	1/4" to 3" 0
SLOW		LOW	SLIGH. MOIST	SOFT		MODERATE		FINE	GRANULAR	COLUMNAR		
RAPID		MEDIUM	MOIST	FIRM		STRONG		MEDIUM COARSE	CRUMB	PRISMATIC		
		HIGH	VERY MOIST	VERY HARD				VERY COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
BOUNDARY			WET								3" to 12" 0	< #200 45-60
DISTINCTIVENESS		TOPOGRAPHY		NOTES:		Could be a very good SC con feel a few sand grains in it but it ribbons well, after @ 6-7 ft it is mostly 5YR 4/4						
ABRUPT		SMOOTH										
CLEAR		WAVY										
GRADUAL		IRREGULAR										
DIFFUSE		BROKEN										

OVERALL NOTES:

This was frozen hard to 40 inches plus.
Material was observed during excavation. Material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed.
Black mottles only in upper half of CL layer

SAMPLES TAKEN: YES <input checked="" type="checkbox"/> NO	WATER OBSERVED: YES <input checked="" type="checkbox"/> NO	BEDROCK: YES <input checked="" type="checkbox"/> NO
SAMPLE ID: <u>JS 11.1 / 16-38 inches</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>18.6"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 966.0</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	STRATIFIED	ALLUVIUM
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	LAMINATED	SLOPE ALLUV.
						MANY	COARSE	PROMINENT	ROOT HAIR	FISSURED	COLLUVIUM
										SLICKEN-SIDED	GLACIAL TILL
										BLOCKY	GLAC. LAKE SED
										PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	>12"	1/4" to 3"
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR		
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN		
		WET	VERY HARD				VERY COARSE				
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY	NOTES:									
ABRUPT	SMOOTH										
CLEAR	WAVY										
GRADUAL	IRREGULAR										
DIFFUSE	BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	STRATIFIED	ALLUVIUM
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	LAMINATED	SLOPE ALLUV.
						MANY	COARSE	PROMINENT	ROOT HAIR	FISSURED	COLLUVIUM
										SLICKEN-SIDED	GLACIAL TILL
										BLOCKY	GLAC. LAKE SED
										PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	>12"	1/4" to 3"
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR		
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN		
		WET	VERY HARD				VERY COARSE				
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY	NOTES:									
ABRUPT	SMOOTH										
CLEAR	WAVY										
GRADUAL	IRREGULAR										
DIFFUSE	BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	STRATIFIED	ALLUVIUM
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	LAMINATED	SLOPE ALLUV.
						MANY	COARSE	PROMINENT	ROOT HAIR	FISSURED	COLLUVIUM
										SLICKEN-SIDED	GLACIAL TILL
										BLOCKY	GLAC. LAKE SED
										PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	>12"	1/4" to 3"
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR		
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN		
		WET	VERY HARD				VERY COARSE				
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY	NOTES:									
ABRUPT	SMOOTH										
CLEAR	WAVY										
GRADUAL	IRREGULAR										
DIFFUSE	BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	STRATIFIED	ALLUVIUM
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	LAMINATED	SLOPE ALLUV.
						MANY	COARSE	PROMINENT	ROOT HAIR	FISSURED	COLLUVIUM
										SLICKEN-SIDED	GLACIAL TILL
										BLOCKY	GLAC. LAKE SED
										PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	>12"	1/4" to 3"
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR		
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN		
		WET	VERY HARD				VERY COARSE				
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY	NOTES:									
ABRUPT	SMOOTH										
CLEAR	WAVY										
GRADUAL	IRREGULAR										
DIFFUSE	BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	STRATIFIED	ALLUVIUM
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	LAMINATED	SLOPE ALLUV.
						MANY	COARSE	PROMINENT	ROOT HAIR	FISSURED	COLLUVIUM
										SLICKEN-SIDED	GLACIAL TILL
										BLOCKY	GLAC. LAKE SED
										PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	>12"	1/4" to 3"
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR		
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN		
		WET	VERY HARD				VERY COARSE				
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY	NOTES:									
ABRUPT	SMOOTH										
CLEAR	WAVY										
GRADUAL	IRREGULAR										
DIFFUSE	BROKEN										

OWNER: Jeff Sever
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 12
DATE: 3/21/2019
ELEVATION: 980.1
LOGGED BY: D. M. He

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48, Grantsburg
NORTHING 166267.9 EASTING 162245.4
COUNTY / STATE: Burnett Co WI

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)

LANDSCAPE POSITION: Toe slope

LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
0" / 16"	ML	Silt Loam	10YR 3/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer is frozen, notes are from small sample brought back to office for notes. Material is like SB 15</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
16" / 49"	ML	Silt Loam	7.5YR 5/3	80	2.5Y 3/1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>is ML silt material with the fine black mottles. This was ML material by checking small chiseled out chunks.</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
49" / 177"	CL	Loam	5YR 4/4 to 7.5YR 4/4	100	2.5Y 3/1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>is like material of SB 15 starts as 5YR 4/4 and slowly goes to 7.5YR 4/4. Has the black mottles in the upper part.</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

OVERALL NOTES:
This was frozen super hard to 4/5 inches plus. Observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed

SAMPLES TAKEN: YES / NO	WATER OBSERVED: YES (NO)	BEDROCK: YES (NO)
SAMPLE ID: <u>JS 12.1 3-4ft</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>177"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 962.5</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDIUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM / COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12" _____	1/4" to 3" _____
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12" _____	< #200 _____
ABRUPT		SMOOTH		NOTES:								
CLEAR		WAVY										
GRADUAL		IRREGULAR										
DIFFUSE		BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDIUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12" _____	1/4" to 3" _____
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12" _____	< #200 _____
ABRUPT		SMOOTH		NOTES:								
CLEAR		WAVY										
GRADUAL		IRREGULAR										
DIFFUSE		BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDIUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12" _____	1/4" to 3" _____
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12" _____	< #200 _____
ABRUPT		SMOOTH		NOTES:								
CLEAR		WAVY										
GRADUAL		IRREGULAR										
DIFFUSE		BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDIUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12" _____	1/4" to 3" _____
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12" _____	< #200 _____
ABRUPT		SMOOTH		NOTES:								
CLEAR		WAVY										
GRADUAL		IRREGULAR										
DIFFUSE		BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
	_____	_____	_____	_____	_____	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDIUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12" _____	1/4" to 3" _____
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12" _____	< #200 _____
ABRUPT		SMOOTH		NOTES:								
CLEAR		WAVY										
GRADUAL		IRREGULAR										
DIFFUSE		BROKEN										

OWNER: Jeff Sauer
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 13
DATE: 3/22/2019
ELEVATION: 979.3
LOGGED BY: D. M. He

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126344.8 EASTING 162255.9
COUNTY / STATE: Burnett City WI

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
LANDSCAPE POSITION: Toe slope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0 / 16"	ML	Silt loam	10YR 3/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes.</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
16" / 55"	ML	Silt loam	7.5YR 5/2 to 5/3 to 7.5YR 5/4	70	5YR 3/4	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0	
DISTINCTIVENESS		TOPOGRAPHY		NOTES:									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
55" / 16.6'	ML	loam	7.5YR 4/3 to 4/4	100	2.5Y 3.1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG		VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>The material has more coarse grains than materials yesterday but dont see any gravels or clays (1)</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OVERALL NOTES: This was frozen super hard to 40 inches plus. Observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed (1) Material could be a very good SC because of the coarse grains but also has some clays within it as it ribbons well

SAMPLES TAKEN: YES (NO)	WATER OBSERVED: YES (NO)	BEDROCK: YES (NO)
SAMPLE ID: <u>JS 13.1 15-16ft</u>	DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>16' 6"</u>
SAMPLE ID: _____	DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	DEPTH: _____	<u>Et. 96208</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY												
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

OWNER: Jeff Souer
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 14
DATE: 3/22/2019
ELEVATION: 978.5
LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126428.2 EASTING 162317.8
COUNTY / STATE: Burnett Cty WI

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
LANDSCAPE POSITION: Tue slope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0 / 15"	ML	Silt Loam	10YR 3/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	PED SURFACE IN-MATRIX ROOT HAIR	>12" <u>0</u>	1/4" to 3" <u>0</u>
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes for this was done by small sample brought back to office</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
15" / 50"	ML	Silt Loam	7.5YR 5/2 to 5/3	70	5YR 3/4	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	PED SURFACE IN-MATRIX ROOT HAIR	>12" <u>0</u>	1/4" to 3" <u>0</u>
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u></u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
50" / 16'6"	CL	Loam	7.5YR 4/3 to 4/4	100	2.5Y 3/1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	PED SURFACE IN-MATRIX ROOT HAIR	>12" <u>0</u>	1/4" to 3" <u>0</u>
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Material is like SB 13 could be a very good SC because of the coarse grains in it</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OVERALL NOTES: This was frozen super hard to 40 inches plus. Observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed

SAMPLES TAKEN: YES (NO)	WATER OBSERVED: YES (NO)	BEDROCK: YES (NO)
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>16'6"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 962.0</u>

OWNER: _____

TEST PIT / BORING NUMBER: _____

DATE: _____

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY											3" to 12" _____		
DISTINCTIVENESS											TOPOGRAPHY		NOTES:
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN		

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY											3" to 12" _____		
DISTINCTIVENESS											TOPOGRAPHY		NOTES:
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN		

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY											3" to 12" _____		
DISTINCTIVENESS											TOPOGRAPHY		NOTES:
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN		

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY											3" to 12" _____		
DISTINCTIVENESS											TOPOGRAPHY		NOTES:
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN		

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY											3" to 12" _____		
DISTINCTIVENESS											TOPOGRAPHY		NOTES:
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN		

OWNER: Jeff Sever
PROJECT: Hay Facility

TEST PIT / BORING NUMBER: 15
DATE: 3/21/2019
ELEVATION: 980.1
LOGGED BY: D. M. He

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48 Grantsburg

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)

NORTHING 126277.6 EASTING 162388.0

LANDSCAPE POSITION: Toe slope

COUNTY / STATE: Burnett Cty Wi

LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0 / 16"	ML	Silt loam	10YR 3/2	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDIUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
DISTINCTIVENESS		TOPOGRAPHY	NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes. This top soil not as silty ①</u>										
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
16" / 16'2"	CL	10A9	5YR 4/4	—	2.5Y 3/1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDIUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
DISTINCTIVENESS		TOPOGRAPHY	NOTES: <u>Starts as 5YR 4/4 and sticky, turns to 7.5YR 4/4, has the fine black mottles in the upper part. ②</u>										
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
—	—	—	—	—	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDIUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
DISTINCTIVENESS		TOPOGRAPHY	NOTES: <u>② It look like there is ML silt cap to 45-50 inches but I chiseled out small chunks and brought back, all are ②</u>										
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OVERALL NOTES:
This was frozen super hard ① as pits before to 42 inches plus. Observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed. ② continued - brownish/red Ch tills. at the office.

SAMPLES TAKEN: <u>YES (NO)</u>	WATER OBSERVED: <u>YES (NO)</u>	BEDROCK: <u>YES (NO)</u>
SAMPLE ID: <u>JS 15.1 5 to 6 ft</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK: <u>16'2"</u>
SAMPLE ID: <u>JS 15.2 13 to 15 ft</u>	TYPE: _____ DEPTH: _____	OR HOLE EXTENT: <u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>E1. 963.9</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	GEOLOGY OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	GEOLOGY RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	GEOLOGY RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	GEOLOGY RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

OWNER: Jeff Sauer
 PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 16
 DATE: 3/28/2019
 ELEVATION: 979.6
 LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS
12884 State Hwy 48 Grantsburg
 NORTHING 126348.0 EASTING 162399.4
 COUNTY/STATE: Burnett Cty Wi

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
 LANDSCAPE POSITION: Toe slope
 LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 16"	ML	Silt loam	10YR 3/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLOVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT GRADE: WEAK STRUCTURE: STRUCTURELESS SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR % BOULDERS: >12% 0 % GRAVEL: 1/4" to 3" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 70-80											
BOUNDARY: _____ DISTINCTIVENESS: _____ TOPOGRAPHY: _____ NOTES: <u>This layer was frozen, notes are from a small sample brought back to the office</u>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
16" / 43"	ML	Silt loam	7.5YR 4/3	80	2.5Y 3.1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLOVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT GRADE: WEAK STRUCTURE: STRUCTURELESS SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR % BOULDERS: >12% 0 % GRAVEL: 1/4" to 3" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 70-80											
BOUNDARY: _____ DISTINCTIVENESS: _____ TOPOGRAPHY: _____ NOTES: <u>the typical silt cap</u>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
43" / 16.9"	CL	loam	5YR 4/3 to 4/4	99	2.5Y 3.1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLOVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT GRADE: WEAK STRUCTURE: STRUCTURELESS SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR % BOULDERS: >12% 0 % GRAVEL: 1/4" to 3" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 50-60											
BOUNDARY: _____ DISTINCTIVENESS: _____ TOPOGRAPHY: _____ NOTES: <u>Has a few areas of brownish red shades, could be a strong SC but it ribbons well</u>											

OVERALL NOTES:
This was frozen hard to 45 inches plus. Observed material during excavation. Material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed.

SAMPLES TAKEN: <u>YES/NO</u>	WATER OBSERVED: <u>YES/NO</u>	BEDROCK: <u>YES/NO</u>
SAMPLE ID: <u>JS 16.1 20-40 inches</u>	DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>16.9"</u>
SAMPLE ID: <u>JS 16.2 11-14 ft</u>	DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	DEPTH: _____	<u>El. 962.85</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY										3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY										3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY										3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY										3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY										3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

OWNER: Jeff Sover
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 17
DATE: 3/22/2019
ELEVATION: 978.7
LOGGED BY: D. Mittle

SITE LOCATION: ADDRESS

C 12884 State Hwy 48 Grantsburg

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)

NORTHING 126419.1 EASTING 162463.0

LANDSCAPE POSITION: Toe slope

COUNTY / STATE: Burnett Cty Wi

LANDSCAPE GEOMETRY: uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 12"	ML	silt 10cm	10YR 3/2	100	---	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY						STRUCTURE					
NONE LOW RAPID						GRADE STRUCTURELESS WEAK MODERATE STRONG					
PLASTICITY						SIZE					
NONPLASTIC LOW MEDIUM HIGH						VERY FINE FINE MEDIUM COARSE VERY COARSE					
MOISTURE						TYPE					
DRY SLIGHT MOIST MOIST VERY MOIST WET						PLATY GRANULAR CRUMB ANGULAR					
CONSISTENCY						LOCATION					
VERY SOFT SOFT FIRM HARD VERY HARD						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
---						>12" 0					
DISTINCTIVENESS						% COBBLE					
ABRUPT CLEAR GRADUAL DIFFUSE						3" to 12" 0					
TOPOGRAPHY						% FINES					
SMOOTH WAVY IRREGULAR BROKEN						< #200 70-90					
NOTES: <u>This layer was frozen, notes are from small sample brought back to the office</u>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
12" / 48"	ML	silt 10cm	7.5YR 5/3 7.5YR 3/6	85	2.5Y 3.1 7.5YR 4/6	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY						STRUCTURE					
NONE LOW RAPID						GRADE STRUCTURELESS WEAK MODERATE STRONG					
PLASTICITY						SIZE					
NONPLASTIC LOW MEDIUM HIGH						VERY FINE FINE MEDIUM COARSE VERY COARSE					
MOISTURE						TYPE					
DRY SLIGHT MOIST MOIST VERY MOIST WET						PLATY GRANULAR CRUMB ANGULAR					
CONSISTENCY						LOCATION					
VERY SOFT SOFT FIRM HARD VERY HARD						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
---						>12" 0					
DISTINCTIVENESS						% COBBLE					
ABRUPT CLEAR GRADUAL DIFFUSE						3" to 12" 0					
TOPOGRAPHY						% FINES					
SMOOTH WAVY IRREGULAR BROKEN						< #200 70-90					
NOTES: <u>Do not see the coarse grains in this material, like the last two bedrock pits - material is more like SBS and SBS</u>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
48" / 15-11"	CL	loam	5YR 4/4	100	---	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY						STRUCTURE					
NONE LOW RAPID						GRADE STRUCTURELESS WEAK MODERATE STRONG					
PLASTICITY						SIZE					
NONPLASTIC LOW MEDIUM HIGH						VERY FINE FINE MEDIUM COARSE VERY COARSE					
MOISTURE						TYPE					
DRY SLIGHT MOIST MOIST VERY MOIST WET						PLATY GRANULAR CRUMB ANGULAR					
CONSISTENCY						LOCATION					
VERY SOFT SOFT FIRM HARD VERY HARD						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
---						>12" 0					
DISTINCTIVENESS						% COBBLE					
ABRUPT CLEAR GRADUAL DIFFUSE						3" to 12" 0					
TOPOGRAPHY						% FINES					
SMOOTH WAVY IRREGULAR BROKEN						< #200 50-60					
NOTES: <u>Do not see the coarse grains in this material, like the last two bedrock pits - material is more like SBS and SBS</u>											

OVERALL NOTES: This was frozen to 35 inches plus. observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated. no seeps observed. didnt see the black mottles

SAMPLES TAKEN (YES) NO	WATER OBSERVED: YES (NO)	BEDROCK: YES (NO)
SAMPLE ID: <u>JS 17.1 8-10ft</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>15.11"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>E1. 962.8</u>



Oakridge
ENGINEERING OWNER:

TEST PIT / BORING NUMBER:

DATE:

CONTINUED
SHEET 2 OF 2

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____	% GRAVEL 1/4" to 3" _____
BOUNDARY											% FINES 3" to 12" _____ < #200 _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____	% GRAVEL 1/4" to 3" _____
BOUNDARY											% FINES 3" to 12" _____ < #200 _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
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BOUNDARY											% FINES 3" to 12" _____ < #200 _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____	% GRAVEL 1/4" to 3" _____
BOUNDARY											% FINES 3" to 12" _____ < #200 _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____	% GRAVEL 1/4" to 3" _____
BOUNDARY											% FINES 3" to 12" _____ < #200 _____
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

OWNER: Jeff Sover
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 18
DATE: 3/22/2019
ELEVATION: 979.3
LOGGED BY: D.M.H.

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126348.0 EASTING 162399.4
COUNTY / STATE: Burnett Cty WI

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Toe slope
LANDSCAPE GEOMETRY: uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0" / 17"	ML	Silt loam	10YR 3/2	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" 0	% GRAVEL 1/4" to 3" 0		
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY NOTES: <u>This layer was frozen, notes are from small sample brought back to office</u>											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
17" / 48"	ML	Silt loam	7.5YR 5/3	85	2.5Y 3.1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" 0	% GRAVEL 1/4" to 3" 0		
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY NOTES: <u>Material is very similar to SB17</u>											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
48" / 16.1"	CL	loam	5YR 4/4	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" 0	% GRAVEL 1/4" to 3" 0		
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY NOTES: <u>Material is very similar to SB17</u>											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OVERALL NOTES:
This was frozen to 40 inches plus, observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed
This Backhoe pit is very similar to SB17

SAMPLES TAKEN: <u>YES/NO</u>	WATER OBSERVED: <u>YES/NO</u>	BEDROCK: <u>YES/NO</u>
SAMPLE ID: <u>JS 18.1 6/6/9A</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>16.1"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 963.2</u>



Oakridge
ENGINEERING OWNER:

TEST PIT / BORING NUMBER:

DATE:

CONTINUED
SHEET 2 OF 2

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		
BOUNDARY										% BOULDERS	% GRAVEL
DISTINCTIVENESS										3" to 12"	< #200
ABRUPT		SMOOTH		NOTES:							
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		
BOUNDARY										% BOULDERS	% GRAVEL
DISTINCTIVENESS										3" to 12"	< #200
ABRUPT		SMOOTH		NOTES:							
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		
BOUNDARY										% BOULDERS	% GRAVEL
DISTINCTIVENESS										3" to 12"	< #200
ABRUPT		SMOOTH		NOTES:							
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		
BOUNDARY										% BOULDERS	% GRAVEL
DISTINCTIVENESS										3" to 12"	< #200
ABRUPT		SMOOTH		NOTES:							
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		BROKEN									

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		
BOUNDARY										% BOULDERS	% GRAVEL
DISTINCTIVENESS										3" to 12"	< #200
ABRUPT		SMOOTH		NOTES:							
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		BROKEN									

OWNER: Jeff Sauer
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 19
DATE: 3/22/2019
ELEVATION: 977.7
LOGGED BY: D. Miller

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126377.7 EASTING 162628.9
COUNTY / STATE: Burnett Co WI

ANY KARST FEATURES WITHIN 1000 FEET: YES/NO
LANDSCAPE POSITION: Toe slope
LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0 / 14"	ML	Silt cap	10YR 3/2	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	PED SURFACE IN-MATRIX ROOT HAIR	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from small sample brought back to office very similar to SB 17 Top soil</u>						3" to 12" 0	< #200 70-90
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
14" / 33"	ML	Silt loam	7.5YR 5/4	95	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	PED SURFACE IN-MATRIX ROOT HAIR	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>is a ML but can feel a little medium grain sand in it but it ribbons very well from sample brought back</u>						3" to 12" 0	< #200 690
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
33" / 16.4"	CL	loam	5YR 4/4	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	PED SURFACE IN-MATRIX ROOT HAIR	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Very similar to SB 17 and SB 18</u>						3" to 12" 0	< #200 240
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OVERALL NOTES:
This was frozen to 35 inches plus. Observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed

SAMPLES TAKEN: YES/NO <u>(NO)</u>	WATER OBSERVED: YES/NO <u>(NO)</u>	BEDROCK: YES/NO <u>(NO)</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>16.4"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 961.4</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		% BOULDERS >12" _____ % COBBLE 3" to 12" _____ % FINES < #200 _____
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		% BOULDERS >12" _____ % COBBLE 3" to 12" _____ % FINES < #200 _____
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
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BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
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BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
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BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY				
<i>13"</i>	<i>CL</i>	<i>loam</i>	<i>5YR 4/4</i>	<i>100</i>	<i>-</i>	FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK				
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE			GRADE		SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM / COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY												3" to 12"	< #200		
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <i>Material is very similar to SB 17 and SB 18</i>											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN													

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK				
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE			GRADE		SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY												3" to 12"	< #200		
DISTINCTIVENESS		TOPOGRAPHY		NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN													

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK				
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE			GRADE		SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY												3" to 12"	< #200		
DISTINCTIVENESS		TOPOGRAPHY		NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN													

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK				
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE			GRADE		SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY												3" to 12"	< #200		
DISTINCTIVENESS		TOPOGRAPHY		NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN													

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL				
						FEW COMMON MANY	FINE MINIMUM COARSE	PLATY FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK				
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE			GRADE		SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		STRUCTURELESS WEAK MODERATE STRONG			WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
BOUNDARY												3" to 12"	< #200		
DISTINCTIVENESS		TOPOGRAPHY		NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN													

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 20
DATE: 3/22/2019
ELEVATION: 978.5
LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126265.2 EASTING 162652.9
COUNTY / STATE: Burnett Cty, WI

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
LANDSCAPE POSITION: Toe slope
LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 17"	ML	Silt 100cm	10YR 8/1	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
<p>DILATANCY: NONE SLOW RAPID PLASTICITY: NONPLASTIC <u>LOW</u> MEDIUM HIGH MOISTURE: DRY SLIGH. MOIST MOIST VERY MOIST WET CONSISTENCY: VERY SOFT SOFT FIRM HARD VERY HARD GRADE: STRUCTURELESS WEAK MODERATE STRONG STRUCTURE: SIZE TYPE LOCATION % BOULDERS % GRAVEL STRUCTURELESS VERY FINE PLATY SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN >12" 0 1/4" to 3" 0 FINE FINE FAINT PED SURFACE IN-MATRIX ROOT HAIR MEDIUM MEDIUM COARSE COARSE ANGLAR VERY COARSE VERY COARSE</p> <p>BOUNDARY: _____</p> <p>DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN</p> <p>NOTES: <u>This layer was frozen, notes are from small sample brought back to office. Material is blacker and more silty than other pits.</u></p>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
17" / 37"	ML	Silt 100cm	7.5YR 5/3 7.5YR 5/6	90 10	5YR 4/6	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
<p>DILATANCY: NONE SLOW RAPID PLASTICITY: NONPLASTIC <u>LOW</u> MEDIUM HIGH MOISTURE: DRY SLIGH. MOIST <u>MOIST</u> VERY MOIST WET CONSISTENCY: VERY SOFT SOFT FIRM HARD VERY HARD GRADE: STRUCTURELESS WEAK MODERATE STRONG STRUCTURE: SIZE TYPE LOCATION % BOULDERS % GRAVEL STRUCTURELESS VERY FINE PLATY SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN >12" 0 1/4" to 3" 0 FINE FINE FAINT PED SURFACE IN-MATRIX ROOT HAIR MEDIUM MEDIUM COARSE COARSE ANGLAR VERY COARSE VERY COARSE</p> <p>BOUNDARY: _____</p> <p>DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN</p> <p>NOTES: <u>Still a good ML - 100cm, the silts slightly from above but picked a little clay is like most of the silt cap previously seen.</u></p>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
37" / 63"	ML	Silt 100cm	5YR 4/4 7.5YR 5/3	60 30	5YR 3/3	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
<p>DILATANCY: NONE SLOW RAPID PLASTICITY: NONPLASTIC <u>MEDIUM</u> HIGH MOISTURE: DRY SLIGH. MOIST <u>MOIST</u> VERY MOIST WET CONSISTENCY: VERY SOFT SOFT FIRM HARD VERY HARD GRADE: STRUCTURELESS WEAK MODERATE STRONG STRUCTURE: SIZE TYPE LOCATION % BOULDERS % GRAVEL STRUCTURELESS VERY FINE PLATY SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN >12" 0 1/4" to 3" 0 FINE FINE FAINT PED SURFACE IN-MATRIX ROOT HAIR MEDIUM MEDIUM COARSE COARSE ANGLAR VERY COARSE VERY COARSE</p> <p>BOUNDARY: _____</p> <p>DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN</p> <p>NOTES: <u>This layer has more clay than above could be a CL but it's silt cap, not till have a few other brownish/red shades in it.</u></p>											

OVERALL NOTES: This was frozen to about 20 inches plus, observed material as it was excavated, all material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed did not see the black mottles

SAMPLES TAKEN: YES NO
WATER OBSERVED: YES (NO)
BEDROCK: YES (NO)
SAMPLE ID: JS 20.1 2-5ft TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____
DEPTH OF BEDROCK OR HOLE EXTENT: 14' 2"
No Bedrock
El. 964.3

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 21
DATE: 3/28/2019
ELEVATION: 983.0
LOGGED BY: D. Mithe

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126474.3 EASTING 161900.3
COUNTY / STATE: Burnett Cty, WI

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
LANDSCAPE POSITION: Summit
LANDSCAPE GEOMETRY: uniform

DEPTH	USCS	SOIL TYPE & OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
0 / 17"	ML	Silt loam	10YR 3/1	100	—	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		TOPOGRAPHY		NOTES:		STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL	% FINES
DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN		This layer was frozen, notes are from a small sample brought back to the office		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	IN-MATRIX ROOT HAIR	3" to 12" 0	< #200 70-90	< #200 70-90

DEPTH	USCS	SOIL TYPE & OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
17" / 19.1"	Ch	loam	7.5YR 4/4	95	7.5YR 5/1B	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		TOPOGRAPHY		NOTES:		STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL	% FINES
DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN		This till is slightly different color than the last few holes done before it, does ribbon well		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	IN-MATRIX ROOT HAIR	3" to 12" 0	< #200 40-60	< #200 40-60

DEPTH	USCS	SOIL TYPE & OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		TOPOGRAPHY		NOTES:		STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL	% FINES
DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN		mottles continue all the way down, did not see any of the black mottles		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	IN-MATRIX ROOT HAIR	3" to 12" 0	< #200 0	< #200 0

OVERALL NOTES:
This was frozen hard to 45 inches plus. Observed material during excavation. Material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed. Ch layer could be a very good SC

SAMPLES TAKEN: YES (NO) WATER OBSERVED: YES (NO) BEDROCK: YES (NO)
SAMPLE ID: JS 21.1 15-18ft TYPE: _____ DEPTH: _____ DEPTH OF BEDROCK OR HOLE EXTENT: 19'-11"
SAMPLE ID: _____ TYPE: _____ DEPTH: _____ No Bedrock
SAMPLE ID: _____ TYPE: _____ DEPTH: _____ El. 963.1

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____ 3" to 12" _____	% GRAVEL 1/4" to 3" _____ % FINES < #200 _____
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____ 3" to 12" _____	% GRAVEL 1/4" to 3" _____ % FINES < #200 _____
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____ 3" to 12" _____	% GRAVEL 1/4" to 3" _____ % FINES < #200 _____
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____ 3" to 12" _____	% GRAVEL 1/4" to 3" _____ % FINES < #200 _____
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS >12" _____ 3" to 12" _____	% GRAVEL 1/4" to 3" _____ % FINES < #200 _____
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 22
DATE: 3/22/2019
ELEVATION: 981.9
LOGGED BY: D. M. He

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48 Grantsburg

NORTHING 126 552.1 EASTING 162 003.2

COUNTY / STATE: Burnett Cty Wi

ANY KARST FEATURES WITHIN 1000 FEET: YES / NO

LANDSCAPE POSITION: Shoulder

LANDSCAPE GEOMETRY: convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
0" 19"	ML	Silt loam	10YR 3/1 to 3/2	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from a small sample brought back to the office</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
19" 18.0	CL	loam	10YR 5/3 5YR 4/4	30	2.5Y 3.1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>again could be a very good SC can feel the sand grains but it ribbons very well, after a few feet it is mostly 5YR 4/4</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>CL layer is very similar to test SB at 23 and 11</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

OVERALL NOTES:

This was frozen hard to 40 inches plus. Observed material during excavation. Material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated. no seeps observed. Black mottles only in the upper part of the CL layer

SAMPLES TAKEN: YES NO

WATER OBSERVED: YES NO

BEDROCK: YES NO

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK OR HOLE EXTENT: 18.0

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock E1. 963.9

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY											3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY											3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY											3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY											3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES	
BOUNDARY											3" to 12"	< #200
DISTINCTIVENESS		TOPOGRAPHY		NOTES:								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										

OWNER: Jeff Sover
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 23
DATE: 3/22/2019
ELEVATION: 982.1
LOGGED BY: D. Mitto

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126465.6 EASTING 162055.9
COUNTY / STATE: Burnett Cty, WI

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
LANDSCAPE POSITION: Shoulder
LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0 / 18"	ML	5 1/4 loam	10YR 3/1	100	—	FEW COMMON MANY	MINIMUM COARSE	FINE FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE		TYPE	% BOULDERS	% GRAVEL	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	>12" 0	1/4" to 3" 0	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from a small sample brought back to the office</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											
												3" to 12" 0	< #200 70-80

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
18" / 18.1"	CL	10am	10YR 5/3	30	2.5Y 3.1	FEW COMMON MANY	MINIMUM COARSE	FINE FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE		TYPE	% BOULDERS	% GRAVEL	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	>12" 0	1/4" to 3" 0	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Could be a very good SC material is very similar to CL layer of SB11 after a few feet, it is mostly 5YR 4/4</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											
												3" to 12" 0	< #200 45-60

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	MINIMUM COARSE	FINE FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE		TYPE	% BOULDERS	% GRAVEL	
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE		PLATY GRANULAR CRUMB ANGULAR	>12" 0	1/4" to 3" 0	
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>checked edge to see if silt cap was deeper but all my little pieces I chiseled out were till, not silt cap</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											
												3" to 12" 0	< #200

OVERALL NOTES:
This was frozen hard to 40 inches plus. Observed material during excavation. Material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed. Black mottles only in the upper part of the CL layer.

SAMPLES TAKEN: YES NO
WATER OBSERVED: YES NO
BEDROCK: YES NO

SAMPLE ID: JS 23.1 8-10ft TYPE: _____ DEPTH: _____
DEPTH OF BEDROCK OR HOLE EXTENT: 18.1"

SAMPLE ID: _____ TYPE: _____ DEPTH: _____
No Bedrock

SAMPLE ID: _____ TYPE: _____ DEPTH: _____
El. 963.2

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	STRUCTURE	TYPE			% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	STRUCTURE	TYPE			% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	STRUCTURE	TYPE			% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	STRUCTURE	TYPE			% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED	
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE PRISMATIC LENSED HOMOGENEOUS	RESIDUUM LOESS BEDROCK	
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	STRUCTURE	TYPE			% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

OWNER: Jeff Sever
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 24
DATE: 3/22/2019
ELEVATION: 980.2
LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126538.7 EASTING 162199.4
COUNTY / STATE: Burnett Cty WI

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
LANDSCAPE POSITION: Footslope
LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
0 / 12"	ML	Silt loam	7.5YR 3/1 to 3/2	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL BLOCKY LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from a small sample brought back to the office</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
12" / 16"	ML	Silt loam	10YR 5/2 to 5/3 10YR 5/6	90	2.5Y 3.1 5YR 4/6	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer is very similar to second layer in SB25 but not very thick</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
16" / 16.7"	Ch	loam	7.5YR 4/4	100	2.5Y 3.1 5YR 4/6	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>could be a very good SC very similar to SB25, don't see the whitish mottles, mottles only in upper half of layer</u>									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OVERALL NOTES: This was frozen hard to 40 inches plus observed material during excavation. Material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, No seeps observed.

SAMPLES TAKEN: YES NO
WATER OBSERVED: YES NO
BEDROCK: YES NO
SAMPLE ID: JS 24.1 15-16ft TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____
DEPTH OF BEDROCK: 11"
OR HOLE EXTENT: 16.7'
No Bedrock
El. 963.6

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES:									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES:									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES:									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES:									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS % COBBLE	% GRAVEL % FINES		
BOUNDARY													
DISTINCTIVENESS		TOPOGRAPHY		NOTES:									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN											

OWNER: Jeff Saver
 PROJECT: Hwy Facility

TEST PIT / BORING NUMBER: 25
 DATE: 3/22/2019
 ELEVATION: 978.9
 LOGGED BY: D. Mittle

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
 NORTHING 126487.6 EASTING 162242.4
 COUNTY / STATE: Burnett Cty Wi

ANY KARST FEATURES WITHIN 1000 FEET: YES NO
 LANDSCAPE POSITION: Footslope
 LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
0 / 27"	ML	Silt 100m	10YR 3/1	100	-	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY										
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										
NOTES: This layer was frozen, notes are from small sample brought back to office very deep top soil layer											3" to 12" 0	< #200 70-80

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
27" / 73"	ML	Silt 100m	10YR 5/3 to 5/6	90	2.54 3.1 5.4 4/6	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY										
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										
NOTES: layer picks up a little clay from above - typical silt cap											3" to 12" 0	< #200 70-80

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
73" / 16.3"	CL	100m	7.5YR 4/4	100	2.54 3.1 5.4 4/6	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		STRUCTURELESS FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		DISTINCTIVENESS TOPOGRAPHY										
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN										
NOTES: could be a very good SC, can see and feel a few sand grains but again it ribbons well, also see a few whiteish fine											3" to 12" 0	< #200 45-60

OVERALL NOTES:
 This was frozen to 40 inches plus of the layer and froze hard. Material was observed during excavation and was slightly moist to moist by touch and visual inspection. No Material was wet or saturated, no seeps observed. nothing only in the upper part of the CL layer

SAMPLES TAKEN: YES NO WATER OBSERVED: YES NO BEDROCK: YES NO
 SAMPLE ID: _____ TYPE: _____ DEPTH: _____ DEPTH OF BEDROCK: 16.7"
 SAMPLE ID: _____ TYPE: _____ DEPTH: _____ OR HOLE EXTENT: No Bedrock
 SAMPLE ID: _____ TYPE: _____ DEPTH: _____ El. 962.3

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY				STRUCTURE	GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD				STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY												% COBBLE	% FINES
DISTINCTIVENESS												3" to 12"	< #200
TOPOGRAPHY													
NOTES:													
ABRUPT CLEAR GRADUAL DIFFUSE													
SMOOTH WAVY IRREGULAR BROKEN													

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY				STRUCTURE	GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD				STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY												% COBBLE	% FINES
DISTINCTIVENESS												3" to 12"	< #200
TOPOGRAPHY													
NOTES:													
ABRUPT CLEAR GRADUAL DIFFUSE													
SMOOTH WAVY IRREGULAR BROKEN													

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY				STRUCTURE	GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD				STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY												% COBBLE	% FINES
DISTINCTIVENESS												3" to 12"	< #200
TOPOGRAPHY													
NOTES:													
ABRUPT CLEAR GRADUAL DIFFUSE													
SMOOTH WAVY IRREGULAR BROKEN													

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY				STRUCTURE	GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD				STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY												% COBBLE	% FINES
DISTINCTIVENESS												3" to 12"	< #200
TOPOGRAPHY													
NOTES:													
ABRUPT CLEAR GRADUAL DIFFUSE													
SMOOTH WAVY IRREGULAR BROKEN													

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY				STRUCTURE	GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD				STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		>12"	1/4" to 3"
BOUNDARY												% COBBLE	% FINES
DISTINCTIVENESS												3" to 12"	< #200
TOPOGRAPHY													
NOTES:													
ABRUPT CLEAR GRADUAL DIFFUSE													
SMOOTH WAVY IRREGULAR BROKEN													

OWNER: Jeff Saver
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 26
DATE: 3/22/2019
ELEVATION: 980.5
LOGGED BY: D. Miller

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126119.1 EASTING 162579.8
COUNTY / STATE: Burnett Cty Wi

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
LANDSCAPE POSITION: Foot slope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 17"	ML	Silt loam	10YR 3/2	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL BLOCKY PRISMATIC LENSED HOMOGENEOUS
DILATANCY						STRUCTURE					
NONE SLOW RAPID						GRADE: WEAK MODERATE STRONG SIZE: FINE MEDIUM COARSE VERY COARSE TYPE: PLATY GRANULAR CRUMB ANGULAR LOCATION: SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
PLASTICITY						% BOULDERS					
NONPLASTIC LOW MEDIUM HIGH						>12" 0 3" to 12" 0					
MOISTURE						% FINES					
DRY SLIGH. MOIST MOIST VERY MOIST WET						< #200 70-80					
CONSISTENCY											
VERY SOFT SOFT FIRM HARD VERY HARD											
BOUNDARY											
DISTINCTIVENESS						NOTES: <u>This layer was frozen, notes are from a small sample brought by to the office</u>					
ABRUPT CLEAR GRADUAL DIFFUSE						TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
17" / 21"	ML	Silt loam	10YR 4/3	95	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM
DILATANCY						STRUCTURE					
NONE SLOW RAPID						GRADE: WEAK MODERATE STRONG SIZE: FINE MEDIUM COARSE VERY COARSE TYPE: PLATY GRANULAR CRUMB ANGULAR LOCATION: SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
PLASTICITY						% BOULDERS					
NONPLASTIC LOW MEDIUM HIGH						>12" 0 3" to 12" 0					
MOISTURE						% FINES					
DRY SLIGH. MOIST MOIST VERY MOIST WET						< #200 60-70					
CONSISTENCY											
VERY SOFT SOFT FIRM HARD VERY HARD											
BOUNDARY											
DISTINCTIVENESS						NOTES: <u>do lose some fines from upper layer but is still a ML silt loam</u>					
ABRUPT CLEAR GRADUAL DIFFUSE						TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
21" / 15.8"	Ch	loam	5YR 4/4	100	2.5Y 3.1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM
DILATANCY						STRUCTURE					
NONE SLOW RAPID						GRADE: WEAK MODERATE STRONG SIZE: FINE MEDIUM COARSE VERY COARSE TYPE: PLATY GRANULAR CRUMB ANGULAR LOCATION: SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
PLASTICITY						% BOULDERS					
NONPLASTIC LOW MEDIUM HIGH						>12" 0 3" to 12" 0					
MOISTURE						% FINES					
DRY SLIGH. MOIST MOIST VERY MOIST WET						< #200 50-60					
CONSISTENCY											
VERY SOFT SOFT FIRM HARD VERY HARD											
BOUNDARY											
DISTINCTIVENESS						NOTES: <u>A good Ch red till, can't feel any sand grains, block mottles in the upper half of the layer only</u>					
ABRUPT CLEAR GRADUAL DIFFUSE						TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN					

OVERALL NOTES:
This was frozen to 40 inches plus. Observed material during excavation. Material below the frozen material was slightly moist to moist by touch and visual inspection. No material was wet or saturated, no seeps observed

SAMPLES TAKEN: YES (NO)
WATER OBSERVED: YES (NO)
BEDROCK: YES (NO)
DEPTH OF BEDROCK: 15.8"
OR HOLE EXTENT: No Bedrock El. 964.8

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL	
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
<u>DILATANCY</u>	<u>PLASTICITY</u>	<u>MOISTURE</u>	<u>CONSISTENCY</u>			<u>GRADE</u>	<u>SIZE</u>	<u>TYPE</u>	<u>LOCATION</u>	<u>% BOULDERS</u>	<u>% GRAVEL</u>	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
<u>BOUNDARY</u>											<u>% COBBLE</u>	<u>% FINES</u>
<u>DISTINCTIVENESS</u>											3" to 12"	< #200
<u>TOPOGRAPHY</u>												
<u>NOTES:</u>												
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN	

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
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<u>DILATANCY</u>	<u>PLASTICITY</u>	<u>MOISTURE</u>	<u>CONSISTENCY</u>			<u>GRADE</u>	<u>SIZE</u>	<u>TYPE</u>	<u>LOCATION</u>	<u>% BOULDERS</u>	<u>% GRAVEL</u>	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
<u>BOUNDARY</u>											<u>% COBBLE</u>	<u>% FINES</u>
<u>DISTINCTIVENESS</u>											3" to 12"	< #200
<u>TOPOGRAPHY</u>												
<u>NOTES:</u>												
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN	

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<u>DILATANCY</u>	<u>PLASTICITY</u>	<u>MOISTURE</u>	<u>CONSISTENCY</u>			<u>GRADE</u>	<u>SIZE</u>	<u>TYPE</u>	<u>LOCATION</u>	<u>% BOULDERS</u>	<u>% GRAVEL</u>	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
<u>BOUNDARY</u>											<u>% COBBLE</u>	<u>% FINES</u>
<u>DISTINCTIVENESS</u>											3" to 12"	< #200
<u>TOPOGRAPHY</u>												
<u>NOTES:</u>												
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN	

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<u>DILATANCY</u>	<u>PLASTICITY</u>	<u>MOISTURE</u>	<u>CONSISTENCY</u>			<u>GRADE</u>	<u>SIZE</u>	<u>TYPE</u>	<u>LOCATION</u>	<u>% BOULDERS</u>	<u>% GRAVEL</u>	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
<u>BOUNDARY</u>											<u>% COBBLE</u>	<u>% FINES</u>
<u>DISTINCTIVENESS</u>											3" to 12"	< #200
<u>TOPOGRAPHY</u>												
<u>NOTES:</u>												
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN	

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
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						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
<u>DILATANCY</u>	<u>PLASTICITY</u>	<u>MOISTURE</u>	<u>CONSISTENCY</u>			<u>GRADE</u>	<u>SIZE</u>	<u>TYPE</u>	<u>LOCATION</u>	<u>% BOULDERS</u>	<u>% GRAVEL</u>	
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"	
<u>BOUNDARY</u>											<u>% COBBLE</u>	<u>% FINES</u>
<u>DISTINCTIVENESS</u>											3" to 12"	< #200
<u>TOPOGRAPHY</u>												
<u>NOTES:</u>												
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN	

OWNER: Jeff Sauer
PROJECT: Hog Facility

TEST PIT / BORING NUMBER: 27
DATE: 3/02/2019
ELEVATION: 980.7
LOGGED BY: D. Mitte

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48 Grantsburg
NORTHING 126014.8 EASTING 162649.5
COUNTY / STATE: Burnett Cty WI

ANY KARST FEATURES WITHIN 1000 FEET: YES / NO
LANDSCAPE POSITION: Footslope
LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 16"	ML	Silt loam	10YR 3/2	100	—	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		GRADE STRUCTURELESS WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes are from a small sample brought by to the office</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									
				3" to 12" 0 < #200 70-80							

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
16" / 24"	ML	Silt loam	10YR 4/3 10YR 5/4	95	5	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		GRADE STRUCTURELESS WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		TOPOGRAPHY		NOTES: <u>is similar to second layer in SB 26</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									
				3" to 12" 0 < #200 60-70							

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
24" / 16.4"	CL	loam	5YR 4/4	100	2.5Y 3.1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE		TYPE	LOCATION	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		GRADE STRUCTURELESS WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
BOUNDARY		TOPOGRAPHY		NOTES: <u>is similar to the CL layer in SB 26, black mottles are only in the upper half of the layer</u>							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									
				3" to 12" 0 < #200 50-60							

OVERALL NOTES:

This was frozen to 40 inches plus. Observed material as it was excavated. Material below the frozen material was slightly moist to moist by touch and visual inspection. No Material was wet or saturated, no seeps observed. This Backhoe is very similar to SB 26

SAMPLES TAKEN: YES / <input checked="" type="checkbox"/> NO	WATER OBSERVED: YES / <input checked="" type="checkbox"/> NO	BEDROCK: YES / <input checked="" type="checkbox"/> NO
SAMPLE ID: <u>JS 27.1 12-16ft</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>16.4"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 964.4</u>

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	GEOLOGY ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
						ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	GEOLOGY ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
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BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

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BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			STRUCTURELESS WEAK MODERATE STRONG	VERY FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

TABLE
SUMMARY OF LABORATORY TEST RESULTS
FOR
MATERIAL CHECK (SOURCE)

OAKRIDGE ENGINEERING
SUIDAE HEALTH (SUIDA-01-19)

JANUARY 2020

ASTM No.		D6913	D4318	D2216	D2487							
Date Sampled	Sample Number	Sample Location	Grain Size Analysis		Atterberg Limits			Sampled Water Content (%)	Proctor Density		Coefficient Permeability (cm/sec)	U.S.C.S.
			%Fines <#200	%Clay <.005	Liquid Limit	Plastic Limit	Plasticity Index		Max. Dry Density (pcf)	Optimum Water (%)		
3/21/19	TP-7 S-1	Test Pit 7	55.2				NP	3.9				ML
3/21/19	TP-8 S-2	Test Pit 8	45.6		26.9	17.5	9.4	14.6				SC
3/21/19	TP-9 S-1	Test Pit 9	47.4		26.5	16.9	9.6	1.4				SC
3/22/19	TP-13 S-1	Test Pit 13	45.3		25.1	15.8	9.3	1.0				SC
3/21/19	TP-15 S-2	Test Pit 15	43.1		23.8	15.1	8.7	0.8				SC
3/22/19	TP-16 S-2	Test Pit 16	44.0		26.7	15.9	10.8	1.2				SC
3/22/19	TP-17 S-1	Test Pit 17	44.6		29.8	16.1	13.7	1.3				SC
3/22/19	TP-18 S-1	Test Pit 18	46.5		32.0	16.2	15.8	1.3				SC
3/22/19	TP-21 S-1	Test Pit 21	40.2		24.9	16.9	8.0	0.9				SC
3/22/19	TP-23 S-1	Test Pit 23	63.9		30.4	16.4	14.0	0.8				CL
3/22/19	TP-24 S-1	Test Pit 24	44.6		28.3	20.8	7.5	1.2				SC
3/22/19	TP-27 S-1	Test Pit 27	54.0		27.4	14.2	13.2	1.1				CL

TABLE
SUMMARY OF LABORATORY TEST RESULTS
FOR
MATERIAL CHECK (SOURCE)

OAKRIDGE ENGINEERING
SUIDAE HEALTH (SUIDA-01-19)

JANUARY 2020

ASTM No.		D6913		D4318		D2216		D2487			
Date Sampled	Sample Number	Sample Location	Grain Size Analysis		Atterberg Limits			Sampled Water Content (%)	Proctor Density		Coefficient Permeability (cm/sec) U.S.C.S.
			%Fines <#200	%Clay <.005	Liquid Limit	Plastic Limit	Plasticity Index		Max. Dry Density (pcf)	Optimum Water (%)	
Minimum:			40.2		23.8	14.2	7.5	0.8			
Maximum:			63.9		32.0	20.8	15.8	14.6			
Average:			47.9		26.9	17.5	9.4	9.3			
Project Requirements:											

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 7
Sample No:	TP-7 S-1
Depth of Sample:	12'-19'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/21/19

LABORATORY DATA:

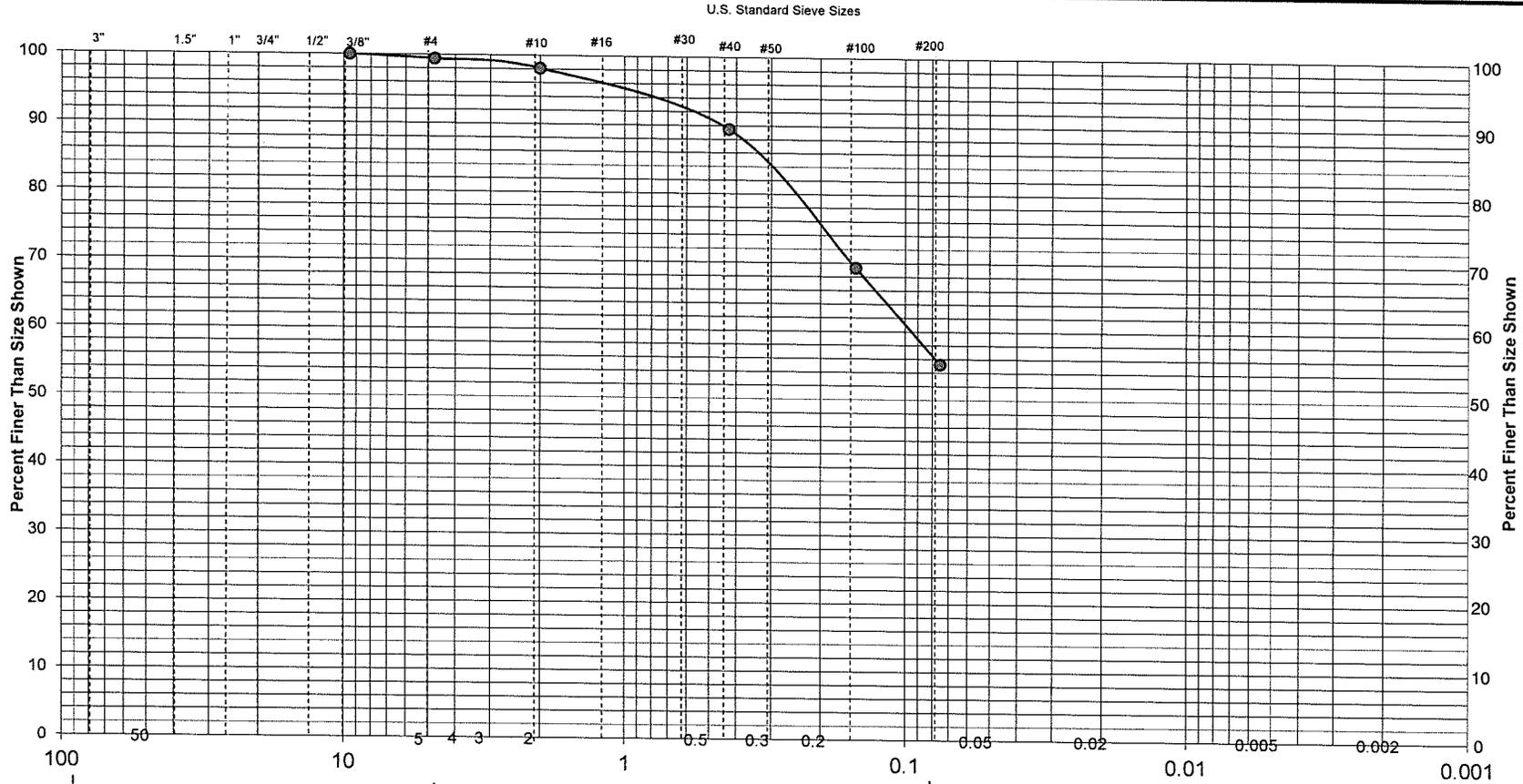
Date Tested:	December 27-31 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	578.8

Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"					
1/2"					
3/8"	0.0	0.0	100.0		
#4	3.5	0.6	99.4		
#10	7.8	1.3	98.1		
#40	49.7	8.6	89.5		
#100	116.8	20.2	69.3		
#200	81.4	14.1	55.2		

REVIEWED BY:	<i>Robert A. Brown</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	0.6%	1.3%	8.6%	34.3%	55.2%

Soil Classification: SANDY SILT, light yellowish brown (ML)

Location Sampled: Test Pit 7

Elevation or Depth: 12'-19'

Date Sampled: 3/21/19

Sample Number: TP-7 S-1

Sampled Moisture Content (%): 3.9

Report No.: TP7 S-1

Sample Source:

CQM, INC.

Atterberg Limits:

LL=

PL=

PI= NP

Client: Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project: Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by: Robert J. Peeters

Date: 1/15/20

Coefficients: Cc=

Cu=

Checked by:

Robert J. Peeters

Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 8
Sample No:	TP-8 S-2
Depth of Sample:	12'-13'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/21/19

LABORATORY DATA:

Date Tested:	December 27-30, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	543.7

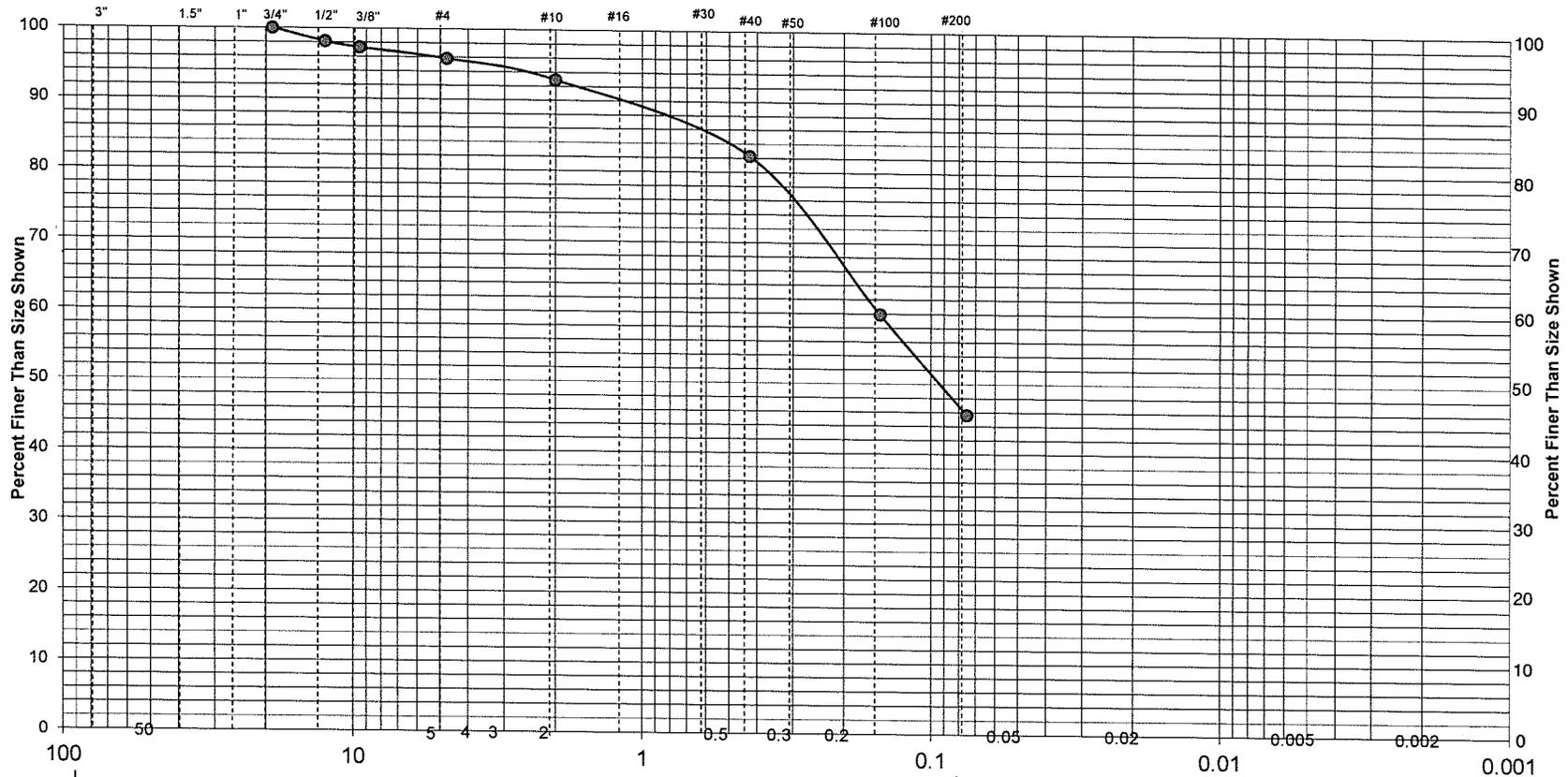
Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"	0.0	0.0	100.0		
1/2"	10.2	1.9	98.1		
3/8"	4.2	0.8	97.3		
#4	8.0	1.5	95.8		
#10	15.5	2.9	92.9		
#40	57.9	10.6	82.3		
#100	121.6	22.4	59.9		
#200	78.0	14.3	45.6		

REVIEWED BY:	<i>Robert A. Rouse</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE

U.S. Standard Sieve Sizes



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	4.2%	2.9%	10.6%	36.7%	45.6%

Soil Classification: CLAYEY SAND, fine to medium grained, a little gravel, light yellowish brown (SC)

Location Sampled: Test Pit 8

Elevation or Depth: 12'-13'

Date Sampled: 3/21/19

Sample Number: TP-8 S-2

Sampled Moisture Content (%): 14.6

Report No.: TP8 S-2

Sample Source:

CQM, INC.

Atterberg Limits: LL= 26.9 PL= 17.5 PI= 9.4

Client: Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project: Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by: Robert J. Peeters

Date: 1/15/20

Coefficients: Cc= Cu=

Checked by: *Robert R. Arnes*

Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 9
Sample No:	TP-9 S-1
Depth of Sample:	8'-10'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/21/19

LABORATORY DATA:

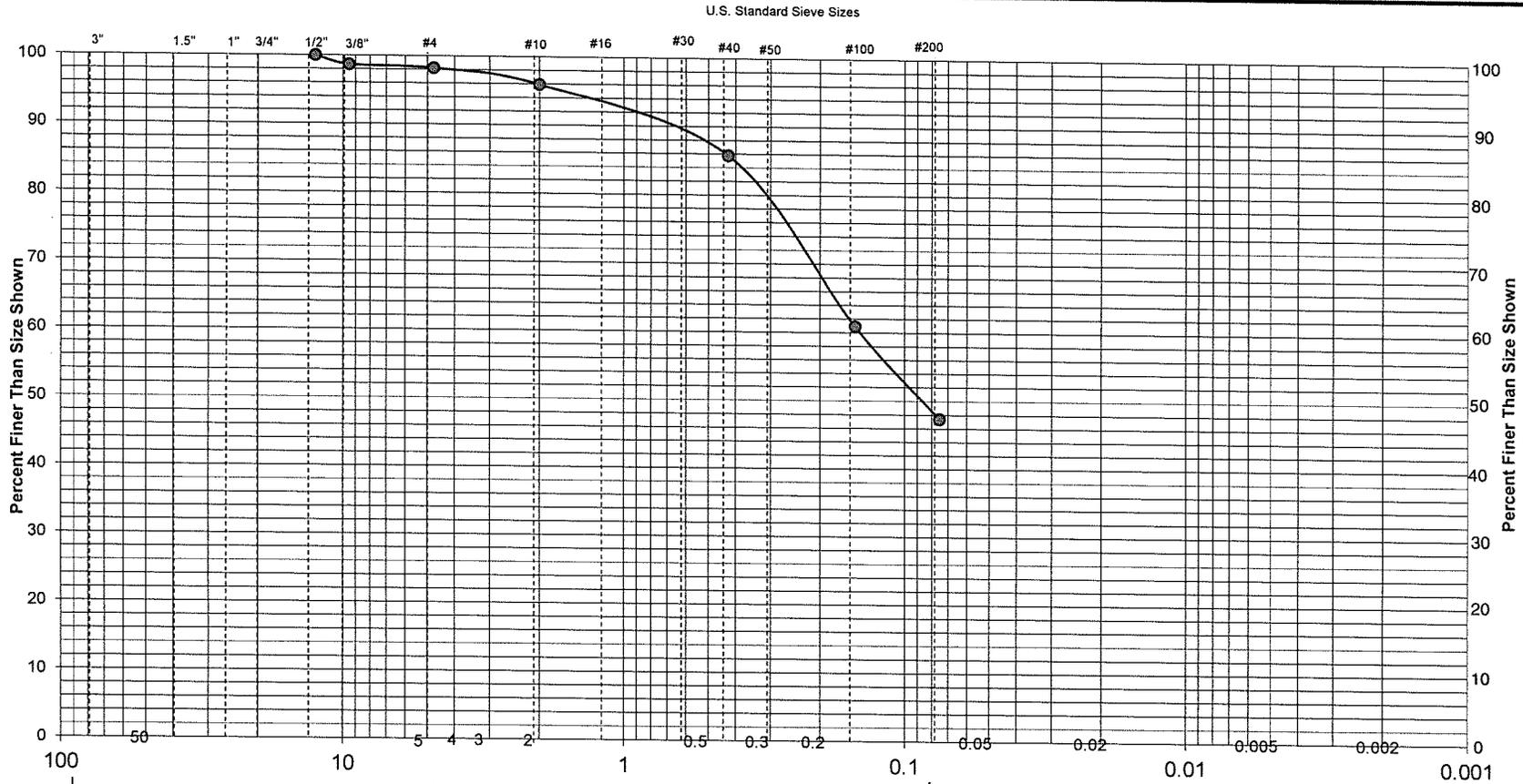
Date Tested:	December 27-31, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	601.6

Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"					
1/2"	0.0	0.0	100.0		
3/8"	8.0	1.3	98.7		
#4	3.3	0.5	98.2		
#10	13.9	2.3	95.9		
#40	60.6	10.1	85.8		
#100	150.0	24.9	60.9		
#200	81.5	13.5	47.4		

REVIEWED BY:	<i>Robert R. Brown</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand				
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay	
	1.8%	2.3%	10.1%	38.4%	47.4%	

Soil Classification: CLAYEY SAND, fine to medium grained, light yellowish brown (SC)

Location Sampled: Test Pit 9			Elevation or Depth: 8'-10'		Date Sampled: 3/21/19	
Sample Number: TP-9 S-1			Sampled Moisture Content (%): 1.4		Report No.: TP9 S-1	
Sample Source:			CQM, INC.			
Atterberg Limits:	LL= 26.5	PL= 16.9	PI= 9.6	Client:	Oakridge Engineering	
Munsell Color Code: 10YR 6/4			Project:	Suidae Health Suida-01-19		Page: 2
Date Received: 12/26/19			Prepared by:	Robert J. Peeters		Date: 1/15/20
Coefficients: Cc=			Cu=	Checked by:	<i>Robert R. Peeters</i>	
					Date: 1/16/20	

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suida Health Suida-01-19
Location Sampled:	Test Pit 13
Sample No:	TP-13 S-1
Depth of Sample:	15'-16'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/22/19

LABORATORY DATA:

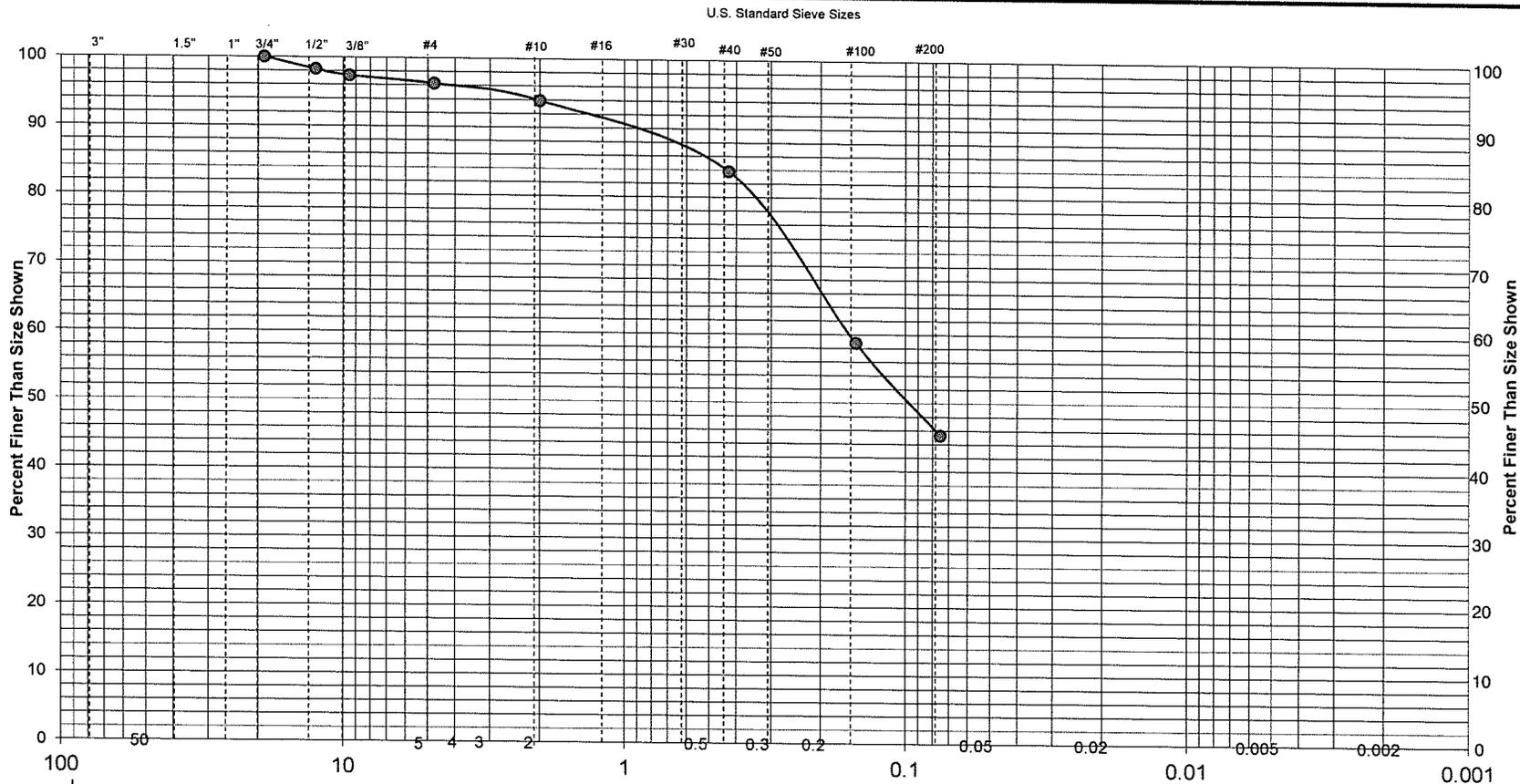
Date Tested:	December 27-31, 2019	
Test Performed By:	AES	
24 Hrs. Turn Around:	NO	
Washed Gradation:	YES	
Dry Weight of Soil (gms):	668.4	

Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"	0.0	0.0	100.0		
1/2"	11.8	1.8	98.2		
3/8"	6.0	0.9	97.3		
#4	7.4	1.1	96.2		
#10	15.7	2.3	93.9		
#40	67.8	10.1	83.8		
#100	166.8	25.0	58.8		
#200	90.5	13.5	45.3		

REVIEWED BY:	<i>Robert R. Pomeroy</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	3.8%	2.3%	10.1%	38.5%	45.3%

Soil Classification: CLAYEY SAND, fine to medium grained, a little gravel, light yellowish brown (SC)

Location Sampled: Test Pit 13			Elevation or Depth: 15'-16'		Date Sampled: 3/22/19	
Sample Number: TP-13 S-1			Sampled Moisture Content (%): 1.0		Report No.: TP13 S1	
Sample Source:			CQM, INC.			
Atterberg Limits:	LL= 25.1	PL= 15.8	PI= 9.3		Client: Oakridge Engineering	
Munsell Color Code: 10YR 6/4			Project: Suidae Health Suida-01-19		Page: 2	
Date Received: 12/26/19			Prepared by: Robert J. Peeters		Date: 1/15/20	
Coefficients: Cc=			Cu=		Checked by: <i>Robert J. Peeters</i>	
					Date: 1/16/20	

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 15
Sample No:	TP-15 S-2
Depth of Sample:	13'-15'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/21/19

LABORATORY DATA:

Date Tested:	December 27-31, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	694.3

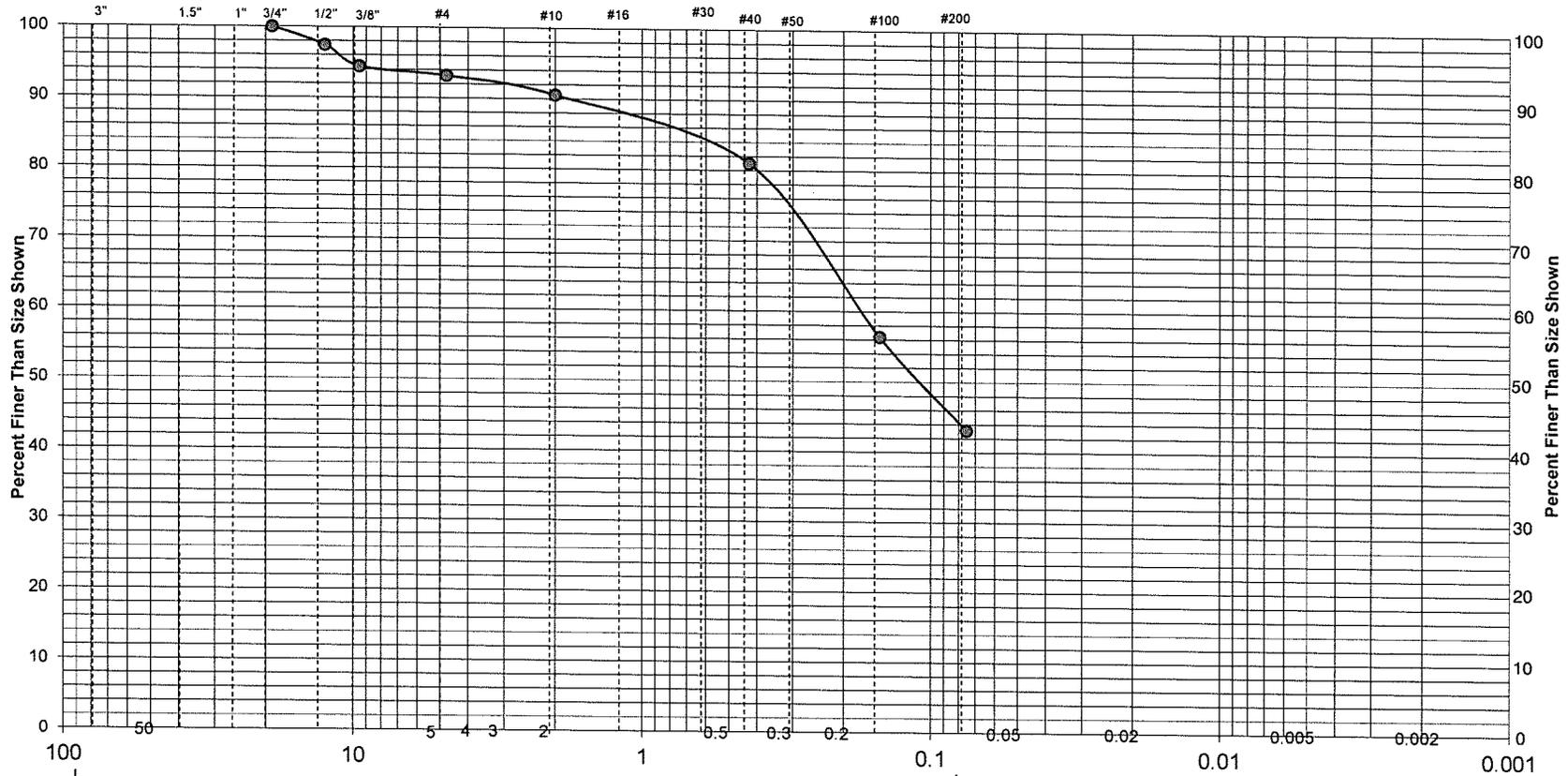
Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"	0.0	0.0	100.0		
1/2"	17.8	2.6	97.4		
3/8"	21.0	3.0	94.4		
#4	8.8	1.3	93.1		
#10	18.2	2.6	90.5		
#40	66.2	9.5	81.0		
#100	170.8	24.6	56.4		
#200	92.0	13.3	43.1		

REVIEWED BY:	<i>Robert R. House</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE

U.S. Standard Sieve Sizes



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	6.9%	2.6%	9.5%	37.9%	43.1%

Soil Classification: CLAYEY SAND, fine grained, a little gravel, light yellowish brown (SC)

Location Sampled: Test Pit 15			Elevation or Depth: 13'-15'		Date Sampled: 3/21/19	
Sample Number: TP-15 S-2			Sampled Moisture Content (%): 0.8		Report No.: TP15 S-2	
Sample Source:			CQM, INC.			
Atterberg Limits:		LL= 23.8	PL= 15.1	PI= 8.7	Client: Oakridge Engineering	
Munsell Color Code: 10YR 6/4			Project: Suidae Health Suida-01-19		Page: 2	
Date Received: 12/26/19			Prepared by: Robert J. Peeters		Date: 1/15/20	
Coefficients: Cc=			Cu=	Checked by: <i>Robert R. Rouse</i>		Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 16
Sample No:	TP-16 S-2
Depth of Sample:	11'-14'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/22/19

LABORATORY DATA:

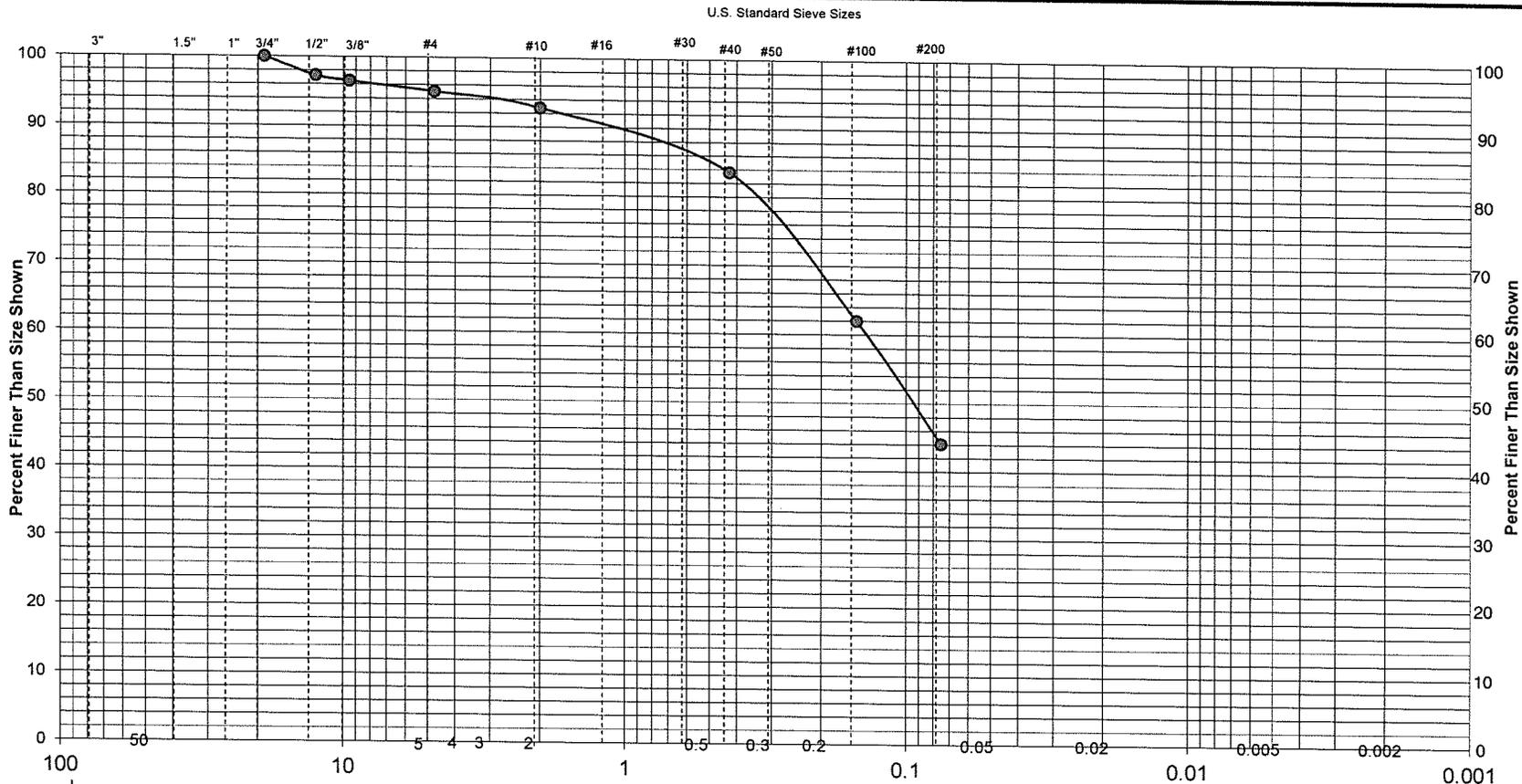
Date Tested:	December 27-31, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	528.7

Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"	0.0	0.0	100.0		
1/2"	14.5	2.7	97.3		
3/8"	4.0	0.8	96.5		
#4	7.8	1.5	95.0		
#10	12.1	2.3	92.7		
#40	48.7	9.2	83.5		
#100	114.4	21.6	61.9		
#200	94.7	17.9	44.0		

REVIEWED BY:	<i>Robert R. Rouse</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	5.0%	2.3%	9.2%	39.5%	44.0%

Soil Classification: CLAYEY SAND, fine grained, a little gravel, light yellowish brown (SC)

Location Sampled: Test Pit 16

Elevation or Depth: 11'-14'

Date Sampled: 3/22/19

Sample Number: TP-16 S-2

Sampled Moisture Content (%): 1.2

Report No.: TP16 S-2

Sample Source:

CQM, INC.

Atterberg Limits:

LL= 26.7

PL= 15.9

PI= 10.8

Client:

Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project:

Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by:

Robert J. Peeters

Date: 1/15/20

Coefficients: Cc=

Cu=

Checked by:

Robert R. Rouse

Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 17
Sample No:	TP-17 S-1
Depth of Sample:	8'-10'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/22/19

LABORATORY DATA:

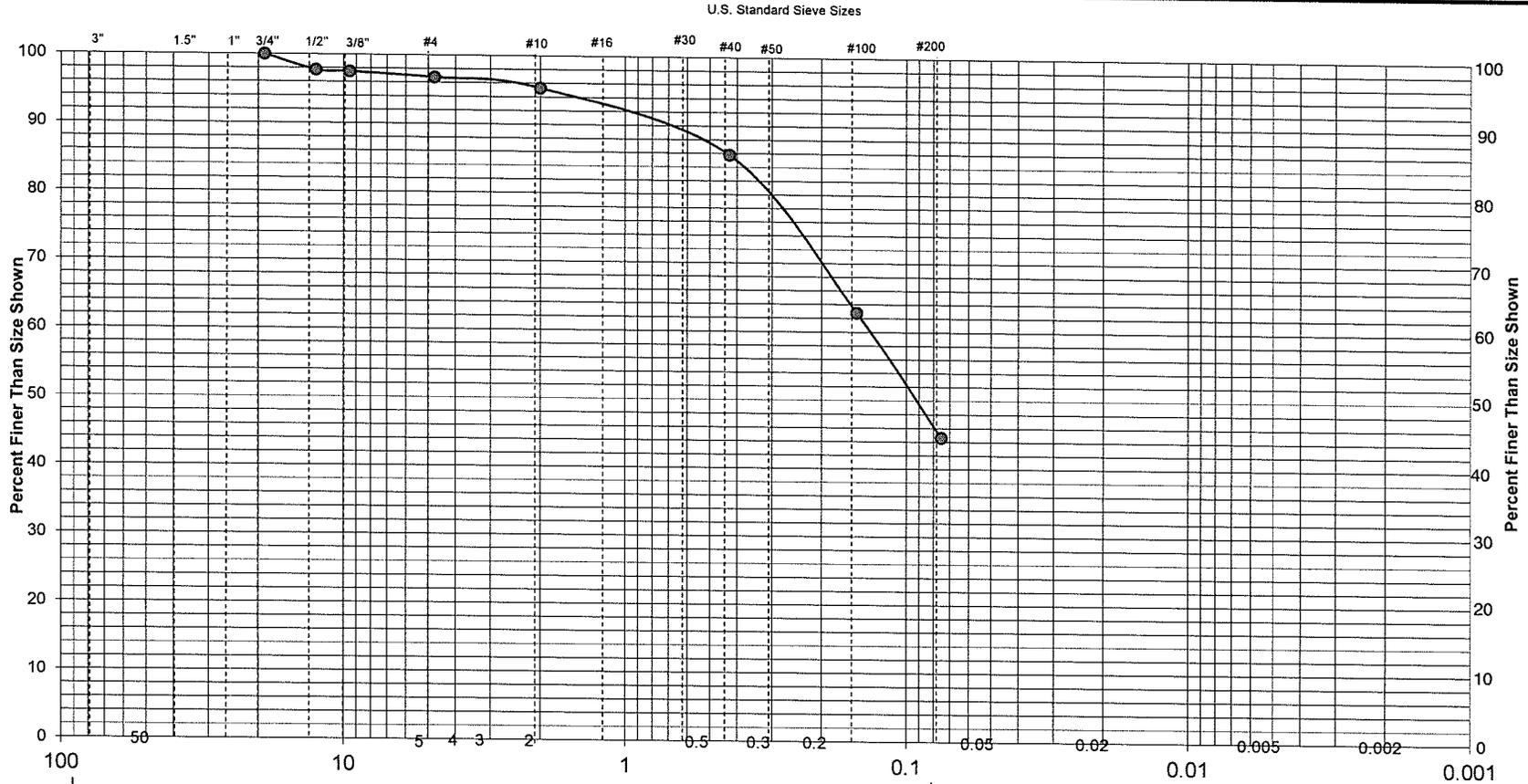
Date Tested:	December 27-31, 2019	
Test Performed By:	AES	
24 Hrs. Turn Around:	NO	
Washed Gradation:	YES	
Dry Weight of Soil (gms):	572.5	

Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"	0.0	0.0	100.0		
1/2"	13.1	2.3	97.7		
3/8"	1.2	0.2	97.5		
#4	4.4	0.8	96.7		
#10	8.3	1.4	95.3		
#40	54.4	9.5	85.8		
#100	131.5	23.0	62.8		
#200	104.3	18.2	44.6		

REVIEWED BY:	<i>Robert R. Power</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	3.3%	1.4%	9.5%	41.2%	44.6%

Soil Classification: CLAYEY SAND, fine grained, a little gravel, light yellowish brown (SC)

Location Sampled: Test Pit 17

Elevation or Depth: 8'-10'

Date Sampled: 3/22/19

Sample Number: TP-17 S-1

Sampled Moisture Content (%): 1.3

Report No.: TP17 S1

Sample Source:

CQM, INC.

Atterberg Limits:

LL= 29.8

PL= 16.1

PI= 13.7

Client: Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project: Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by: Robert J. Peeters

Date: 1/15/20

Coefficients: Cc=

Cu=

Checked by:

Robert R. Rose

Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 18
Sample No:	TP-18 S-1
Depth of Sample:	6'-7'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/22/19

LABORATORY DATA:

Date Tested:	December 27-31, 2019	
Test Performed By:	AES	
24 Hrs. Turn Around:	NO	
Washed Gradation:	YES	
Dry Weight of Soil (gms):	637.5	

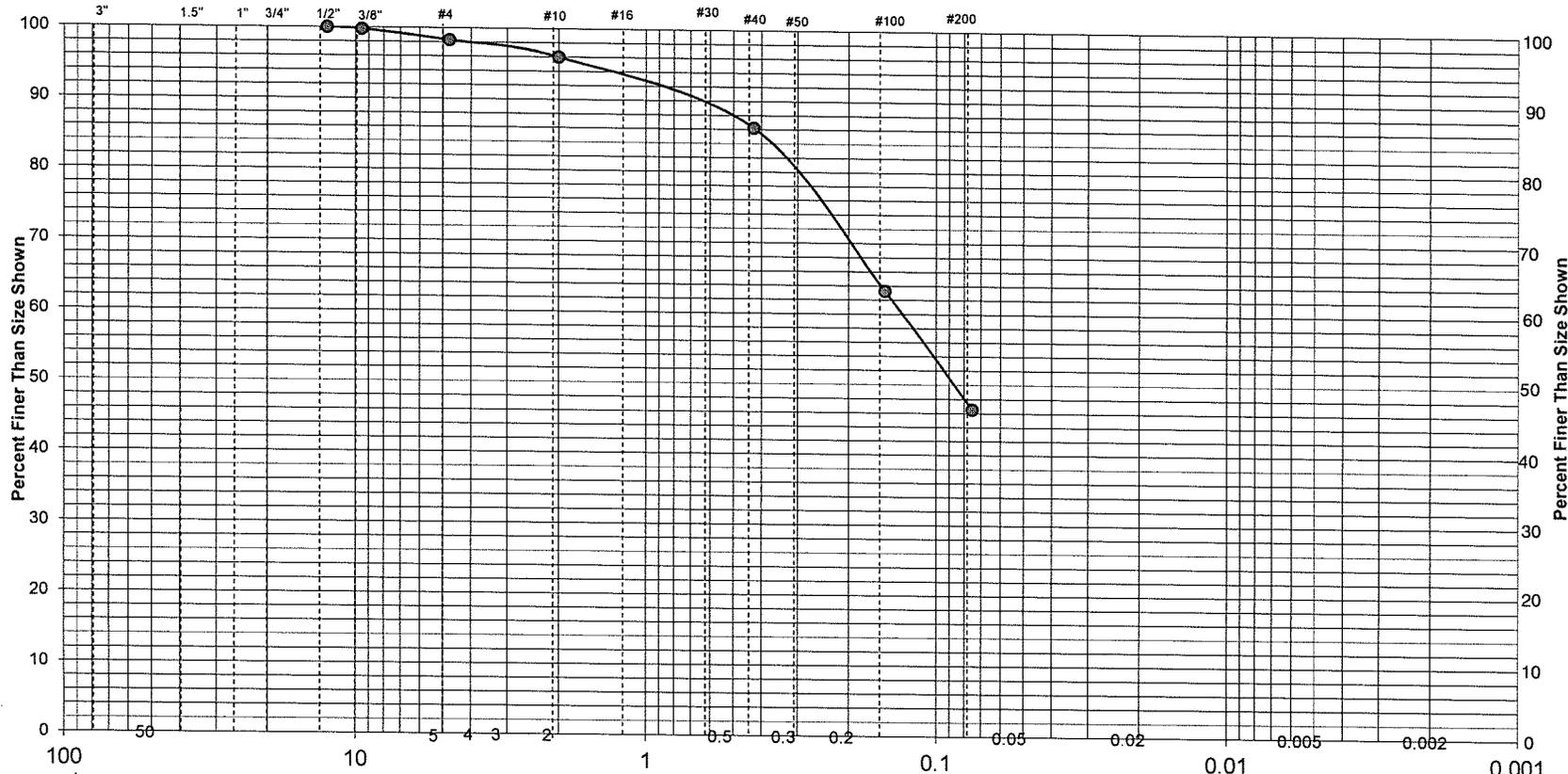
Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"					
1/2"	0.0	0.0	100.0		
3/8"	1.5	0.2	99.8		
#4	9.5	1.5	98.3		
#10	14.6	2.3	96.0		
#40	62.2	9.8	86.2		
#100	146.2	22.9	63.3		
#200	106.8	16.8	46.5		

REVIEWED BY:	<i>Robert R. Rouse</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE

U.S. Standard Sieve Sizes



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	1.7%	2.3%	9.8%	39.7%	46.5%

Soil Classification: CLAYEY SAND, fine grained, light yellowish brown (SC)

Location Sampled: Test Pit 18

Elevation or Depth: 6'-7'

Date Sampled: 3/22/19

Sample Number: TP-18 S-1

Sampled Moisture Content (%): 1.3

Report No.: TP18 S-1

Sample Source:

CQM, INC.

Atterberg Limits:

LL= 32.0

PL= 16.2

PI= 15.8

Client: Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project: Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by: Robert J. Peeters

Date: 1/15/20

Coefficients: Cc= Cu=

Checked by:

Robert A. Roosa

Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 21
Sample No:	TP-21 S-1
Depth of Sample:	15'-18'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/22/19

LABORATORY DATA:

Date Tested:	December 27-31, 2019	
Test Performed By:	AES	
24 Hrs. Turn Around:	NO	
Washed Gradation:	YES	
Dry Weight of Soil (gms):	632.8	

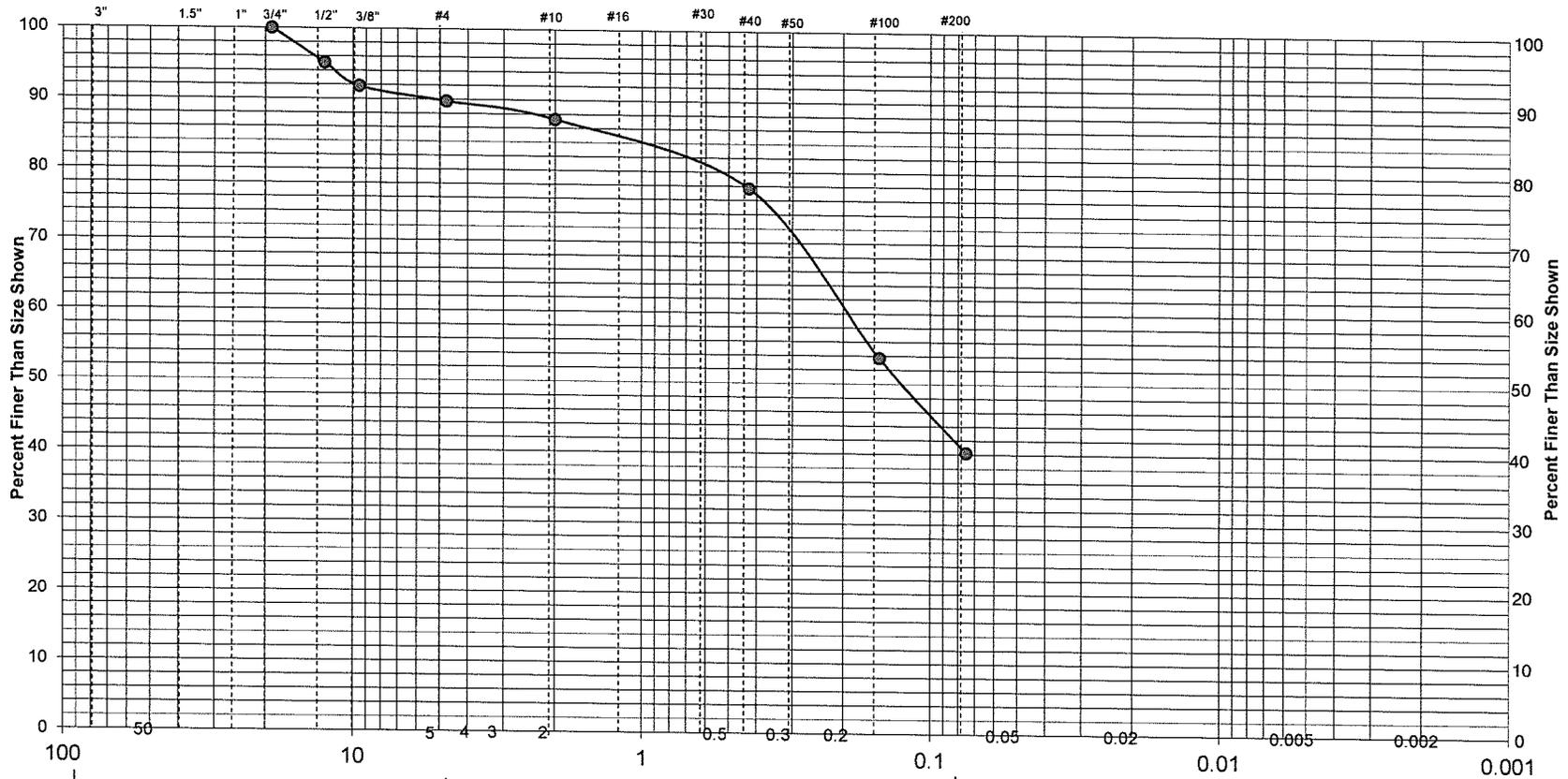
Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"	0.0	0.0	100.0		
1/2"	31.2	4.9	95.1		
3/8"	20.8	3.3	91.8		
#4	13.0	2.1	89.7		
#10	15.5	2.4	87.3		
#40	60.7	9.6	77.7		
#100	151.7	24.0	53.7		
#200	85.4	13.5	40.2		

REVIEWED BY:	<i>Robert A. Pouse</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE

U.S. Standard Sieve Sizes



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	10.3%	2.4%	9.6%	37.5%	40.2%

Soil Classification: CLAYEY SAND, fine grained, a little gravel, light yellowish brown (SC)

Location Sampled: Test Pit 21

Elevation or Depth: 15'-18'

Date Sampled: 3/22/19

Sample Number: TP-21 S-1

Sampled Moisture Content (%): 0.9

Report No.: TP21 S-1

Sample Source:

CQM, INC.

Atterberg Limits:

LL= 24.9

PL= 16.9

PI= 8.0

Client: Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project: Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by: Robert J. Peeters

Date: 1/15/20

Coefficients: Cc= Cu=

Checked by:

Robert A. Rose

Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 23
Sample No:	TP-23 S-1
Depth of Sample:	8'-10'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/22/19

LABORATORY DATA:

Date Tested:	December 27-30, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	920.6

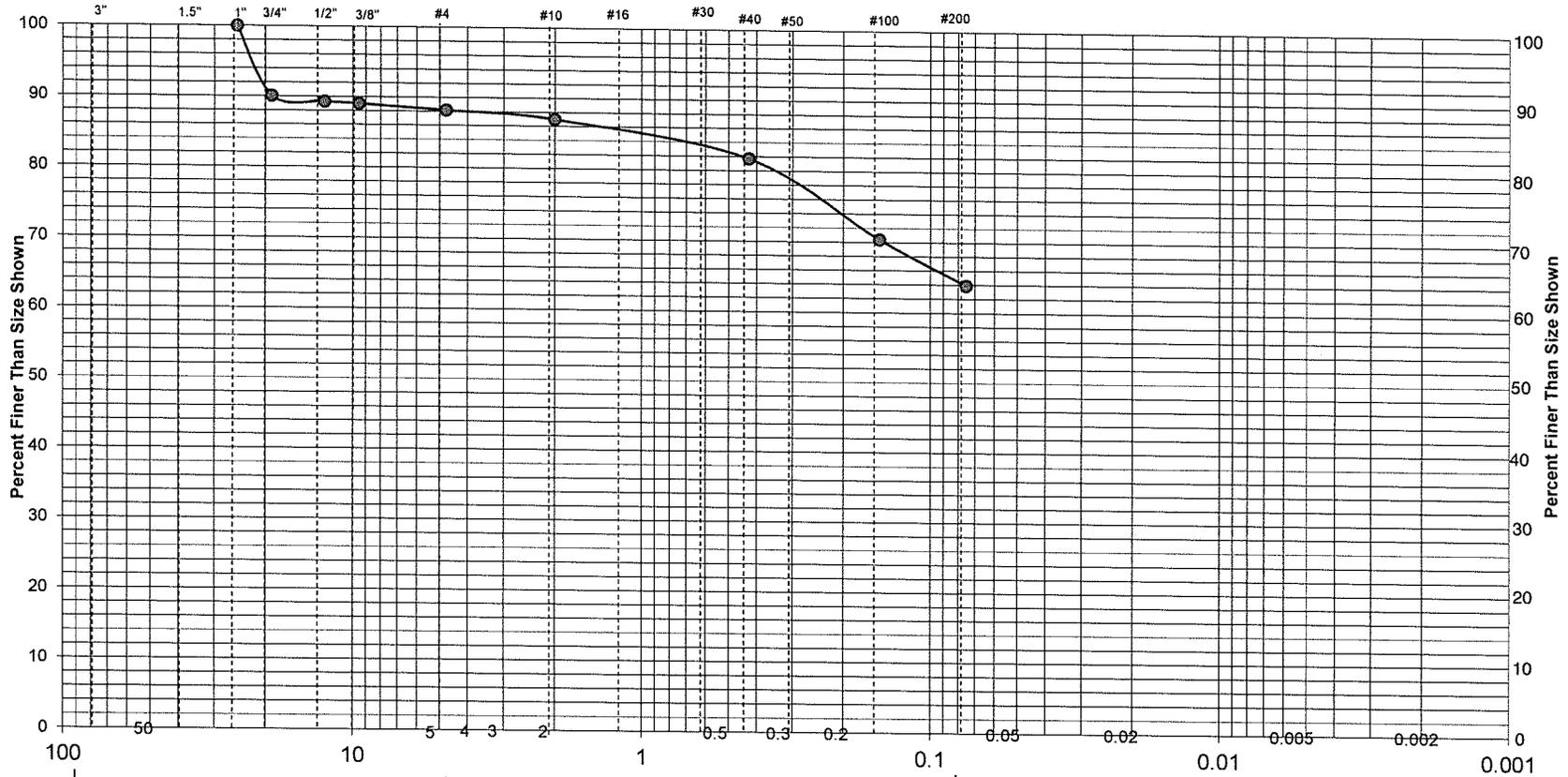
Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"	0.0	0.0	100.0		
3/4"	91.9	10.0	90.0		
1/2"	6.8	0.7	89.3		
3/8"	3.2	0.3	89.0		
#4	7.1	0.8	88.2		
#10	11.2	1.2	87.0		
#40	49.0	5.3	81.7		
#100	104.2	11.3	70.4		
#200	59.7	6.5	63.9		

REVIEWED BY:	<i>Robert R. Rouse</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE

U.S. Standard Sieve Sizes



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
10.0%	1.8%	1.2%	5.3%	17.8%	63.9%

Soil Classification: SANDY LEAN CLAY, a little gravel, light yellowish brown (CL)

Location Sampled: Test Pit 23

Elevation or Depth: 8'-10'

Date Sampled: 3/22/19

Sample Number: TP-23 S-1

Sampled Moisture Content (%): 0.8

Report No.: TP23 S-1

Sample Source:

CQM, INC.

Atterberg Limits:

LL= 30.4

PL= 16.4

PI= 14.0

Client: Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project: Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by: Robert J. Peeters

Date: 1/15/20

Coefficients: Cc=

Cu=

Checked by:

Robert R. Peeters

Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 24
Sample No:	TP-24 S-1
Depth of Sample:	15'-16'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/22/19

LABORATORY DATA:

Date Tested:	December 27-30, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	640.2

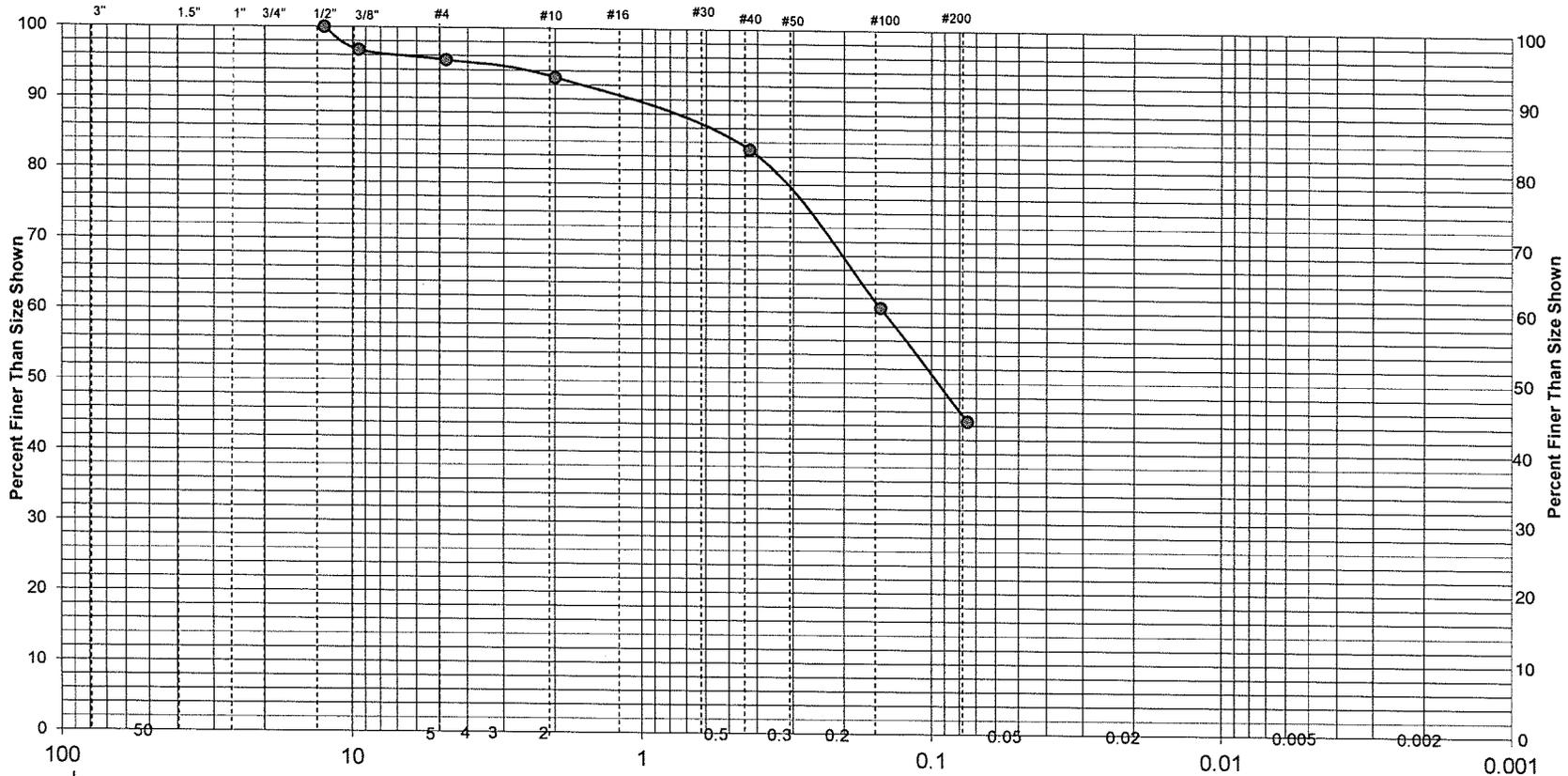
Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"					
1/2"	0.0	0.0	100.0		
3/8"	21.0	3.3	96.7		
#4	8.6	1.3	95.4		
#10	15.1	2.4	93.0		
#40	64.3	10.0	83.0		
#100	142.9	22.3	60.7		
#200	103.3	16.1	44.6		

REVIEWED BY:	<i>Robert A. Deane</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE

U.S. Standard Sieve Sizes



Gravel		Sand				
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay	
	4.6%	2.4%	10.0%	38.4%	44.6%	

Soil Classification: CLAYEY SAND, fine to medium grained, a little gravel, light yellowish brown (SC)

Location Sampled: Test Pit 24

Elevation or Depth: 15'-16'

Date Sampled: 3/22/19

Sample Number: TP-24 S-1

Sampled Moisture Content (%): 1.2

Report No.: TP24 S-1

Sample Source:

CQM, INC.

Atterberg Limits:

LL= 28.3

PL= 20.8

PI= 7.5

Client: Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project: Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by: Robert J. Peeters

Date: 1/15/20

Coefficients: Cc=

Cu=

Checked by:

Robert R. Peeters

Date: 1/16/20

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:

Client:	Oakridge Engineering
Project:	Suidae Health Suida-01-19
Location Sampled:	Test Pit 27
Sample No:	TP-27 S-1
Depth of Sample:	12'-16'
Date Received:	12/26/19
Sample Designated For:	Soil Classification
Source of Sample:	
Munsell Color Code:	10YR 6/4
Date Sampled:	3/22/19

LABORATORY DATA:

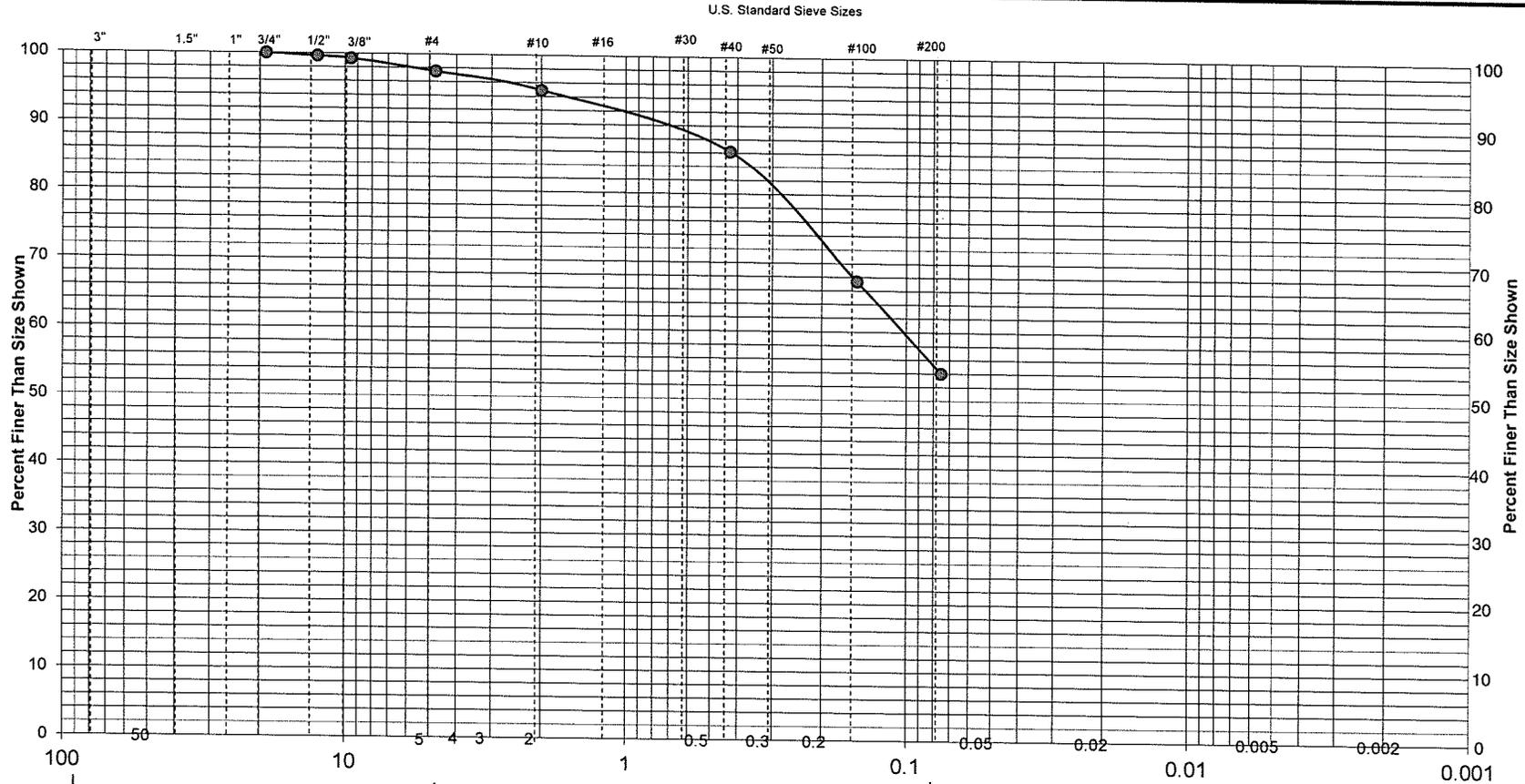
Date Tested:	December 27-31, 2019	
Test Performed By:	AES	
24 Hrs. Turn Around:	NO	
Washed Gradation:	YES	
Dry Weight of Soil (gms):	708.3	

Sieve Size	Weight Retained	% Retained	% Passing	Project Specification % Passing by Weight	Source of Specification
3"					
1 1/2"					
1"					
3/4"	0.0	0.0	100.0		
1/2"	2.9	0.4	99.6		
3/8"	2.2	0.3	99.3		
#4	12.7	1.8	97.5		
#10	18.3	2.6	94.9		
#40	61.6	8.7	86.2		
#100	133.4	18.8	67.4		
#200	94.6	13.4	54.0		

REVIEWED BY:	<i>Robert R. Poore</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			
Coarse	Fine	Coarse	Medium	Fine	Silt - Clay
	2.5%	2.6%	8.7%	32.2%	54.0%

Soil Classification: SANDY LEAN CLAY, light yellowish brown (CL)

Location Sampled: Test Pit 27

Elevation or Depth: 12'-16'

Date Sampled: 3/22/19

Sample Number: TP-27 S-1

Sampled Moisture Content (%): 1.1

Report No.: TP27 S-1

Sample Source:

CQM, INC.

Atterberg Limits: LL= 27.4 PL= 14.2 PI= 13.2

Client: Oakridge Engineering

Munsell Color Code: 10YR 6/4

Project: Suidae Health Suida-01-19

Page: 2

Date Received: 12/26/19

Prepared by: Robert J. Peeters

Date: 1/15/20

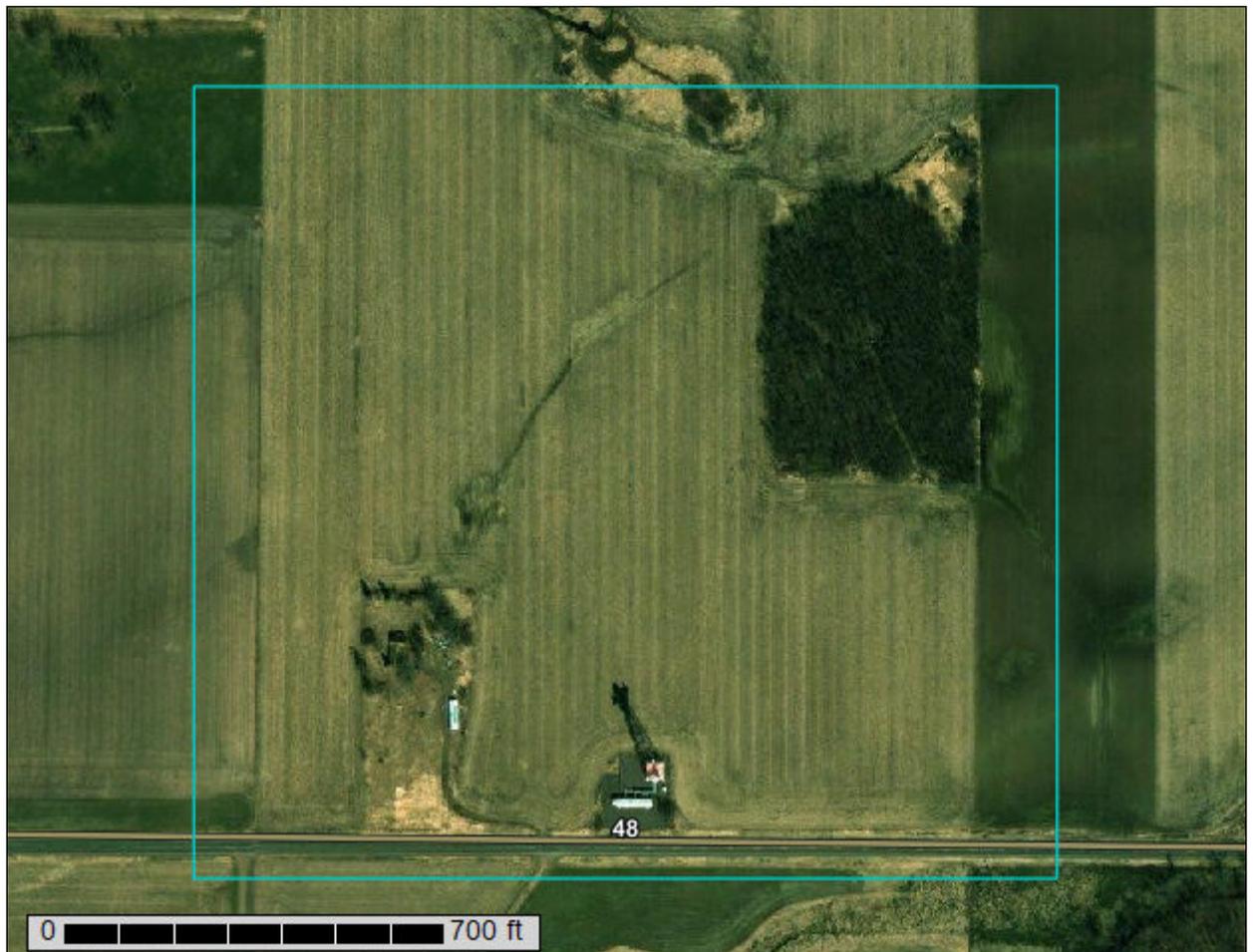
Coefficients: Cc= Cu=

Checked by: *Robert R. Rouss*

Date: 1/16/20

Custom Soil Resource Report for **Burnett County, Wisconsin**

Cumberland LLC - Melin Site



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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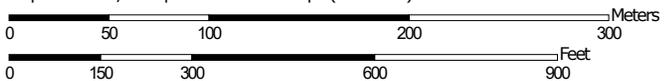
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:3,760 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Burnett County, Wisconsin
 Survey Area Data: Version 18, Sep 10, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 9, 2013—Sep 8, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
152A	Alstad loam, 0 to 3 percent slopes	19.7	36.9%
422A	Seelyeville, Cathro, and Rondeau soils, 0 to 1 percent slopes	0.7	1.3%
553B	Branstad fine sandy loam, 2 to 6 percent slopes	30.5	57.0%
553C	Branstad fine sandy loam, 6 to 12 percent slopes	2.6	4.8%
Totals for Area of Interest		53.5	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

Custom Soil Resource Report

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Burnett County, Wisconsin

152A—Alstad loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: h1cx
Elevation: 800 to 2,000 feet
Mean annual precipitation: 28 to 33 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 90 to 140 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Alstad and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Alstad

Setting

Landform: Moraines
Landform position (two-dimensional): Footslope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Loamy calcareous till

Typical profile

Ap - 0 to 9 inches: loam
E - 9 to 15 inches: fine sandy loam
E/B - 15 to 18 inches: fine sandy loam
B/E - 18 to 24 inches: sandy clay loam
Bt - 24 to 49 inches: sandy clay loam
C - 49 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 6 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 10 percent
Available water storage in profile: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Forage suitability group: Mod AWC, high water table (G090AY004WI)
Hydric soil rating: No

Minor Components

Bluffton

Percent of map unit: 10 percent

Landform: Drainageways on moraines, depressions on moraines

Hydric soil rating: Yes

Branstad

Percent of map unit: 5 percent

Hydric soil rating: No

422A—Seelyeville, Cathro, and Rondeau soils, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: h1kt

Elevation: 600 to 1,950 feet

Mean annual precipitation: 25 to 33 inches

Mean annual air temperature: 36 to 45 degrees F

Frost-free period: 90 to 135 days

Farmland classification: Not prime farmland

Map Unit Composition

Seelyeville and similar soils: 50 percent

Cathro and similar soils: 25 percent

Rondeau and similar soils: 20 percent

Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Seelyeville

Setting

Landform: Depressions, depressions, drainageways

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Dip

Down-slope shape: Concave, linear

Across-slope shape: Concave

Parent material: Herbaceous organic material more than 51 inches thick

Typical profile

Oa1 - 0 to 19 inches: muck

Oa2 - 19 to 80 inches: muck

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Very poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 6.00 in/hr)

Depth to water table: About 0 inches

Custom Soil Resource Report

Frequency of flooding: None
Frequency of ponding: Frequent
Available water storage in profile: Very high (about 23.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Frequently flooded, organics (G090AY010WI)
Hydric soil rating: Yes

Description of Cathro

Setting

Landform: Depressions on disintegration moraines, drainageways on disintegration moraines
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, convex
Parent material: Herbaceous organic material 16 to 51 inches thick over loamy or silty deposits

Typical profile

Oa - 0 to 28 inches: muck
Cg1 - 28 to 49 inches: loam
Cg2 - 49 to 60 inches: sandy loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Very high (about 16.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: B/D
Forage suitability group: Frequently flooded, organics (G090AY010WI)
Hydric soil rating: Yes

Description of Rondeau

Setting

Landform: Depressions on moraines, drainageways on moraines
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, convex
Parent material: Herbaceous organic material 16 to 51 inches thick over limnic materials which are mostly marl

Custom Soil Resource Report

Typical profile

Oa - 0 to 44 inches: muck
Cg - 44 to 60 inches: marly silt loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 90 percent
Available water storage in profile: Very high (about 20.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Forage suitability group: Frequently flooded, organics (G090AY010WI)
Hydric soil rating: Yes

Minor Components

Lupton

Percent of map unit: 5 percent
Landform: Drainageways
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

553B—Branstad fine sandy loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: h211
Elevation: 790 to 1,640 feet
Mean annual precipitation: 25 to 33 inches
Mean annual air temperature: 36 to 45 degrees F
Frost-free period: 90 to 140 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Branstad and similar soils: 95 percent
Minor components: 5 percent

Custom Soil Resource Report

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Branstad

Setting

Landform: Moraines
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy calcareous till

Typical profile

Ap - 0 to 9 inches: fine sandy loam
E - 9 to 14 inches: fine sandy loam
E/B - 14 to 20 inches: fine sandy loam
B/E - 20 to 45 inches: sandy clay loam
Bt1 - 45 to 55 inches: sandy clay loam
Bt2 - 55 to 68 inches: fine sandy loam
Btk - 68 to 80 inches: fine sandy loam

Properties and qualities

Slope: 2 to 6 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: About 24 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 10 percent
Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Forage suitability group: Mod AWC, adequately drained (G090AY005WI)
Hydric soil rating: No

Minor Components

Alstad

Percent of map unit: 5 percent
Landform: Moraines
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

553C—Branstad fine sandy loam, 6 to 12 percent slopes

Map Unit Setting

National map unit symbol: h212

Elevation: 790 to 1,640 feet

Mean annual precipitation: 25 to 33 inches

Mean annual air temperature: 36 to 45 degrees F

Frost-free period: 90 to 140 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Branstad and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Branstad

Setting

Landform: Moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Concave

Parent material: Loamy calcareous till

Typical profile

Ap - 0 to 9 inches: fine sandy loam

E - 9 to 14 inches: fine sandy loam

E/B - 14 to 20 inches: fine sandy loam

B/E - 20 to 45 inches: sandy clay loam

Bt1 - 45 to 55 inches: sandy clay loam

Bt2 - 55 to 68 inches: fine sandy loam

Btk - 68 to 80 inches: fine sandy loam

Properties and qualities

Slope: 6 to 12 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Moderately well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)

Depth to water table: About 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

Available water storage in profile: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Custom Soil Resource Report

Hydrologic Soil Group: C

Forage suitability group: Mod AWC, adequately drained (G090AY005WI)

Hydric soil rating: No

Minor Components

Alstad

Percent of map unit: 5 percent

Landform: Moraines

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: No

Cushing

Percent of map unit: 5 percent

Landform: Moraines

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: No