

OWNER: Jeff Saver
PROJECT: 110g 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 BEDROCK
<p>DILATANCY: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u></p> <p>GRADE: <u>WEAK</u> STRUCTURE: <u>STRUCTURELESS</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> LOCATION: <u>SUBANGULAR</u> % BOULDERS: <u>>12"</u> % GRAVEL: <u>1/4" to 3"</u></p> <p>BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> 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" / 12"	CL	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 BEDROCK
<p>DILATANCY: <u>NONE</u> PLASTICITY: <u>LOW</u> MOISTURE: <u>SLIGH. MOIST</u> CONSISTENCY: <u>VERY SOFT</u></p> <p>GRADE: <u>WEAK</u> STRUCTURE: <u>STRUCTURELESS</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> LOCATION: <u>SUBANGULAR</u> % BOULDERS: <u>>12"</u> % GRAVEL: <u>1/4" to 3"</u></p> <p>BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> 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
12" / 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 BEDROCK
<p>DILATANCY: <u>NONE</u> PLASTICITY: <u>LOW</u> MOISTURE: <u>SLIGH. MOIST</u> CONSISTENCY: <u>VERY SOFT</u></p> <p>GRADE: <u>WEAK</u> STRUCTURE: <u>STRUCTURELESS</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> LOCATION: <u>SUBANGULAR</u> % BOULDERS: <u>>12"</u> % GRAVEL: <u>1/4" to 3"</u></p> <p>BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> 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 saturated. no seeps observed. Material above 12 inches was disturbed and must have been brought in.

SAMPLES TAKEN: <u>YES</u> / <u>NO</u>	WATER OBSERVED: <u>YES</u> / <u>NO</u>	BEDROCK: <u>YES</u> / <u>NO</u>
SAMPLE ID: <u>JS 1.1 7-9ft</u>	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK: <u>12ft</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	OR HOLE EXTENT: <u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 969.0</u>

Oakridge ENGINEERING		OWNER: Jeff Saver		TEST PIT / BORING NUMBER: 1		DATE: 3/21/19		CONTINUED SHEET 2 OF 2				
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	FINE 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	
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	
75" / 117"	CL	loam	5YR 4/3	100	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	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 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: a very good CL material, darker in color, no gravels - clean. Has the black mottles also						
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 to 4/4	100	7.5 YR 5/6	FEW COMMON MANY	FINE 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	
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: Material is like what was in SB 9						
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	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 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: This material is slightly different than any observed in previous test pits - is a good CL						
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	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 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: 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	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: 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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		TYPE: PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
BOUNDARY: —						% BOULDERS: >12" 0		% COBBLE: 3" to 12" 0		% GRAVEL: 1/4" to 3" 0	
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			

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	10M 6/3	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: 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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		TYPE: PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
BOUNDARY: —						% BOULDERS: >12" 0		% COBBLE: 3" to 12" 0		% GRAVEL: 1/4" to 3" 0	
DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE						TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN		NOTES: layer was frozen, notes are from small sample			

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	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: 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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		TYPE: PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
BOUNDARY: —						% BOULDERS: >12" 0		% COBBLE: 3" to 12" 0		% GRAVEL: 1/4" to 3" 10	
DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE						TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN		NOTES: has a little small fine gravel stone mixed in, under 3/8" in size also has some mottling			

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)

WATER OBSERVED: YES (NO)

BEDROCK: YES (NO)

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK: _____

OR HOLE EXTENT: _____


SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock
E1.962.8

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

		OWNER: <u>Jeff Saver</u>		TEST PIT / BORING NUMBER: <u>2</u>		DATE: <u>3/21/19</u>		CONTINUED SHEET 2 OF 2			
DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>57"</u> <u>17.1</u>	<u>CL</u>	<u>10cm</u>	<u>7.5YR 4/4</u>	<u>70</u>	<u>7.5YR 5/6</u>	FEW COMMON MANY	FAINT 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	PLASTICITY	MOISTURE	CONSISTENCY			ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>			FEW COMMON MANY	FAINT 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
BOUNDARY											
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>has some small gravels up to 1/2 inch in size, no larger</u> <u>Color is mostly a reddish/brown but</u>							
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 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			ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</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
BOUNDARY											
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>there are areas of a pinkish/gray</u> <u>Do not see any of the black mottles</u>							
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 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			ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</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
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 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			ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</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
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 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			ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</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
BOUNDARY											
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT		SMOOTH									
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		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 2.5/3	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 <u>NONE</u> PLASTICITY <u>NONPLASTIC</u> MOISTURE <u>DRY</u> CONSISTENCY <u>VERY SOFT</u> <u>SLOW</u> <u>LOW</u> <u>SLIGH. MOIST</u> <u>SOFT</u> <u>RAPID</u> <u>MEDIUM</u> <u>MOIST</u> <u>FIRM</u> <u></u> <u>HIGH</u> <u>VERY MOIST</u> <u>HARD</u> <u></u> <u></u> <u>WET</u> <u>VERY HARD</u>						GRADE <u>STRUCTURELESS</u> SIZE <u>VERY FINE</u> TYPE <u>PLATY</u> <u>WEAK</u> <u>FINE</u> <u>GRANULAR</u> <u>MODERATE</u> <u>MEDIUM</u> <u>CRUMB</u> <u>STRONG</u> <u>COARSE</u> <u>ANGULAR</u> <u></u> <u>VERY COARSE</u>		LOCATION <u>SUBANGULAR</u> % BOULDERS <u>>12"</u> <u>0</u> <u></u> <u>COLUMNAR</u> % COBBLE <u>3" to 12"</u> <u>0</u> <u></u> <u>PRISMATIC</u> % FINES <u>< #200</u> <u>70-80</u> <u></u> <u>SINGLE GRAIN</u>			
BOUNDARY <u>ABRUPT</u> TOPOGRAPHY <u>SMOOTH</u> NOTES: <u>This layer was frozen</u> <u>CLEAR</u> <u>WAVY</u> <u>notes are from small sample brought back</u> <u>GRADUAL</u> <u>IRREGULAR</u> <u>to office for notes</u> <u>DIFFUSE</u> <u>BROKEN</u>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
15" 23"	ML	Silt 10cm	10YR 5/3	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 LOESS BEDROCK
DILATANCY <u>NONE</u> PLASTICITY <u>NONPLASTIC</u> MOISTURE <u>DRY</u> CONSISTENCY <u>VERY SOFT</u> <u>SLOW</u> <u>LOW</u> <u>SLIGH. MOIST</u> <u>SOFT</u> <u>RAPID</u> <u>MEDIUM</u> <u>MOIST</u> <u>FIRM</u> <u></u> <u>HIGH</u> <u>VERY MOIST</u> <u>HARD</u> <u></u> <u></u> <u>WET</u> <u>VERY HARD</u>						GRADE <u>STRUCTURELESS</u> SIZE <u>VERY FINE</u> TYPE <u>PLATY</u> <u>WEAK</u> <u>FINE</u> <u>GRANULAR</u> <u>MODERATE</u> <u>MEDIUM</u> <u>CRUMB</u> <u>STRONG</u> <u>COARSE</u> <u>ANGULAR</u> <u></u> <u>VERY COARSE</u>		LOCATION <u>SUBANGULAR</u> % BOULDERS <u>>12"</u> <u>0</u> <u></u> <u>COLUMNAR</u> % COBBLE <u>3" to 12"</u> <u>0</u> <u></u> <u>PRISMATIC</u> % FINES <u>< #200</u> <u>50</u> <u></u> <u>SINGLE GRAIN</u>			
BOUNDARY <u>ABRUPT</u> TOPOGRAPHY <u>SMOOTH</u> NOTES: <u>layer was frozen, notes are from</u> <u>CLEAR</u> <u>WAVY</u> <u>small sample</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
23" 67"	ML	Silt 10cm	7.5YR 7/6	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 LOESS BEDROCK
DILATANCY <u>NONE</u> PLASTICITY <u>NONPLASTIC</u> MOISTURE <u>DRY</u> CONSISTENCY <u>VERY SOFT</u> <u>SLOW</u> <u>LOW</u> <u>SLIGH. MOIST</u> <u>SOFT</u> <u>RAPID</u> <u>MEDIUM</u> <u>MOIST</u> <u>FIRM</u> <u></u> <u>HIGH</u> <u>VERY MOIST</u> <u>HARD</u> <u></u> <u></u> <u>WET</u> <u>VERY HARD</u>						GRADE <u>STRUCTURELESS</u> SIZE <u>VERY FINE</u> TYPE <u>PLATY</u> <u>WEAK</u> <u>FINE</u> <u>GRANULAR</u> <u>MODERATE</u> <u>MEDIUM</u> <u>CRUMB</u> <u>STRONG</u> <u>COARSE</u> <u>ANGULAR</u> <u></u> <u>VERY COARSE</u>		LOCATION <u>SUBANGULAR</u> % BOULDERS <u>>12"</u> <u>0</u> <u></u> <u>COLUMNAR</u> % COBBLE <u>3" to 12"</u> <u>0</u> <u></u> <u>PRISMATIC</u> % FINES <u>< #200</u> <u>80</u> <u></u> <u>SINGLE GRAIN</u>			
BOUNDARY <u>ABRUPT</u> TOPOGRAPHY <u>SMOOTH</u> NOTES: <u>les a few gravel stones under</u> <u>CLEAR</u> <u>WAVY</u> <u>3/8" in size</u> <u>GRADUAL</u> <u>IRREGULAR</u> <u>DIFFUSE</u> <u>BROKEN</u>											

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)

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK
OR HOLE EXTENT: 14'-4"

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock
El. 965.9

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

OWNER: Jeff Saver
PROJECT: Hog Facility

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

SITE LOCATION: ADDRESS
@ 12884 State Hwy 48 Grantsburg
NORTHING 126041.4 EASTING 162271.1
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"		5.1t ML	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
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE			
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	% BOULDERS	% GRAVEL
						WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
						MODERATE	MEDIUM	CRUMB	PRISMATIC	% COBBLE	% FINES
						STRONG	COARSE	ANGULAR	SINGLE GRAIN	3" to 12"	< #200
						DISTINCTIVENESS TOPOGRAPHY					
						ABRUPT	SMOOTH				
						CLEAR	WAVY				
						GRADUAL	IRREGULAR				
						DIFFUSE	BROKEN				

NOTES: This layer was frozen, notes are from small sample brought back to office for notes

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
15 14.4"		10am	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
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE			
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	% BOULDERS	% GRAVEL
						WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
						MODERATE	MEDIUM	CRUMB	PRISMATIC	% COBBLE	% FINES
						STRONG	COARSE	ANGULAR	SINGLE GRAIN	3" to 12"	< #200
						DISTINCTIVENESS TOPOGRAPHY					
						ABRUPT	SMOOTH				
						CLEAR	WAVY				
						GRADUAL	IRREGULAR				
						DIFFUSE	BROKEN				

NOTES: is like the material in 5B #9, could be a very good SC but feels like a Ch for all of the 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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE			
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	% BOULDERS	% GRAVEL
						WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
						MODERATE	MEDIUM	CRUMB	PRISMATIC	% COBBLE	% FINES
						STRONG	COARSE	ANGULAR	SINGLE GRAIN	3" to 12"	< #200
						DISTINCTIVENESS TOPOGRAPHY					
						ABRUPT	SMOOTH				
						CLEAR	WAVY				
						GRADUAL	IRREGULAR				
						DIFFUSE	BROKEN				

NOTES:

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 <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>14'-4"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>El. 967.7</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 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			GRADE	STRUCTURE	SIZE	TYPE		% 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				% COBBLE	% FINES
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 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			GRADE	STRUCTURE	SIZE	TYPE		% 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				% COBBLE	% FINES
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 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			GRADE	STRUCTURE	SIZE	TYPE		% 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				% COBBLE	% FINES
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 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			GRADE	STRUCTURE	SIZE	TYPE		% 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				% COBBLE	% FINES
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 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			GRADE	STRUCTURE	SIZE	TYPE		% 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				% COBBLE	% FINES
BOUNDARY												
DISTINCTIVENESS TOPOGRAPHY NOTES:												
ABRUPT SMOOTH												
CLEAR WAVY												
GRADUAL IRREGULAR												
DIFFUSE BROKEN												

OWNER: Jeff Saver
PROJECT: Hog Facility

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

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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT						GRADE: WEAK STRUCTURE: WEAK SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: % BOULDERS: >12" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 70-80					
DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH NOTES: This layer was frozen, notes are from small sample brought back to office for notes.											


DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
15" / 5'-6"	CL	100m	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: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT						GRADE: WEAK STRUCTURE: WEAK SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: % BOULDERS: >12" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 50-60					
DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH NOTES: like layer 3 in 588											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
5'-6" / 9'-10"	CL	Clay 100m	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: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT						GRADE: WEAK STRUCTURE: WEAK SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: % BOULDERS: >12" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 60-70					
DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH NOTES: like in 588 material gets a lot harder to excavate, color stays the same.											

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	WATER OBSERVED: YES/NO	BEDROCK: YES/NO
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	DEPTH OF BEDROCK OR HOLE EXTENT: <u>14' 6"</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>E1. 966.8</u>
SAMPLE ID: _____	TYPE: _____ DEPTH: _____	<u>No Bedrock</u>

		OWNER: <u>Jeff Sever</u>		TEST PIT / BORING NUMBER: <u>5</u>		DATE: <u>3/2/19</u>		CONTINUED SHEET 2 OF 2			
DEPTH	USCS	SOIL TYPE & OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>9-10 ft</u> <u>14'6"</u>	<u>CL</u>	<u>loam</u>	<u>7.5YR</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 <u>HOMOGENEOUS</u>	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			ABUNDANCE	SIZE	TYPE	LOCATION		
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	<u>% BOULDERS</u> <u>>12"</u> <u>0</u>	<u>% GRAVEL</u> <u>1/4" to 3"</u> <u><1</u>
BOUNDARY											
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>material feels to me to be</u> <u>CL, could be a very good SC</u>							
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 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			ABUNDANCE	SIZE	TYPE	LOCATION		
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	<u>% BOULDERS</u> <u>>12"</u> <u>0</u>	<u>% GRAVEL</u> <u>1/4" to 3"</u> <u><1</u>
BOUNDARY											
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT		SMOOTH									
CLEAR		WAVY									
GRADUAL		IRREGULAR									
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			ABUNDANCE	SIZE	TYPE	LOCATION		
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	<u>% BOULDERS</u> <u>>12"</u> <u>0</u>	<u>% GRAVEL</u> <u>1/4" to 3"</u> <u><1</u>
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 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			ABUNDANCE	SIZE	TYPE	LOCATION		
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	<u>% BOULDERS</u> <u>>12"</u> <u>0</u>	<u>% GRAVEL</u> <u>1/4" to 3"</u> <u><1</u>
BOUNDARY											
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT		SMOOTH									
CLEAR		WAVY									
GRADUAL		IRREGULAR									
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			ABUNDANCE	SIZE	TYPE	LOCATION		
<u>NONE</u> <u>SLOW</u> <u>RAPID</u>	<u>NONPLASTIC</u> <u>LOW</u> <u>MEDIUM</u> <u>HIGH</u>	<u>DRY</u> <u>SLIGH. MOIST</u> <u>MOIST</u> <u>VERY MOIST</u> <u>WET</u>	<u>VERY SOFT</u> <u>SOFT</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	<u>% BOULDERS</u> <u>>12"</u> <u>0</u>	<u>% GRAVEL</u> <u>1/4" to 3"</u> <u><1</u>
BOUNDARY											
DISTINCTIVENESS		TOPOGRAPHY		NOTES:							
ABRUPT		SMOOTH									
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		BROKEN									

OWNER: Jeff Saver
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: Backslope

LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 9"	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 <u>NONE</u> PLASTICITY <u>LOW</u> MOISTURE <u>SLIGH. MOIST</u> CONSISTENCY <u>VERY SOFT</u> <u>SLOW</u> <u>NONPLASTIC</u> <u>MOIST</u> <u>SOFT</u> <u>RAPID</u> <u>HIGH</u> <u>VERY MOIST</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>						GRADE <u>WEAK</u> STRUCTURE <u>STRUCTURELESS</u> SIZE <u>VERY FINE</u> TYPE <u>PLATY</u> <u>MODERATE</u> <u>WEAK</u> <u>VERY FINE</u> <u>GRANULAR</u> <u>STRONG</u> <u>MODERATE</u> <u>COARSE</u> <u>CRUMB</u> <u>ANGULAR</u>		LOCATION <u>SUBANGULAR</u> % BOULDERS <u>>12"</u> % GRAVEL <u>1/4" to 3"</u> <u>COLUMNAR</u> <u>0</u> <u>0</u> <u>PRISMATIC</u> % COBBLE % FINES <u>SINGLE GRAIN</u> <u>3" to 12"</u> <u>< #200</u> <u>70-90</u>			
BOUNDARY <u>ABRUPT</u> TOPOGRAPHY <u>SMOOTH</u> NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes</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
9 / 15"	ML	Silt loam	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 <u>NONE</u> PLASTICITY <u>LOW</u> MOISTURE <u>SLIGH. MOIST</u> CONSISTENCY <u>VERY SOFT</u> <u>SLOW</u> <u>NONPLASTIC</u> <u>MOIST</u> <u>SOFT</u> <u>RAPID</u> <u>HIGH</u> <u>VERY MOIST</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>						GRADE <u>WEAK</u> STRUCTURE <u>STRUCTURELESS</u> SIZE <u>VERY FINE</u> TYPE <u>PLATY</u> <u>MODERATE</u> <u>WEAK</u> <u>VERY FINE</u> <u>GRANULAR</u> <u>STRONG</u> <u>MODERATE</u> <u>COARSE</u> <u>CRUMB</u> <u>ANGULAR</u>		LOCATION <u>SUBANGULAR</u> % BOULDERS <u>>12"</u> % GRAVEL <u>1/4" to 3"</u> <u>COLUMNAR</u> <u>0</u> <u>0</u> <u>PRISMATIC</u> % COBBLE % FINES <u>SINGLE GRAIN</u> <u>3" to 12"</u> <u>< #200</u> <u>70-90</u>			
BOUNDARY <u>ABRUPT</u> TOPOGRAPHY <u>SMOOTH</u> NOTES: <u>like above, layer was frozen, notes are from sample</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
15 / 13.0	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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY <u>NONE</u> PLASTICITY <u>LOW</u> MOISTURE <u>SLIGH. MOIST</u> CONSISTENCY <u>VERY SOFT</u> <u>SLOW</u> <u>NONPLASTIC</u> <u>MOIST</u> <u>SOFT</u> <u>RAPID</u> <u>HIGH</u> <u>VERY MOIST</u> <u>FIRM</u> <u>HARD</u> <u>VERY HARD</u>						GRADE <u>WEAK</u> STRUCTURE <u>STRUCTURELESS</u> SIZE <u>VERY FINE</u> TYPE <u>PLATY</u> <u>MODERATE</u> <u>WEAK</u> <u>VERY FINE</u> <u>GRANULAR</u> <u>STRONG</u> <u>MODERATE</u> <u>COARSE</u> <u>CRUMB</u> <u>ANGULAR</u>		LOCATION <u>SUBANGULAR</u> % BOULDERS <u>>12"</u> % GRAVEL <u>1/4" to 3"</u> <u>COLUMNAR</u> <u>0</u> <u>0</u> <u>PRISMATIC</u> % COBBLE % FINES <u>SINGLE GRAIN</u> <u>3" to 12"</u> <u>< #200</u> <u>45-60</u>			
BOUNDARY <u>ABRUPT</u> TOPOGRAPHY <u>SMOOTH</u> 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 CL is a very good SC by touch</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: YES/NO

SAMPLE ID: JS 6.1 2-3 ft.

SAMPLE ID: _____

SAMPLE ID: _____

WATER OBSERVED: YES/NO

TYPE: _____ DEPTH: _____

TYPE: _____ DEPTH: _____

TYPE: _____ DEPTH: _____

BEDROCK: YES/NO

DEPTH OF BEDROCK: 13.0"
 OR HOLE EXTENT: No Bedrock
at 96.7

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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
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DILATANCY NONE LOW 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 SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE TYPE PLATY GRANULAR CRUMB ANGULAR		LOCATION SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % BOULDERS _____ % COBBLE _____ % FINES _____			
BOUNDARY _____ DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: _____											

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

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

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

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 NONE LOW 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 SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE TYPE PLATY GRANULAR CRUMB ANGULAR		LOCATION SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % BOULDERS _____ % COBBLE _____ % FINES _____			
BOUNDARY _____ DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: _____											

OWNER: Jeff Saver
PROJECT: Hog Facility

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

SITE LOCATION: ADDRESS

@ 12834 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	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: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>WEAK</u> STRUCTURELESS: <u>VERY FINE</u> TYPE: <u>PLATY</u> SUBANGULAR: <u>COLUMNAR</u> % BOULDERS: <u>>12"</u> % GRAVEL: <u>1/4" to 3"</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>This Beckhoe Pit is identical to SB6 done just before this pit</u>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>This Beckhoe Pit is identical to SB6 done just before this pit</u>					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL 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: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>WEAK</u> STRUCTURELESS: <u>VERY FINE</u> TYPE: <u>PLATY</u> SUBANGULAR: <u>COLUMNAR</u> % BOULDERS: <u>>12"</u> % GRAVEL: <u>1/4" to 3"</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>like above, layer was frozen</u>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>like above, layer was frozen</u>					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL 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: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>WEAK</u> STRUCTURELESS: <u>VERY FINE</u> TYPE: <u>PLATY</u> SUBANGULAR: <u>COLUMNAR</u> % BOULDERS: <u>>12"</u> % GRAVEL: <u>1/4" to 3"</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>exactly like material in SB6</u>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>exactly like material in SB6</u>					

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: J.S. 7.1 12-19 inches TYPE: _____ DEPTH: _____
SAMPLE ID: JS 7.2 12-14 ft. TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK: 14.9"
OR HOLE EXTENT: No Bedrock
El. 968.85

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			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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK	
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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												
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DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
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BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
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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											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
TOPOGRAPHY												
NOTES:												
ABRUPT												
CLEAR												
GRADUAL												
DIFFUSE												
SMOOTH												
WAVY												
IRREGULAR												
BROKEN												

OWNER: Jeff Sover
PROJECT: Hog Facility

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

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 10YR 3/2	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: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>WEAK</u> STRUCTURE: <u>WEAK</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> LOCATION: <u>SUBANGULAR</u> % BOULDERS: <u>>12" 0</u> % GRAVEL: <u>1/4" to 3" 0</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes</u>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes</u>					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
12" 19"	ML	Silt 10YR 4/4	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: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>WEAK</u> STRUCTURE: <u>WEAK</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> LOCATION: <u>SUBANGULAR</u> % BOULDERS: <u>>12" 0</u> % GRAVEL: <u>1/4" to 3" 0</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>like above, layer was frozen notes are from sample</u>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>like above, layer was frozen notes are from sample</u>					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
19" 5'6"	Ch	10YR 5M 3/4	10YR 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: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>WEAK</u> STRUCTURE: <u>WEAK</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> LOCATION: <u>SUBANGULAR</u> % BOULDERS: <u>>12" 0</u> % GRAVEL: <u>1/4" to 3" 0</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>a good Ch - has a few small gravel stones up to 3/8" in size</u>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>a good Ch - has a few small gravel stones up to 3/8" in size</u>					

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

		OWNER: <u>Jeff Saver</u>		TEST PIT / BORING NUMBER: <u>8</u>		DATE: <u>3/21/19</u>		CONTINUED SHEET 2 OF 2			
DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>5'-6" / 9'-6"</u>	<u>CL</u>	<u>clay 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 <u>HOMOGENEOUS</u>	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 <u>MEDIUM</u> HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD <u>VERY HARD</u>		WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	<u>>12"</u>	<u>1/4" to 3"</u>
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES:		3" to 12"		< #200	
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN				<u>The material stays the same color but material stronger CL, it was a lot harder to excavate by backhoe</u>		<u>3" to 12" 0</u>		<u>< #200 60-70</u>	
DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
<u>9'-6" / 13'-6"</u>	<u>CL</u>	<u>loam</u>	<u>7.5YR 1/0</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 <u>HOMOGENEOUS</u>	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 <u>MEDIUM</u> HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD <u>VERY HARD</u>		WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	<u>>12"</u>	<u>1/4" to 3"</u>
BOUNDARY		DISTINCTIVENESS		TOPOGRAPHY		NOTES:		3" to 12"		< #200	
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN				<u>material is like in bottom of SB-6, 7 - if it's not a CL, it's a very good SC, but to me it feels CL</u>		<u>3" to 12" 0</u>		<u>< #200 45-60</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 <u>HOMOGENEOUS</u>	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		WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	<u>>12"</u>	<u>1/4" to 3"</u>
BOUNDARY		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
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NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD		WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	<u>>12"</u>	<u>1/4" to 3"</u>
BOUNDARY		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 PRISMATIC LENSED <u>HOMOGENEOUS</u>	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		WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	<u>>12"</u>	<u>1/4" to 3"</u>
BOUNDARY		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 PRISMATIC LENSED <u>HOMOGENEOUS</u>	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		WEAK MODERATE STRONG		PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	<u>>12"</u>	<u>1/4" to 3"</u>
BOUNDARY		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: 9
DATE: 3/21/2019
ELEVATION: 983.2
LOGGED BY: D. M. He

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 ☐

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	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 NONE <input checked="" type="checkbox"/> SLOW <input type="checkbox"/> RAPID <input type="checkbox"/> PLASTICITY NONPLASTIC <input type="checkbox"/> LOW <input checked="" type="checkbox"/> MEDIUM <input type="checkbox"/> HIGH <input type="checkbox"/> MOISTURE DRY <input type="checkbox"/> SLIGH. MOIST <input type="checkbox"/> MOIST <input type="checkbox"/> VERY MOIST <input type="checkbox"/> WET <input type="checkbox"/> CONSISTENCY VERY SOFT <input type="checkbox"/> SOFT <input type="checkbox"/> FIRM <input type="checkbox"/> HARD <input type="checkbox"/> VERY HARD <input type="checkbox"/> GRADE STRUCTURELESS <input type="checkbox"/> WEAK <input type="checkbox"/> MODERATE <input type="checkbox"/> STRONG <input type="checkbox"/> STRUCTURE SIZE: VERY FINE <input type="checkbox"/> FINE <input type="checkbox"/> MEDIUM <input type="checkbox"/> COARSE <input type="checkbox"/> VERY COARSE <input type="checkbox"/> TYPE PLATY <input type="checkbox"/> GRANULAR <input type="checkbox"/> CRUMB <input type="checkbox"/> ANGULAR <input type="checkbox"/> LOCATION SUBANGULAR <input type="checkbox"/> COLUMNAR <input type="checkbox"/> PRISMATIC <input type="checkbox"/> SINGLE GRAIN <input type="checkbox"/> % BOULDERS >12" <input type="checkbox"/> 1/4" to 3" <input type="checkbox"/> % COBBLE 3" to 12" <input type="checkbox"/> % FINES <#200 <input type="checkbox"/>						BOUNDARY DISTINCTIVENESS ABRUPT <input type="checkbox"/> CLEAR <input type="checkbox"/> GRADUAL <input type="checkbox"/> DIFFUSE <input type="checkbox"/> TOPOGRAPHY SMOOTH <input type="checkbox"/> WAVY <input type="checkbox"/> IRREGULAR <input type="checkbox"/> BROKEN <input type="checkbox"/> NOTES: <u>This layer was frozen, notes are from small sample brought back to office for notes, no structure observed because frozen</u>					

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

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

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 ☐

WATER OBSERVED: YES ☐ NO ☒

BEDROCK: YES ☐ NO ☒

SAMPLE ID: JS 9.1 8 to 10ft

TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK
OR HOLE EXTENT: 17'-9"

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

965.45 EI

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock

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
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DILATANCY						PLASTICITY		MOISTURE		CONSISTENCY	
NONE						NONPLASTIC		DRY		VERY SOFT	
SLOW						LOW		SLIGH. MOIST		SOFT	
RAPID						MEDIUM		MOIST		FIRM	
						HIGH		VERY MOIST		HARD	
								WET		VERY HARD	
BOUNDARY						GRADE		STRUCTURE		TYPE	
						WEAK		VERY FINE		PLATY	
						MODERATE		FINE		GRANULAR	
						STRONG		MEDIUM		CRUMB	
								COARSE		ANGULAR	
								VERY COARSE			
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 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
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DILATANCY						PLASTICITY		MOISTURE		CONSISTENCY	
NONE						NONPLASTIC		DRY		VERY SOFT	
SLOW						LOW		SLIGH. MOIST		SOFT	
RAPID						MEDIUM		MOIST		FIRM	
						HIGH		VERY MOIST		HARD	
								WET		VERY HARD	
BOUNDARY						GRADE		STRUCTURE		TYPE	
						WEAK		VERY FINE		PLATY	
						MODERATE		FINE		GRANULAR	
						STRONG		MEDIUM		CRUMB	
								COARSE		ANGULAR	
								VERY COARSE			
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 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
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DILATANCY						PLASTICITY		MOISTURE		CONSISTENCY	
NONE						NONPLASTIC		DRY		VERY SOFT	
SLOW						LOW		SLIGH. MOIST		SOFT	
RAPID						MEDIUM		MOIST		FIRM	
						HIGH		VERY MOIST		HARD	
								WET		VERY HARD	
BOUNDARY						GRADE		STRUCTURE		TYPE	
						WEAK		VERY FINE		PLATY	
						MODERATE		FINE		GRANULAR	
						STRONG		MEDIUM		CRUMB	
								COARSE		ANGULAR	
								VERY COARSE			
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 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
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DILATANCY						PLASTICITY		MOISTURE		CONSISTENCY	
NONE						NONPLASTIC		DRY		VERY SOFT	
SLOW						LOW		SLIGH. MOIST		SOFT	
RAPID						MEDIUM		MOIST		FIRM	
						HIGH		VERY MOIST		HARD	
								WET		VERY HARD	
BOUNDARY						GRADE		STRUCTURE		TYPE	
						WEAK		VERY FINE		PLATY	
						MODERATE		FINE		GRANULAR	
						STRONG		MEDIUM		CRUMB	
								COARSE		ANGULAR	
								VERY COARSE			
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 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	
NONE						NONPLASTIC		DRY		VERY SOFT	
SLOW						LOW		SLIGH. MOIST		SOFT	
RAPID						MEDIUM		MOIST		FIRM	
						HIGH		VERY MOIST		HARD	
								WET		VERY HARD	
BOUNDARY						GRADE		STRUCTURE		TYPE	
						WEAK		VERY FINE		PLATY	
						MODERATE		FINE		GRANULAR	
						STRONG		MEDIUM		CRUMB	
								COARSE		ANGULAR	
								VERY COARSE			
DISTINCTIVENESS						TOPOGRAPHY		NOTES:			
ABRUPT						SMOOTH					
CLEAR						WAVY					
GRADUAL						IRREGULAR					
DIFFUSE						BROKEN					



Oakridge
ENGINEERING

Chippewa Falls, WI 54729
www.OakridgeEng.com

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: Backslope

LANDSCAPE GEOMETRY: Uniform

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0" 9"	ML	Silt 10YR2.5/2	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
						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 SLOW 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					
						>12" <u>0</u>					
DISTINCTIVENESS						% COBBLE					
ABRUPT CLEAR GRADUAL DIFFUSE						3" to 12" <u>0</u>					
TOPOGRAPHY						% FINES					
SMOOTH WAVY IRREGULAR BROKEN						< #200 <u>70-90</u>					

NOTES: This layer was frozen, notes
are from small sample brought back to office
for notes, no structure observed because frozen

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
9" 18"	ML	Silt 10YR2.5/2	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
						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 SLOW 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					
						>12" <u>0</u>					
DISTINCTIVENESS						% COBBLE					
ABRUPT CLEAR GRADUAL DIFFUSE						3" to 12" <u>0</u>					
TOPOGRAPHY						% FINES					
SMOOTH WAVY IRREGULAR BROKEN						< #200 <u>70-80</u>					

NOTES: like layer above, notes from
small sample as layer was frozen

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
18" 22"	ML	Silt 10YR2.5/2	2.5Y 7/3 7.5YR 4/4	70 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
						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 SLOW 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					
						>12" <u>0</u>					
DISTINCTIVENESS						% COBBLE					
ABRUPT CLEAR GRADUAL DIFFUSE						3" to 12" <u>0</u>					
TOPOGRAPHY						% FINES					
SMOOTH WAVY IRREGULAR BROKEN						< #200 <u>70-80</u>					

NOTES: like layer above, notes from
small sample as layer was frozen

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 NO

WATER OBSERVED: YES/NO NO

BEDROCK: YES/NO NO

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK
OR HOLE EXTENT: 17.8"

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock
964.1 EL.

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

SHEET SIDE 1 OF 2

OKE SOIL LOG-2 REV.3 11-27-2018

OAKRIDGE
ENGINEERINGOWNER: Jeff SaverTEST PIT / BORING NUMBER: 10DATE: 3/21/19CONTINUED
SHEET 2 OF 2

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>95</u>	<u>2.5Y 3/1</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	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHTLY MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE	FINE MINIMUM COARSE	PLATY GRANULAR CRUMB ANGULAR	>12"	1/4" to 3"
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES: <u>Has very small black mottles in it, also is a very good, strong clay 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" / 7.8'</u>	<u>CL</u>	<u>Loam</u>	<u>2.5YR 4/4</u>	<u>95</u>	<u>2.5Y 3/1</u> <u>2.5YR 3/4</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	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHTLY MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE	FINE MINIMUM COARSE	PLATY GRANULAR CRUMB ANGULAR	>12"	1/4" to 3"
BOUNDARY											
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
						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	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHTLY MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE	FINE MINIMUM COARSE	PLATY GRANULAR CRUMB ANGULAR	>12"	1/4" to 3"
BOUNDARY											
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
						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	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHTLY MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE	FINE MINIMUM COARSE	PLATY GRANULAR CRUMB ANGULAR	>12"	1/4" to 3"
BOUNDARY											
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
						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	% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHTLY MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			WEAK MODERATE STRONG	STRUCTURELESS VERY FINE FINE MEDIUM COARSE VERY COARSE	FINE MINIMUM COARSE	PLATY GRANULAR CRUMB ANGULAR	>12"	1/4" to 3"
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES: <u>After @ 9ft have spots that the till has a greenish color also 5Y 5/3 about 25%</u>											
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										



Oakridge
ENGINEERING

Chippewa Falls, WI 54729
www.OakridgeEng.com

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 5/3	100	-	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED	ALLUVIUM SLOPE ALLUV. COLLUVIUM
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT	PED SURFACE IN-MATRIX ROOT HAIR	SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE					
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					
						GRADE WEAK MODERATE STRONG		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		% BOULDERS >12" 0	% GRAVEL 1/4" to 3" 0
										% COBBLE 3" to 12" 0	% FINES < #200 70-80
DISTINCTIVENESS		TOPOGRAPHY		NOTES: This layer was frozen, notes are from small sample brought back to office							
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" / 38"	ML	Silt loam	10YR 5/3	90	5YR 4/4	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED	ALLUVIUM SLOPE ALLUV. COLLUVIUM
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT	PED SURFACE IN-MATRIX ROOT HAIR	SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE					
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					
						GRADE WEAK MODERATE STRONG		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		% BOULDERS >12" 0	% GRAVEL 1/4" to 3" 0
										% COBBLE 3" to 12" 0	% FINES < #200 60-70
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
38" / 18.6"	CL	loam	10YR 5/3	30	2.5Y 3/1	FEW COMMON MANY	MINIMUM COARSE	FAINT DISTINCT	IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED	ALLUVIUM SLOPE ALLUV. COLLUVIUM
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT	PED SURFACE IN-MATRIX ROOT HAIR	SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		STRUCTURE					
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					
						GRADE WEAK MODERATE STRONG		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN		% BOULDERS >12" 0	% GRAVEL 1/4" to 3" 0
										% COBBLE 3" to 12" 0	% FINES < #200 45-60
DISTINCTIVENESS		TOPOGRAPHY		NOTES: Could be a very good SC can feel a few sand grains in it but it ribbons well, after @ 6-7 ft it is mostly 5YR 4/4							
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR 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 ☒ NO

WATER OBSERVED: YES ☒ NO

BEDROCK: YES ☒ NO

SAMPLE ID:

JS 11.1 / 16-38 inches

TYPE:

DEPTH:

DEPTH OF BEDROCK

OR HOLE EXTENT: 18.6"

SAMPLE ID:

TYPE:

DEPTH:

No Bedrock

SAMPLE ID:

TYPE:

DEPTH:

El. 966.0



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 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	STRUCTURE	SIZE	TYPE		
NONE	NONPLASTIC	DRY	VERY SOFT			WEAK	STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	% BOULDERS
SLOW	LOW	SLIGH. MOIST	SOFT			MODERATE		FINE	GRANULAR	COLUMNAR	% GRAVEL
RAPID	MEDIUM	MOIST	FIRM			STRONG		MEDIUM	CRUMB	PRISMATIC	
	HIGH	VERY MOIST	HARD					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 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
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	STRUCTURE	SIZE	TYPE		
NONE	NONPLASTIC	DRY	VERY SOFT			WEAK	STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	% BOULDERS
SLOW	LOW	SLIGH. MOIST	SOFT			MODERATE		FINE	GRANULAR	COLUMNAR	% GRAVEL
RAPID	MEDIUM	MOIST	FIRM			STRONG		MEDIUM	CRUMB	PRISMATIC	
	HIGH	VERY MOIST	HARD					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
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	STRUCTURE	SIZE	TYPE		
NONE	NONPLASTIC	DRY	VERY SOFT			WEAK	STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	% BOULDERS
SLOW	LOW	SLIGH. MOIST	SOFT			MODERATE		FINE	GRANULAR	COLUMNAR	% GRAVEL
RAPID	MEDIUM	MOIST	FIRM			STRONG		MEDIUM	CRUMB	PRISMATIC	
	HIGH	VERY MOIST	HARD					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 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	STRUCTURE	SIZE	TYPE		
NONE	NONPLASTIC	DRY	VERY SOFT			WEAK	STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	% BOULDERS
SLOW	LOW	SLIGH. MOIST	SOFT			MODERATE		FINE	GRANULAR	COLUMNAR	% GRAVEL
RAPID	MEDIUM	MOIST	FIRM			STRONG		MEDIUM	CRUMB	PRISMATIC	
	HIGH	VERY MOIST	HARD					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 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	STRUCTURE	SIZE	TYPE		
NONE	NONPLASTIC	DRY	VERY SOFT			WEAK	STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	% BOULDERS
SLOW	LOW	SLIGH. MOIST	SOFT			MODERATE		FINE	GRANULAR	COLUMNAR	% GRAVEL
RAPID	MEDIUM	MOIST	FIRM			STRONG		MEDIUM	CRUMB	PRISMATIC	
	HIGH	VERY MOIST	HARD					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.H.

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48, Grantsburg
NORTHING 16267.9 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
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	>12"	1/4" to 3"
						WEAK	FINE	GRANULAR	COLUMNAR		
						MODERATE	MEDIUM	CRUMB	PRISMATIC		
						STRONG	COARSE	ANGULAR	SINGLE GRAIN		
						BOUNDARY					
						DISTINCTIVENESS					
						ABRUPT					
						CLEAR					
						GRADUAL					
						DIFFUSE					
						TOPOGRAPHY					
						SMOOTH					
						WAVY					
						IRREGULAR					
						BROKEN					
NOTES: <u>This layer is frozen, notes are from small sample brought back to office for notes. Material is like SB 15</u>											

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
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	>12"	1/4" to 3"
						WEAK	FINE	GRANULAR	COLUMNAR		
						MODERATE	MEDIUM	CRUMB	PRISMATIC		
						STRONG	COARSE	ANGULAR	SINGLE GRAIN		
						BOUNDARY					
						DISTINCTIVENESS					
						ABRUPT					
						CLEAR					
						GRADUAL					
						DIFFUSE					
						TOPOGRAPHY					
						SMOOTH					
						WAVY					
						IRREGULAR					
						BROKEN					
NOTES: <u>IS ML silt material with the fine black mottles. This was ML material by checking small chiseled out chunks.</u>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
49" / 17'7"	CL	Loam	5YR 4/4 to	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
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE	LOCATION	% BOULDERS	% GRAVEL
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR	>12"	1/4" to 3"
						WEAK	FINE	GRANULAR	COLUMNAR		
						MODERATE	MEDIUM	CRUMB	PRISMATIC		
						STRONG	COARSE	ANGULAR	SINGLE GRAIN		
						BOUNDARY					
						DISTINCTIVENESS					
						ABRUPT					
						CLEAR					
						GRADUAL					
						DIFFUSE					
						TOPOGRAPHY					
						SMOOTH					
						WAVY					
						IRREGULAR					
						BROKEN					
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>											

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

SAMPLE ID: JS 12.1 3-4ft

SAMPLE ID: _____

SAMPLE ID: _____

WATER OBSERVED: YES (NO)

TYPE: _____ DEPTH: _____

TYPE: _____ DEPTH: _____

TYPE: _____ DEPTH: _____

BEDROCK: YES (NO)

DEPTH OF BEDROCK

OR HOLE EXTENT: 17'7"

El. 962.5

No Bedrock



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 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			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 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 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			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 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 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			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 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 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			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 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 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			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 TOPOGRAPHY NOTES:										3" to 12"	< #200
ABRUPT CLEAR GRADUAL DIFFUSE										SMOOTH WAVY IRREGULAR BROKEN	

OWNER: Jeff Saver
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 10YR 10cm 3/2	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: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT						GRADE: WEAK STRUCTURE: WEAK SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: PRISMATIC					
BOUNDARY: NONE PLASTICITY: LOW MOISTURE: SLIGHTLY MOIST CONSISTENCY: FIRM						% BOULDERS: >12" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 70-90					
DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH						NOTES: This layer was frozen, notes are from small sample brought back to office for notes.					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
16" 55"	ML	Silt 7.5YR 10cm 5/2 to 5/3 to 7.5YR 5/4	7.5YR 5/2 to 5/3 to 5/4	30	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: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT						GRADE: WEAK STRUCTURE: WEAK SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: PRISMATIC					
BOUNDARY: NONE PLASTICITY: LOW MOISTURE: SLIGHTLY MOIST CONSISTENCY: FIRM						% BOULDERS: >12" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 70-90					
DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH						NOTES:					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
55" 16.6"	ML	10cm 7.5YR 4/3 to 4/4	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: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT						GRADE: WEAK STRUCTURE: WEAK SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: PRISMATIC					
BOUNDARY: NONE PLASTICITY: LOW MOISTURE: SLIGHTLY MOIST CONSISTENCY: FIRM						% BOULDERS: >12" 0 % COBBLE: 3" to 12" 0 % FINES: < #200 40-60					
DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH						NOTES: The material has more coarse grains than materials yesterday but don't see any gravels or cobbles (1)					

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: <u>16'-6"</u>
SAMPLE ID: _____	DEPTH: _____	OR HOLE EXTENT: <u>No Bedrock</u>
SAMPLE ID: _____	DEPTH: _____	<u>El. 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 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		% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		WET	VERY HARD				VERY COARSE			3" to 12"	< #200
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
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NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		WET	VERY HARD				VERY COARSE			3" to 12"	< #200
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
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		WET	VERY HARD				VERY COARSE			3" to 12"	< #200
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT SMOOTH											
CLEAR WAVY											
GRADUAL IRREGULAR											
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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	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		WET	VERY HARD				VERY COARSE			3" to 12"	< #200
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT SMOOTH											
CLEAR WAVY											
GRADUAL IRREGULAR											
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DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
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NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		WET	VERY HARD				VERY COARSE			3" to 12"	< #200
BOUNDARY											
DISTINCTIVENESS TOPOGRAPHY NOTES:											
ABRUPT SMOOTH											
CLEAR WAVY											
GRADUAL IRREGULAR											
DIFFUSE BROKEN											

OWNER:

PROJECT:

TEST PIT / BORING NUMBER:

DATE:

ELEVATION:

LOGGED BY: *D. M. He*

SITE LOCATION: ADDRESS

NORTHING

EASTING

COUNTY / STATE:

ANY KARST FEATURES WITHIN 1000 FEET: YES / NO

LANDSCAPE POSITION:

LANDSCAPE GEOMETRY:

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 15"	ML	5.1t Loam	10YR 3/8	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 LOW MEDIUM HIGH MOISTURE DRY SLIGH. MOIST MOIST VERY MOIST WET CONSISTENCY VERY SOFT SOFT FIRM HARD VERY HARD GRADE STRUCTURELESS WEAK MODERATE STRONG SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE TYPE PLATY GRANULAR CRUMB ANGULAR LOCATION SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % BOULDERS >12" 0 % GRAVEL 1/4" to 3" 0 % COBBLE 3" to 12" 0 % FINES < #200 70-90</p>											
<p>BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: This layer was frozen, notes for this was done by small sample brought back to office</p>											
15" 50"	ML	5.1t Loam	7.5YR 5R 4.5/3 70 3/4	30	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
<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 SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE TYPE PLATY GRANULAR CRUMB ANGULAR LOCATION SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % BOULDERS >12" 0 % GRAVEL 1/4" to 3" 0 % COBBLE 3" to 12" 0 % FINES < #200 70-90</p>											
<p>BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES:</p>											
50" 16'6"	CL	100m	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
<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 SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE TYPE PLATY GRANULAR CRUMB ANGULAR LOCATION SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % BOULDERS >12" 0 % GRAVEL 1/4" to 3" 0 % COBBLE 3" to 12" 0 % FINES < #200 70-90</p>											
<p>BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: Material is like SB 13 Could be a very good SC because of the coarse grains in it</p>											

OVERALL NOTES:

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 ☐

SAMPLE ID:

SAMPLE ID:

SAMPLE ID:

WATER OBSERVED: YES / NO ☒

TYPE:

TYPE:

TYPE:

DEPTH:

DEPTH:

DEPTH:

BEDROCK: YES ☒ NO ☐

DEPTH OF BEDROCK

OR HOLE EXTENT: 16-6

No Bedrock
El. 962.0

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 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			GRADE	SIZE	TYPE		% 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 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			GRADE	SIZE	TYPE		% 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 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
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% 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 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			GRADE	SIZE	TYPE		% 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 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			GRADE	SIZE	TYPE		% 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: Hwy 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
NORTHING 126277.6 EASTING 162388.0
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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT GRADE: STRUCTURELESS SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: % BOULDERS >12" 0, % GRAVEL 1/4" to 3" 0, % COBBLE 3" to 12" 0, % FINES < #200 70-80											
BOUNDARY: — DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH NOTES: This layer was frozen, notes are from small sample brought back to office for notes. This top soil not as silty ①											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
16" / 16'2"	CL	10YR 5/4	5YR 4/4	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: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT GRADE: STRUCTURELESS SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: % BOULDERS >12" 0, % GRAVEL 1/4" to 3" 0, % COBBLE 3" to 12" 0, % FINES < #200 45-60											
BOUNDARY: — DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH NOTES: Starts as 5YR 4/4 and silty, turns to 2.5YR 4/4, has the fine black mottles in the upper part. 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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY: NONE PLASTICITY: NONPLASTIC MOISTURE: DRY CONSISTENCY: VERY SOFT GRADE: STRUCTURELESS SIZE: VERY FINE TYPE: PLATY LOCATION: SUBANGULAR STRUCTURE: COLUMNAR GEOLOGY: % BOULDERS >12" 0, % GRAVEL 1/4" to 3" 0, % COBBLE 3" to 12" 0, % FINES < #200											
BOUNDARY: — DISTINCTIVENESS: ABRUPT TOPOGRAPHY: SMOOTH NOTES: 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											

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 CL tills. at the office.

SAMPLES TAKEN: YES (NO)
SAMPLE ID: JS 15.1 5 to 6 ft TYPE: _____ DEPTH: _____
SAMPLE ID: JS 15.2 13 to 15 ft TYPE: _____ DEPTH: _____
SAMPLE ID: _____ TYPE: _____ DEPTH: _____

WATER OBSERVED: YES (NO)
BEDROCK: YES (NO)
DEPTH OF BEDROCK: 16'2"
OR HOLE EXTENT: No Bedrock
E1. 963.9



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 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	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"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES	
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	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"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES	
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	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"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES	
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	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"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES	
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	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"	1/4" to 3"	
BOUNDARY											% COBBLE	% FINES	
DISTINCTIVENESS											TOPOGRAPHY	NOTES:	
ABRUPT CLEAR GRADUAL DIFFUSE											SMOOTH WAVY IRREGULAR BROKEN		

OWNER: Jeff Souer
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 162379.4
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 100m	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
						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						GRADE					
NONE LOW RAPID						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						SUBANGULAR					
VERY SOFT SOFT FIRM HARD VERY HARD						COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
						>12" 0					
						% COBBLE					
						3" to 12" 0					
						% FINES					
						< #200 70-80					
DISTINCTIVENESS						TOPOGRAPHY					
ABRUPT CLEAR GRADUAL DIFFUSE						SMOOTH WAVY IRREGULAR BROKEN					
NOTES: <u>This layer was frozen, notes</u>											
<u>are from a small sample brought back to</u>											
<u>the office</u>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
16" 43"	ML	Silt 100m	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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
						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						GRADE					
NONE LOW RAPID						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						SUBANGULAR					
VERY SOFT SOFT FIRM HARD VERY HARD						COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
						>12" 0					
						% COBBLE					
						3" to 12" 0					
						% FINES					
						< #200 70-80					
DISTINCTIVENESS						TOPOGRAPHY					
ABRUPT CLEAR GRADUAL DIFFUSE						SMOOTH WAVY IRREGULAR BROKEN					
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	100m	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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
						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						GRADE					
NONE LOW RAPID						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						SUBANGULAR					
VERY SOFT SOFT FIRM HARD VERY HARD						COLUMNAR PRISMATIC SINGLE GRAIN					
BOUNDARY						% BOULDERS					
						>12" 0					
						% COBBLE					
						3" to 12" 0					
						% FINES					
						< #200 50-60					
DISTINCTIVENESS						TOPOGRAPHY					
ABRUPT CLEAR GRADUAL DIFFUSE						SMOOTH WAVY IRREGULAR BROKEN					
NOTES: <u>Has a few areas of brownish</u>											
<u>red shades. Could be a strong SC</u>											
<u>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>	TYPE: _____	DEPTH: _____	SAMPLE ID: <u>JS 16.2 11-14 ft</u>	TYPE: _____	DEPTH: _____
SAMPLE ID: _____	TYPE: _____	DEPTH: _____	SAMPLE ID: _____	TYPE: _____	DEPTH: _____

DEPTH OF BEDROCK
OR HOLE EXTENT: 16.9"
No Bedrock
El. 962.85



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 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	GEOLOGY	
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 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	GEOLOGY	
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 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	GEOLOGY	
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 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	GEOLOGY	
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 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	GEOLOGY	
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:

PROJECT:

TEST PIT / BORING NUMBER:

DATE:

ELEVATION:

LOGGED BY:

SITE LOCATION: ADDRESS

NORTHING

FASTING

COUNTY / STATE:

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO

LANDSCAPE POSITION:

LANDSCAPE GEOMETRY:

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 12"	ML	silt 100M	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 LESS BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			ABUNDANCE	SIZE	TYPE	LOCATION		
NON SLOW RAPID	LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE				% BOULDERS	% GRAVEL
			GRADE STRUCTURELESS WEAK MODERATE STRONG				SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE	TYPE PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" 0	1/4" to 3" 0
										% COBBLE	% FINES
BOUNDARY										3" to 12" 0	<#200 70-90
DISTINCTIVENESS	TOPOGRAPHY	NOTES: This layer was frozen, notes are from small sample brought back to the office									
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" / 48"	ML	51H 10cm	7.5YR 5/3	85	2.5Y 3.1	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLOVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
			7.5YR 3/6	15	7.5YR 4/6	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN MATRIX ROOT HAIR		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			STRUCTURE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHT MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			GRADE STRUCTURELESS WEAK MODERATE STRONG	SIZE VERY FINE FINE MEDIUM COARSE VERY COARSE	TYPE PLATY GRANULAR CRUMB ANGULAR		>12" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY										% COBBLE	% FINES
DISTINCTIVENESS										3" to 12" <u>0</u>	< #200 <u>70-90</u>
TOPOGRAPHY		NOTES:									
ABRUPT											
CLEAR											
GRADUAL											
DIFFUSE											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL 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	PLASTICITY	MOISTURE	CONSISTENCY			ABUNDANCE	SIZE	TYPE	LOCATION		
NONE SLOW RAPID	NONPLASTIC LOW <u>MEDIUM</u> HIGH	DRY <u>SLIGHT MOIST</u> MOIST VERY MOIST WET	VERY SOFT SOFT <u>FIRM</u> HARD VERY HARD			FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE	SIZE	TYPE		% BOULDERS	% GRAVEL
						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>
										% COBBLE	% FINES
										3" to 12" <u>0</u>	<#200 <u>506</u>
BOUNDARY DISTINCTIVENESS TOPOGRAPHY NOTES: Do not see the coarse grains in this material, like the last two bedrock pits - material is more like SPS and SPS											
ABRUPT	SMOOTH										
CLEAR	WAVY										
GRADUAL	IRREGULAR										
DIFFUSE	BROKEN										

OVERALL NOTES:

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.
didn't see the black mottles

SAMPLES TAKEN: YES ☒ NO ☐

SAMPLE ID:

SAMPLE ID:

SAMPLE ID:

WATER OBSERVED: YES ☒ NO ☐

TYPE:

TYPE: _____

TYPE:_____

BEDROCK: YES / NO

DEPTH OF BEDROCK

OR HOLE EXTENT :

No Bedrock
El. 962.8



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 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			GRADE	STRUCTURE	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			WEAK MODERATE STRONG	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 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			GRADE	STRUCTURE	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			WEAK MODERATE STRONG	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 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			GRADE	STRUCTURE	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			WEAK MODERATE STRONG	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 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			GRADE	STRUCTURE	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			WEAK MODERATE STRONG	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 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: <u>NONE</u> LOW RAPID						PLASTICITY: <u>NONPLASTIC</u> LOW MEDIUM HIGH		MOISTURE: <u>DRY</u> SLIGHT, MOIST MOIST VERY MOIST WET		CONSISTENCY: <u>VERY SOFT</u> SOFT FIRM HARD VERY HARD	
GRADE: <u>STRUCTURELESS</u> WEAK MODERATE STRONG						SIZE: <u>VERY FINE</u> FINE MEDIUM COARSE VERY COARSE		TYPE: <u>PLATY</u> GRANULAR CRUMB ANGULAR		% BOULDERS: <u>>12"</u> % COBBLE: <u>3" to 12"</u> % FINES: <u>< #200</u>	
BOUNDARY: <u>ABRUPT</u> CLEAR GRADUAL DIFFUSE						TOPOGRAPHY: <u>SMOOTH</u> WAVY IRREGULAR BROKEN					
NOTES: <u>This layer was frozen, notes</u> <u>are from small sample brought back to</u> <u>office</u>											

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: <u>NONE</u> LOW RAPID						PLASTICITY: <u>NONPLASTIC</u> LOW MEDIUM HIGH		MOISTURE: <u>DRY</u> SLIGHT, MOIST MOIST VERY MOIST WET		CONSISTENCY: <u>VERY SOFT</u> SOFT FIRM HARD VERY HARD	
GRADE: <u>STRUCTURELESS</u> WEAK MODERATE STRONG						SIZE: <u>VERY FINE</u> FINE MEDIUM COARSE VERY COARSE		TYPE: <u>PLATY</u> GRANULAR CRUMB ANGULAR		% BOULDERS: <u>>12"</u> % COBBLE: <u>3" to 12"</u> % FINES: <u>< #200</u>	
BOUNDARY: <u>ABRUPT</u> CLEAR GRADUAL DIFFUSE						TOPOGRAPHY: <u>SMOOTH</u> WAVY IRREGULAR BROKEN					
NOTES: <u>Material is very similar</u> <u>to SB17</u>											

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: <u>NONE</u> LOW RAPID						PLASTICITY: <u>NONPLASTIC</u> LOW MEDIUM HIGH		MOISTURE: <u>DRY</u> SLIGHT, MOIST MOIST VERY MOIST WET		CONSISTENCY: <u>VERY SOFT</u> SOFT FIRM HARD VERY HARD	
GRADE: <u>STRUCTURELESS</u> WEAK MODERATE STRONG						SIZE: <u>VERY FINE</u> FINE MEDIUM COARSE VERY COARSE		TYPE: <u>PLATY</u> GRANULAR CRUMB ANGULAR		% BOULDERS: <u>>12"</u> % COBBLE: <u>3" to 12"</u> % FINES: <u>< #200</u>	
BOUNDARY: <u>ABRUPT</u> CLEAR GRADUAL DIFFUSE						TOPOGRAPHY: <u>SMOOTH</u> WAVY IRREGULAR BROKEN					
NOTES: <u>Material is very similar</u> <u>to SB17</u>											

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 Bedhoe pit is very similar to SB17

SAMPLES TAKEN: YES/NO

WATER OBSERVED: YES/NO

BEDROCK: YES/NO

SAMPLE ID: JS 18.1 6/6/9A

TYPE: _____ DEPTH: _____


DEPTH OF BEDROCK: 16.1"
OR HOLE EXTENT: No Bedrock
El. 963.2


SAMPLE ID: _____


TYPE: _____ DEPTH: _____

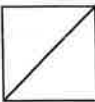
SAMPLE ID: _____


TYPE: _____ DEPTH: _____

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

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

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

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

OWNER: Jeff Sauer
PROJECT: Hog Facility

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

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 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 PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
DILATANCY: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>STRUCTURELESS</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> % BOULDERS: <u>>12" 0</u> % GRAVEL: <u>1/4" to 3" 0</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>This layer was frozen, notes are from small sample brought back to office very similar to SB17 Top soil</u>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> 3" to 12" <u>0</u> < #200 <u>70-90</u>					
14" 33"	ML	Silt clay	7.5YR 5/4	75	—	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: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>STRUCTURELESS</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> % BOULDERS: <u>>12" 0</u> % GRAVEL: <u>1/4" to 3" 0</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> 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>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> 3" to 12" <u>0</u> < #200 <u>490</u>					
33" 164"	CL	clay	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: <u>NONE</u> PLASTICITY: <u>NONPLASTIC</u> MOISTURE: <u>DRY</u> CONSISTENCY: <u>VERY SOFT</u>						GRADE: <u>STRUCTURELESS</u> SIZE: <u>VERY FINE</u> TYPE: <u>PLATY</u> % BOULDERS: <u>>12" 0</u> % GRAVEL: <u>1/4" to 3" 0</u>					
BOUNDARY: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> NOTES: <u>Very similar to SB17 and SB18</u>						DISTINCTIVENESS: <u>ABRUPT</u> TOPOGRAPHY: <u>SMOOTH</u> 3" to 12" <u>0</u> < #200 <u>240</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

SAMPLES TAKEN: YES/NO NO

WATER OBSERVED: YES/NO NO

BEDROCK: YES/NO NO

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK
OR HOLE EXTENT: 16.4"
No Bedrock
E1. 961.4

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

SAMPLE ID: _____

TYPE: _____ DEPTH: _____



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 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										% 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
						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										% 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
						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										% 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
						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										% 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
						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										% COBBLE	% FINES
DISTINCTIVENESS										3" to 12" _____	< #200 _____
TOPOGRAPHY		NOTES:									
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN									

 Oakridge ENGINEERING		OWNER: <u>Jeff Sever</u>		TEST PIT / BORING NUMBER: <u>20</u>		DATE: <u>3/28/19</u>		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 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	% 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" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Material is very similar to SB 17 and SB 18</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	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	% 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" <u>0</u>	1/4" to 3" <u>0</u>
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	% 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" <u>0</u>	1/4" to 3" <u>0</u>
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	% 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" <u>0</u>	1/4" to 3" <u>0</u>
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	% 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" <u>0</u>	1/4" to 3" <u>0</u>
BOUNDARY												
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

ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)

NORTHING 126265.2 EASTING 162652.9

LANDSCAPE POSITION: Toe slope

COUNTY / STATE: Burnett Cty. WI

LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 / 17"	ML	Silt	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
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE			
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
						WEAK	FINE	GRANULAR	COLUMNAR		
						MODERATE	MEDIUM	CRUMB	PRISMATIC		
						STRONG	COARSE	ANGULAR	SINGLE GRAIN		
						DILATANCY					
						NONPLASTIC					
						LOW					
						MEDIUM					
						HIGH					
						MOISTURE					
						DRY					
						SLIGH. MOIST					
						MOIST					
						VERY MOIST					
						WET					
						CONSISTENCY					
						VERY SOFT					
						SOFT					
						FIRM					
						HARD					
						VERY HARD					
						BOUNDARY					
						ABRUPT					
						CLEAR					
						GRADUAL					
						DIFFUSE					
						TOPOGRAPHY					
						SMOOTH					
						WAVY					
						IRREGULAR					
						BROKEN					
						NOTES: This layer was frozen, notes are from small sample brought back to office. Material is blacker and more silty than other pits.					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
17" / 37"	ML	Silt	7.5YR 5/3	90	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
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE			
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
						WEAK	FINE	GRANULAR	COLUMNAR		
						MODERATE	MEDIUM	CRUMB	PRISMATIC		
						STRONG	COARSE	ANGULAR	SINGLE GRAIN		
						DILATANCY					
						NONPLASTIC					
						LOW					
						MEDIUM					
						HIGH					
						MOISTURE					
						DRY					
						SLIGH. MOIST					
						MOIST					
						VERY MOIST					
						WET					
						CONSISTENCY					
						VERY SOFT					
						SOFT					
						FIRM					
						HARD					
						VERY HARD					
						BOUNDARY					
						ABRUPT					
						CLEAR					
						GRADUAL					
						DIFFUSE					
						TOPOGRAPHY					
						SMOOTH					
						WAVY					
						IRREGULAR					
						BROKEN					
						NOTES: Still a good ML - 100sm the silts slightly from above but picked a little clay is like most of the silt cap previously seen					

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
37" / 63"	ML	Silt	5YR 4/4	60	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
						ABUNDANCE	SIZE	TYPE	LOCATION		
						FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR		
						STRUCTURE					
						GRADE	SIZE	TYPE			
						STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
						WEAK	FINE	GRANULAR	COLUMNAR		
						MODERATE	MEDIUM	CRUMB	PRISMATIC		
						STRONG	COARSE	ANGULAR	SINGLE GRAIN		
						DILATANCY					
						NONPLASTIC					
						LOW					
						MEDIUM					
						HIGH					
						MOISTURE					
						DRY					
						SLIGH. MOIST					
						MOIST					
						VERY MOIST					
						WET					
						CONSISTENCY					
						VERY SOFT					
						SOFT					
						FIRM					
						HARD					
						VERY HARD					
						BOUNDARY					
						ABRUPT					
						CLEAR					
						GRADUAL					
						DIFFUSE					
						TOPOGRAPHY					
						SMOOTH					
						WAVY					
						IRREGULAR					
						BROKEN					
						NOTES: This layer has more clay than above could be a CL but it's silt cap, not till have a few other brownish/red streaks in it.					

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: _____

DEPTH OF BEDROCK OR HOLE EXTENT: 14' 2"

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock
El. 964.3

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

OWNER:

PROJECT:

TEST PIT / BORING NUMBER:

DATE:

ELEVATION:

LOGGED BY:

SITE LOCATION: ADDRESS

NORTHING

EASTING

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	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0 17"	ML	Silt 100m	10YR 3/1 to 3/6	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
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY				STRUCTURE	TYPE			
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD				GRADE	SIZE		% BOULDERS	% GRAVEL
							STRUCTURELESS WEAK MODERATE STRONG	FINE FINE MEDIUM COARSE VERY COARSE	PLATY GRANULAR CRUMB ANGULAR	>12"	1/4" to 3"
									SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% COBBLE	% FINES
										3" to 12"	< #200
BOUNDARY											
DISTINCTIVENESS	TOPOGRAPHY	NOTES: This layer was frozen, notes are from a small sample brought back to the office									
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	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
17" 19.11"	CL	loam	7.5YR 4/4	95	7.5YR 5/8	ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR		
			7.5YR 4/6	5							
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY		GRADE	STRUCTURE	SIZE	TYPE		% BOULDERS	% GRAVEL
NON- SLOW RAPID	NON-PLASTIC LOW MEDIUM HIGH	DRY SLUGH. 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"	1/4" to 3"
BOUNDARY										% COBBLE	% FINES
DISTINCTIVENESS	TOPOGRAPHY	NOTES: This till is slightly different color than the last few holes done before it - has ribbon wall								3" to 12"	< #200 40%
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN										

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

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

Fl 963.1



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 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	STRUCTURE	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			WEAK MODERATE STRONG	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											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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BOUNDARY											% COBBLE	% FINES
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DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	STRUCTURE	SIZE	TYPE	% BOULDERS	% GRAVEL	
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BOUNDARY											% COBBLE	% FINES
DISTINCTIVENESS											3" to 12"	< #200
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TOPOGRAPHY												
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ABRUPT CLEAR GRADUAL DIFFUSE												
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NOTES:												
ABRUPT CLEAR GRADUAL DIFFUSE												
SMOOTH WAVY IRREGULAR BROKEN												



Oakridge
ENGINEERING

Chippewa Falls, WI 54729
www.OakridgeEng.com

OWNER:

Jeff Saver

PROJECT:

Hog Facility

TEST PIT / BORING NUMBER:

22

DATE:

3/28/2019

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

(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
						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		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					
						GRADE					
						STRUCTURELESS WEAK MODERATE STRONG					
						SIZE					
						VERY FINE FINE MEDIUM COARSE VERY COARSE					
						TYPE					
						PLATY GRANULAR CRUMB ANGULAR					
						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
						% BOULDERS					
						>12"					
						% COBBLE					
						3" to 12"					
						% FINES					
						< #200					
						70-80					
DISTINCTIVENESS		TOPOGRAPHY		NOTES: This layer was frozen, notes are from a small sample brought back to the office							
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 30 2.5Y 3.1	5/4 70	—	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
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						GRADE					
						STRUCTURELESS WEAK MODERATE STRONG					
						SIZE					
						VERY FINE FINE MEDIUM COARSE VERY COARSE					
						TYPE					
						PLATY GRANULAR CRUMB ANGULAR					
						SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
						% BOULDERS					
						>12"					
						% COBBLE					
						3" to 12"					
						% FINES					
						< #200					
						75-60					
DISTINCTIVENESS		TOPOGRAPHY		NOTES: 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							
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 30 2.5Y 3.1	5/4 70	—	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
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						SIZE					
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						PLATY GRANULAR CRUMB ANGULAR					
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						% BOULDERS					
						>12"					
						% COBBLE					
						3" to 12"					
						% FINES					
						< #200					
						75-60					
DISTINCTIVENESS		TOPOGRAPHY		NOTES: CL layer is very similar to test SB at 23 and 11							
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:



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 GLAC. LAKE SED
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BOUNDARY										% COBBLE	% FINES
DISTINCTIVENESS										3" to 12" _____	< #200 _____
ABRUPT		SMOOTH		NOTES:							
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		BROKEN									

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DISTINCTIVENESS										3" to 12" _____	< #200 _____
ABRUPT		SMOOTH		NOTES:							
CLEAR		WAVY									
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CLEAR		WAVY									
GRADUAL		IRREGULAR									
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BOUNDARY										% COBBLE	% FINES
DISTINCTIVENESS										3" to 12" _____	< #200 _____
ABRUPT		SMOOTH		NOTES:							
CLEAR		WAVY									
GRADUAL		IRREGULAR									
DIFFUSE		BROKEN									

OWNER: Jeff Sover
PROJECT: Hog Facility

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

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 (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	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	
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NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHTLY 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>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>This layer was frozen, notes</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN		<u>are from a small sample brought back</u>								
				<u>to the office</u>								

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY	
18" 18.11"	CL	10cm 5 1/4	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	
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DILATANCY		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHTLY 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>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>Could be a very good SC</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN		<u>material is very similar to CL layer of SB11</u>								
				<u>after a few feet, it is mostly 5YR 4/4</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	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		PLASTICITY	MOISTURE	CONSISTENCY		GRADE		STRUCTURE	SIZE	TYPE	% BOULDERS	% GRAVEL
NONE SLOW RAPID		NONPLASTIC LOW MEDIUM HIGH	DRY SLIGHTLY 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>
BOUNDARY												
DISTINCTIVENESS		TOPOGRAPHY		NOTES: <u>checked edge to see if</u>								
ABRUPT CLEAR GRADUAL DIFFUSE		SMOOTH WAVY IRREGULAR BROKEN		<u>silt cap was deeper but all my little</u>								
				<u>pieces I chiseled out were till, not silt cap</u>								

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 (YES)

WATER OBSERVED: YES/NO (NO)

BEDROCK: YES/NO (NO)

SAMPLE ID: JS 23.1 8-10ft TYPE: _____ DEPTH: _____

SAMPLE ID: _____ TYPE: _____ DEPTH: _____

SAMPLE ID: _____ TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK
OR HOLE EXTENT: 18.11"
No Bedrock
El. 963.2



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	FINE	FAINT	PED SURFACE	STRATIFIED	ALLUVIUM
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	LAMINATED	SLOPE ALLUV.
						MANY	COARSE	PROMINENT	ROOT HAIR	FISSURED	COLLUVIUM
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	SLICKEN-SIDED	GLACIAL TILL
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	BLOCKY	GLAC. LAKE SED
						MANY	COARSE	PROMINENT	ROOT HAIR	PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		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
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	SLICKEN-SIDED	GLACIAL TILL
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	BLOCKY	GLAC. LAKE SED
						MANY	COARSE	PROMINENT	ROOT HAIR	PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		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
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	SLICKEN-SIDED	GLACIAL TILL
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	BLOCKY	GLAC. LAKE SED
						MANY	COARSE	PROMINENT	ROOT HAIR	PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		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
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	SLICKEN-SIDED	GLACIAL TILL
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	BLOCKY	GLAC. LAKE SED
						MANY	COARSE	PROMINENT	ROOT HAIR	PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		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
						ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
						FEW	FINE	FAINT	PED SURFACE	SLICKEN-SIDED	GLACIAL TILL
						COMMON	MINIMUM	DISTINCT	IN-MATRIX	BLOCKY	GLAC. LAKE SED
						MANY	COARSE	PROMINENT	ROOT HAIR	PRISMATIC	OUTWASH
										LENSED	RESIDUUM
										HOMOGENEOUS	LOESS
											BEDROCK
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			GRADE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE	NONPLASTIC	DRY	VERY SOFT			STRUCTURELESS	VERY FINE	PLATY	SUBANGULAR		
SLOW	LOW	SLIGH. MOIST	SOFT			WEAK	FINE	GRANULAR	COLUMNAR	>12"	1/4" to 3"
RAPID	MEDIUM	MOIST	FIRM			MODERATE	MEDIUM	CRUMB	PRISMATIC		
	HIGH	VERY MOIST	HARD			STRONG	COARSE	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
		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: 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 GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE					
TYPE: PLATY GRANULAR CRUMB ANGULAR						LOCATION: SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
% BOULDERS: >12" 0						% GRAVEL: 1/4" to 3" 0					
% COBBLE: 3" to 12" 0						% FINES: < #200 70-80					
DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE											
TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN											
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
12" / 16"	ML	Silt loam	10YR 5/2 to 5/3 10YR 5/6 10	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 GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE					
TYPE: PLATY GRANULAR CRUMB ANGULAR						LOCATION: SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
% BOULDERS: >12" 0						% GRAVEL: 1/4" to 3" 0					
% COBBLE: 3" to 12" 0						% FINES: < #200 70-80					
DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE											
TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN											
NOTES: <u>This layer is very similar to second layer in SB25 but not very thick</u>											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
16" / 16.7"	CL	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 GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE					
TYPE: PLATY GRANULAR CRUMB ANGULAR						LOCATION: SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN					
% BOULDERS: >12" 0						% GRAVEL: 1/4" to 3" 0					
% COBBLE: 3" to 12" 0						% FINES: < #200 45-60					
DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE											
TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN											
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>											

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: _____

DEPTH OF BEDROCK: 16.7"

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock
El. 963.6

SAMPLE ID: _____

TYPE: _____ DEPTH: _____



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 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	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 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	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 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	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 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	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 Saver
PROJECT: Hwy Facility

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

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48 Grantsburg

ANY KARST FEATURES WITHIN 1000 FEET: YES ☒ NO ☐

NORTHING 126487.6 EASTING 162242.4

LANDSCAPE POSITION: Footslope

COUNTY / STATE: Burnett Cty WI

LANDSCAPE GEOMETRY: Convex

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
0" / 27"	ML	Silt	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 BEDROCK
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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		TYPE: PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
BOUNDARY: —						% BOULDERS: >12" 0		% COBBLE: 3" to 12" 0		% FINES: < #200 70-80	
DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE		TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN		NOTES: This layer was frozen, notes are from small sample brought back to office very deep Top soil layer							

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
27" / 73"	ML	Silt	10YR 5/3 90	3.1	2.54	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 BEDROCK
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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		TYPE: PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
BOUNDARY: —						% BOULDERS: >12" 0		% COBBLE: 3" to 12" 0		% FINES: < #200 70-80	
DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE		TOPOGRAPHY: SMOOTH WAVY IRREGULAR BROKEN		NOTES: layer picks up a little clay from above - typical silt cap							

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	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 BEDROCK
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: WEAK MODERATE STRONG						STRUCTURE: STRUCTURELESS FINE MEDIUM COARSE VERY COARSE		TYPE: PLATY GRANULAR CRUMB ANGULAR		SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	
BOUNDARY: —						% BOULDERS: >12" 0		% COBBLE: 3" to 12" 0		% FINES: < #200 45-60	
DISTINCTIVENESS: ABRUPT CLEAR GRADUAL DIFFUSE		TOPOGRAPHY: 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 whitish fine							

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: _____

No Bedrock
El. 962.3

SAMPLE ID: _____

TYPE: _____ DEPTH: _____



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 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	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"	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 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	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"	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 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	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"	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 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	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"	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 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	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"	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: 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 10YR 10cm 3/2	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 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 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											
BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: This layer was frozen, notes are from a small sample brought by the office											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
17" / 21"	ML	Silt 10YR 10cm 4/3	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 LOESS BEDROCK
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 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 60-70											
BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: do lose some fines from upper layer but is still a ML silt loam											

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
21" / 15.8"	CH	10cm 5YR 4/4	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 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 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 50-60											
BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL DIFFUSE TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN NOTES: A good CH red till, can't feel any sand grains, block mottles in the upper half of the layer only											

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

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK OR HOLE EXTENT: 15.8"

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock
El. 964.8

SAMPLE ID: _____

TYPE: _____ DEPTH: _____



OWNER:

TEST PIT / BORING NUMBER:

DATE:

CONTINUED
SHEET 2 OF 2

OWNER:

Jeff Sauer

TEST PIT / BORING NUMBER: 27

PROJECT:

Hog Facility

DATE: 3/22/2019

ELEVATION: 930.7

LOGGED BY: D. M. H.

SITE LOCATION: ADDRESS

@ 12884 State Hwy 48 Grantsburg

ANY KARST FEATURES WITHIN 1000 FEET: YES ☐ NO ☒

NORTHING 126014.8 EASTING 162649.5

LANDSCAPE POSITION: Footslope

COUNTY / STATE: Burnett Co. WI

LANDSCAPE GEOMETRY: Uniform[illegible]

DEPTH	USCS	SOIL TYPE &/OR USDA	MUNCCELL COLORS	%	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
16" / 24"	ML	5.1t 10cm	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 BEDROCK
			10YR 5/4	5		ABUNDANCE FEW COMMON MANY	SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR		
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY			STRUCTURE	SIZE	TYPE		% BOULDERS	% GRAVEL
NONE SLOW RAPID	NON-PLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD			GRADE 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: 15 similar to second layer in							3" to 12"	< #200	
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN	5B 26									

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

OVERALL NOTES:

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 5B26

SAMPLES TAKEN: YES/ NO

WATER OBSERVED: YES ☒ NO

BEDROCK: YES ☒ NO

SAMPLE ID: JS 221 12-16 ft

TYPE: _____ DEPTH: _____

DEPTH OF BEDROCK
OR HOLE EXTENT: 16.4"

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

No Bedrock
El. 964.4

SAMPLE ID: _____

TYPE: _____ DEPTH: _____

SHEET SIDE 1 OF 2

OKE SOIL LOG-2 REV.3 11-27-2018



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 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	STRUCTURE	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			WEAK MODERATE STRONG	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											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 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	STRUCTURE	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			WEAK MODERATE STRONG	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											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 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	STRUCTURE	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			WEAK MODERATE STRONG	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											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 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	STRUCTURE	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			WEAK MODERATE STRONG	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											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 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	STRUCTURE	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			WEAK MODERATE STRONG	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											3" to 12"	< #200
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:

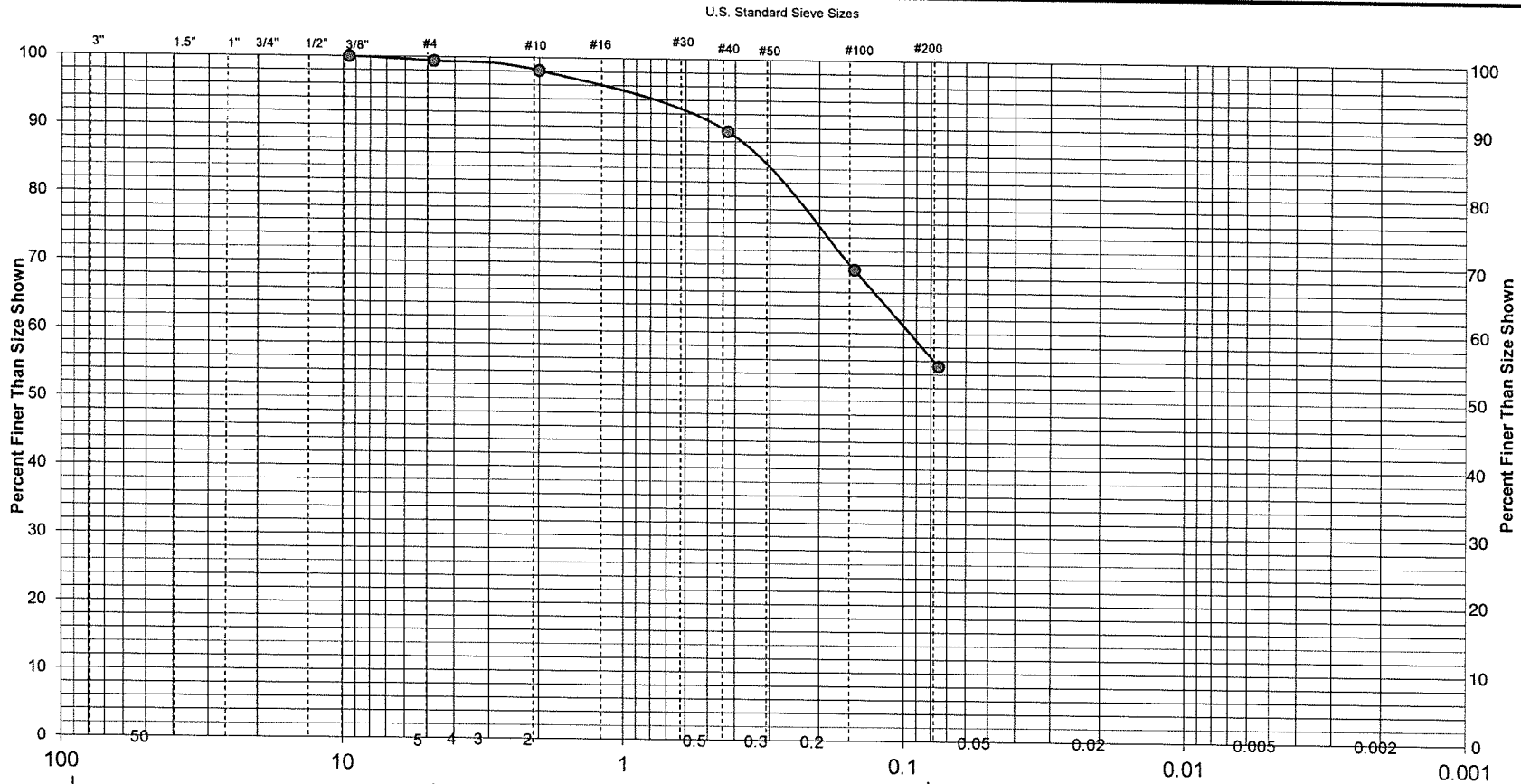
Robert A. Brown

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:

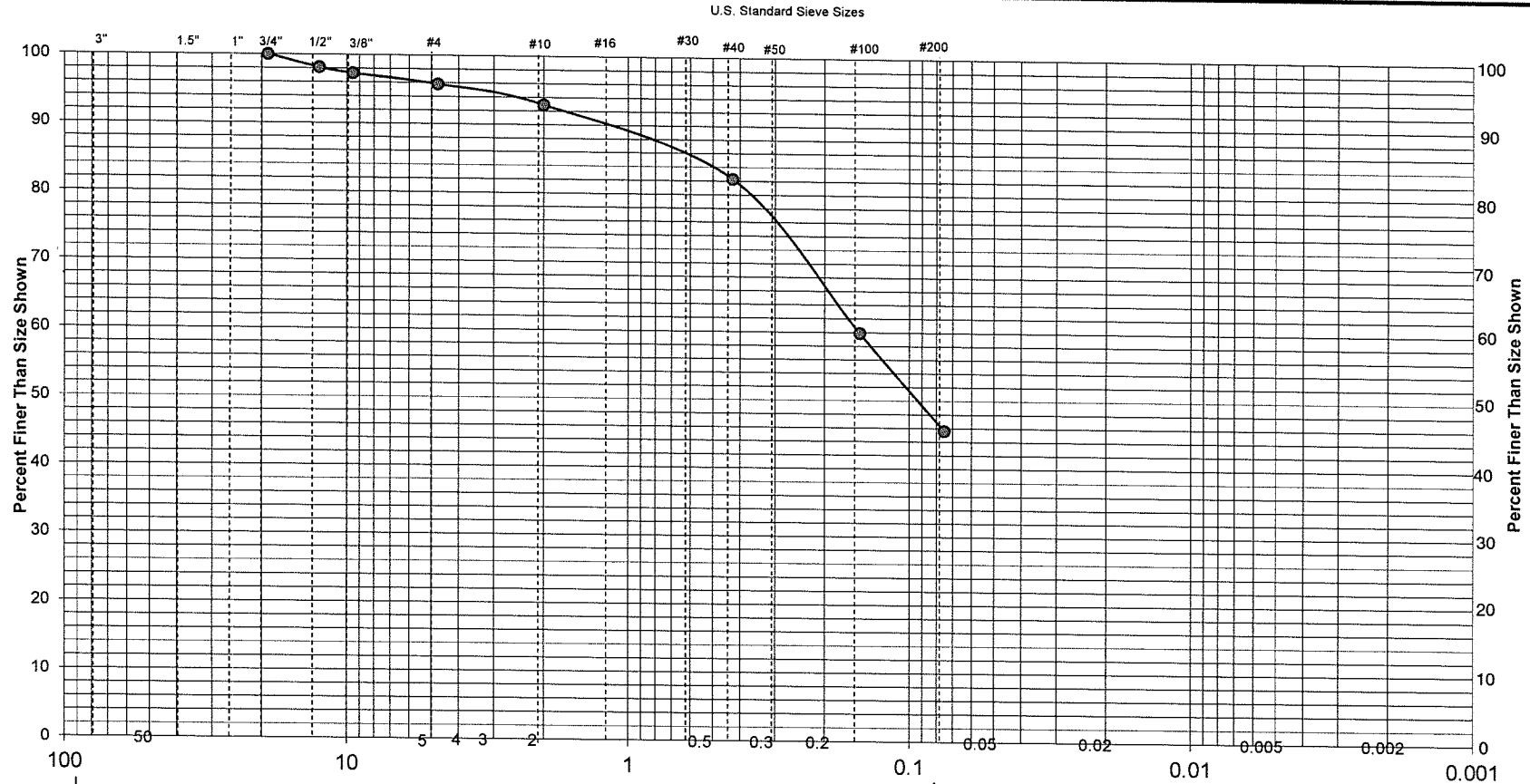
Date Tested:	December 27-30, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	543.7

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



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. 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 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:

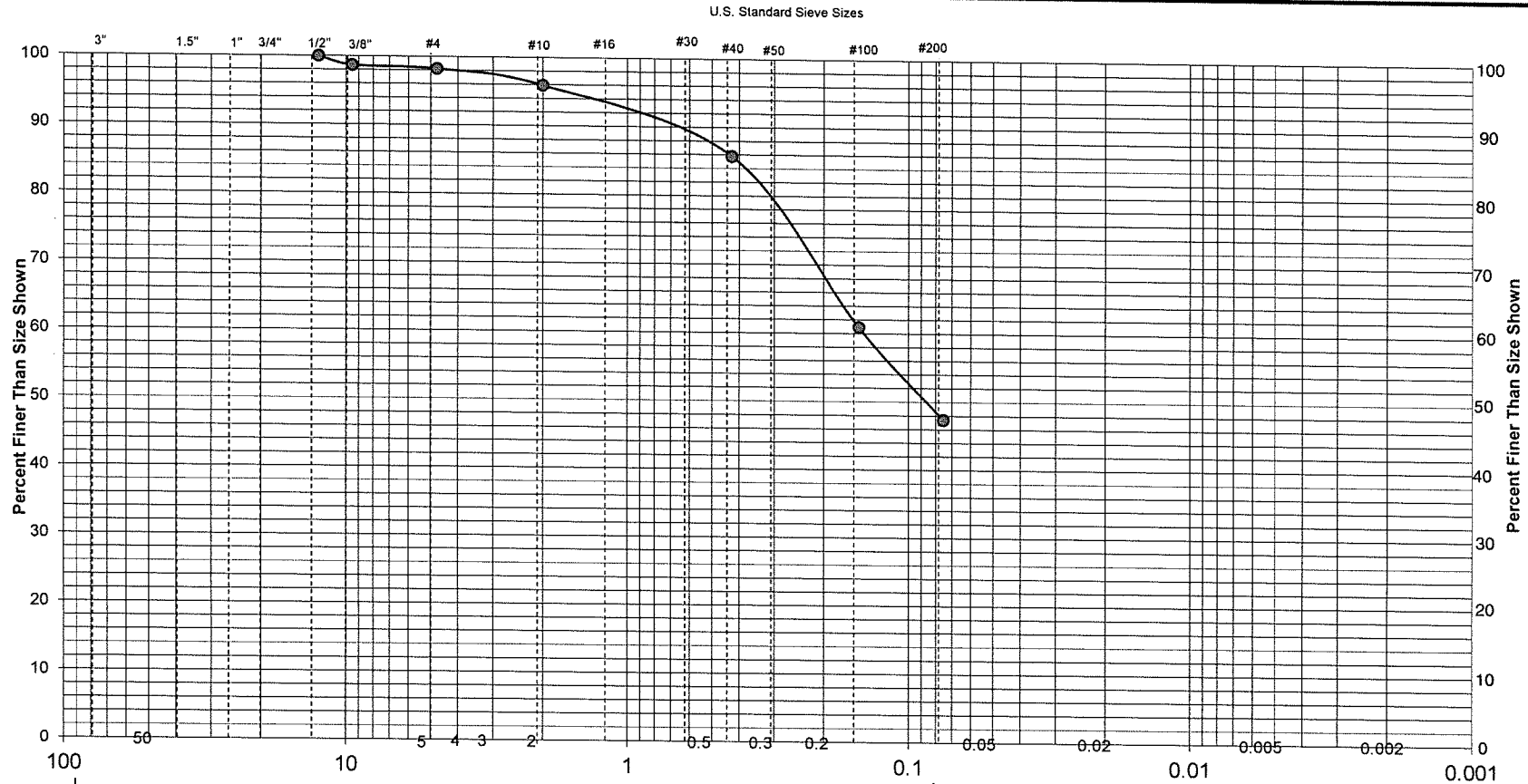
Date Tested:	December 27-31, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	601.6

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			Silt - Clay
Coarse	Fine	Coarse	Medium	Fine	
	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:

Robert L. Rouss

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 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:

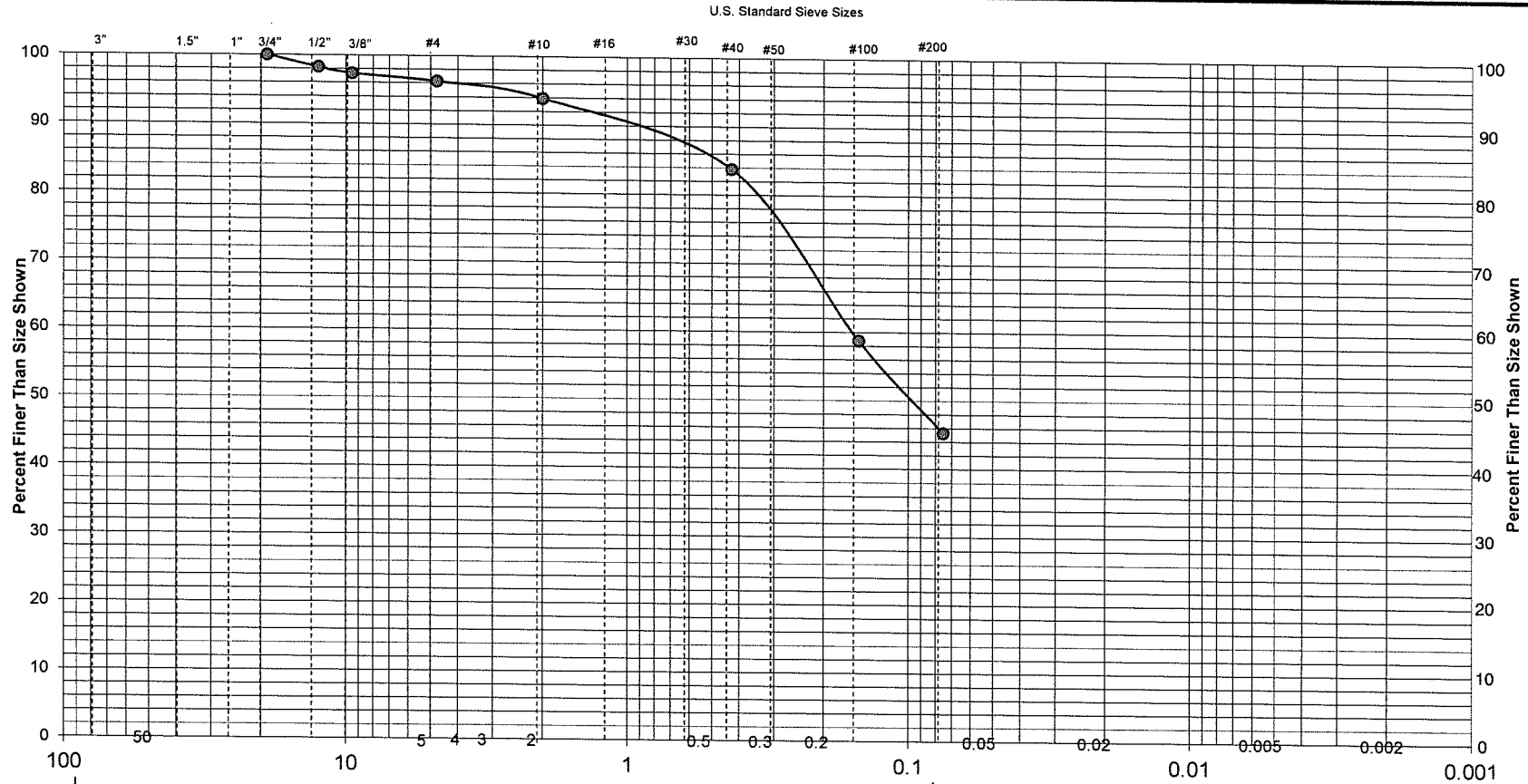
Date Tested:	December 27-31, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	668.4

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:	Robert R. Pomeroy
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:

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:

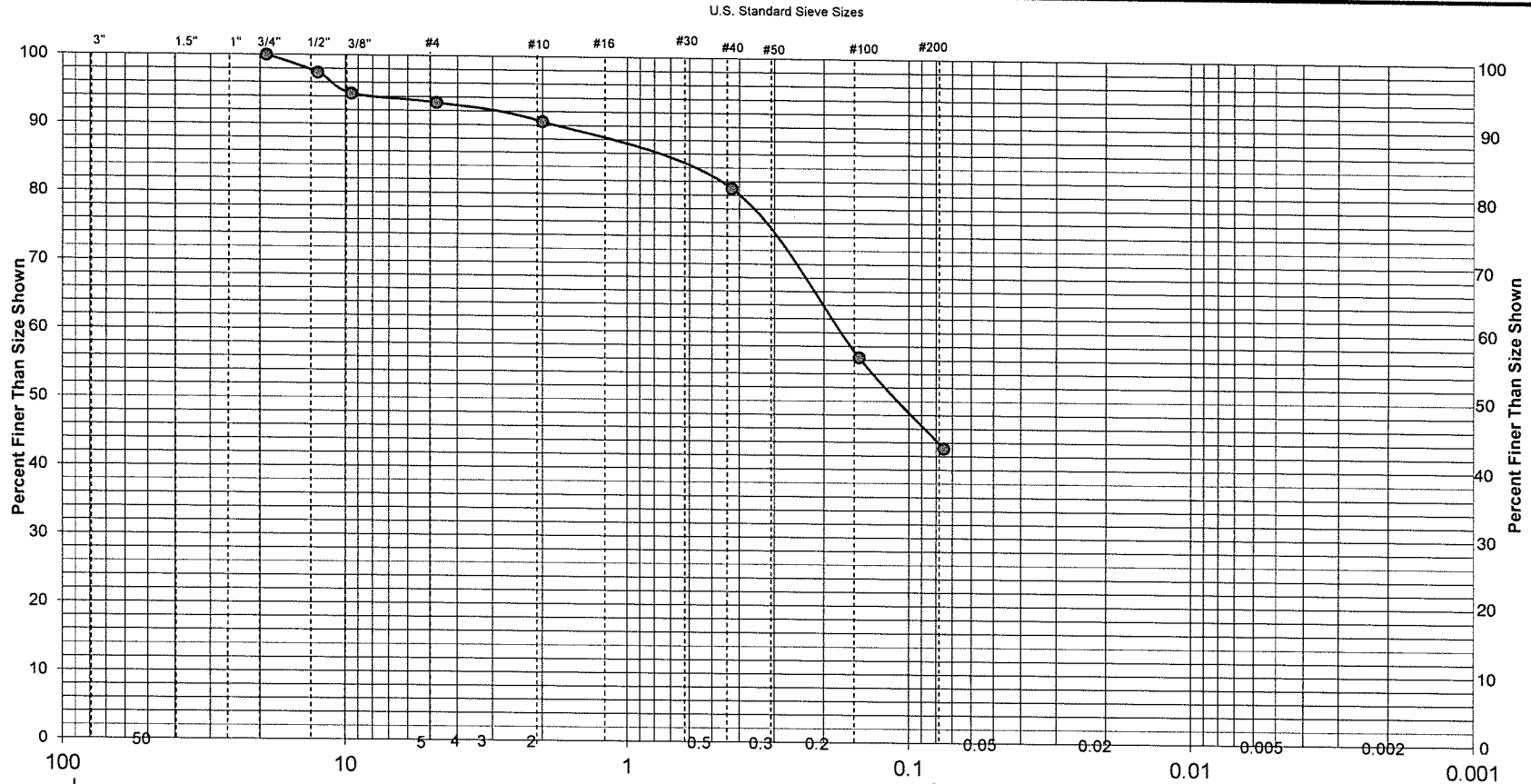
Date Tested:	December 27-31, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	694.3

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:	Robert R. Pouse
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



Gravel		Sand			Silt - Clay
Coarse	Fine	Coarse	Medium	Fine	
	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:

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 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:

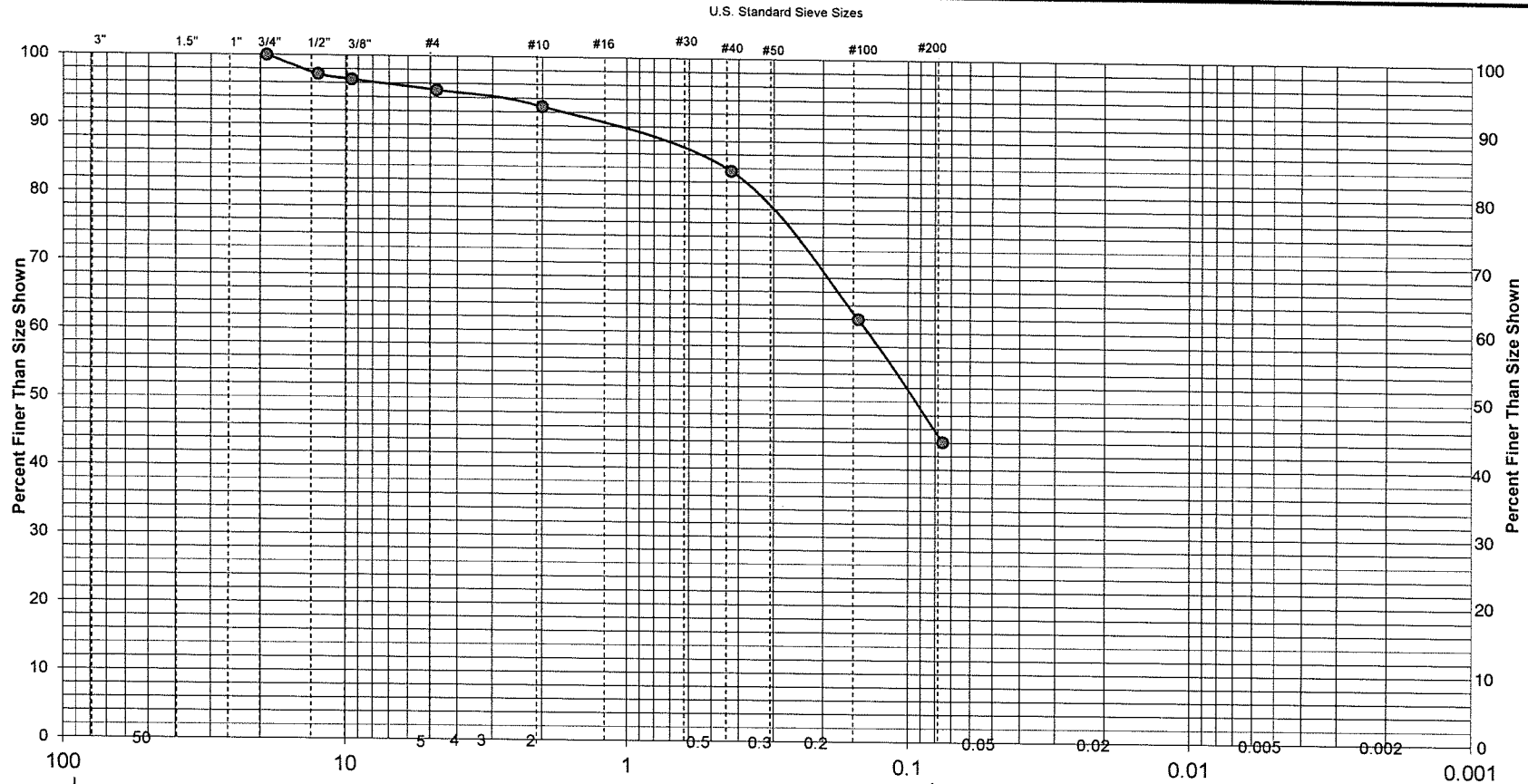
Robert R. Rouse

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:

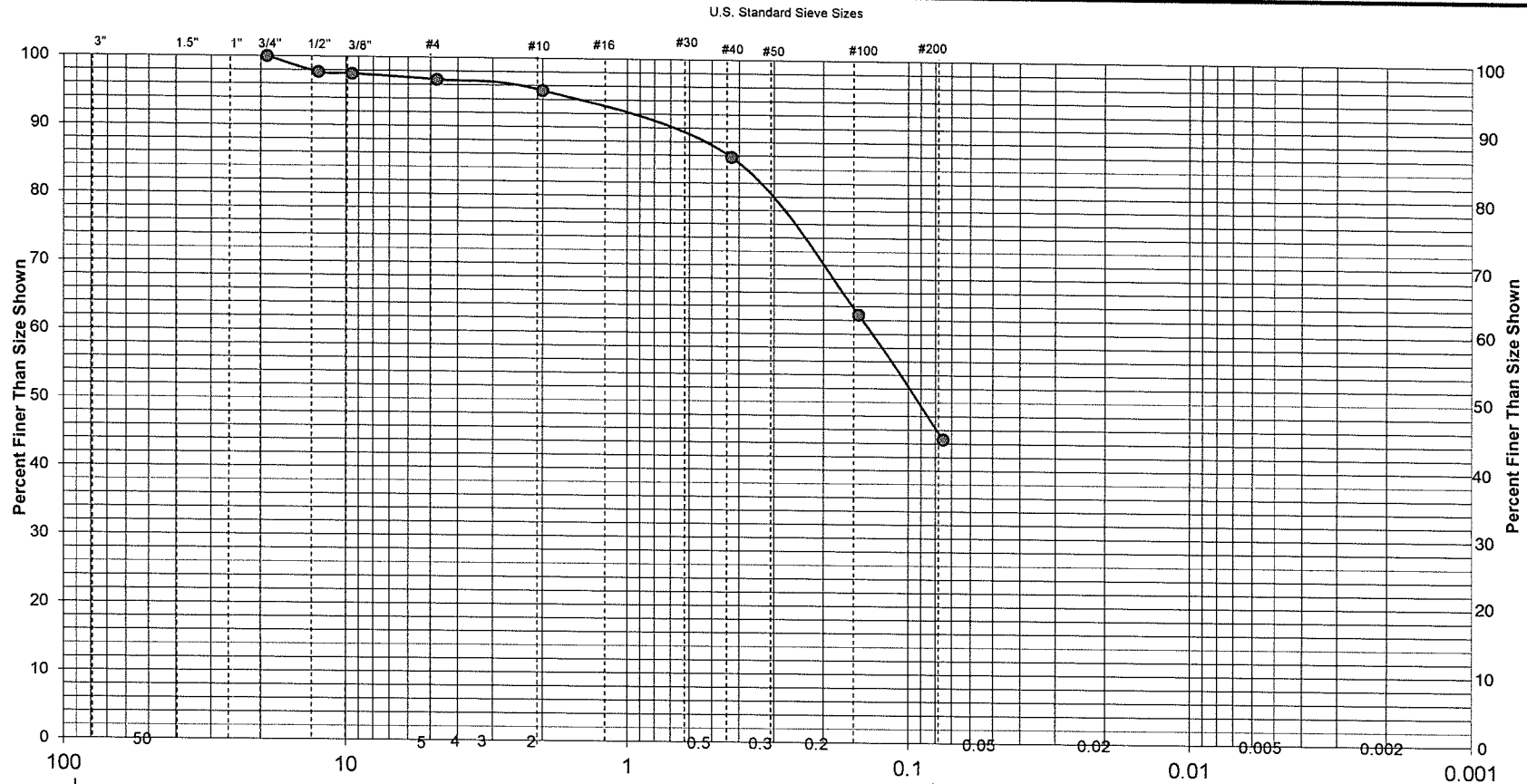
Robert R. Powner

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. 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 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:

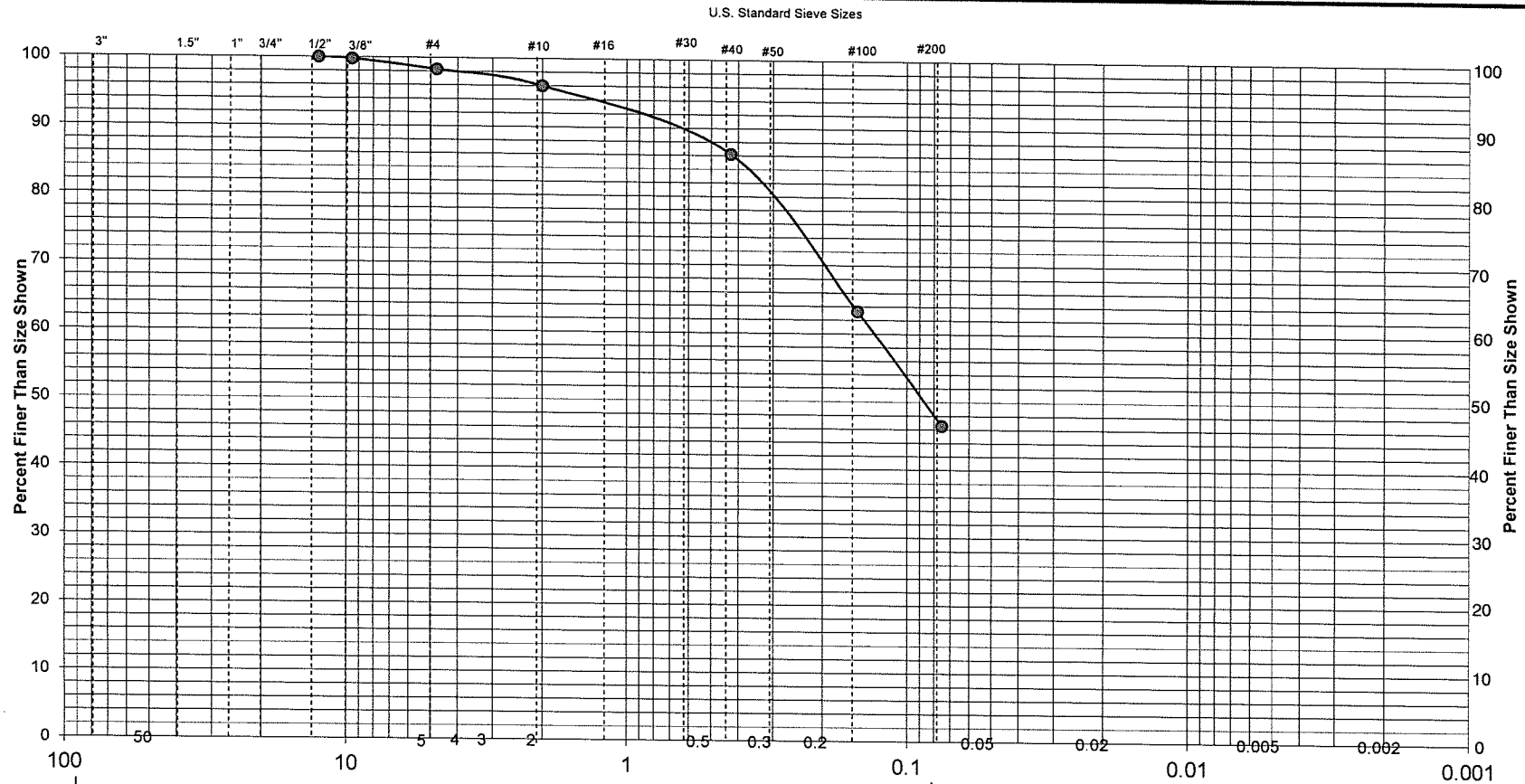
Robert R. Rouse

DATE REVIEWED:

1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



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:

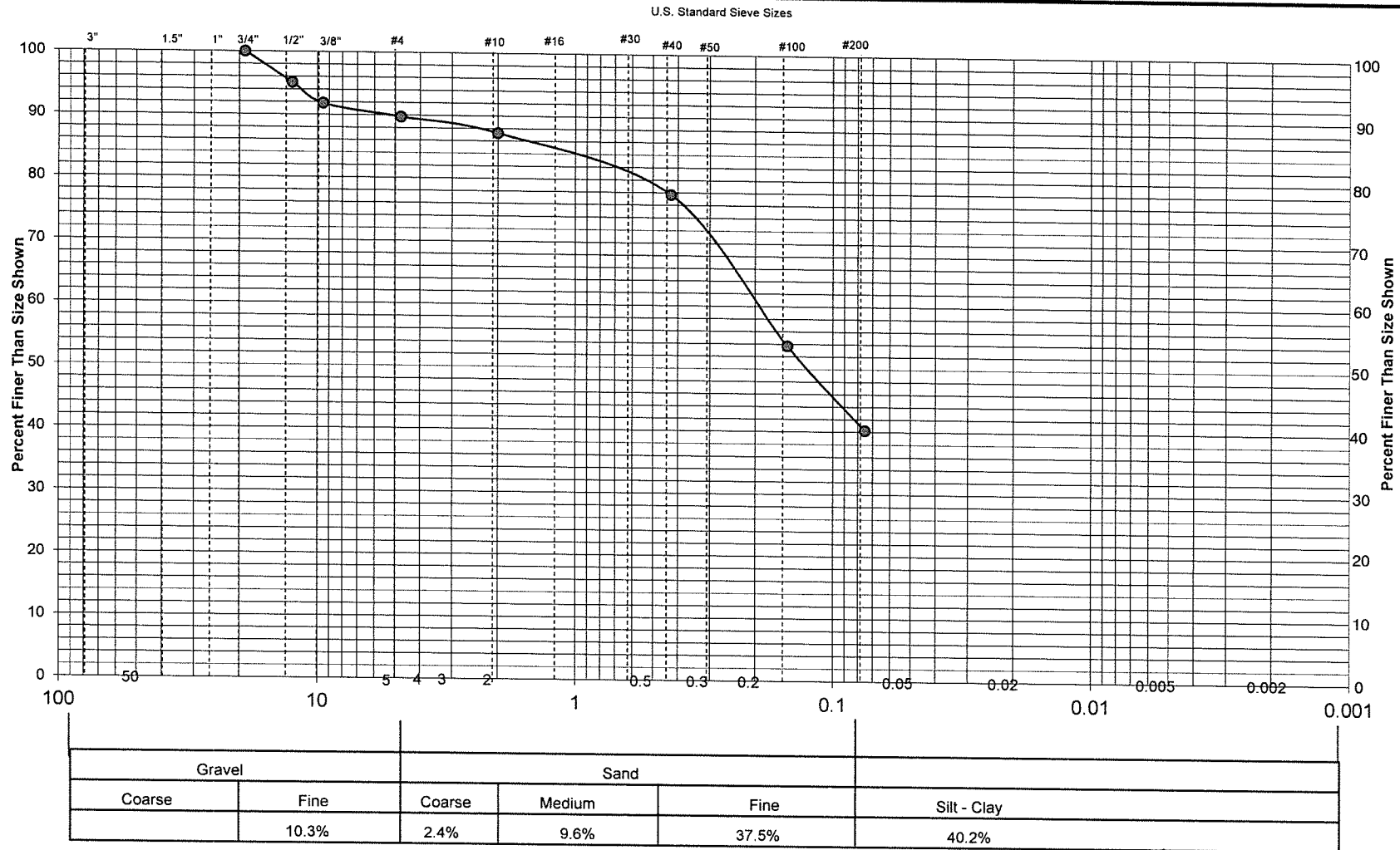
Date Tested:	December 27-31, 2019
Test Performed By:	AES
24 Hrs. Turn Around:	NO
Washed Gradation:	YES
Dry Weight of Soil (gms):	632.8

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. Ponce</i>
DATE REVIEWED:	1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



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 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 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:

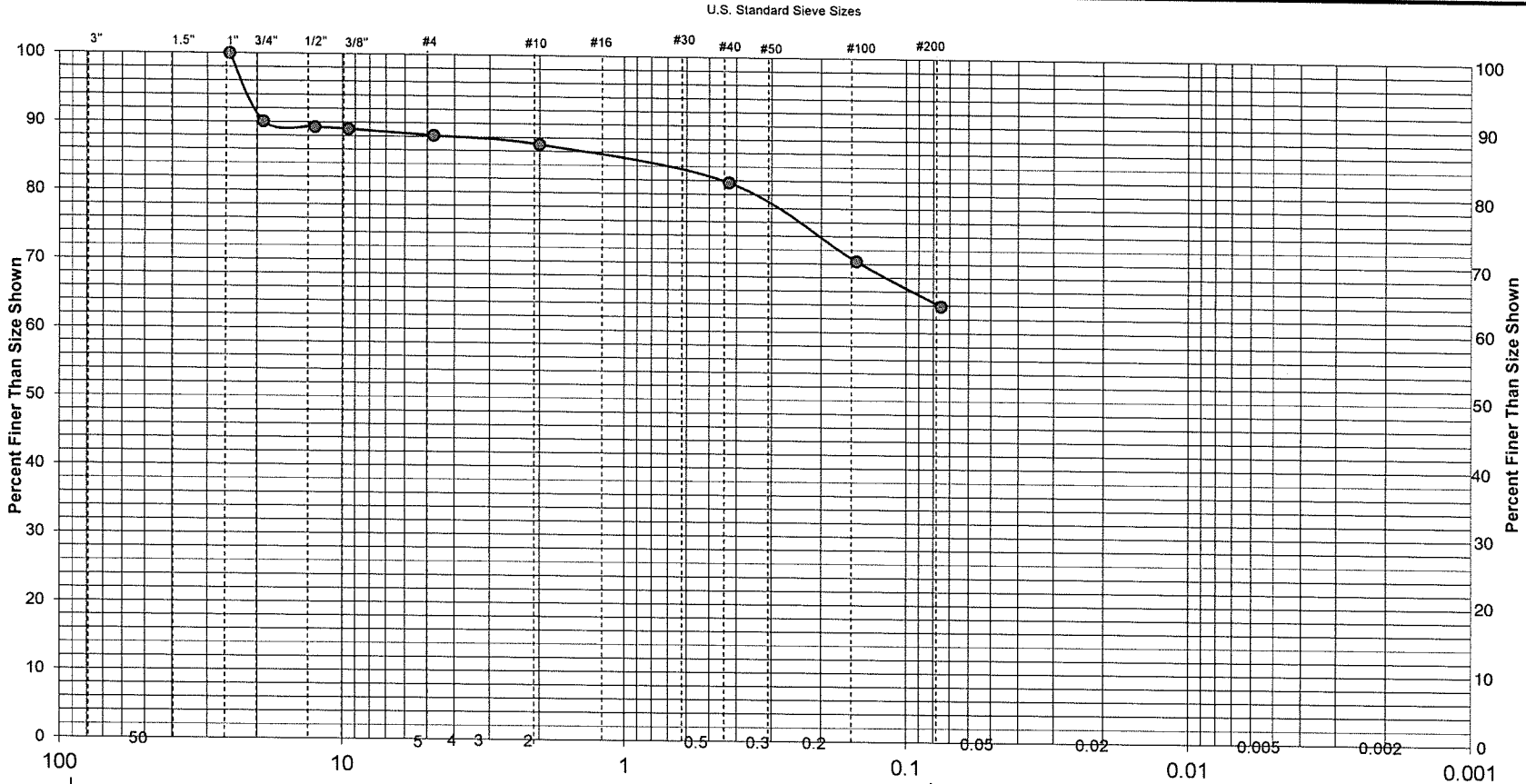
Robert R. Rouse

DATE REVIEWED:

1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



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: $C_c =$

Cu=

Checked by:

Date:	1/26/20
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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:

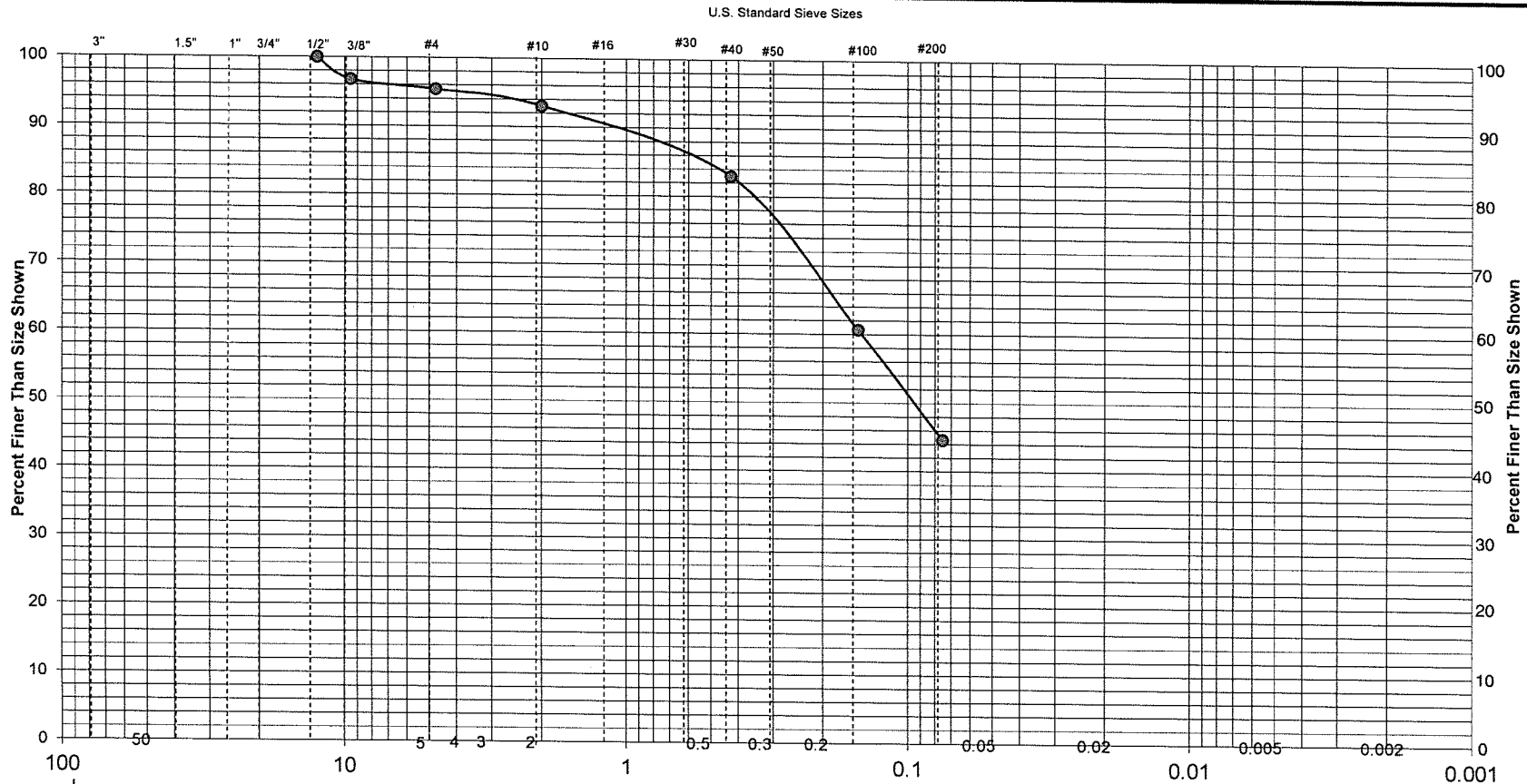
Robert B. Davis

DATE REVIEWED:

1/16/20

Remarks:

GRAIN SIZE DISTRIBUTION CURVE



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:

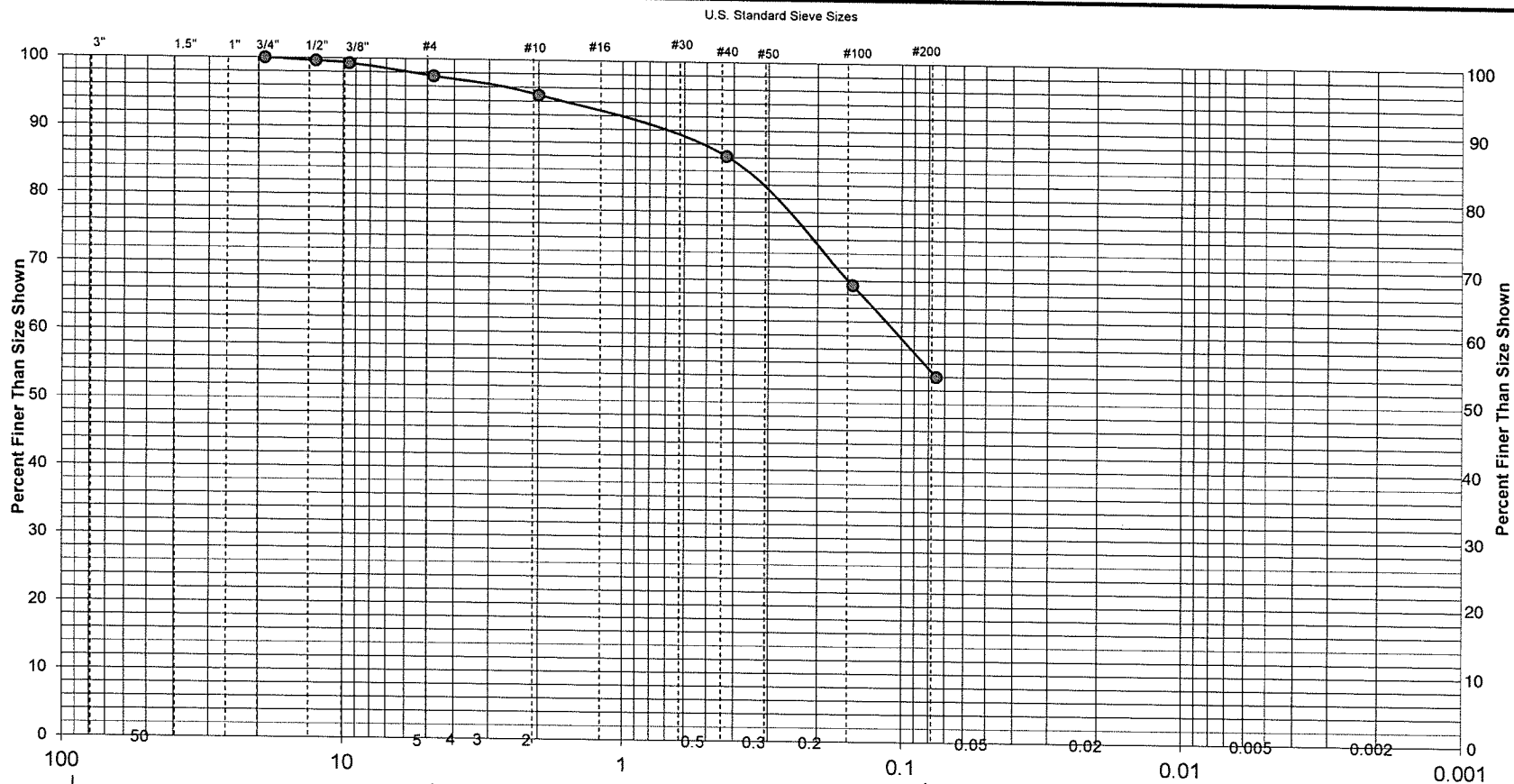
Robert R. Poirer

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. Peeters*

Date: 1/16/20



United States
Department of
Agriculture

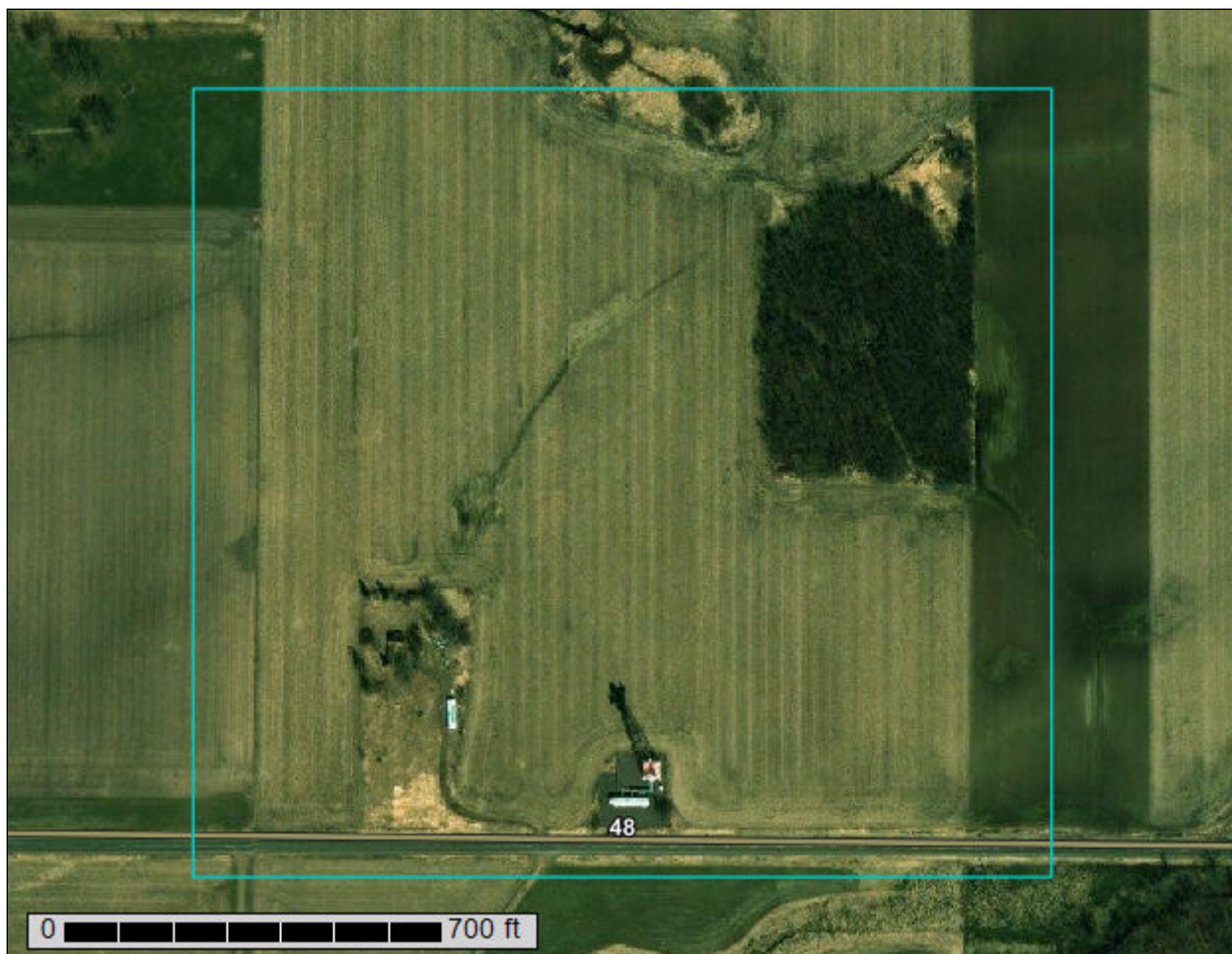
NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

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

Cumberland LLC - Melin Site



February 6, 2020

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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Legend.....	7
Map Unit Legend.....	8
Map Unit Descriptions.....	8
Burnett County, Wisconsin.....	10
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422A—Seelyeville, Cathro, and Rondeau soils, 0 to 1 percent slopes.....	11
553B—Branstad fine sandy loam, 2 to 6 percent slopes.....	13
553C—Branstad fine sandy loam, 6 to 12 percent slopes.....	15

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.

Soil Map may not be valid at this scale.

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

0 50 100 200 300 Meters

0 150 300 600 900 Feet

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

Custom Soil Resource Report

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

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