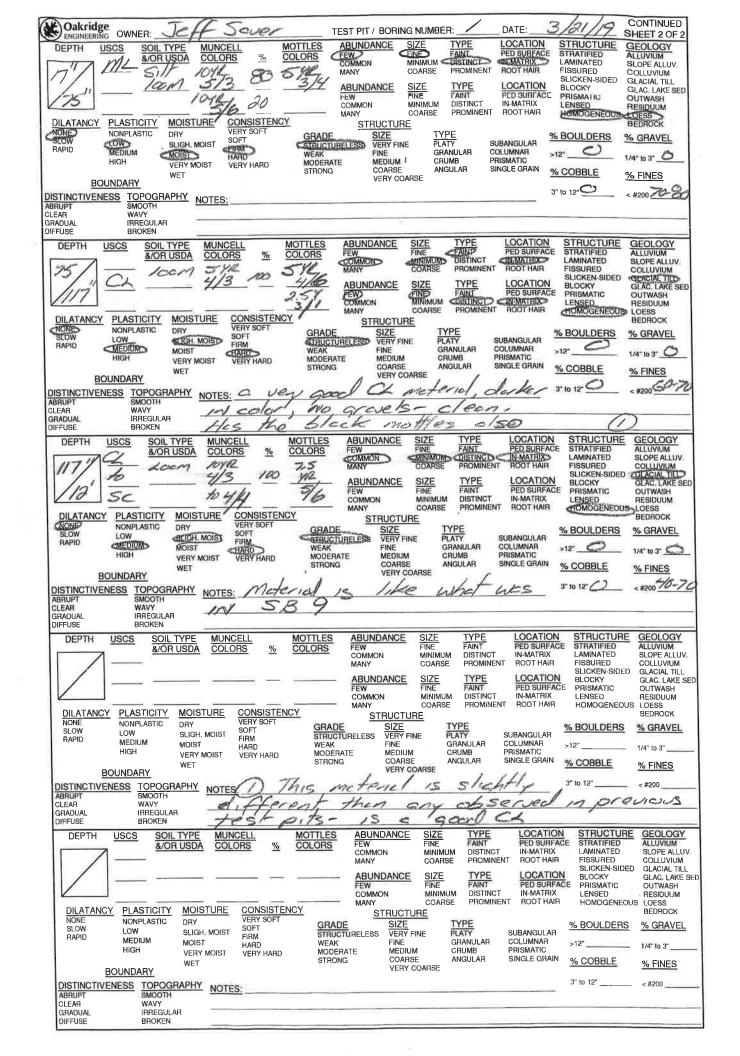
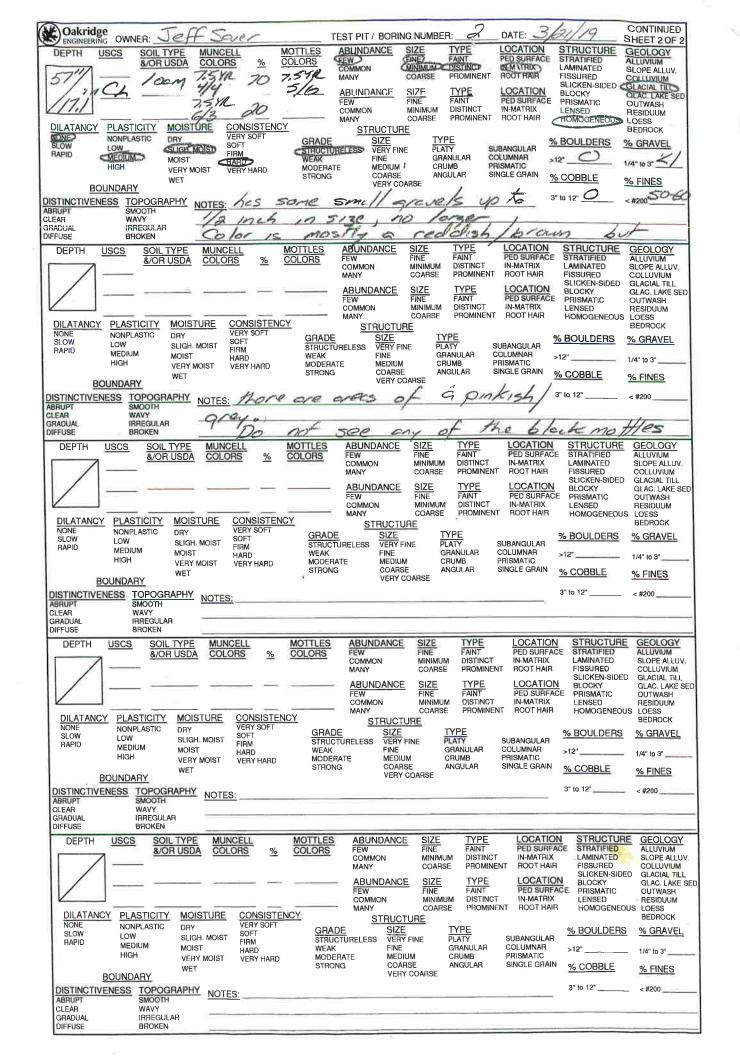
Oakridge OWNER:	eff Sover	TEST PIT / BORING NUMBER:	/
Chippewa Falls, WI 54729 PROJECT:	g Fecility	DATE:	019
Www.OakridgeEng.com		ELEVATION: 98/.	0
SITE LOCATION: ADDRESS		LOGGED BY: D. M. H	4e
	Huy 48 Grantst	ANY KARST FEATURES WITHIN 1000	FEET: VECTOR
NORTHING 126009, 4/ EAS	TING 162086.9	LANDSCAPE POSITION: _ Show	11
0	Gr Wis	LANDSCAPE GEOMETRY: Unit	Con mo
DEPTH USCS SOIL TYPE MUNCE	LL MOTTLES ABUNDANCE	SIZE TYPE LOCATION STRUCT	URE GEOLOGY
Suff 1010	COMMON	FINE FAINT PED SURFACE STRATIFIE MINIMUM DISTINCT IN-MATRIX LAMINATE	D ALLUVIUM SLOPE ALLU
/11 ML 1000 3/1	MANY ABUNDANCI	SLICKEN-SLICKE	
V2	FEW COMMON	FINE FAINT PED SURFACE PRISMATI MINIMUM DISTINCT IN-MATRIX LENSED	C OUTWASH
DILATANCY PLASTICITY MOISTURE ON NONPLASTIC DRY	ONSISTENCY STRUCT	UHE	NEOUS TOESS BEDROCK
RAPID MEDIUM SLIGH, MOIST	OFT GHADE SIZE IRM STRUCTURELESS VERY	FINE PLATY SUBANGULAR	4
HIGH VERY MOIST	ARD WEAK FINE ERY HARD MODERATE MEDII STRONG COAF	DE ANGULAD CINCLE COAIN	- 1/4 (0 3"
BOUNDARY		COARSE	70111120
DISTINCTIVENESS TOPOGRAPHY SMOOTH WAVY	Chis lever was	frozen, notes 3" to 12"	<#200 70·
CLEAR WAVY GRADUAL IRREGULAR DIFFUSE BROKEN	notes	mple diveril or che	Les CALLE
DEPTH USCS SOIL TYPE MUNC	LL MOTTLES ABUNDANC	E SIZE TYPE LOCATION STRUC	
8/OR USDA COLOR	S % COLORS FEW COMMON	FINE FAINT PED SURFACE STRATIFI MINIMUM DISTINCT IN MATHIX LAMINATI COARSE PROMINENT ROOT HAIR FISSURE	ED SLOPE ALLI
11/11/20 40 4/4/	ABUNDANC	E SIZE TYPE LOCATION BLOCKY	
112 Silt loan	FEW COMMON	FINE FAINT PED SURFACE PRISMAT MINIMUM DISTINCT IN-MATRIX LENSED	IC OUTWASH RESIDUUM
DILATANCY PLASTICITY MOISTURE	CONSISTENCY STRUC	TURE	ENEOUS LOESS BEDROCK
SLOW SLIGH, MOIST	OFT GHADE SIZE	Y FINE PLATY SUBANGULAR	7
HIGH	MEAN WEAK FINE MODERATE MED STRONG COA	IUM CRUMB PRISMATIC	1/4" to 3"
BOUNDARY	VER	Y COARSE 3" to 12"	% FINES 2 <#200
DISTINCTIVENESS TOPOGRAPHY SMOOTH WAVY	This leyer was a	411 1. 1. 1000 0 5 1	1- Cool to
GRADUAL IRREGULAR DIFFUSE BROKEN	e since in the internal	2011 4000 27-	1
DEPTH USCS SOIL TYPE MUNC		E SIZE TYPE LOCATION STRUC FINE FAINT PED SURFACE STRATE	TURE GEOLOGI
121/ - 5,15 10x10	COMMON	MINIMUM DISTINCT IN-MATRIX LAMINA COARSE PROMINENT ROOT HAIR FISSURE	TED SLOPE ALL
17" ML 1000 8/1	ABUNDANG	DE SIZE TYPE LOCATION BLOCKY	
	COMMON MANY	MINIMUM DISTINCT IN-MATRIX LENSED	
NONE NONPLASTIC DRY	CONSISTENCY VERY SOFT GRADE SIZ	TURE	BEDROCK
RAPID MEDIUM MOIST		Y FINE PLATY SUBANGULAR	<u> </u>
WET	VERY HARD MODERATE MED STRONG COA	DIUM CRUMB PRISMATIC ARSE ANGULAR SINGLE GRAIN % CORRI	1/4" to 3" _E % FINES
BOUNDARY DISTINCTIVENESS TOPOGRAPHY NOTES:	This is the now	Y COARSE 3" to 12"	> /01/1/20 <#200 70
ABRUPT SMOOTH CLEAR WAVY	er was frozer	The Top will	
GRADUAL IRREGULAR DIFFUSE BROKEN	7 7 5		
OVERALL NOTES:	C 1	20 1 -1-	
MIS WES	trozen to	Inches plus	1/
ossered mete	110/ 95 15	wes executed, e	//
material below	The frugen n	neterial was, slightly	10.5/
to moist by 7	ouch ord vis	in inspection. no	Mcterk.
was wet or =	eteretale no	seeps observed	
Material above	12 inches was	alisti dengt, and in	1 ust here
SAMPLES TAKEN: YES)NO	BACC MATER ORGANI	myself in	
	WATER OBSERV	ED: YES NO BEDROCK: YE	-
SAMPLE ID: JS /a/	7-944 TYPE:	DEPTH: OR HOLE EX	1200
SAMPLE ID:	TYPE:	DEPTH:	conce
	· · · · · · · · · · · · · · · · · · ·	21. 9.	690
SAMPLE ID:	TYPE:	DEPTH:	



DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PROBLEMANT CONFIDENCE PROMINENT ROOTH MANUAL PRESENCE OF A DILATARY PLASTICITY MOISTURE CONSISTENCY WERK MANUAL PROBLEMANT ROOTH MANUAL PROBLEMANT RO	Oakridge ENGINEERING	OWNER: JEFF	Saver	TEST PIT / BORING NUMBER:
SITE LOCATION ADDRESS C	Chippewa Falls, WI 54729	PROJECT: Hog	Esc 1/hy	DATE: 3/21/2019
AND KARST FEATURES WITTIN 1000 FEET YES NO LANGSCAPE ROSITION. DE SOUTH SE	www.OakndgeEng.com	/	/	ELEVATION: 979.9
NORTHING ADD STATE COUNTY STATE ADDITION AND STATE COUNTY STATE ADDITION AND STATE COUNTY STATE ADDITION AND STATE COUNTY AND	SITE LOCATION: ADDI	RESS		LOGGED BY: D. M. He
COUNTY STATE: WARD LANGE AND COUNTY STATE: WARD LANGE AND COUNTY STATE: WARD LANGE AND COUNTY AN	0 12884	State Hwy 48	Grants burg	ANY KARST FEATURES WITHIN 1000 FEET: YES NO
DETTIL USGS SOL TYPE MANCEL SOL SEAR COLORS STRUCTURE SOL SEAR COLORS SOL S	NORTHING 126	180, 7 EASTING	162045.1	
ACCIDENCE OCCURS WATER OCCURS	COUNTY/STATE:	Burnott CL	· Wi	LANDSCAPE GEOMETRY: CONCOVE
DILATIANCY PLASTICITY MOSTURE CONSISTENCY WERE OF THE	DEPTH <u>USCS</u>			
DILATANCE PLASTICITY MOISTURE CONSISTENCY MACHINE PLASTICITY MOISTURE CONSISTENCY MORPHATIC PLASTICITY MOISTURE CONSISTENCY DILATANCE PLASTICITY MOISTU	0/10/00/	Sill love old in	COMMON	MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV. COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
SOUNDARY SINCTURES STOCKARD WAS ASSETTED. STRUCTURE STRUCTURE SOUNDARY SOUNDARY SINCTURES STOTIC COMMENT SOUNDARY SOUNDARY STRUCTURE SOUNDARY SOUNDARY SOUNDARY STRUCTURE SOUNDARY SO	112 11/2	200 PA TO THE TOP TOP	FEW COMMON MANY	SIZE TYPE LOCATION BLOCKY GLAC, LAKE SE FINE FAINT PED SURFACE PRISMATIC OUTWASH MINIMUM DISTINCT IN-MATRIX LENSED BESIDIU IM
AND	NONE NONPLAS	STIC DRY VERY SOFT	3111001011	E BEDROCK
THE COLUMN STROKE COARSE SOUTH THE STROKE COARSE STROKE CO	RAPID MEDIUM	SLIGH, MOIST FIRM	STRUCTURELESS VERY FINE WEAK FINE	FLATY SUBANGULAR GRANULAR COLUMNAR 12" 12"
STINCTUPENSS DEPOCRAPHY MACH LEAR MACH MACH MACH MACH MACH MACH MACH MACH		WET	STRONG COARSE	ANGULAR SINGLE GRAIN % CORRI E
PROPERLY BENEGLIAR BENCH PROPERLY BE	DISTINCTIVENESS TO	POGRAPHY NOTES	s lever was t	
DEPTH USCS SOLLTYPE MUNCELL SOLLTANCY PLASTICITY MOISTURE CONSTRUCTURE SOUNDAMY NORTH SOLLAND DILATANCY PLASTICITY MOISTURE CONSTRUCTURE SOUNDAMY NORTH SOLLAND NORTH SOLLAND NORTH SOLLAND DILATANCY PLASTICITY NORTH SOLLAND NORTH SOLL	CLEAR WAY	NOTH NOKES O	ge from sme	1/ semple brought but to
ALLUVANIA DESINATORY PROBLEMS STRATERS SUPERALLY SUPERAL	DIFFUSE BRO	DKEN Office f	MOTTIES ADMINISTRATOR	CITE TYPE LOCATION OTPUOTUPE OFFICE
ABUNDANCE FEW MARIAM DISTRICTY NORTH CONSISTENCY NORTH MARIAM NORTH CONSISTENCY NORTH MARIAM N	DEPTH USCS	&/OR USDA COLORS %	COLORS (FEW)	FINE CEAIN PED SURFACE STRATIFIED ALLUVIUM
DUNTARY PLASTICITY NORTH CONSISTENCY NORTH CONSI	12/1 ML		MANY MANY	COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL
DILATANCY PLASTICITY MOISTURE SCOW NOW. RAPID MEDIUM NOTES: BOUNDARY WET WISH ON THE STRUCTURE STRUCTURE SIZE TYPE LOCATION FROM NOTES: BOUNDARY WET WISH ON THE STRUCTURE ST	Z17 —	5414 20	FEW	FINE FAINT PED SURFACE PRISMATIC OUTWASH
SIGNAL LOST SOFT FIRST STEEL URGELESS SYEET FIRST PROBLEMS STEEL STEEL URGELESS SYEET FIRST PROBLEMS STEEL URGELESS STEEL URGELESS SYEET STEEL URGELESS STEEL U		LIEDI/ COET	ENCY STRUCTUE	COARSE PROMINENT ROOTHAIR HOMOGENEOUS TOESS
HARD WERY HARD W	SLOW LOW	SLIGH. MOIST SOFT	GRADE SIZE STRUCTURELESS VERY FIN	E PLATY SUBANGULAR
SET TOPOGRAPHY SINGTIMENESS TOPOGRAPHY MOIST THROUGH SERVICE SINGTIMENESS TOPOGRAPHY MOIST THROUGH SERVICE SINGTIMENESS TOPOGRAPHY SINGTIMENESS TOPOGRAPHY SINGTIMENESS TOPOGRAPHY NOTES: 45 A 11 Miles SERVICE SINGTIMENESS TOPOGRAPHY SINGTIMENESS TOPOGRAPHY NOTES: 45 A 11 Miles SERVICE SINGTIMENESS SINGTIMENESS SINGTIMENESS SINGTIME	MICDION	MOIST HARD VERY MOIST VERY HARD	MODERATE MEDIUM	CRUMB PRISMATIC 1/4 10 3
BRUPT SMOOTH WAY WAY WAY WAY BELL SOUTH FOR MUNCELL SOUTH FOR MUNC		_		DARSE % FINES
IRROULD INCOME DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY AND LUNCY PLASTICITY MOISTURE CONSISTENCY WORTH AND LOCATION WITHOUT WELL WORTH AND LOCATION WORTH AND LOCATION WITHOUT WELL WORTH AND LOCATION WORTH AND LOCATION WELL W	ABRUPT SMC	OOTH NOTES.	wes frozen,	notes are 3 to 12 4200 100 2
ALLOYUNDA OCIORS COLORS COMMON MANY COARSE PROMINENT FEW FINE FORM MONITOR FORM MONITOR FORM MONITOR FORM MONOPLASTIC DRY FORM MONOPLASTIC FORM MONOPLASTIC FORM MONOPLASTIC FORM MONOPLASTIC DRY FORM MONOPLASTIC FORM MANY COARSE FORM FORM MONOPLASTIC F	GRADUAL IRR	IEGULAR	racij sempore	
SAMPLE ID: SAMPLE	DEPTH USCS			
ABUNDANCE SIZE TYPE COATION PINE CONSISTENCY COMMON MINIMAL PROBLEMS PROMISED COMMON PINE PINE PINE PINE PINE PINE PINE PIN	19/	SIH MYLL ST	10 YR, MANY	MINIMUM DISTINCT AND ATRIX LAMINATED SLOPE ALLUV COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT STRUCTURE STRU	157 116	C10	FEW	SIZE TYPE LOCATION BLOCKY GLAC, LAKES
SLOW NON-ASTIC DRY WORT ON COMMAND STORM MODIST STRONG STORM MEDIUM MODIST STRONG STRO	DII ATANCY PLAST		ENCY	MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM HOMOGENEOUS LOESS
MODERATE MIGH WERY MOIST VERY MODERATE MODERATE MEDIUM MCDUMB PRIBMATIC	NONE NONPLA	ASTIC DRY VERY SOFT	GRADE SIZE	TYPE % BOULDERS % GRAVEL
BOUNDARY WET STRONG COARSE VERY COARSE VER	RAPIO . MEDIUM	MOIST CHARD	WEAK FINE	GRANULAR COLUMNAR >12"
DISTINCTIVENESS TOPOGRAPHY NOTES: AS a little smell fine grave 5 to 12 0 4200 670 SMOOTH SHEPT THE BROKEN BROKEN BROKEN OVERALL NOTES: OVER	BOUNDARY	WET	STRONG COARSE	ANGULAR SINGLE GRAIN % CORRLE % FINES
SAMPLE ID: DEFTH: STORE MYRING STORE MYRING STORE MYRING STORE MYRING SOME MONTHS SOME MO	DISTINCTIVENESS TO	POPOGRAPHY NOTES LES	alittle smel	fine grave 3-1012 0 <#200 60
SAMPLE ID: SAMPLE	GRADUAD IR	AVY) Stone	mixed in,	unger 3/8" in 5/30
SAMPLE ID: SAMPLE	74 75	OKEN C/SO	has some m	2 /17 rold
SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2	OVERALL NOTES:	Jozen to 3	Jantos o	lus
SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2	deserve	I meterial	as it we	s executed all
SAMPLES TAKEN: YES NO SAMPLE ID: SAMPLE ID: SAMPLE ID: TYPE: DEPTH: DEPTH: SHEET SIDE 1 OF 2	meteria	1 below ;	the frozen	1 1 2 , 111
SAMPLES TAKEN: YES NO WATER OBSERVED: YES NO BEDROCK: YES NO SAMPLE ID: TYPE: DEPTH: OR HOLE EXTENT: SAMPLE ID: TYPE: DEPTH: El. 9 Ca. 8 SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2	moist	to moisi	- by touch	1 1 1 1 1
SAMPLES TAKEN: YES NO WATER OBSERVED: YES NO BEDROCK: YES NO SAMPLE ID: TYPE: DEPTH: OR HOLE EXTENT: SAMPLE ID: TYPE: DEPTH: El. 9 Ca. 8 SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2	11300 1- 0	r seturde	1. 10 sex	es of sevel
SAMPLE ID: TYPE: DEPTH: DEPTH OF BEDROCK OR HOLE EXTENT: SAMPLE ID: TYPE: DEPTH: El.963.8 SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2		- 100)	
SAMPLE ID: TYPE: DEPTH: DEPTH OF BEDROCK OR HOLE EXTENT: SAMPLE ID: TYPE: DEPTH: El.963.8 SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2				proving a
SAMPLE ID: TYPE: DEPTH: OR HOLE EXTENT: SAMPLE ID: TYPE: DEPTH: El. 9GJ. 8 SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2	SAMPLES TAKEN: YE	S(NO)	WATER OBSERVED	- Standard 9
SAMPLE ID: TYPE: DEPTH: L1.962.8 SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2	SAMPLE ID:		TYPE:	DEPTH
SAMPLE ID:	SAMPLE ID:	52	TYPE:	Alm Bar Por
SHEET SIDE 1 OF 2				E1.962.8
		SolsVOKE SOIL LOG-2 REV 1 11-21-2018.dwg = Saved: Dua		SHEET SIDE 1 OF 2



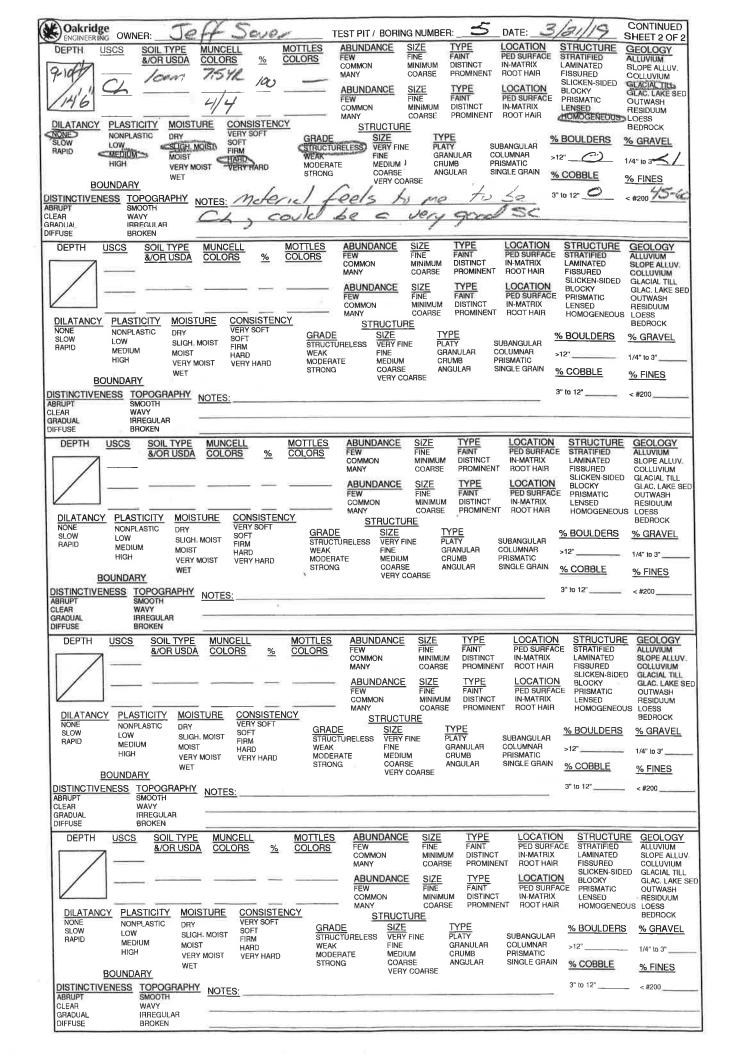
Oakridge ENGINEERING	OWNER: Jeff	Sover	TEST	PIT / BORING NUMBER:	3
Chippewa Falls, WI 54729	PROJECT: Hay F.	ecility	DATE	3/21/2019	9
www.OakridgeEng.com			ELEV	ATION: 980.2	
SITE LOCATION: ADDI	RESS			GED BY: D. M. He	
0 128	384 State Hu	4 48 Gants	burg ANY KARST	FEATURES WITHIN 1000 FEET	YES (NO
NORTHING 126	140. 2 EASTING	162164.5	LANDSCAPE	POSITION: BOCKS/0,	æ
COUNTY / STATE:	Burnett Chy	· Wi	LANDSCAPE	GEOMETRY: COTUR	<i>y</i> c
DEPTH USCS	SOIL TYPE MUNCELL 8/OR USDA COLORS %	MOTTLES ABUNDANCE FEW	FINE FAINT	PED SURFACE STRATIFIED	GEOLOGY ALLUVIUM
0/ 1	5.14 104R 100	COMMON	MINIMUM DISTINCT COARSE PROMINENT	SLICKEN-SIDED	SLOPE ALLUV COLLUVIUM GLACIAL TILL
15" 111	roam dist	ABUNDANCE FEW COMMON	SIZE TYPE FINE FAINT MINIMUM DISTINCT	LOCATION BLOCKY PED SURFACE PRISMATIC IN-MATRIX LENSED	GLAC. LAKE SED OUTWASH
DILATANCY PLASTIC		MANY	COARSE PROMINENT		RESIDUUM BEDROCK
NONE NONPLAS SLOW COW RAPID MEDIUM	SLIGH, MOIST SOFT	GRADE SIZE STRUCTURELESS VERY	TYPE FINE PLATY	SUBANGULAR % BOULDERS	% GRAVEL
HIGH	MOIST HARD VERY MOIST VERY HARD	WEAK FINE MODERATE MEDI STRONG COAF	JM CRUMB F	COLUMNAR >12" SINGLE GRAIN % COBBLE	1/4" to 3"
BOUNDARY	DOODARING 76.15	VERY	COARSE	3" to 12"	% FINES < #200 > 80
BRUPT SMC	POGRAPHY NOTES:	are from	smell sem	ale brought.	backer
RADUAL IRRI	EGULAR TO OFFICE	71/			
DEPTH USCS	SOIL TYPE MUNCELL &/OR USDA COLORS %	MOTTLES ABUNDANC FEW	FINE FAINT	PED SURFACE STRATIFIED	ALLUVIUM
15 / 1	5.15 10 pg 90	COMMON	MINIMUM DISTINCT COARSE PROMINEN	SLICKEN-SIDED	SLOPE ALLUV. COLLUVIUM GLACIAL TILL
123 110	7.5 yr (r)	ABUNDANO FEW	E SIZE TYPE FAINT MINIMUM DISTINCT	LOCATION BLOCKY PED SURFACE PRISMATIC IN-MATRIX LENSED	GLAC. LAKE SED OUTWASH
DILATANCY PLASTI		ENCY STRUC	COARSE PROMINEN		RESIDUUM S LOESS BEDROCK
NONE NONPLA SLOW LOW LOW	SLIGH, MOIST SOFT	GRADE SIZ	TYPE FINE PLATY	SUBANGULAR % BOULDERS	% GRAVEL
HIGH	MOIST HARD VERY MOIST VERY HARD	WEAK FINE MODERATE MED STRONG COA	UM CRUMB	COLUMNAR >12" PRISMATIC SINGLE GRAIN % CORRI F	1/4" to 3"
BOUNDARY	- /		Y COARSE	SINGLE GHAIN % COBBLE	% FINES
DISTINCTIVENESS TO ABRUPT SM CLEAR WA	OOTH NOTES	was frozen	, notes an	2 from 5 10 12	< #200 <u>COO</u>
GRADUAL IRR	REGULAR OKEN	- white			
DEPTH USCS	SOIL TYPE MUNCELL &/OR USDA COLORS %	MOTTLES ABUNDANG	E SIZE TYPE FAINT	LOCATION STRUCTURE PED SURFACE STRATIFIED	ALLUVIUM
23"/	5,14 7,5x2 81	SYR COMMON MANY	COARSE PROMINE		SLOPE ALLUV. COLLUVIUM D GLACIAL TILL
167"	100m 1/6 00	ABUNDAN FEW	FINE FAINT	PED SURFACE PRISMATIC	GLAC, LAKE SED OUTWASH
DILATANCY PLAST		ENCY COMMON MANY	MINIMUM DISTINCT COARSE PROMINE CTURE		RESIDUUM US CUESS BEDROCK
SLOW LOW	ASTIC DRY VERY SOFT SOFT	GRADE SIZ		SUBANGULAR % BOULDERS	
RAPID MEDIUM HIGH	MOIST FIRM HARD VERY MOIST VERY HARD	WEAR FIN MODERATE ME	E GRANULAR DIUM CRUMB	COLUMNAR >12"	- 1/4" to 3" <
BOUNDAR	Y WET		ARSE ANGULAR RY COARSE	SINGLE GRAIN % COBBLE	% FINES
	MOOTH NOTES	a few grove	/ Stenes	undlan 3 10 12 C	- < #200 <u>650</u>
GRADUAL IR	AVY REGULAR ROKEN	n 2136		ь	
OVERALL NOTES:		, ,	70 /	,	
/	his was fro	3em 70 3	d inchas	plus	/ . /
OBSEIVER	meterial.	as it we	S excever	sel, all ma	teric!
Delow	The trozon	material,	Wes Slig	htly moist	to
moist	by touch, 1	10 meteria	WES W	et or sctu	retect,
_00 SG	eps obser	red			
SAMPLES TAKEN: Y	ES (NO)	WATER OBSER	/ED: YES (NO)	BEDROCK: YES	(6)
SAMPLE ID:		TYPE:	DEPTH:	DEPTH OF BEDRO	121 60
				Na Roda	
SAMPLE ID:		TYPE:	DEPTH:	- El. 765	2 (14/20/20/20/20/2
SAMPLE ID:			DEPTH:	SHE	ET SIDE 1 OF 2
File: IIO4KBIDGE1\Base\ures\Technical	NSolislOKE SOIL LOG-2 REV 1 11-21-2018.dwg - Saved: Dua	no 11/27/2018 12:34 PM Printed: Duane 3/7/2019 3	13 PM	OKE SOIL LO	OG-2 REV.3 11-27-201

Oakridg ENGINEERIN	e G OWNER:	Jeff	Sover		EST PIT / BO	ORING NUMB	er: 3	DATE: 3		CONTINUED SHEET 2 OF 2
DEPTH L	JSCS SOIL	TYPE MUNC	ELL M	OTTLES OLORS	ABUNDANO	E SIZE FINE MINIMUM	TYPE FAINT	PED SURFACE IN-MATRIX	STRUCTURE STRATIFIED	SEOLOGY ALLUVIUM
67/	01 10	am 7.5	YR 98		COMMON MANY ABUNDANO	COARSE	PROMINENT TYPE	ROOT HAIR	SLICKEN-SIDED	SLOPE ALLUV. SOLLUVIUM BEACIAL TIDS
14.4		4			COMMON	FINE MINIMUM	FAINT DISTINCT	PED SURFACE IN-MATRIX	PRISMATIC C	OUTWASH
DILATANCY		MOISTURE	CONSISTENCY VERY SOFT		MANY STRUC	TURE	PROMINENT		HOMOGENEOUS	OESS BEDROCK
	LOW	A STATE OF THE PARTY OF THE PAR	SOFT	GRADE.	SIZI RELESS VER FINE	E I` Y FINE PL : GI	YPE ATY SU RANULAR CO		~ ?	GRAVEL
	HIGH	WET	FIRM HARD VERY HARD	MODERAT STRONG	E MED	RSE A	RUMB PE NGULAR SI	NGLE GRAIN	COBBLE .	4" to 3"
<u>BO</u> DISTINCTIVEN	UNDARY ESS TOPOGRA	APHY NOTES	a for	cree	VEH	COARSE	apple	li Horas	1612"	#200 50-60
ABRUPT CLEAR GRADUAL	SMOOTH WAVY IBBEGULAB	COL	lors to	06	ove!	listed	100	Fmol	Hed	
DIFFUSE	BROKEN USCS SOIL			IOTTLES	ABUNDANG		TYPE	LOCATION	STRUCTURE	
	8/OR	USDA COLO	ORS % C	OLORS	FEW COMMON	FINE	FAINT	PED SURFACE IN-MATRIX	LAMINATED	ALLUVIUM SLOPE ALLUV
					ABUNDANG		TYPE	ROOT HAIR LOCATION	SLICKEN-SIDED	COLLUVIUM GLACIAL TILL GLAC. LAKE SED
				- 1	FEW COMMON MANY	FINE MINIMUM COARSE		PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC	OUTWASH RESIDUUM
DILATANCY NONE SLOW	PLASTICITY NONPLASTIC	DRY	CONSISTENCY VERY SOFT SOFT	CDADE	STRUC	CTURE T	VDE			BEDROCK
RAPID	LOW MEDIUM HIGH	SLIGH, MOIST MOIST	FIRM HARD	STRUCTU WEAK MODERA	RELESS VEF	TYFINE P	LATY S HANULAR C	ODANGOLAR	·12"1	
ВС	UNDARY	VERY MOIST WET	VERY HARD	STRONG	COA	ARSE A RY COARSE				% FINES
DISTINCTIVEN ABRUPT	IESS TOPOGR	APHY NOTES	<u>3:</u>						3" to 12"	< #200
CLEAR GRADUAL DIFFUSE	WAVY IRREGULAF BROKEN	_								
	USCS SOIL			MOTTLES	ABUNDAN		TYPE	LOCATION	Particular and Partic	GEOLOGY
	<u>8/OH</u>	USDA COLO	ORS % C	COLORS	FEW COMMON MANY	FINE MINIMUM COARSE		IN-MATRIX	STRATIFIED LAMINATED FISSURED	SLOPE ALLUV COLLUVIUM
				-	ABUNDAN	CE SIZE	TYPE	LOCATION PED SURFACE	SLICKEN-SIDED	GLACIAL TILL GLAC, LAKE SEI
DILATANCY	PLASTICITY	MOISTURE	CONSISTENCY	,	COMMON MANY	MINIMUI	M DISTINCT PROMINENT	IN-MATRIX	LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS
NONE SLOW	NONPLASTIC LOW	DRY SLIGH, MOIST	VERY SOFT SOFT	GRADE	STRU Slz	CTURE ZE RY FINE I	TYPE		% BOULDERS	BEDROCK % GRAVEL
RAPID	MEDIUM HIGH	MOIST VERY MOIST	FIRM HARD VERY HARD	STRUCTI WEAK MODERA STRONG	URELESS VE FIN TE ME	IE (GMANULAH (SUBANGULAH COLUMNAR DRISMATIC	>12"	
	DUNDARY	WET		STRONG	i CO VE	ARSE RY COARSE	ANGULAR S	SINGLE GRAIN		% FINES
ABHUPI	NESS TOPOGE SMOOTH	NOTES	3:					(3" to 12"	< #200
CLEAR GRADUAL DIFFUSE	WAVY IRREGULA BROKEN	R								
DEPTH		TYPE MUN		MOTTLES	ABUNDAN	ICE SIZE FINE	TYPE	LOCATION PED SURFACE	E STRATIFIED	GEOLOGY
					COMMON MANY	MINIMU		IN-MATRIX T ROOT HAIR	LAMINATED FISSURED SLICKEN-SIDED	SLOPE ALLUV. COLLUVIUM
					ABUNDAN FEW	FINE	TYPE FAINT	LOCATION PED SURFAC	BLOCKY E PRISMATIC	GLACIAL TILL GLAC, LAKE SE OUTWASH
DILATANCY	PLASTICITY	MOISTURE	CONSISTENC	Υ	COMMON MANY STRI	MINIMU COARS JCTURE		IN-MATRIX T ROOT HAIR	LENSED HOMOGENEOUS	RESIDUUM LOESS BEDROCK
NONE SLOW RAPID	NONPLASTIC LOW	DRY SLIGH. MOIST	VERY SOFT SOFT FIRM	GRADE STRUCT	SI	ZE	TYPE PLATY	SUBANGULAR	% BOULDERS	% GRAVEL
	MEDIUM HIGH	MOIST VERY MOIST	HARD VERY HARD	WEAK MODERA STRONG	ATE MI	NE	GRANULAR CRUMB ANGULAR	COLUMNAR PRISMATIC SINGLE GRAIN		1/4" to 3"
	OUNDARY	WET		STRONG		ERY COARSE	ANGULAN	SINGLE GRAIN	% COBBLE	% FINES
CLEAR	NESS TOPOGE SMOOTH WAVY	NOTE	<u>S:</u>						3" lo 12"	< #200
GRADUAL DIFFUSE	IRREGULA BROKEN	AR								
DEPTH				MOTTLES COLORS	ABUNDAI FEW	FINE	TYPE FAINT	LOCATION PED SURFACE	CE STRATIFIED	ALLUVIUM
					COMMON MANY	MINIMI COARS	SE PROMINEN		FISSURED SLICKEN-SIDED	SLOPE ALLUV COLLUVIUM GLACIAL TILL
					ABUNDA FEW COMMON	NCE SIZE FINE MINIM	TYPE FAINT UM DISTINCT	LOCATION PED SURFAI IN-MATRIX	N BLOCKY	GLAC, LAKE SE OUTWASH
DILATANC			CONSISTENC VERY SOFT	<u>Y</u>	MANY	COAR!			HOMOGENEOUS	- RESIDUUM B LOESS BEDROCK
SLOW RAPID	NONPLASTIC LOW MEDIUM	DRY SLIGH, MOIST	SOFT FIRM		E S TURELESS V	ERY FINE	TYPE PLATY	SUBANGULAR	% BOULDERS	% GRAVEL
	HIGH	MOIST VERY MOIST WET	HARD VERY HARD	WEAK MODER STRON	IATE M	INÉ IEDIUM :OARSE	GRANULAR CRUMB ANGULAR	COLUMNAR PRISMATIC SINGLE GRAIN	>12"	1/4" to 3"
and the second s	OUNDARY NESS TOPOG	=0020000		÷		ERY COARSE			% COBBLE 3" to 12"	% FINES
ABRUPT CLEAR	SMOOTH	14011	:S:							< #∠∪∪
GRADUAL DIFFUSE	IRREGUL/ BROKEN	AR								

Oakridg ENGINEERII	NG OWNER:	Jeff	and the later	,		TEST PI	/ BORING	NUMBER:	7
Chippewa Falls, Wi 5472 www.OakridgeEng.com	9 PROJECT:_	Hog	tecil.	Ly		DATE: _		121/201	9
		J		,		ELEVATI	ON:	982.	0
SITE LOCATION:	ADDRESS					LOGGE	BY: D	mitte	
@ 12	884 51	Ete Hwy	48 6	ents bun	5 ANY	KARST FEA	TURES W	THIN 1000 FEET	YES
NORTHING /6	6041.4		162274		r: LAN			Beck Sk	
COUNTY / STATE:	Ruca	A Ct	Wi			DSCAPE GE		11.1	ron
DEPTH USCS	SOIL TYPE	MUNCELL	MOTTLES	ABUNDANCE	SIZE T	YPE L	OCATION	STRUCTURE	GEOLO
0/-	&/OR USDA	COLORS %	COLORS	FEW COMMON MANY	MINIMUM DI	STINCT II	ED SURFACE N-MATRIX OOT HAIR	STRATIFIED LAMINATED FISSURED	SLOPE A
1/21 M	1 /00m	3/2 100		ABUNDANCE	SIZE T	YPE L	OCATION	SLICKEN-SIDED BLOCKY	GLACIAL GLAC. LA
113		1		FEW COMMON	MINIMUM D	STINCT I	ED SURFACE	PRISMATIC LENSED	OUTWAS
	STICITY MOIST	URE CONSISTE		MANY STRUCTU	<u>RE</u>	ROMINENT F	NAH TOOI	HOMOGENEOUS	DEDROC
SLOW COW	SLIGH. N	MOIST SOFT	GRADE	RELESS VERY FIL		SUB	ANGULAR	% BOULDERS	% GRA
HIGH	VERY M	HARD OIST VERY HARD	WEAK MODERA STRONG		GRANU CRUME ANGUL	PRIS	JMNAR MATIC ILE GRAIN	>12" %_CORRLE	1/4" to 3"_
BOUND	TODOODADING	-7	. /	VERY CO		4	4	% COBBLE	% FINES
DISTINCTIVENESS ABRUPT	SMOOTH	NOTES: ////S	loyer	was f	To Tong D	note	Fh	5 10 12 <u></u>	<#200 7
CLEAR GRADUAL DIFFUSE	WAVY IRREGULAR BROKEN	Fut no	7	1 meny	14 01	esus 1	RIC E	res 0/	FRE
DEPTH USCS	SOIL TYPE	MUNCELL	MOTTLES	ABUNDANCE	SIZE]		OCATION		
15/	&/OR USDA	COLORS %	COLORS	COMMON MANY	MINIMUM D	ISTINCT	PED SURFAC IN-MATRIX ROOT HAIR	E STRATIFIED LAMINATED FISSURED	SLOPE A
1/11/2	109m	4/4 100		ABUNDANCE	SIZE	YPE	LOCATION	SLICKEN-SIDED BLOCKY	GLAG. L
17.4				FEW COMMON MANY	MINIMUM I	ISTINCT	PED SURFAC IN-MATRIX ROOT HAIR	LENSED	OUTWA RESIDU
NONE NO	ASTICITY MOIST	TURE CONSISTE VERY SOFT	0.000	STRUCTU	RE		NOOT HAIR	HOMOGENEOU:	BEDRO
SLOW LOV		The state of the s	GRADE	URELESS SIZE VERY F FINE	NE PLATY GRAN	SUE	IANGULAR UMNAR	% BOULDERS	% GRA
Hid	VERY N	MOIST VERY HARD		ATE MEDIUN	I CRUM	B PRI	SMATIC GLE GRAIN	% COBBLE	1/4" to 3"
BOUND	ARY		11	VERY C	OARSE			3" to 12"	% FINE
DISTINCTIVENESS ABRUPT CLEAR	SMOOTH WAVY	NOTES: 15	11Ke	101	cherical	, 300 m s s	20-11	3 10 12 <u>-</u>	<#200 _
GRADUAL DIFFUSE	IRREGULAR BROKEN	Feels	1160	W 50	4 F.	Jery C	of	the de	0/2
DEPTH USC	S SOIL TYPE	MUNCELL	MOTTLES	ABUNDANCE		TYPE	LOCATION		
	&/OR USDA	COLORS %	COLORS	FEW COMMON MANY	MUMINIM	FAINT DISTINCT PROMINENT	PED SURFA IN-MATRIX ROOT HAIR	LAMINATED FISSURED	SLOPE COLLU
$\parallel / \parallel_{-}$				ABUNDANCE	SIZE	TYPE	LOCATIO	SLICKEN-SIDER BLOCKY	GLACIA GLAC.
			-	FEW COMMON MANY	MINIMUM	FAINT DISTINCT PROMINENT	PED SURFA IN-MATRIX ROOT HAIR	LENSED	OUTWA RESIDU
NONE NO	ASTICITY MOIST	VERY SOFT		STRUCTI	JRE		HOOT HAIT		BEDRO
SLOW LO		FIRIVI	GRAD STRUC WEAK	E SIZE TURELESS VERY I FINE		√ SU	BANGULAR	% BOULDERS	% GRA
HIC	H VERY I WET	HALID		ATE MEDIU G COARS	M CRUI SE ANGL	AB PR	ISMATIC NGLE GRAIN	>12" % COBBLE	1/4" to 3"
DISTINCTIVENESS	DARY			VERY	COARSE				% FINE % FINE
ABRUPT CLEAR	SMOOTH WAVY	NOTES:			-				< #200
GRADUAL DIFFUSE	irregular Broken								
OVERALL NOTES	^	1 0	0 1		,				
	70300	10 30	2 snche		<u>s, </u>	-/		11	1
Obser	ed mer	Cericl a	5 15	Wes	exc	over	28	c// m	CFE/
below	The f	10300	meter	iel wes	5/	941	+ mo	ist to	mo!
byf	eel .	and yis	syel 1	75,0ec	tian.	9		eteriel.	WES
wer	01 5	cturateu	1,00	500	os c	630	ruea	V	
4									
SAMPLES TAKE	VYES AND		W//	ATER OBSERVE	YES MA		PE	DROCK: YES N	0
48.							DE	PTH OF BEDRO	CK
ALCOHOLD BY A SHARE THE PARTY OF THE PARTY O			TY	PE:	DEPTH:			R HOLE EXTENT	14
SAMPLE ID:							1	lo Bedroc	1-
SAMPLE ID:			TY	PE:	DEPTH:				-
3 (2)				PE:			_	El. 967.	7

Oakridge ENGINEERING OWNER:	TEST PIT / BORING NUMBER:	DATE: CONTINUED SHEET 2 OF 2
DEPTH USCS SOIL TYPE MUNCELL COLORS %	MOTTLES COLORS REW COMMON MANY ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON MANY COARSE TYPE FAINT PROMINENT PROMINENT DISTINCT DISTINCT PROMINENT DISTINCT PROMINENT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR PED SURFACE IN-MATRIX ROOT HAIR RESIDUM R
NONPLASTIC DRY VERY SOFT	STRUCTURELESS VERY FINE PLATY SL WEAK FINE GRANULAR CO	SEANGULAR SEAN
HADIVAL IRREGULAR FFUSE BROKEN		
DEPTH USCS SOIL TYPE MUNCELL COLORS % DILATANCY PLASTICITY MOISTURE VERY SOFT SOFT SOFT SOFT SOFT SOFT SOFT SOFT	ABUNDANCE SIZE TYPE	LOCATION PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR UBANGULAR OLUMNAR RISMATIC INGLE GRAIN INGLE GRAIN WE SUMMAR OLUMNAR RISMATIC INGLE GRAIN WE SUMMAR OLUMNAR RISMATIC INGLE GRAIN WE SUMMAR STRUCTURE STRUCTURE STRUCTURE STRUCTURE STRUCTURE STRUCTURE SLICKEN-SIDED SLICKEN-SID
RADUAL IRREGULAR IFFUSE BROKEN	(4)	
DILATANCY PLASTICITY MOISTURE CONSISTINATION MONE SLOW LOW SLIGH MOIST FIRM MOIST HARD VERY MOIST WET WET SOUNDARY DISTINCTIVENESS TOPOGRAPHY SMOOTH MOTES:	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY WEAK FINE GRANULAR MODERATE MEDIUM CRIMB	SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC, LAKE SE PRISMATIC OUTWASH I FNSED BESIDIU IIM
SLEAR WAVY GRADUAL IRREGULAR DIFFUSE BROKEN DEPTH USCS SOIL TYPE MUNCELL	MOTTLES ABUNDANCE SIZE TYPE	LOCATION STRUCTURE GEOLOGY
BILATANCY PLASTICITY MOISTURE CONSIST NONE NONPLASTIC DRY SLIGH, MOIST HARD HIGH VERY MOIST HARD VERY HARD	COLORS	LOCATION BLOCKY GLAC. LAKE S PED SURFACE PRISMATIC OUTWASH IN-MATRIX LENSED RESIDUUM
BOUNDARY DISTINCTIVENESS TOPOGRAPHY SMOOTH CLEAR WAVY GRADUAL IRREGULAR	STRONG COARSE ANGULAR VERY COARSE	SINGLE GRAIN
DIFFUSE BROKEN DEPTH USCS SOIL TYPE MUNCELL & OCIORS 9	ABUNDANCE SIZE TYPE FEW FINE FAINT COMMON MINIMUM DISTINCT MANY COARSE FEW FINE FEW FINE COMMON MINIMUM COARSE FINE COMMON MINIMUM MINIMUM DISTINCT MANY COARSE PROMINE STRUCTURE	NT ROOT HAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL LOCATION BLOCKY GLAC, LAKE- IN-MATRIX LENSED RESIDUUM

Oakridge ENGINEERING OWNER: Jeff Saver TEST PIT / BORING NUMBER: 5
Chippewa Falls, WI 54729 PROJECT: How Facility DATE: 3/8/1/9
www.OakridgeEng.com ELEVATION: 981,3
SITE LOCATION: ADDRESS LOGGED BY: D. M. TE
@ 12884 State Huy 48 Grants burg ANY KARST FEATURES WITHIN 1000 FEET: YES IND)
NORTHING 126168.3 EASTING 162280.8 LANDSCAPE POSITION: Beckstope
COUNTY/STATE: Burnett Cty WI LANDSCAPE GEOMETRY: Uniform
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY ALLUVIUM
COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV. COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
ABUNDANCE SIZE TYPE LOCATION BLOCKY GLAC LAKE SED PED SURFACE PRISMATIC OUTWASH
COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUM MANY COARSE PROMINENT ROOT HAIR HOMOGENEOUS TOESS DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE
NONE NONPLASTIC DRY VEHY SOFT GRADE SIZE TYPE STELLOT LIGHT MOIST STELLOT LIGHT SSENT SSEN
MEDIUM MOIST HARD WEAK FINE GRANULAR COLUMNAR >12" 1/4" to 3" 1/4"
BOUNDARY VERY COARSE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: /h/s /eyer wes freszen, notes 3" to 12" (#200 10-10) ABRUPT SMOOTH CLEAR WAYY WAYY ONE FORM 5 MM / Semale brought backer to
CLEAR WAYY GRADUAL IRREGULAR DIFFUSE BROKEN OFFICE FOR SMITT SCORES.
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY &/OR USDA COLORS % COLORS FEW FINE FAINT PED SURFACE STRATIFIED ALLUVIUM
COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV. COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
ABUNDANCE SIZE TYPE LOCATION BLOCKY GIZE TO GRACIAL TILLS FEW FINE FAINT PED SURFACE PRISMATIC OUTWASH
COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOESS
NONE NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE % BOULDERS % GRAVEL
HIGH VERY MOIST VERY HARD MODERATE MEDIUM CRUMB PRISMATIC 1/4" to 3"
BOUNDARY WET STRONG COARSE ANGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES://ke//ajer-3-7-58-8 3" to 12" O <#200 50-60
CLEAR WAVY GRADUAL IRREGULAR DIFFUSE BROKEN
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY ALUVIUM
COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV. MANY COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
ABUNDANCE SIZE TYPE LOCATION BLOCKY GLAC-TAKE SED FEW FINE FAINT PED SURFACE PRISMATIC OUTWASH
COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM COARSE PROMINENT ROOT HAIR CHOMOGENEOUS LOESS
NOND NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE % BOULDERS % GRAVEL
MEDIUM MOIST HARD WEAK FINE GRANULAR COLUMNAR >12" 1/4" to 3"
BOUNDARY WET STRONG COARSE ANGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: 1/2 1/2 5/200 Meterial gets 3" to 12" 4/200 4/200
CLEAR GRADUAL IRREGULAR OIFFUSE BROKEN TO THE CONTROL OF THE CONT
OVERALL NOTES:
This was to dy makes plus.
observed meterial as it was executed, all meterial
below the frager meterial was slightly moist to moist
by touch and visual inspection, No meteral was
wet or saturated, no see, os observed was
by touch and visual inspection, No meteral was
wet or saturated, no see, os observed was
by touch and visual inspection, we material was wet or saturated no seeps observed No black mottles seem. This Hole is very similar to SAMPLES TAKEN: YES (NO) WATER OBSERVED: YES (NO) DEPTH OF BEDROCK 14' ("
by touch or Jusuel inspection, No metericles Wet or stureted no seeps observed No black nottles seeps. This Hole is very similar to SAMPLES TAKEN: YES (NO) SAMPLE ID: DEPTH: DEPTH: OR HOLE EXTENT: 14 6
by touch and visual inspection, we material was wet or saturated no seeps observed No black mottles seem. This Hole is very similar to SAMPLES TAKEN: YES (NO) WATER OBSERVED: YES (NO) DEPTH OF BEDROCK 14 6"



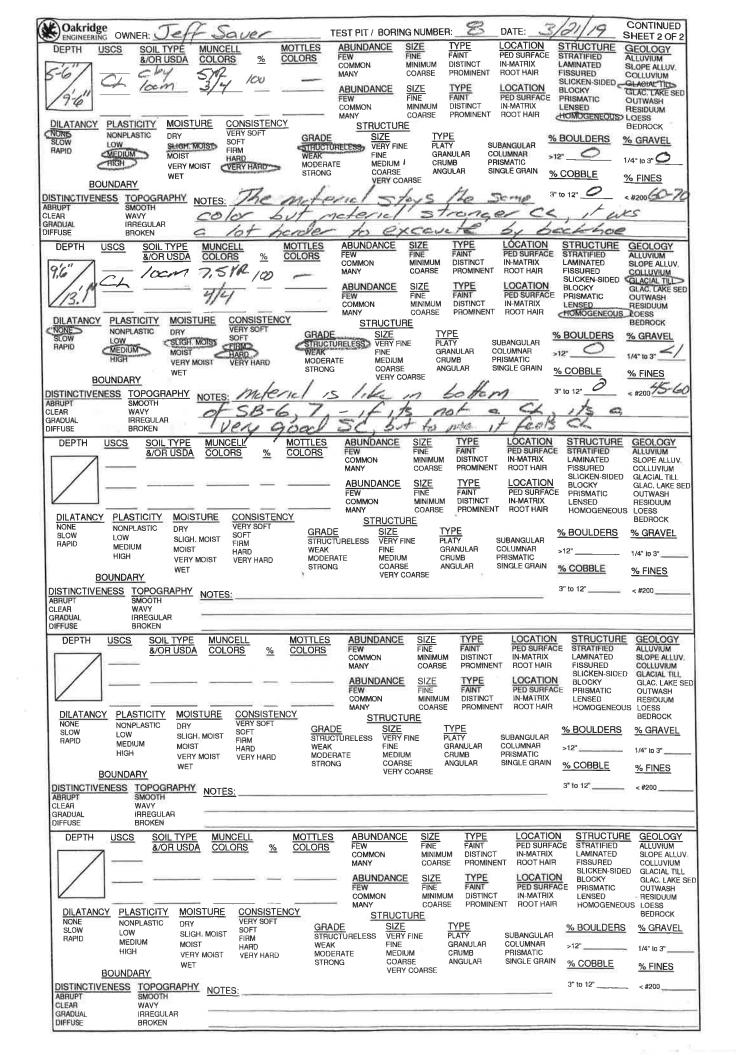
Oakridge engineering owner: Jeff Sover	TEST PIT / BORING NUMBER;
Chippewa Falls, WI 54729 Www.OakridgeEng.com	DATE:3/21/2019
WWW.CanlugeLing.com	ELEVATION: 982.7
SITE LOCATION: ADDRESS	LOGGED BY: D. M. He
	ANY KARST FEATURES WITHIN 1000 FEET: YESTNO
NORTHING 126/02-1 EASTING 162350.2	LANDSCAPE POSITION: Books lege
COUNTY/STATE.	TYPE LOCATION STRUCTURE GEOLOGY
8/OR USDA COLORS % COLORS FEW FINE MINIMUM	FAINT PED SURFACE STRATIFIED ALLUVIUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV.
MANY COARSE ABUNDANCE SIZE	PROMINENT ROOT HAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL TYPE LOCATION BLOCKY GLAC. LAKE SED
FEW FINE COMMON MINIMUM	FAINT PED SURFACE PRISMATIC OUTWASH DISTINCT IN-MATRIX LENSED RESIDUUM
DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE	BEDROCK
SLOW COW SLIGH, MOIST SOFT GRADE STRUCTURELESS VERY FINE PRINE GRADE WEAK FINE GRADE WEAK FINE GRADE G	RANULAR COLUMNAR >12"
HIGH VERY MOIST VERY HARD MODERATE MEDIUM COARSE A WET	RUMB PRISMATIC 1/4 to 3 NGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: This lever was froze	21 notes 3" to 12" <#200 70-90
CLEAR WAVY are from SME/ 3cm/	ole brought back troffice
DEPTH USCS SOILTYPE MUNCELL MOTTLES ABUNDANCE SIZE	TYPE LOCATION STRUCTURE GEOLOGY
8/OR USDA COLORS % COLORS FEW COMMON MINIMUM MANY COARS	
ML 100m 4/3 NO ABUNDANCE SIZE	TYPE LOCATION SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC. LAKE SED FAINT PED SURFACE PRISMATIC OUTWASH
COMMON MINIMUI MANY COARSI	M DISTINCT IN-MATRIX LENSED RESIDUUM E PROMINENT ROOT HAIR HOMOGENEOUS LOESS
	TYPE % BOULDERS % GRAVEL
RAPID MEDIUM MOIST HARD WEAK FINE	PLATY SUBANGULAR GRANULAR COLUMNAR >12"
	ANGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: I'VE a Love / ayer was	5 frozen, 3" to 12" C -#200
CLEAR WAVY GRADUAL IRREGULAR DIFFUSE BROKEN	PR
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE	TYPE LOCATION STRUCTURE GEOLOGY FAINT PED SURFACE STRATIFIED ALLUVIUM
8/OR USDA COLORS % COLORS FEW COMMON MINIMUM COARS	JM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV.
13.0 ABUNDANCE SIZE FINE FINE FINE	TYPE LOCATION BLOCKY GLAC LAKE SED FAINT PED SURFACE PRISMATIC OUTWASH
DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE	
NONE NONPLASTIC DRY VERY SOFT GRADE SIZE	TYPE PLATY SUBANGULAR % BOULDERS % GRAVEL
HAPTU MEDIUM MOIST HARD WEAK FINE HIGH VERY MOIST VERY HARD MODERATE MEDIUM	GRANULAR COLUMNAR >12" 1/4" to 3"
BOUNDARY WET STRONG COARSE VERY COARSE	ANGULAR SINGLE GRAIN % COBBLE % FINES YR 3/4 cold 3 to 12
DISTINCTIVENESS TOPOGRAPHY NOTES: WLTERIC STORIS GS DISTINCTIVENESS SMOOTH SMOOTH SHOULD TURN TO TEST TOPOGRAPHY NOTES: WLTERIC STORIS GS DISTINCTIVENESS TOPOGRAPHY NOTES: WLTERIC STORIS GS DISTINCTIVE GS DISTI	IR 4/4 Hes smill gresel
GRADUAL IRREGULAR DIFFUSE BROKEN Up to 3/8" 5/30, If me	of CL is a very good SC
OVERALL NOTES:	by touch
al second last trasper to	antel all meterial
balow the former meterial was 5	lightly moist to moist
by touch and visual inspection.	no meterial was
wet or seturated no seeps	observal.
do not see the black mothers.	
SAMPLES TAKEN: YES NO WATER OBSERVED: YES /	NO BEDROCK: YES (NO)
TSCIARN	DEPTH OF BEDROCK
SAMPLE ID: 55 6. / 2-3 / TYPE: DEP	TH: OR HOLE EXTENT: 50
SAMPLE ID:	NO DONOCOL
	H:
SAMPLE ID: DEP	TH: #4 96 9. 7 TH: SHEET SIDE 1 OF 2

Oakridge ENGINEERING OWNER:		TEST PIT / BO	RING NUMBER:	DATE:	CONTINUE
DEPTH USCS SUIL	TYPE MUNCELL COLORS %	COLORS FEW COMMON MANY	SIZE TYPE FINE FAINT MINIMUM DISTINCT COARSE PROMINEN	LOCATION S PED SURFACE S IN-MATRIX LA T ROOT HAIR FI	SHEET 2 OF TRAITFIED ALLUVIUM SLOPE ALLUVIUM GLACIAL TILL
DILATANCY PLASTICITY NONE NONPLASTIC	MOISTURE CONSISTEN DRY VERY SOFT	ABUNDANCE FEW COMMON MANY STRUCT	FINE FAINT MINIMUM DISTINCT COARSE PROMINEN	PED SURFACE PI	CICKEN-SIDED GLACIAL TILL LOCKY GLAC. LAKE S RISMATIC OUTWASH ENSED RESIDUUM OMOGENEOUS LOESS BEDROCK
SLOW LOW RAPID MEDIUM HIGH BOUNDARY	SLIGH, MOIST SOFT FIRM MOIST HARD VERY MOIST VERY HARD	ACY GRADE STRUCTI GRADE STRUCTURELESS WEAK MODERATE MODIFICATION STRONG COAR: VERY VERY VERY VERY	FINE PLATY GRANULAR M CRUMB SE ANGULAR COARSE	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN % C	OULDERS % GRAVEL 1/4" to 3" COBBLE % FINES
STINCTIVENESS TOPOGR RUPT SMOOTH EAR WAVY ADUAL IRREGULAR FUSE BHOKEN	NOTES:		*:		12" < #200
4.1011611	TYPE MUNCELL RUSDA COLORS %	MANY ABUNDANCE	MINIMUM DISTINCT COARSE PROMINEN SIZE TYPE	IN-MATRIX L NT ROOTHAIR F S LOCATION B	STRUCTURE STRATIFIED AMINATED AMINATED SISURED SLICKEN-SIDED SLICKEN-SIDED GLACIAL TILL GLAC. LAKE &
DILATANCY PLASTICITY NONE NONPLASTIC SLOW LOW MEDIUM	MOISTURE CONSISTEN DRY VERY SOFT SLIGH. MOIST FIRM	FEW COMMON MANY STRUCT GRADE STRUCTURELESS VERY WEAK MODERATE STRONG COAR VERY	FINE FAINT MINIMUM DISTINCT	PED SURFACE P	PRISMATIC OUTWASH RESIDUUM HOMOGENEOUS LOESS BEDROCK BOULDERS % GRAVEL
BOUNDARY STINCTIVENESS TOPOGRESHOTH	APHY NOTES.	WEAK FINE MODERATE MEDIL STRONG COAR VERY	GRANULAR JM CRUMB SE ANGULAR COARSE		1/4" to 3"
EAR WAVY IADUAL IRREGULAI FFUSE BROKEN	N.L.				
		COMMON		IN-MATRIX I	STRUCTURE STRATIFIED ALLUVIUM LAMINATED FISSURED SLICKEN-SIDED BLOCKY GLAC, LAKE PRISMATIC OUTWASH
DILATANCY PLASTICITY NONE NONPLASTIC SLOW LOW MEDIUM HIGH	SLIGH MOIST FIRM MOIST HARD VERY MOIST VERY HARD	ABUNDANCI FEW COMMON MANY NCY GRADE STRUCTURELESS VERY WEAK MODERATE MEDI STRONG COAF	COARSE PROMINE TYPE FINE PLATY GRANULAR UM CRUMB	SUBANGULAR COLUMNAR PRISMATIC 212	RESIDUM HOMOGENEOUS RESIDUM LOESS BEDROCK
BOUNDARY STINCTIVENESS TOPOGR IRUPT SMOOTH EAR WAVY AADUAL IRREGULA FFUSE BROKEN		VERY	COARSE		COBBLE % FINES 0 12" < #200
DEPTH USCS SOIL	L TYPE MUNCELL R USDA COLORS %	MOTTLES ABUNDANC COLORS FEW	E SIZE TYPE		STRUCTURE GEOLOGY
DILATANCY PLASTICITY	MOISTURE CONSISTER	COMMON MANY ABUNDANC FEW COMMON MANY	MINIMUM COARSE PROMINE SIZE FINE MINIMUM COARSE PROMINE MINIMUM PROMINE MORE PROMINE	IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX	STRATIFIED LAMINATED SLOPE ALLUVIUM FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TIL BLOCKY GLAC. LAKE PRISMATIC OUTWASH LENSED RESIDUUM HOMOGENEOUS LOESS BEDROCK
SLOW LOW RAPID MEDIUM HIGH BOUNDARY	SLIGH, MOIST SOFT FIRM MOIST HARD VERY MOIST VERY HARD WET	GRADE SIZE STRUCTURELESS VERY WEAK FINE MODERATE MED STRONG COA	TYPE FINE PLATY GRANULAR UM CRUMB	SUBANGULAR COLUMNAR >12 PRISMATIC	## BOULDERS
STINCTIVENESS BRUPT EAR HADUAL FFUSE SMOOTH WAVY IRREGULA BROKEN	NOTES.			3"	to 12" <#200
	L TYPE MUNCELL R USDA COLORS %	MOTTLES ABUNDANC FEW COMMON MANY ABUNDANC FEW COMMON COMM	FINE FAINT MINIMUM DISTINC COARSE PROMIN	T IN-MATRIX ENT ROOT HAIR LOCATION PED SURFACE	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY GLAC, LAKE PRISMATIC LENSED GEOLOGY GLAC, LAKE OUTWASH LENSED
DILATANCY NONE SLOW RAPID NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH, MOIST MOIST VERY MOIST VERY MOIST VERY HARD	MANY	COARSE PROMIN TURE E TYPE Y FINE PLATY GRANULAR IUM CRUMB	SUBANGULAR COLUMNAR PRISMATIC SUBANGULAR COLUMNAR >1	LENSED RESIDUM HOMOGENEOUS LOESS BEDROCK BOULDERS % GRAVEI
BOUNDARY	WET		RSE ANGULAR Y COARSE		COBBLE % FINES

Chippewa Falls, V	VI 54729 PROJECT:	Hoc	Facility	ty		DATE:	_3/	21/2019	
www.OakridgeE	ig.com	1		1		ELEVA	TION:	983.0	
0						LOGG	1	mitte	
SHE LOCATI	ION: ADDRESS	71.4	, 0/8	Gratel	6		111-11-11	11/1	
	2007	tate Mu	14 70	Granyssi	urg A			THIN 1000 FEET	
NORTHING_	126031.9	EASTING	62472.	2	L	ANDSCAPE F	POSITION:	Backs	9
COUNTY / ST	ATE: BUCK	H Hy	Wi		L	ANDSCAPE (-
DEPTH L	JSCS SOIL TYPE &/OR USDA	MUNCELL 6	COLORS	ABUNDANCE FEW	SIZE FINE	TYPE FAINT	PED SURFACE		GA
0/	5.17	10/2 100		COMMON MANY	MINIMUM	DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	LAMINATED FISSURED	SL
/12"	Mr locus	3/2_/00		ABUNDANCE FEW	SIZE FINE	TYPE	LOCATION PED SURFACE	SLICKEN-SIDED BLOCKY E PRISMATIC	GI
DUATANOV	DI AGTIGITA MAGIGI	TURE CONSISTE	NOV	COMMON MANY	MINIMUM COARSE	DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	LENSED HOMOGENEOUS	R
DILATANCY NONE SLOW	PLASTICITY MOIST	TURE CONSISTED VERY SOFT SOFT	GRADE	STRUCTUR SIZE	<u>TY</u>	PE		% BOULDERS	%
RAPID	MEDIUM SLIGH.	MOIST FIRM HARD		URELESS VERY FIN	NE PLA GR/	ATÝ SU Anular co	JBANGULAR DLUMNAR	>12"	1/4
	HIGH VERY N	MOIST VERY HARD	MODERA STRONG	COARSE	ANG		IISMATIC NGLE GRAIN	% COBBLE	%
and the second second second second	UNDARY ESS TOPOGRAPHY	NOTES: This	P	VERY CO	AHSE	c		3" to 12"	< #
ABRUPT CLEAR	SMOOTH WAVY	NOTES: ///	s deck	53	6	Anna	7115/	- Lofen	0
GRADUAL DIFFUSE	IRREGULAR BROKEN	This	317	Mean	1000	ant se de	J.	75.6	
	USCS SOIL TYPE	MUNCELL 1	MOTTLES	ABUNDANCE	SIZE FINE	TYPE	LOCATION PED SURFACE		Ğ
12"/	- 8/OR USDA	COLORS %	COLORS	COMMON MANY	MINIMUM COARSE	DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	LAMINATED FISSURED	S
10/19"	ML Joen	4/3 /00		ABUNDANCE	SIZE	TYPE	LOCATION	SLICKEN-SIDED	9
///				FEW COMMON	MINIMUM	FAINT	PED SURFAC	CE PRISMATIC LENSED	C FI
DILATANCY		TURE CONSISTE		MANY STRUCTU		PROMINENT	ROOT HAIR	HOMOGENEOU	C C
SLOW	LOW SLIGH	MOIST SOFT	GRADE STRUCT	TURELESS VERY FI	NE PL	<u>PE</u> ATY S	UBANGULAR	% BOULDERS	%
	HIGH WERY	HARD	WEAK MODERA	FINE ATE MEDIUM	CF.	NUMB P	OLUMNAR RISMATIC	>12"	1/
	DUNDARY WET	, ,	STRONG	VERY CO		IGULAR S	INGLE GRAIN	% COBBLE	%
DISTINCTIVÉN ABRUPT	IESS TOPOGRAPHY SMOOTH	NOTES:	2 9500	2 / cye,	Wes	4003	6007	3" to 12"	<
CLEAR GRADUAL	WAVY IRREGULAR	notes	cre y	Crovy :	20-40	10			_
DIFFUSE	USCS SOIL TYPE	MUNCELL	MOTTLES	ABUNDANCE	SIZE	TYPE	LOCATIO	N STRUCTURE	
[10// A	&/OR USDA	COLORS %		FEW COMMON	FINE MINIMUM	FAINT	PED SURFA		10000
19/1	Ch loom	3/4 10	2 -	MANY	COARSE	PROMINENT		SI ICKEN SIDE	
14.9		407.5 VR		ABUNDANCE FEW COMMON	SIZE FINE MINIMUM	TYPE FAINT DISTINCT	PED SURFA IN-MATRIX		1
DILATANCY	PLASTICITY MOIS	STURE CONSISTI	ENCY	MANY	COARSE	PROMINENT			s
NONE SLOW	NONPLASTIC DRY LOW SLIGH	VERY SOFT SOFT	GRAD			YPE	SUBANGULAR	% BOULDERS	9
RAPID	MEDIUM MOIST	1-11-(IVI	WEAK	FINE	G	RANULAR	COLUMNAR	>12"	1
B/	OUNDARY	WOO! VERT HARD	STRON	G COARS			SINGLE GRAIN	% COBBLE	9
DISTINCTIVE	NESS TOPOGRAPHY	NOTES: CXC	ctly 1	te mo	Lorse	100	556	3" to 12"	<
ABRUPT CLEAR GRADUAL	SMOOTH WAVY IRREGULAR	· · · · · · · · · · · · · · · · · · ·							
DIFFUSE	BROKEN								
OVERALL NO	TES: The	inc f		1 -24	1	Las	- 1.	~	
	-00-	nes fro	130/	L CX	7776	ayer 3	1-1	1/	_
_065	served i	Materki	95	it was	: 2)	CCOV	TECH	1 0//	,
Mai	terial 6	elow 1	he fr	0300 1	nete	ricl .	ues	Slight	z
_mo	1ST to M	1015+ 6	1 70	uch ar	of s	115 WE	105	pection	
_ 10	meteri	al was	wet	or so	turc	tech,	20	seeps	
_05	served							6.1	
T OSCINERAL DESCRIPTION					20 - 120 Care		111 - 1200		0
SAMPLES T	AKEN YES / NO		<u>w</u>	ATER OBSERVED	P. YES TNO)	1000	EDROCK: YESTN	
SAMPLE ID:	J.S. 7	7.1 12-1	19mchogy	'PE:	DEPTH	:		EPTH OF BEDRO	
1	TS 7	2 12-14	101 -	/DC.	DERTI		,	Vo Borton	-
CANADI C ID	21 (1)	0 10 1	110	'PE:	DEPTH:		_ ′	V- 00000	-
SAMPLE ID:			5 8				- 1	1 410	1
SAMPLE ID:			TY	/PE:	DEPTH:			5/, 968, Shee	6

Oakridge ENGINEERING OWNER:	TEST PIT / BORING NUMBER:	DATE: CONTINUED SHEET 2 OF 2
DEPTH USCS SOIL TYPE MUNCELL COLORS % DILATANCY PLASTICITY MOISTURE CONSISTENCY	COLORS FEW COMMON MINIMUM DISTINCT DISTINCT COARSE PROMINENT FEW FINE FAINT DISTINCT	LOCATION STRUCTURE PED SURFACE IN-MATRIX ROOT HAIR LOCATION BLOCKY PED SURFACE PISMATIX LENSED LOCATION BLOCKY PED SURFACE PRISMATIC LENSED PERSON LENSED PERSON ROOT HAIR LENSED PRISMATIC LENSED PERSON ROOT HAIR ROOT HAIR LENSED PERSON ROOT HAIR
NONE	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY SUB- WEAK FINE GRANULAR COL	## BOULDERS
RUPT SMOOTH NOTES: EAR WAVY ADUAL IRREGULAR FUSE BROKEN	11.00m	
DILATANCY PLASTICITY MOISTURE CONSISTEN NONE NONPLASTIC DRY SLIGH, MOIST HARD HIGH VERY MOIST VERY HARD MEDIUM HIGH MOIST HARD VERY MOIST VERY HARD	COLORS FEW COMMON MINIMUM DISTINCT COARSE PROMINENT ABUNDANCE FEW FINE FAINT DISTINCT PROMINENT ABUNDANCE FEW FINE FAINT DISTINCT COARSE PROMINENT STRUCTURE STRUCTURE STRUCTURE STRUCTURELESS VERY FINE GRANULAR COARSE PLATY SU WEAK FINE GRANULAR COARSE PROMINENT WEAK FINE GRANULAR COARSE PLATY SU WEAK FINE GRANULAR COARSE PROMINENT	SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC. LAKE SED OUTWASH IN-MATRIX LENSED RESIDITION
BOUNDARY ISTINCTIVENESS TOPOGRAPHY NOTES:	VERY COARSE	3" to 12" <#200
BRUPT SMOOTH LEAR WAVY RADUAL IRREGULAR FFUSE BROKEN	*	
DILATANCY PLASTICITY MOISTURE CONSISTEN NONE NONPLASTIC DRY VERY SOFT SLOW LOW SLIGH. MOIST HARD HIGH VERY MOIST VERY HARD BOUNDARY	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY SI WEAK FINE GRANULAR CI MODERATE MEDIUM CRUMB PI	LOCATION PED SURFACE IN-MATRIX ROOT HAIR UBANGULAR OLUMNAR RISMATIC INGLE GRAIN PED SURFACE BLOCKY BLOCKY GLAC. LAKE SET OUTWASH HOMOGENEOUS BEDROCK **BOULDERS **GRAVEL** 1/4" to 3"
DISTINCTIVENESS TOPOGRAPHY BRUPT SMOOTH LEAR WAVY IRREGULAR IFFUSE BROKEN		3" to 12" < #200
DEPTH USCS SOIL TYPE MUNCELL & MOISTER COLORS % DILATANCY PLASTICITY MOISTURE CONSISTER VERY SOFT SIGH, MOIST HARD WET WET BOUNDARY MUNCELL & MUNCELL & COLORS & M	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY S WEAK FINE GRANULAR (MODERATE MEDIUM CRUMB S	SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC, LAKE SE PRISMATIC OUTWASH IN-MATRIX LENSED RESIDUUM
DISTINCTIVENESS TOPOGRAPHY ABRUPT SMOOTH CLEAR WAVY GRADUAL IRREGULAR DIFFUSE BROKEN		3" to 12" <#200
DEPTH USCS SOIL TYPE MUNCELL COLORS % A/OR USDA COLORS % DILATANCY PLASTICITY MOISTURE CONSISTE VERY SOFT SLOW LOW SLIGH, MOIST FIRM MEDIUM MOIST HARD	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY	SLICKEN-SIDED GLACIAL TILL LOCATION BLOCKY GLAC, LAKE SI PED SURFACE PRISMATIC OUTWASH IN-MATRIX LENSED RESIDUUM
BOUNDARY DISTINCTIVENESS TOPOGRAPHY SMOOTH CLEAR WAYY VERY MOIST VERY HARD WET NOTES:	STRONG COARSE ANGULAR VERY COARSE	

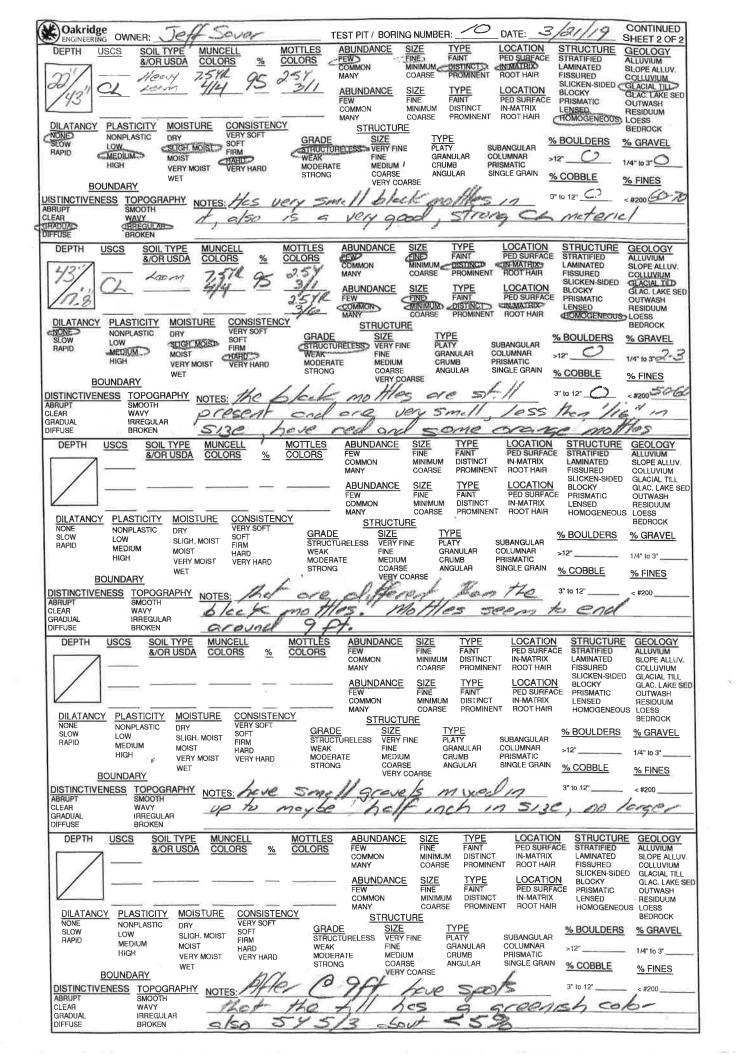
Oakridge Engineering Owner: Jeff Sover	TEST PIT / BORING NUMBER:
Chippewa Falls, WI 54729 PROJECT: How Fee July	DATE: 3/21/2019
www.OakridgeEng.com	ELEVATION: 98/-2
SITE LOCATION: ADDRESS	LOGGED BY: D. M. He
@ 12884 State Huy 18 Grantsburg	ANY KARST FEATURES WITHIN 1000 FEET: YES (NO
NORTHING 126 147. 5 EASTING 162 469. 7	LANDSCAPE POSITION: Beckslope
	LANDSCAPE GEOMETRY: Uniform
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE FINE COMMON MINIMUM MINIMUM	TYPE LOCATION STRUCTURE GEOLOGY FAINT PED SURFACE STRATIFIED DISTINCT IN-MATRIX LAMINATED SLOPE ALLUVIUM LOPE ALLU
0 S/17 1014 100 MANY COARSE	PROMINENT ROOT HAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL
ABUNDANCE SIZE FEW FINE COMMON MINIMUM	
DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE NONPLASTIC DRY VERY SOFT CRADE SIZE T	PROMINENT ROOT HAIR HOMOGENEOUS LOESS BEDROCK
SLOW COW SLIGH MOIST SOFT GRADE SIZE I STRUCTURELESS VERY FINE PI	YPE % BOULDERS % GRAVEL PARTY SUBANGULAR COLUMNAR >12" (2" to 2" to 2" (2" to 2" to 2" to 2" (2" to 2"
HIGH VERY MOIST VERY HARD MODERATE MEDIUM CI WET STRONG COARSE AI	RUMB PRISMATIC 1/4" to 3" 1/4" to
BOUNDARY VERY COARSE DISTINCTIVENESS TOPOGRAPHY NOTES: This Layer was frozen	10 tes 3 to 12 0 < #200 70 %
ABRUPT SMOOTH LEAR WAVY PARADUAL BREEdular	le brought Lecte to
DIFFUSE BROKEN Office for more	TYPE LOCATION STRUCTURE GEOLOGY
8/OR USDA COLORS % COLORS FEW COMMON MINIMUM	FAINT PED SURFACE STRATIFIED ALLUVIUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV.
Social 4/4 100 - MANY COARSE ABUNDANCE SIZE	PROMINENT ROOT HAIR FISSURED COLLUVIUM TYPE LOCATION BLOCKY GLAC, LAKE SE
FEW FINE COMMON MINIMUM	FAINT PED SURFACE PRISMATIC OUTWASH M DISTINCT IN-MATRIX LENSED RESIDUUM
DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE NONE NONPLASTIC DRY VERY SOFT CRAPE SIZE	BEDROCK
RAPID MEDIUM MOIST FIRM STRUCTURELESS VERY FINE FIRM WEAK FINE G	RATY SUBANGULAR GRANULAR COLUMNAR >12"
NIGH VERY MOIST VERY HARD MODERATE MEDIUM C	CRUMB PRISMATIC 1/4 10 3 1/4 1
DISTINCTIVENESS TOPOGRAPHY NOTES: LLG GOODE LOURS IN	KE Frozen 3" 10 12" 0 <#200 70 9
ABRUPT SMOOTH CLEAR WAYY GRADUAL IRREGULAR GRADUAL IRREGULAR	mple
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE	TYPE LOCATION STRUCTURE GEOLOGY
8/OR USDA COLORS % COLORS FEW COMMON MINIMUM	FAINT PED SURFACE STRATIFIED ALLUVIUM M DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV.
ABUNDANCE SIZE	TYPE LOCATION SLICKEN-SIDED STACIAL TILD BLOCKY GLAC, LAKE SE
3/4 FEW FINE COMMON MINIMUM COARS	
DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT SOFT SOFT SOFT GRADE SIZE	TYPE % BOULDERS % GRAVEL
RAPID MEDIUM MOIST FIRM STRUCTURELESS VERY FINE FINE	PLATY SUBANGULAR GRANULAR COLUMNAR >12"
	ANGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: 9 good C - bes a	1° 10 12" 0 <#200 50 G
CLEAR WAYY GRADUAL IRREGULAR DIFFUSE BROKEN CLEAR WAYY SMELL STORES U CLEAR WAYY SMELL STORES W WAYY SMELL STORES W W W W W W W W W W W W W	p to 3/8 in \$130
OVERALL NOTES:	
This was frozen to 24 inch	es plus.
observed meterial as it was exe	extert all meterial
below the frozen meterial was s	slightly moist to moist
by Touch and Viguel inspection	7. no meterial was
wet or soturated, no seeps o	6 Served.
no black mestiles seen	
SAMPLES TAKEN YES /NO WATER OBSERVED: YES	BEDROCK: YES (NO
	DEPTH OF BEDROCK
SAMPLE ID: JS 8, / 6/2-8/2 TYPE: DEPTI	12-1
Te 0 0 12-1201	H: OR HOLE EXTENT : _/3 -/
SAMPLE ID: JS 8.2 6/2-8/2 FT TYPE: DEPTH SAMPLE ID: TYPE: DEPTH SAMPLE ID: TYPE: DEPTH	OR HOLE EXTENT: 13-1 H: OR HOLE EXTENT: 13-1 No Bedrock



Oakridge ENGINEERING	OWNER:	Teff Sav	er			TEST F	PIT / BORING	NUMBER;	9
Chippewa Falls, WI 54729 Www.OakridgeEng.com	PROJECT:	tag fee,	lity			DATE:	3	1/21/2019	9
*****, Oak (dgoElig.com)		,	1			ELEVA	TION:	983.2	
SITE LOCATION: ADDR	RESS	With College				LOGGE	ED BY:	n, Me	
C 12884	State.	Huy 48	Gran	nts burg	A	NY KARST F	EATURES WI	THIN 1000 FEET:	
NORTHING/263	304.9	EASTING	1940.	9			POSITION:		
COUNTY / STATE;	Burnett	· Cty 1	vis					Slight C	
	&/OR USDA CO	OLORS % C	OLORS	ABUNDANCE FEW COMMON	SIZE FINE MINIMUM	TYPE FAINT DISTINCT	PED SURFACE IN-MATRIX	STRUCTURE STRATIFIED LAMINATED	GEOLOGY ALLUVIUM SLOPE ALLUV.
ONI ML	SIST 10	100	-	MANY ABUNDANCE	COARSE	PROMINENT TYPE	ROOT HAIR LOCATION	FISSURED SLICKEN-SIDED	COLLUVIUM GLACIAL TILL
29				FEW COMMON	FINE MINIMUM	FAINT	PED SURFACE IN-MATRIX	LENSED	GLAC. LAKE SED OUTWASH RESIDUUM
DILATANCY PLASTIC		CONSISTENCY VERY SOFT	•	MANY STRUCTUR		PROMINENT	ROOT HAIR	HOMOGENEOUS	LOESS) BEDROCK
RAPID MEDIUM	SLIGH, MOIS MOIST	SOFT FIRM HARD	GRADE STRUCTUR WEAK	<u>SIZE</u> RELESS VERY FIN FINE		TY SUNULAR CO	JBANGULAR DLUMNAR		% GRAVEL
HIGH	VERY MOIST	VERY HARD	MODERATE STRONG		CRU ANG		RISMATIC	% COBBLE	1/4" to 3" —
BOUNDARY DISTINCTIVENESS TOP	POGRAPHY NO	res: This lo	yer we	s froze	nnoL	rotes		3" to 12"	<#200 Zo-90
CLEAR WAV	OTH -	e from	5mel	1 semp	le be	rought	book	to office	e
DIFFUSE BRO DEPTH USCS	KEN	UNCELL N	MOTTLES	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
CS CS		OLORS % C	COLORS	COMMON MANY	FINE MINIMUM COARSE	PROMINENT	PED SURFAC IN MATRIX ROOT HAIR	E STRATIFIED LAMINATED FISSURED	ALLUVIUM SLOPE ALLUV.
9/1 to	Joen -	100	5/6	ABUNDANCE	SIZE	TYPE	LOCATION	SLICKEN-SIDED BLOCKY	GLACIAL TILL GLAC. LAKE SED
	to keem	4/4		COMMON MANY	FINE MINIMUM COARSE	DISTINCT PROMINENT	PED SURFAC IN-MATRIX ROOT HAIR	E PRISMATIC LÉNSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS
DILATANCY PLASTIC	STIC DRY	VERY SOFT	GRADE	STRUCTU	<u>TY</u>	PE		% BOULDERS	BEDROCK % GRAVEL
RAPID MEDIÚM HIGH	SLIGHT MOIST VERY MOIST	FIRM	WEAK MODERAT	FINE	GR	ANULAR C	SUBANGULAR COLUMNAR PRISMATIC	>12_0	1/4" 10 3"
BOUNDARY	WET	T VERY HARD	STRONG	COARSE VERY C	AN		SINGLE GRAIN	% COBBLE	% FINES
	POGRAPHY NO	TES: Meter	7c/ 51	terts o	2 2	stra	m,	3" to 12"	<#200 <u>66-76</u>
	VY SEGULAR SKEN	in alpha	5/0	te do	COS Y	ecse i	in Fine	and SC	as esan
DEPTH USCS	SOIL TYPE N		MOTTLES	ABUNDANCE	SIZE FINE	TYPE FAINT	LOCATION PED SURFA	N STRUCTURE	GEOLOGY
	&/OR USDA C	OLORS %	COLORS	FEW COMMON MANY	MINIMUM COARSE	DISTINCT PROMINEN	IN-MATRIX	LAMINATED FISSURED	SLOPE ALLUV. COLLUVIUM
/				ABUNDANCE FEW	SIZE FINE	TYPE FAINT	LOCATIO PED SURFA		GLACIAL TILL GLAC. LAKE SED OUTWASH
DILATANCY PLASTI	CITY MOISTUR	RE CONSISTENC	Υ	COMMON MÁNY	MINIMUM COARSE	DISTINCT PROMINEN	IN-MATRIX T ROOT HAIR	LENSED	RESIDUUM S LOESS
NONE NONPLATE		VERY SOFT	GRADE STRUCTU	STRUCTU SIZE JAELESS VERY F	T	YPE ATY	SUBANGULAR	% BOULDERS	% GRAVEL
MEDIUM HIGH	MOIST VERY MOIS	FIRM HARD T VERY HARD	WEAK MODERA	FINE TE MEDIUI	GI A CI	ranular Rumb	COLUMNAR PRISMATIC	>12"	1/4" ta 3"
BOUNDARY	-	. /	STRONG	COARS VERY C	COARSE	NGULAR	SINGLE GRAIN	% COBBLE	% FINES
DISTINCTIVENESS TO SME	OOTH	TES: OUT 1	ed n	nottles ;	from	SEM	ole	3" to 12"	<#200
GRADUAL IRR	EGULAR OKEN	7							
OVERALL NOTES:	2	1. 20.	20600	/15					
26 Seculor	l'ozeri	erel or	.t	10105		inta	1 -	11	. /
below ?	the f	10200 0	n ton	d 1115	_xcc	1,064	1000	et to	(C)
moist	S, For	07 000	1 01	such 1	2500	ction	7 10	meter	10/
WES WE	F or	seture	tal	00	500	25 0	6.ser	od	
			•	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7				
CAMPI EC TAVENA	(No		14/47	TER OPERATE	VEC AL		0.0	EDBOCK VES A	
SAMPLES TAKEN: YE	E 9-20 190	81 101	7/	TER OBSERVED		_		EDROCK: YES (NO EPTH OF BEDROO	1 1
SAMPLE ID:	5 7./	8to 10f	E TYP	E:	DEPTH	-		R HOLE EXTENT	17-9
SAMPLE ID:			TYP	'E:	DEPTH:		_	965.4	5 E/
SAMPLE ID:			ТҮР	PE:	DEPTH:		_	No Isedi	T SIDE 1 OF C
File: i1OAKRIDGE/1/Resources/Technical/S	Gallstoke 901L LOG-2 REV 1 1	-21-2018 dwg - Saved: Ouane 11/2	7/2018 12:34 PM - Primi	ed: Ouane 3/7/2019 3:13 PM					T SIDE 1 OF 2 G-2 REV 3 11-27-201

Oakridg					TEST PIT /	BORING NU	MBER:	DATE:		CONTINUED SHEET 2 OF
DEPTH	JSCS SOIL	TYPE M	MUNCELL COLORS %	MOTTLES	ABUNDA	NCE SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
	&/OR	USDA C	OLORS %	COLORS	COMMON	FINE	JM DISTINCT	IN-MATRIX	LAMINATED	ALLUVIUM SLOPE ALLUV
/					MANY	COARS		IT ROOT HAIR	FISSURED	COLLUMB
/					ABUNDA	NCE SIZE	FAINT	LOCATION	SLICKEN-SIDED BLOCKY	GLAC. LAKE SE
DII ATANOV	DI ASTISITY	MOJETNE	OONGISTE	NOV	COMMON MANY	FINE MINIMU COARS	UM DISTINCT SE PROMINEN	IN-MATRIX NT ROOT HAIR	E PRISMATIC LENSED HOMOGENEOUS	OUTWASH
NUNE	NONPLASTIC	DRY	RE CONSISTED VERY SOFT	NOT COAL	STH	UCTURE	TVDE			BEDROCK
SLOW RAPID	LOW	SLIGH, MOI	IST SOFT	STRUC	TURELESS T	SIZE VERY FINE	TYPE PLATY		% BOULDERS	
OI ID	MEDIUM HIGH	MOIST VERY MOIS		WEAK	PATE !	ANE MEDIUM	GRANULAR CRUMB	COLUMNAR PRISMATIC	>12"	1/4" to 3"
		WET WOIS	NEHT DADO	STRON	iG (VERY FINE FINE MEDIUM COARSE VERY COARSE	ANGULAR	SINGLE GRAIN		% FINES
	UNDARY				,	PEHT COARCE				
TOPI	ESS TOPOGR	APHY NO	OTES:						3" to 12"	< #200
EAR ADUAL	WAVY	. –								
FUSE	BROKEN									
DEPTH	USCS SOIL	TYPE M	MUNCELL	MOTTLES	ABUNDA	ANCE SIZE	TYPE FAINT	LOCATION PED SUBFACE	STRUCTURE STRATIFIED	GEOLOGY
	ā/Un	RUSDA C	COLORS %	COLORS	COMMON	MINIM	NUM DISTINCT	IN-MATRIX	LAMINATED	SLOPE ALLUV
/					MANY	COAR		NT ROOT HAIR	FISSURED SLICKEN-SIDED	COLLUVIUM
/				-	- ABUND	ANCE SIZE	TYPE FAINT	LOCATION PED SURFACE	BLOCKY CE PRISMATIC	GLAC. LAKE S
					COMMON	4 MINIM	JUM DISTINCT	IN-MATHIX	LENSED	OUTWASH RESIDUUM
DILATANCY			RE CONSISTE	NCY	STI	AUCTURE	TYPE PLATY GRANULAR CRUMB ANGULAR	:N) HOUTHAIA	HOMOGENEOUS	S LOESS BEDROCK
NONE SLOW	NONPLASTIC LOW		VERY SOFT SOFT FIRM HARD ST VERY HARD	GRA	DE	SIZE	TYPE		% BOULDERS	
RAPID	MEDIUM	SLIGH. MO MOIST	JIS1 FIRM	STRU	CTURELESS	VERY FINE	PLATY GRANULAR	SUBANGULAR COLUMNAR	>12"	
	HIGH	VERY MOIS	ST VERY HARD	MODE	HATE	MEDIUM	CRUMB	PRISMATIC SINGLE GRAIN		
	DUNDARY	WET				VERY COARSE	MIGGET.	OHIGHE STORE	78 COBBLE	
		APHY NO	OTES:						3" to 12"	< #200
RUPT EAR	WAVI		5120.							
ADUAL FUSE	IRREGULA BROKEN	я —								
		TVDE	MI INICEL I	MOTTLES	ADLINE	DANCE SIZE	E TYPE	LOCATIO	AI STRUCTURE	OFOLOOV
DEFIN	USCS SOIL	RUSDA	COLORS %		FEW	FINE	FAINT	PED SURFA	ACE STRATIFIED	ALLUVIUM
				2	COMMO		MUM DISTING RISE PROMIN	T IN-MATRIX	LAMINATED	SLOPE ALLUY COLLUVIUM
/				· · · · · · · · · · · · · · · · · · ·	ARUNE	DANCE SIZE	F TYPE	LOCATIO	SLICKEN-SIDE	D GLACIAL TILI
/					FEW	DANCE SIZI	E TYPE FAINT	PED SURF	ACE PRISMATIC	GLAC, LAKE OUTWASH
		- 46			COMMO	NI MINI	IMUM DISTING	T IN-MATRIX	LENSED HOMOGENEOU	RESIDUUM
DILATANCY NONE	PLASTICITY NONPLASTIC	MOISTU	RE CONSISTI	ENCY	ST	RUCTURE	11102	10111	HOMOGENESS	BEDROCK
SLOW	NONPLASTIC LOW	Driy Sugh, Mo	VERY SOFT SOFT FIRM HARD VERY HARD	GRA	IDE	SIZE	TYPE	SUBANGULAR	% BOULDERS	% GRAVEL
RAPID	MEDIUM	MOIST	FIRM HARD	WEA!	K IOHELESS	FINE	GRANULAR	COLUMNAR	>12"	1/4" by 3"
× 10	riida	VERY MO	IST VERY HARD	MOD STRO	erate Dng	MEDIUM COARSE	CRUMB ANGULAR	PRISMATIC SINGLE GRAIN	% COBBLE	
<u>B</u>	OUNDARY	(1000)		*		VERY COARSE	Ē			
STINCTIVE	NESS TOPOG	RAPHY N	IOTES:						3" to 12"	< #200
EAR	WAVY									
RADUAL FFUSE	IRREGUL/ BROKEN	AH								
DEPTH			MUNCELL	MOTTLE		IDANCE SIZ				
	<u>&/O</u>	R USDA	COLORS %	COLORS	FEW COMMO	FIN DN MIN	ie faint Nimum distin	PED SURI		ALLUVIUM SLOPE ALLI
					MANY		ARSE PROMI		IR FISSURED	COLLUVIUM
						DANCE SIZ			DECOUNT	GLAC, LAKE
	8				FEW	ON MIN	NE FAINT			OUTWASH RESIDUUM
DILATANC	Y PLASTICITY	MOISTL	URE CONSIST	ENCY	MANY	co		INENT ROOT HA		OUS LOESS
NONE	NONPLASTIC	DRY	VERY SOFT		ADE S	SIZE	TYPE		% BOULDERS	BEDROCK 9/ CDAVE
SLOW RAPID	LOW MEDIUM	SLIGH. M	FIRM	STR	IUCTURELESS	VERY FINE	PLATY	SUBANGULA	R 76 BOOLDENS	36 GHAVE
	HIGH	MOIST VERY MO	HARD DIST VERY HARI	WEA MOI	AK Deraté	FINE MEDIUM	GRANULAR CRUMB	COLUMNAR PRISMATIC	>12"	_ 1/4" to 3"
	CUNDARY	WET	J. VEITI HAVI		RONG	COARSE VERY COARS	ANGULAR	SINGLE GRA	% COBBLE	% FINES
AUTO-CONTRACTOR AND CONTRACTOR	SOUNDARY ENESS TOPOG	DADUV				VERT COARS	HE.		27 to 428	
BRUPT	SMOOTH		NOTES:			-			3" to 12"	_ < #200
LEAR RADUAL	WAVY IRREGUL	AR -								
IFFUSE	BROKEN									
DEPTH		IL TYPE	MUNCELL	MOTTLE			IZE TYP			
	8/0	OR USDA	COLORS	6 COLOR	S FEW COMM		NE FAINT			ALLUVIUM SLOPE ALL
					MANY			MINENT ROOTH		COLLUVIU
	-		-				IZE TYP		TION BLOCKY	GLAC, LAK
<u>/</u>]				FEW		INÉ FAINT IINIMUM DISTI			OUTWASH RESIDUUN
DILATANO	Y PLASTICITY	Y MOIST	URE CONSIST	TENCY	MANY	r c	OARSE PRO	MINENT ROOT H		OUS LOESS
NONE	NONPLASTIC		VERY SOF	T	RADE	SIZE	TYPE		ev BOULDED	BEDROCK
SLOW FIAPID	LOW MEDIUM	SLIGH. N	MOIST SOFT			S VERY FINE	PLATY	SUBANGUL		
	HIGH	MOIST VERY M	HARD KOIST VERYHAF		DERATE	FINE MEDIUM	GRANULA CRUMB	R COLUMNAF PRISMATIC		— 1/4" to 3"
		WET	OIO! VER! DAF		RONG	COARSE	ANGULAR			% FINES
	BOUNDARY					VERY COAR	ISE			
									3" 10 12"	
DISTINCTIVI	ENESS TOPOG	GRAPHY	NOTES:						3" to 12"	< #200
DISTINCTIVI ABRUPT CLEAR	WAVY		NOTES:							< #200
DISTINCTIVI ABRUPT	SMOOT	ILAR	NOTES:					-11.71.11	V 10 12	< #200

Oakridge	OWNER: J	of Sa	ver		TES	T PIT / BORING	NUMBER:	0
Chippewa Falls, WI 54729	PROJECT: Ho	& Faci	1,4		DAT	E:3/	25/19	
www.OakridgeEng.com		,			ELE'	VATION:	981.8	
SITE LOCATION: ADDI	RESS				LOG	GED BY: 0	mitte	
@ 1288	34 State	81 48,	Grents.	bure	ANY KARST	FEATURES WI	THIN 1000 FEET:	YES/NO
NORTHING 26		ASTING 162	069.2			E POSITION:	Rack 5 by	P .
COUNTY/STATE:	Burnot	L Con 1	11"			E GEOMETRY:	Unifor	-2,
DEPTH USCS	SOIL TYPE MUN	ICELL MO	TTLES ABU		ZE TYPE	LOCATION	STRUCTURE	GEOLOGY
	&/OR USDA COL	ORS % COL	ORS FEW		NE FAINT NIMUM DISTINCT DARSE PROMINEN	PED SURFACE IN-MATRIX T ROOT HAIR	STRATIFIED LAMINATED FISSURED	ALLUVIUM SLOPE ALLUV
10 mL	Dom 1041	23/2/00 -	ABL	NDANCE SI	ZE TYPE	LOCATION	SLICKEN-SIDED BLOCKY	GLACIAL TILL GLAC. LAKE SED
7			FEW	MON MI	NE FAINT INIMUM DISTINCT DARSE PROMINEN	PED SURFACE IN-MATRIX IT ROOT HAIR	LENSED	OUTWASH RESIDUUM
DILATANCY PLASTIC		CONSISTENCY VERY SOFT		STRUCTURE			HOMOGENEOUS	BEDROCK
SLOW RAPID MEDIUM	SLIGH, MOIST MOIST	SOFT FIRM	GRADE STRUCTURELES WEAK	SIZE S VERY FINE FINE	TYPE PLATY GRANULAR	SUBANGULAR COLUMNAR	()	% GRAVEL
HIGH	VERY MOIST WET	HARD VERY HARD	MODERATE STRONG	MEDIUM COARSE	CRUMB ANGULAR	PRISMATIC SINGLE GRAIN	o/ CORDI E	1/4" to 3"
BOUNDARY	DOOD ADUN	71 1		VERY COARS	SE	/	3" to 12"	% FINES < #200 70-90
DISTINCTIVENESS TO SMC	HTOC		Er uk	STRONG	le hom	15 h	chto a	<#200 <u>70-70</u>
RADUAL IRRI	EGULAR	r notes	00 5	tructur	e 0650	red ,	secarse f	rozen
DEPTH <u>USCS</u>					IZE TYPE	LOCATION PED SURFACE	STRUCTURE	GEOLOGY
9"/	S//F Z=	<u>.ORS % CO</u> 541 /00		MON M	NINIMUM DISTINCT COARSE PROMINE	IN-MATRIX	LAMINATED FISSURED	SLOPE ALLUV.
/1611 ML	loom "ig	lef			SIZE TYPE INE FAINT	LOCATION PED SURFACE		GLACIAL TILL GLAC. LAKE SED
<u> </u>			FEW COM MAN	AMON M	INE FAINT INIMUM DISTINCT COARSE PROMINE	IN-MATRIX	E PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM
DILATANCY PLASTI		CONSISTENCY VERY SOFT	GRADE	STRUCTURE SIZE	TYPE			BEDROCK
RAPID MEDIUM	SLIGH. MOIST MOIST	SOFT FIRM HARD	STRUCTURELE		PLATY GRANULAR	SUBANGULAR	% BOULDERS	% GRAVEL
HIGH	VERY MOIST WET	VERY HARD	MODERATE STRONG	MEDIUM COARSE	CRUMB ANGULAR	PRISMATIC SINGLE GRAIN	% COBBLE	% FINES
BOUNDARY DISTINCTIVENESS TO	POCOVORA	. like	1	VERY COAP	sates t	Sales	3" to 12"	<#200 70-80
ABRUPT SM CLEAR WA	OOTH NY	mall 500	oble	e 5.	de you	Nes Fre	200	
	REGULAR OKEN		/		· ·			
DEPTH USCS			DLORS FE	V	SIZE TYPE FAINT	LOCATION PED SURFA	CE STRATIFIED	ALLUVIUM
181/ -	5/1/ 2:	54 90	CO MA		MINIMUM DISTINCT COARSE PROMINE		FISSURED SLICKEN-SIDED	SLOPE ALLUV. COLLUVIUM GLACIAL TILL
22" ML	100m 7/	540 m	FE	N I	SIZE TYPE FAINT	LOCATION PED SURFA	N BLOCKY CE PRISMATIC	GLAC, LAKE SEC OUTWASH
DILATANCY PLAST		CONSISTENCY		NY	MINIMUM DISTING COARSE PROMINI		LENSED HOMOGENEOU	RESIDUUM S LOESS
NONE NONPLA	ASTIC DRY	VERY SOFT	GRADE	STRUCTURE	TYPE	32052-N1U592-N1U92-V	% BOULDERS	BEDROCK % GRAVEL
RAPID MEDIUM	mois!	FIRM HARD	STRUCTUREL WEAK MODERATE	ESS VERY FINE FINE MEDIUM	PLATY GRANULAR CRUMB	SUBANGULAR COLUMNAR PRISMATIC	>12_0	1/4 10 3 💭
BOUNDAR	VERY MOIST WET	VERY HARD	STRONG	COARSE VERY COA	ANGULAR	SINGLE GRAIN	% COBBLE	% FINES
DISTINCTIVENESS TO	DPOGRAPHY NOT	FS: //Ke	10,00	- 650	W	os fern	3" to 12"	< #200 70-8
CLEAR W	MOOTH STATE	me 11 5	emple	03	/cymp.	wes 1	Crozen	
	ROKEN			-				
OVERALL NOTES:	Conna de	30	-603	-/10	0/50		an love	. /
7	10301110		- 0	11	1. 6000	1/-/-	Mada	C
25 //	1	xcever s	11)	1/1	10161161	L 1	Cal	rozen
DVICTET1	1 No	5/190	1.4 1	10151	1 moi	5/		10
Meterie,	1 Wes	wer or	- Sc!	Urette	er, no	seep	25 063	erveer.
SAMPLES TAKEN: Y	ES (NO)		WATER	OBSERVED: Y	ESTNO)	BE	DROCK: YES /NO	5)
							EPTH OF BEDROO	170
SAMPLE ID:			IYPE:_		DEPTH:	0	R HOLE EXTENT	11.8
SAMPLE ID:			TYPE:_		DEPTH:		9/4/	F/.
SAMPLE ID:	X		TYPE:		DEPTH:		10/0/	T CIDE + CE :
								T SIDE 1 OF 2



Oakridge ENGINEERING	OWNER: JEAS SO	ver	TEST PIT / BORING	NUMBER: _//
Chippewa Falls, WI 54729 Www.OakridgeEng.com	PROJECT: HOS FECT	lity	DATE:3/	122/2019
www.OakildgeElig.com			ELÉVATION:	979,5
SITE LOCATION: ADD		- 1	LOGGED BY: D.	mitte
@ 128	384 State Huy	48 Grantsburg		THIN 1000 FEET: YES NO
NORTHING 126	424,7 EASTING 162	16/.8	LANDSCAPE POSITION:	
COUNTY / STATE:	SOIL TYPE MUNCELL MOTT	TLES ABUNDANCE SIZE	LANDSCAPE GEOMETRY: TYPE LOCATION	STRUCTURE GEOLOGY
DEFIN 0303	&/OR USDA COLORS % COLO	ORS FEW FINE COMMON MINIMU	FAINT PED SURFACE JM DISTINCT IN-MATRIX	STRATIFIED ALLUVIUM LAMINATED SLOPE ALLUV.
Of 11 ML	Silt 100 -	MANY COARS ABUNDANCE SIZE	TYPE LOCATION	FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC, LAKE SED
	3/2	FEW FINE COMMON MINIMI MANY COARS		PRISMATIC OUTWASH LENSED RESIDUUM HOMOGENEOUS LOESS
NONE NONPLANTING	STIC DRY VERY SOFT	STRUCTURE GRADE SIZE	7000	#BOULDERS % GRAVEL
RAPID MEDIUM HIGH	SLIGH. MOIST FIRM MOIST HARD	STRUCTURELESS VERY FINE NEAK FINE MODERATE MEDIUM	PLATY SUBANGULAR	>12"
BOUNDARY	WET	STRONG COARSE VERY COARSE	ANOUGH AD CINICLE OF AIM	% COBBLE % FINES
DISTINCTIVENESS TO SMO	POGRAPHY NOTES: This /	/ // /	sen, notes	3" to 12" < #200 70-80
	VY <u>are from</u> DEGULAR DIKEN	Smell semp	12 Brought E	rach to office
DEPTH USCS	SOIL TYPE MUNCELL MOT & COLORS % COLORS		TYPE LOCATION FED SURFACE	STRUCTURE GEOLOGY E STRATIFIED ALLUVIUM
16"/ 11	Silt 104/2 90 54	COMMON MININ	UMD DISTINCT CIN-MATRIXO	LAMINATED SLOPE ALLUV. FISSURED COLLUVIUM
38"	10x4 10	ABUNDANCE SIZE	FAINT PED SURFAC	E PRISMATIC OUTWASH
DILATANCY PLAST		COMMON MINIM MANY COAR STRUCTURE		LENSED RESIDUUM HOMOGENEOUS LOESS BEDROCK
NONE NONPLA SLOW LOW RAPID MEDIUM	SLIGH. MOIST SOFT	GRADE SIZE STRUCTURELESS VERY FINE	TYPE PLATY SUBANGULAR	% BOULDERS % GRAVEL
HIGH	MOIST HARD VERY MOIST VERY HARD	WEAK FINE MODERATE MEDIUM STRONG COARSE	GRANULAR COLUMNAR CRUMB PRISMATIC ANGULAR SINGLE GRAIN	>12"
BOUNDARY DISTINCTIVENESS TO		VERY COARSE	ANGOLAN SINGLE GIAIN	% COBBLE % FINES 3" to 12" <#200 60 70
ABRUPT SM CLEAR WA	NOOTH NOTES.			3 10 12 < \$200@D 7D
DIFFUSE BR	REGULAR OKEN			
DEPTH USCS	&/OR USDA COLORS % COL		TYPE LOCATION FAINT PED SURFACE MUM DISTINCT IN MATRIX	CE STRATIFIED ALLUVIUM
3/11/04	10cm 101/3 30 2:	MANY COAL	RSE PROMINENT ROOTHAIR	FISSURED COLLUVIUM SLICKEN-SIDED COLACIAL TILD
/18.6	5/14 70	FEW FINE COMMON MINII	FAINT PED SURFA MUM DISTINCT IN-MATRIX	CE PRISMATIC OUTWASH LENSED RESIDUUM
DILATANCY PLAST	ASTIC DRY VERY SOFT	MANY COA STRUCTURE GRADE SIZE		HOMOGENEOUS LOESS BEDROCK
RAPID LOW	O MOIST SOFT HARD	STRUCTURELESS VERY FINE WEAK FINE	TYPE PLATY SUBANGULAR GRANULAR COLUMNAR	% BOULDERS % GRAVEL
HIGH BOUNDAR	VERY MOIST VERY HARD WET	MODERATE MEDIUM STRONG COARSE VERY COARSE	CRUMB PRISMATIC ANGULAR SINGLE GRAIN	% COBBLE % FINES
DISTINCTIVENESS TO	OPOGRAPHY NOTES: COULD LA	e overy good	15C cm	3" to 12" 0 < #200 75-60
CLEAR W/ GRADUAL IRI	AVY REGULAR	N Sand gre	13 11 1 6	VE IT CIBBONS
OVERALL NOTES:	OKEN Well, offer	6-1-11	13 masy 5,	17
	his was frozen	herd to 40	nekes plu	5.
Material	Was observed	during ex	cevetion	Meterial
below	The trozen met	erial was a	slightly most	to moist
by 700	ich and visual i	ns pection .	No materi	el was ust
or sa	HI NO	seeps obser	veil-	
Dicch Mo	THES only in upp	or neighbor	L Payer	
SAMPLES TAKEN:	S) NO	WATER OBSERVED: YES		DROCK: YES / NO
SAMPLE ID:	5 11,1 /6-38 meh	5 TYPE: DEF	OTLI.	PTH OF BEDROCK
SAMPLE ID:		TYPE: DEP	λ	lo Bedrack
SAMPLE ID:			тн:	El. 9660
	SoilsIOKE SOIL LOG-2 REV 11-21-2018.dwg = Saved: Duane 11/27/2018 12		116	SHEET SIDE 1 OF 2 OKE SOIL LOG-2 REV.3 11-27-2018

Decem	G OWNER:	E MUNICELL		ABUNDANCE			DATE:		SHEET 2 OF 2
DEPTH U	JSCS SOIL TYPE &/OR USD	MUNCELL A COLORS %	COLORS	FEW COMMON MANY ABUNDANCE	FINE FA MINIMUM DI COARSE PE	AINT I ISTINCT I ROMINENT I	PED SURFACE N-MATRIX ROOT HAIR LOCATION	LAMINATED FISSURED SLICKEN-SIDED BLOCKY	SLOPE ALLUV
DILATANCY	PLASTICITY MOINONPLASTIC DRY	ISTURE CONSISTER	NCY	FEW COMMON MANY STRUCTUR	MINIMUM DI COARSE PE RE	ISTINCT ROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK
SLOW RAPID	LOW SLIG	SH. MOIST SOFT FIRM ST HARD RY MOIST VERY HARD	GRADE STRUCTUI WEAK MODERAT STRONG	SIZE RELESS VERY FIN FINE E MEDIUM COARSE VERY CO	TYPE PLATY GRANU CRUME ANGUL	JLAR COL	UMNAR SMATIC	6 COBBLE	
	UNDARY IESS TOPOGRAPH' SMOOTH WAVY			VERY CO	DARSE			" to 12"	
ADUAL FUSE	IRREGULAR BROKEN			1					
DEPTH	USCS SOIL TYP 8/OR USI	MUNCELL DA COLORS %	MOTTLES COLORS	ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON MANY	FINE FINE FOR SIZE FINE FINE FINE FINE FINE FINE FINE FIN	TYPE FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC, LAKE SE OUTWASH RESIDUUM
NONE SLOW RAPID	NONPLASTIC DR' LOW SLI MEDIUM MO HIGH VEI	GH, MOIST SOFT FIRM HARD RY MOIST VERY HARD	GRADE STRUCTU WEAK	STRUCTU SIZE PRELESS VERY F FINE TE MEDIUM COARS	IRE TYPE INE PLATY GRAN CRUM	E Y SU IULAR CC MB PR	BANGULAR DLUMNAR IISMATIC	% BOULDERS >12" % COBBLE	% GRAVEL
	OUNDARY NESS TOPOGRAPH	NOTES:		VEHT	OARSE			3" to 12"	
RUPT EAR RADUAL FFUSE	SMOOTH WAVY IRREGULAR BROKEN	<u>NOTES.</u>							
DILATANC	Y PLASTICITY M	OISTURE CONSISTI		ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON MANY STRUCT	FINE MINIMUM COARSE SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT PROMINENT	IN-MATRIX	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC, LAKE S OUTWASH RESIDUUM
	LOW SL MEDIUM MO HIGH VE	QY VERY SOFT LIGH. MOIST FIRM OIST HARD VERY HARD VERY HARD	GRADE STRUCT WEAK MODER/ STRONG	STRUCT SIZE URELESS VERY FINE ATE MEDIL COAR VERY	TYP FINE PLAT GRA JM CRU SE ANG COARSE	TY S ANULAR C IMB P	UBANGULAR OLUMNAR RISMATIC IINGLE GRAIN	% BOULDERS >12" % COBBLE 3" to 12"	1/4" to 3"
BRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN	NOTES:							
DEPTH	USCS SOIL TY 8/OR US		MOTTLES COLORS	ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON	FINE MINIMUM COARSE E SIZE FINE MINIMUM	TYPE FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT	LOCATIO PED SURFA IN-MATRIX	CE STRATIFIED LAMINATED FISSURED SLICKEN-SIDE BLOCKY ICE PRISMATIC LENSED	ALLUVIUM SLOPE ALLU' COLLUVIUM D GLACIAL TILI GLAC. LAKE OUTWASH RESIDUUM
DILATANC NONE SLOW RAPID	NONPLASTIC D LOW S MEDIUM N HIGH V	MOISTURE CONSIST VERY SOFT SLIGH, MOIST FIRM MOIST HARD VERY HAR	GRAD STRUC WEAK	TURELESS VERY FINE MEDI G COAI	FINE PLA GR.	IANULAR IUMB	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS	BEDROCK % GRAVEL 1/4" to 3" % FINES
recommended in the contract of	ENESS TOPOGRAF SMOOTH WAVY IRREGULAR BROKEN	PHY NOTES:		YEM	CONTOL			3" lo 12"	<#200
DEPTH	USCS SOIL T &/OR U		MOTTLES 6 COLORS	ABUNDANO FEW COMMON MANY ABUNDANO FEW COMMON	FINE MINIMUM COARSE E SIZE FINE MINIMUM	TYPE FAINT DISTINCT	LOCATION PED SURF	ACE STRATIFIED LAMINATED R FISSURED SLICKEN-SID BLOCKY ACE PRISMATIC LENSED	ALLUVIUM SLOPE ALLU COLLUVIUM
DILATANO		MOISTURE CONSIS DRY VERY SOFT SLIGH, MOIST	GRAI	MANY STRUC DE SIZ	E T	PROMINE! YPE LATY	NT ROOT HAI SUBANGULAF	R HOMOGENEO % BOULDERS	DUS LOESS BEDROCK

Oakridge ENGINEERING	OWNER:	Jeff.	Jover			TEST	PIT / BORING	NUMBER:	12
Chippewa Falls, WI 54729 www.OakridgeEng.com	PROJECT:	Hog F.	cellity	7		DATE		121/2	2/3
www.CaknageEng.com		1	/			ELEV	ATION:	980,1	
SITE LOCATION: ADD	DRESS					LOGG	ED BY:	mite	
@ 12		State Hu	1 48	Grantsh	1105	ANY KARST F	FATURES W	THIN 1000 FEET	· VEC WIST
NORTHING 1262	7/-7	EASTING /	6224	5.4				Toe 5 6	- TESTINO
VAR-11-12-12-12-12-12-12-12-12-12-12-12-12-	Russa	4 CL	tali"			LANDSCAPE		Conv	9
DEPTH USCS	SOIL TYPE	MUNCELL	MOTTLES	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOGY
	8/OR USDA	COLORS %	COLORS	FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED	ALLUVIUM SLOPE ALLU
O/11 ML	Lock	3/2 /00		ABUNDANCE	SIZE	TYPE	LOCATION	SLICKEN-SIDED BLOCKY	COLLUVIUM GLACIAL TIL GLACI LAKE
116				FEW COMMON MANY	FINE MINIMUM COARSE	FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR	PRISMATIC LENSED	OUTWASH RESIDUUM
DILATANCY PLASTI		TURE CONSISTENCE VERY SOFT		STRUCTUE	RE			HOMOGENEOUS	BEDROCK
SLOW COWD RAPID MEDIUM	SLIGH.	MOIST SOFT FIRM HARD	GRADE STRUCTU WEAK		NE PL		UBANGULAR OLUMNAR	% BOULDERS	% GRAVEL
HIGH	VERY M		MODERA STRONG	TE MEDIUM COARSE	CI At	RUMB P	RISMATIC	% COBBLE	1/4" to 3"
BOUNDARY DISTINCTIVENESS TO	Y COORADIN	74.0	1	VERY CO			Se	3" to 12"	% FINES
ABRUPT SM	MOOTH AVY	NOTES: 1915	n Sn	17	300	10 00	no ht	back to	< #200
GRADUAL IRR	REGULAR OKEN	office +	for ne	stes. n	12 ter	ic/15	like	58/5	>
DEPTH <u>USCS</u>	SOIL TYPE &/OR USDA	MUNCELL COLORS %	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION PED SURFAC	STRUCTURE E STRATIFIED	GEOLOG'
16"/	5.17	7/5/40 00	254	COMMON	MINIMUM	PROMINENT	HOOT HAIR	LAMINATED FISSURED	SLOPE ALL COLLUVIUM
/49" ML	10cm	7.544 0	3/1	ABUNDANCE FEW	SIZE FINE	TYPE FAINT	LOCATION PED SURFACE		GLAC, LAKE
211 1711121		5/6 00		COMMON	MINIMUM	DISTINCT	IN-MATRIX	LENSED HOMOGENEOU	OUTWASH RESIDUUM
DILATANCY PLAST NONE NONPLA	ASTIC DRY	VERY SOFT	GRADE	STRUCTU		YPE		% BOULDERS	BEDROCK % GRAVE
RAPID MEDIUM	1810101	FIRM HARD	WEAK	URECESS VERY FI FINE	INE P	LATY S	SUBANGULAR COLUMNAR	>12"	1/4" to 3"
	VERY N	MOIST VERY HARD	MODERA STRONG		E A		PRISMATIC BINGLE GRAIN	% COBBLE	% FINES
<u>BOUNDAR)</u> <u>DISTINCTIVENESS</u> TO	_	NOTES: /S	11 =1	11	erse i	1 with	the	3" to 12"	<#200 70
ABRUPT SM CLEAR WA	MOOTH	Fine bi	calme 1	no Hles	. 7.	715 W15	= M4	meteri	1
DIFFUSE BR	REGULAR ROKEN	by check	7	smell c		eled	out	chunk	S.
DEPTH USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS %	COLORS	ABUNDANCE COMMON	SIZE	TYPE FAINT	LOCATION PED SURFA	DE STRATIFIED	ALLUVIUM
49% 01	10cm	5/19, 100	3.54	MANY	COARSE	PROMINEN'	ROOT HAIR	LAMINATED FISSURED SLICKEN-SIDE	SLOPE ALL COLLUVIUI
177		7,5424/4	3//	ABUNDANCE FEW	FINE	TYPE FAINT	LOCATION PED SURFA	DE PRISMATIC	GLAC. L'AK OUTWASH
DILATANCY PLAST		TURE CONSISTEN	CY	COMMON MÁNY	COARSE		IN-MATRIX T ROOT HAIR	LENSED CHOMOGENEOU	RESIDUUM LOESS
NONE NONPLA	ASTIC DRY	VERY SOFT SOFT	GRADI	STRUCTU ESIZE	JKE			A STATE OF THE PARTY OF THE PAR	
RAPID MEDIUM	ALC: ALC: ALC: ALC: ALC: ALC: ALC: ALC:					TYPE	aug angul ag	% BOULDERS	BEDROCK
HIGH	MOGI	HAED	WEAK	TURELESS VERY F	INE I	PLATY GRANULAR	SUBANGULAR COLUMNAR PRISMATIC	% BOULDERS	% GRAVE
BOUNDAR	VERY WET	HAED		VERY F FINE MEDIUM G COARS	INE I	PLATY GRANULAR CRUMB			% GRAVE
BOUNDAR' DISTINCTIVENESS TO	VERY WET IY OPOGRAPHY	HAED	WEAK MODER	VERY F FINE MEDIUM G COARS	FINE FINE FINE FINE FINE FINE FINE FINE	PLATY GRANULAR CRUMB	COLUMNAR PRISMATIC	>12"	BEDROCK % GRAVE 1/4" to 3" % FINES
BOUNDAR DISTINCTIVENESS TO SM ABRUPT SM CLEAR W, GRADUAL IRI	VERY WET	MOIST VERY HARD	WEAK MODER	VERY F FINE MEDIUM G COARS	FINE FINE FINE FINE FINE FINE FINE FINE	PLATY GRANULAR CRUMB	COLUMNAR PRISMATIC	>12"	8EDROCK % GRAVE 1/4" to 3" % FINES < #200
BOUNDAR	VERY WET Y OPOGRAPHY MOOTH MOY	MOIST VERY HARD	WEAK MODER	VERY F FINE MEDIUM G COARS	FINE FINE FINE FINE FINE FINE FINE FINE	PLATY GRANULAR CRUMB	COLUMNAR PRISMATIC	>12"	8EDROCK % GRAVE 1/4" to 3" % FINES < #200
BOUNDAR DISTINCTIVENESS TO SM ABRUPT SM CLEAR W, GRADUAL IRI	VERY WET Y OPOGRAPHY MOOTH AVY IREGULAR	MOIST VERY HARD	WEAK MODER	VERY F FINE MEDIUM G COARS	FINE FINE FINE FINE FINE FINE FINE FINE	PLATY GRANULAR CRUMB	COLUMNAR PRISMATIC	>12"	8EDROCK % GRAVE 1/4" to 3" % FINES < #200
BOUNDAR	VERY WET Y OPOGRAPHY MOOTH AVY IREGULAR	MOIST VERY HARD	WEAK MODER STRONG	MERELSS VERY FINE MEDIUM G COARS VERY C	M SE COARSE	PLATY BRANULAR SHUMB ANGULAR ANGULAR ANGULAR	COLUMNAR PRISMATIC	>12"	8EDROCK % GRAVE 1/4" to 3" % FINES < #200
BOUNDAR	VERY WET Y OPOGRAPHY MOOTH AVY IREGULAR	MOIST VERY HARD NOTES: /S 7, 5 4 R cs from	WEAK MODER	MELESS VERY FINE MEDIUM G COARS VERY C MEDIUM THE MEDIU	M SECONDER S	PLATY GRANULAR CRUMB	COLUMNAR PRISMATIC	>12"	8EDROCK % GRAVE 1/4" to 3" % FINES < #200
BOUNDAR	VERY WET Y OPOGRAPHY MOOTH AVY IREGULAR	MOIST HARD NOTES: /S 7, 5 ye cs froze frozen	WEAK MODER STRONG	MERELSS VERY FINE MEDIUM G COARS VERY C MEDIUM FINE M	M SE COARSE	PLATY BRANULAR SHUMB ANGULAR ANGULAR ANGULAR	COLUMNAR PRISMATIC SINGLE GRAIN	12" C % COBBLE 3" to 12" C 100 S Au 100 S	96 FINES #200
BOUNDAR	VERY WET Y OPOGRAPHY MOOTH AVY IREGULAR	MOIST VERY HARD NOTES: /S 7, 5 4 R cs from	WEAK MODER STRONG	MERELSS VERY FINE MEDIUM G COARS VERY C MEDIUM FINE M	ME COARSE COARSE LE L	PATY PRIVATE THE PRIVATE PRIVA	COLUMNAR PRISMATIC SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN	12" C) % COBBLE 3" to 12" C) % COBBLE 3" to 12" C) % COBBLE 3" to 12" C) % COBBLE 10" Average	96 GRAVE 1/4" to 3" C 96 FINES 4200
BOUNDAR	VERY WET Y OPOGRAPHY MOOTH AVY IREGULAR	MOIST HARD NOTES: /S 7, 5 ye cs froze frozen	WEAK MODER STRONG	MERELSS VERY FINE MEDIUM G COARS VERY C MEDIUM FINE M	ME COARSE COARSE LE L	PLATY BRANULAR SHUMB ANGULAR ANGULAR ANGULAR	COLUMNAR PRISMATIC SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN	12" C % COBBLE 3" to 12" C 100 S Au 100 S	96 FINES #200
BOUNDAR	VERY VERY WET OPPOGRAPHY MOOTH MAYY IREGULAR ROKEN The The	MOIST HARD NOTES: /S 7, 5 ye cs froze frozen	WEAK MODERS STRONG	MERELSS VERY FINE MEDIUM G COARS VERY C MEDIUM FINE M	ME COARSE COARSE LE L	PATY PRINCE PRIN	COLUMNAR PRISMATIC SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN	12" C % COBBLE 3" to 12" C 100 S Au 100 S	% GRAVE 1/4" to 3" C % FINES <#200 MOIST WOLLD WOLL WOLLD WOLLD WOLLD WOLLD WOLLD WOLLD WOLLD WOLLD WOLLD
BOUNDARY DISTINCTIVENESS TO ABRUPT Sh. Sh. CLEAR W. Sh. CLEAR BF. OVERALL NOTES: OVERALL NOTES: DISTINCTIVENESS TO Sh.	VERY VERY VERY VERY VERY VERY VERY VERY	MOIST HARD NOTES: /S 7, 5 ye cs froze frozen	WEAK MODERS STRONG	ATE MEDIUM G COARS VERY C MEDIUM TO THE MEDI	COARSE COARSE	PATY PRINCE PRIN	COLUMNAR COLUMNAR PRISMATIC SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN BE DE	STOP SON	% GRAVE 1/4" to 3" C % FINES <#200
BOUNDARY DISTINCTIVENESS TO ABRUPT SAMPLES TAKEN; YE SAMPLE ID:	VERY VERY VERY VERY VERY VERY VERY VERY	MOIST VERY HARD NOTES: /S TISYR CS Froze A Color of C	WEAK MODERS STRONG	TER OBSERVED	COARSE CO	PLATY PRINCE PRI	COLUMNAR PRISMATIC SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN SINGLE GRAIN BEE DE OF	% COBBLE 3" to 12" CO % COBBLE 3" to 12" CO % COBBLE 3" to 12" CO % COBBLE 10" A	% GRAVE 1/4" to 3" C % FINES <#200

ENGINEERIN	e G OWNER:			TEST PIT / BOR	NG NUMBER:			CONTINUED SHEET 2 OF 2
DEPTH L	JOUR JOIL I	YPE MUNCELL SDA COLORS	MOTTLES % COLORS	FEW COMMON MANY — ABUNDANCE FEW	FINE FAINT DISTINC COARSE PROMINI	PED SURFACE IN-MATRIX ENT ROOT HAIR LOCATION PED SURFACE IN-MATRIX	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	GEOLOGY ALLUVIUM SLOPE ALLUV, COLLUVIUM GLACIAL TILL GLAC, LAKE SED OUTWASH
NONE SLOW RAPID	NONPLASTIC LOW SEMEDIUM HIGH SOUNDARY	DRY VEF SLIGH, MOIST SOF FIRE MOIST HAR VERY MOIST VEF WET	NSISTENCY IY SOFT TO GRA M STRIM AD WEA HARD MOD STRO	MANY STRUCTU DE SIZE ICTURELESS VERY FINE K FINE	COARSE PROMIN RE TYPE NE PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	HOMOGENEOUS **BOULDERS **12"	LOESS BEDROCK GRAVEL 1/4" to 3" FINES
RUPT EAR IADUAL FUSE	IESS TOPOGHA SMOOTH WAVY IRREGULAR BROKEN	NOTES:						17200
DILATANCY NONE SLOW RAPID	PLASTICITY NONPLASTIC LOW MEDIUM	MOISTURE CC DRY VE SLIGH, MOIST HA	NSISTENCY RY SOFT GR	FEW COMMON MANY ABUNDANCE FEW COMMON MANY STRUCTI ADE UCTURELESS VERY K FINE DERATE MEDIU ONG COAR	FINE MINIMUM DISTING COARSE PROMIS FINE MINIMUM COARSE PROMIS JRE TYPE	PED SURFACE IN-MATRIX RENT ROOT HAIR LOCATION PED SURFACE IN-MATRIX RENT ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL
	NESS TOPOGRA SMOOTH WAVY	APHY NOTES:					3" to 12"	< #200
NONE SLOW RAPID		MOISTURE OF SUIGH, MOIST H	S % COLOR ONSISTENCY ERY SOFT GF	FEW COMMON MANY ABUNDANCE FEW COMMON	FINE FAINT MINIMUM DISTIN COARSE PROM E SIZE TYPE FINE FAINT MINIMUM DISTIN COARSE PROM URE TYPE	ICT IN-MATRIX INENT ROOT HAIR LOCATION PED SURFACI IN-MATRIX INENT ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV, COLLUVIUM GLACIAL TILL GLAC, LAKE S OUTWASH RESIDUUM S LOESS BEDROCK GRAVEL 1/4" to 3"
	NESS TOPOGR SMOOTH WAVY IRREGULAI BROKEN						3" to 12"	< #200
DILATANO NONE SLOW RAPID DISTINCTIVE ABRUPT CLEAR	USCS SOIL &/OF CY PLASTICITY NONPLASTIC LOW MEDIUM HIGH BOUNDARY ENESS TOPOGI SMOOTH WAYY	DRY SLIGH, MOIST MOIST VERY MOIST WET RAPHY NOTES:	S % COLOF	FEW COMMON MANY ABUNDANC FEW COMMON MANY STRUC RADE FINE FINE FINE FINE FINE FINE FINE FIN	FINE FAIN MINIMUM DIST COARSE PROI E SIZE TYP FINE FAIN MINIMUM DIST COARSE PRO TURE E TYPE Y FINE PLATY GRANULA GRANULA	T PED SURFAINCH IN-MATRIX ROOT HAIR E LOCATIO PED SURFAINCH IN-MATRIX ROOT HAIR SUBANGULAR R COLUMNAR PRISMATIC	ACE STRATIFIED LAMINATED LAMINATED SISURED SLICKEN-SIDE BLOCKY ACE PRISMATIC LENSED HOMOGENEOU 9/8 BOULDERS	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILLU GLAC. LAKE 9 OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES
GRADUAL DIFFUSE DEPTH		LTYPE MUNC RUSDA COLO		RS FEW COMMON	FINE FAII MINIMUM DIS		ACE STRATIFIED LAMINATED	RE GEOLOGY ALLUVIUM SLOPE ALLU COLLUVIUM
DILATANO NONE SLOW RAPID	CY PLASTICITY NONPLASTIC LOW MEDIUM	DRY	FIRM S	GRADE SIZ	CE SIZE FAI FINE FAI MINIMUM DIS COARSE PRO CTURE ZE TYPE RY FINE PLATY	PE LOCATION PED SURFITTINCT IN-MATRIX PROOT HA	SLICKEN-SIDI BLOCKY FACE PRISMATIC X LENSED HOMOGENEC	ED GLACIAL TIL GLAC. LAKE OUTWASH RESIDUUM OUS LOESS BEDROCK 6 % GRAVEL

Oakridge ENGINEERING OWNER: Jeff Saver	TEST PIT / BORING NUMBER:
Chippewa Falls, WI 54729 PRO JECT	DATE: 3/20/2019
Www.OakridgeEng.com	ELEVATION: 979, 3
SITE LOCATION: ADDRESS	LOGGED BY: D. M. Ho
@ 12884 State Hwy 48 Grantsburg	ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
NORTHING 126344. 8 EASTING 162255. 9	LANDSCAPE POSITION: The steps
COUNTY/STATE: Burnett Cty Wh	LANDSCAPE GEOMETRY: Uniform
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE	TYPE LOCATION STRUCTURE GEOLOGY
&/OR USDA COLORS % COLORS FEW FINE COMMON MINIMUM MANY COARSE	
ML Joem 3/2 OD ABUNDANCE SIZE	TYPE LOCATION SLICKEN-SIDED GLACIAL TILL GLAC, LAKE SED
FEW FINE COMMON MINIMUM MANY COARSE	
DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT STRUCTURE	BEDROCK
RAPID MEDIUM SLIGH. MOIST FIRM STRUCTURELESS VERY FINE FINE	PLATY SUBANGULAR
HIGH VERY MOIST VERY HARD MODERATE MEDIUM COARSE	CRUMB PRISMATIC 1/4" to 3"
BOUNDARY	70 COBBLE % FINES 2 10 12 0 < #200 70-90
DISTINCTIVENESS TOPOGRAPHY SMOOTH WAYY STORY SMOOTH WAYY STORY SMOOTH WAYY STORY SMOOTH WAYY	le brought beck to
GRADUAL IRREGULAR DIFFUSE BROKEN A FICE FOR 1875	
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE COLORS COLORS FINE	TYPE LOCATION STRUCTURE GEOLOGY FAINT PED SURFACE STRATIFIED ALLUVIUM
16"/ SILL 7548 FL 7544 MANY COARS	IM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV. BE PROMINENT ROOT HAIR FISSURED COLLUVIUM
55 ML form 5/2 to 5/3 10 3/4 ABUNDANCE SIZE FEW FINE	TYPE LOCATION BLOCKY GLACIAL TILL FAINT PED SURFACE PRISMATIC OUTWASH
COMMON MINIMU MANY COARS	JM DISTINCT IN-MATRIX LENSED RESIDUUM
DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT SIZE NONPLASTIC DRY VERY SOFT SOFT SIZE SLOW SLOW STANDARD SIZE SOFT SOFT SIZE GRADE SIZE	TYPE % BOULDERS % GRAVEL
RAPID MEDIUM MOIST HARD STRUCTURELESS VERY FINE WEAK FINE	PLATY SUBANGULAR GRANULAR COLUMNAR 3127 O 1445 CO.
WET STRONG COARSE	CRUMB PRISMATIC ANGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES:	3" to 12" 0 <#200 70-90
CLEAR WAVY	
GRADUAL IRREGULAR DIFFUSE BROKEN	
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE COLORS COLORS COMMON MINIM	TYPE LOCATION STRUCTURE GEOLOGY FAINT PED SURFACE STRATIFIED ALLUVIUM
55/ 100 259 MANY COARS	SE PROMINENT ROOT HAIR FISSURED COLLUYIUM SUICKEN-SIDED CLACIAL TO
//6.6 SIZE FEW FINE	FAINT PED SURFACE PRISMATIC OUTWASH
DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE STRUCTURE	
STRUCTURE STOW SHORT SOFT SOFT SOFT SOFT SOFT SOFT SOFT SOFT	TYPE PLATY SUBANGULAR % BOULDERS % GRAVEL
HAPID MEDIUM MOIST FIRM STRUCTURELESS VERY FINE HARD WEAK FINE VERY MOIST VERY HARD MODERATE MEDIUM	GRANULAR COLUMNAR >12" 1/4" (o 3"
WET STRONG COARSE BOUNDARY VERY COARSE	ANGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: The material has more	COORSE 3" to 12" C < #200 40 GO
CLEAR WAVY GRADUAL IRREGULAR GEORGE THE MLTERIE	13 yestarday
DIFFUSE BROKEN 2 OF CONT SEE OF 9	revers or 5 terms ()
OVERALL NOTES: This was frozen super hard to	Ho inches slus.
Observed interel as it was excer	sted, all meteral
below the fresen nateral was s	lights moist by moist
by touch and usual inspertion	No M. force was wet
or saturated a No seeps of server	0
1 Malacal and 10 La	C because of the coorse gran
but also has samp class withit	as it ribbons well
SAMPLES TAKEN YES NO WATER OBSERVED: YES	NO BEDROCK: YES NO
SAMPLE ID: 55 /3.1 /5-/6F TYPE: DEP	DEPTH OF BEDROCK
11	Al Radiante
SAMPLE ID: DEPT	11 Or 1 8
SAMPLE ID: DEPT	TH: SHEET SIDE 1 OF 2
	OVE SOIL LOC 3. REV 3 44 97 9949

ENGINEERI	ge NG OWNER:	PE MUNCELL	MOTTI CO	ADUNDANCE		YPE	LOCATION		CONTINUED SHEET 2 OF 2
DILATANCY	&OR US	DIA COLORS %	COLOHS	FEW COMMON MANY ABUNDANCE FEW COMMON MANY STRUCTUR	FINE FINE FINE FINE FINE FINE FINE FINE	AINT DISTINCT PROMINENT TYPE AINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	GLAC. LAKE SET OUTWASH RESIDUUM LOESS BEDROCK
RUPT	MEDIUM MCHIGH VE DUNDARY NESS LOPUGHAPI SMOOTH	IGH. MOIST SOFT FIRM DIST HARD ERY MOIST VERY HARD ET	GRADE STRUCTUR WEAK MODERAT STRONG	reless very fil	GRAN CRUM ANGU	ULAR CO	DLUMNAR RISMATIC NGLE GRAIN	% BOULDERS 5-12" % COBBLE 3" to 12"	1/4" to 3"
AR ADUAL FUSE	WAVY IRREGULAR BROKEN								
NONE SLOW RAPID B ISTINCTIVE	NONPLASTIC DI LOW SI MEDIUM MHIGH V OUNDARY NESS TOPOGRAF		GRADE STRUCTU WEAK MODERA STRONG	ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON MANY SIZE RELESS VERY FINE COARS VERY C	FINE MINIMUM COARSE SIZE FINE MINIMUM COARSE RE TYP INE PLAT GRAI C CRUI E ANG	TYPE FAINT DISTINCT PROMINENT E Y S NULAR C	IN-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS **BOULDERS >12"	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES
BRUPT LEAR RADUAL	SMOOTH WAVY IRREGULAR BROKEN				- 5				
NONE SLOW RAPID	Y PLASTICITY NONPLASTIC DOWN MEDIUM HIGH	MOISTURE CONSISTE DRY VERY SOFT SLIGH, MOIST MOIST HARD VERY MOIST VERY HARD WET	GRADE STRUCT	STRUCTI SIZE URELESS VERY FINE MEDIU COAR	FINE MINIMUM COARSE SIZE FINE MINIMUM COARSE URE TYPE FINE PLA		IN-MATRIX ROOT HAIR LOCATION PED SURFAI IN-MATRIX ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC	LAMINATED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC: LAKE S OUTWASH RESIDUUM S EDROCK GRAVEL 1/4" to 3" % FINES
LEAR FRADUAL FFFUSE DEPTH	WAVY IRREGULAR BROKEN USCS SOIL T &/OR L		MOTTLES COLORS	ABUNDANCE FEW	SIZE FINE	TYPE FAINT	LOCATIO PED SURFA	CE STRATIFIED	GEOLOGY ALLUVIUM
	CY PLASTICITY NONPLASTIC LOW MEDIUM HIGH	MOISTURE CONSIST DRY VERY SOFT SLIGH. MOIST FIRM HARD VERY MOIST VERY HARD WET	ENCY GRAD STRUC WEAK	TURELESS VERY FINE ATE MEDI G COAF	FINE MINIMUM COARSE FURE TY FINE GF UM CF	DISTINCT PROMINEN TYPE FAINT DISTINCT PROMINEN ATY AANULAR RUMB IGULAR	LOCATIO PED SURFA IN-MATRIX	N SLICKEN-SIDEI BLOCKY PRISMATIC LENSED HOMOGENEOU 8 BOULDERS >12"	GLAC LAKE: OUTWASH RESIDUUM
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN	NOTES.							
DEPTH					FINE MINIMUM COARSE E SIZE FINE MINIMUM COARSE TURE	TYPE FAINT DISTINCT	ENT ROOT HAI LOCATI PED SURI IN-MATRI	ACE STRATIFIED (LAMINATED) FISSURED SLICKEN-SIDE ACE PRISMATIC K LENSED IR HOMOGENED	ALLUVIUM SLOPE ALLL COLLUVIUM ED GLACIAL TIL GLAC. LAKE OUTWASH RESIDUUM SUS LOESS BEDROCK

Oakridge ENGINEERING	OWNER:	Jeff S	over			TEST	PIT / BORING	NUMBER:	14
Chippewa Falls, WI 54729	PROJECT:	Hos 1	Ecilia	4		DATE:	3/0	2/0019	
www.OakridgeEng.com			/	,		ELEVA	TION:	978.5	and delivery.
SITE LOCATION: ADDI	RESS			ā		LOGGE	D BY: 2	mitte	
@ 128	284 .	State Hwy	, 48 G	Seents 6	15 AN	NY KARST FE	EATURES WIT	THIN 1000 FEET	:YES/NO2
NORTHING 126	428.2	Stete Hwy	62317	. 8_	LA			Tue slo	
COUNTY / STATE:	Bur	11	w			ANDSCAPE G	EOMETRY:_	Unifor,	ng
	SOIL TYPE &/OR USDA	MUNCELL COLORS %	MOTTLES COLORS	ABUNDANCE FEW	SIZE FINE	TYPE FAINT	LOCATION PED SURFACE	STRUCTURE	GEOLOGY
	5.11	104h 100	_	COMMON MANY	MINIMUM COARSE	DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	LAMINATED FISSURED SLICKEN-SIDED	SLOPE ALLUV. COLLUVIUM
15" 116	Lacon	<u> </u>		ABUNDANCE FEW COMMON	<u>SIZE</u> FINE MINIMUM	TYPE FAINT DISTINCT	LOCATION PED SURFACE IN-MATRIX	BLOCKY PRISMATIC	GLACIAL TILL GLAC: LAKE SED OUTWASH
DILATANCY PLASTIC			CY	MANY	COARSE	PROMINENT	ROOT HAIR	LENSED HOMOGENEOUS	RESIDUUM LOESS BEDROCK
SLOW NONPLAS SLOW NONPLAS SLOW NONPLAS NEDIUM	SLIGH.	VERY SOFT SOFT FIRM	GRADE STRUCTU	SIZE JRELESS VERY FII	TYP NE PLAT	₹ su	BANGULAR 7	% BOULDERS	% GRAVEL
HIGH	MOIST VERY I WET	HARD MOIST VERY HARD	WEAK MODERA STRONG		CRUI	MB PR	ISMATIC	% COBBLE	1/4" to 3"
BOUNDARY DISTINCTIVENESS TOP		7/10	1	VERY CO			7	3" to 12"	% FINES < #200_ 70-90
ABRUPT SMC	OTH	FOR this	W.S	clone .	5,50	nells	emple	brown	of back
GRADUAL IRRE DIFFUSE BRO	EGULAR KEN	to of	Lice	30-72	/				46.5 46.5
DEPTH USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS %	MOTTLES COLORS	ABUNDANCE	SIZE	TYPE	LOCATION PED SUBFACE		GEOLOGY ALLUVIUM
15"/ M	Silt	75 YR 1370	5 Yn.	COMMON MANY	COARSE	PROMINENT	ROOT HAIR	LAMINATED FISSURED SLICKEN-SIDED	SLOPE ALLUV, COLLUVIUM GLACIAL TILL
150"	10=11	7.570 20		ABUNDANCE FEW	SIZE FINE	TYPE FAINT	LOCATION PED SURFACE	BLOCKY FRISMATIC	GLAC. LAKE SED OUTWASH
DILATANCY PLASTI	CITY MOIS	TURE CONSISTEN	ICY	COMMON MANY STRUCTU	MINIMUM COARSE	DISTINCT PROMINENT	IN-MATRIX ROOT HAIR	HOMOGENEOUS	RESIDUUM LOESS BEDROCK
NONE NONPLAS SLOW RAPID MEDIUM		VERY SOFT SOFT FIRM	GRADE				JBANGULAR	% BOULDERS	% GRAVEL
HAPID MEDIÚM HIGH	MOIST VERY	HARD	WEAR MODERA	FINE MEDIUM	GRA I CRL	ANULAR CO	OLUMNAR RISMATIC	>12"	1/4" to 3"
BOUNDARY	, WET		STRONG	COARS VERY C		GULAR SI	NGLE GRAIN	% COBBLE	% FINES
ABRUPT SMC	POGRAPHY	NOTES:			-			3" to 12"	< #200 B90
	EGULAR OKEN								
DEPTH <u>USCS</u>	SOIL TYPE	MUNCELL COLORS %	MOTTLES	ABUNDANCE	SIZE	TYPE	LOCATION PED SURFAC		GEOLOGY
50"/	local.	7.5 M 100	2.54	COMMON		PHOMINENT	HOOT HAIR	LAMINATED FISSURED	SLOPE ALLUV.
166	, 50-, 7	4/3/2	_3,/_	ABUNDANCE FEW	SIZE	TYPE	LOCATION PED SURFACE	BLOCKY	GLACIAL TILL GLAC: LAKE SED OUTWASH
DILATANCY PLASTI	ICITY MOIS	STURE CONSISTER	licy.	COMMON MANY	MINIMUM COARSE	DISTINCT PROMINENT	IN-MATRIX	LENSED HOMOGENEOU	RESIDUUM S LOESS
NONE NONPLA	STIC DRY	VERY SOFT	GRADI		TY	<u>PE</u>		% BOULDERS	* BEDROCK % GRAVEL
RAPID MEDIUM	MOIS		WEAK MODER	TURELESS VERY F FINE ATE MEDIU	GR	ANULAR C	UBANGULAR COLUMNAR RISMATIC	>12"	1/4" to 3"
BOUNDARY	WET	TEITIMID	STRONG	G COARS			SINGLE GRAIN	% COBBLE	% FINES
	POGRAPHY OOTH	NOTES: Marke	cicl 15	s like	53	13		3" to 12"	< #200 50 60
	IEGULAR	COVID	600	very go	sel Si	c /e	ceuse	of	
OVERALL NOTES:	OKEN	The cas	130 9	16-175	11	17			
SVEHALL NOTES.	This	wes fr	38-7	Super	heret	16	40 m	ches p	lus.
Observe	d m	cterial	95 17	1 WES	ex	cauch	and,	all ma	force!
below 1	the fi	ogen Me	teriel	wes	5/15/	My 1	noist	to mo	137
by tou	ch a	got visu	1 10	spectro	7 .	No 1	netor	ust wes	wex
- 61 5c	furet	al No	500	000	6500	wel			
1			/	W					
SAMPLES TAKEN: YE	s/Nn)		10/4	TER OBSERVED	+ VEVINO	`	QE!	DROCK: YES (NO	3
			-500.00			,-	DEI	PTH OF BEDROO	
SAMPLE ID:			TYI	PE:	DEPTH:		On	HOLE EXTENT	
SAMPLE ID:			TYI	PE:	DEPTH: _			o Bedroc	form
SAMPLE ID:			TY	PE:	DEPTH:_			7, 962,0	T SIDE 4 OF C
		EV 1 11-21-2018.dwg - Saved: Duane 1						SHEE	T SIDE 1 OF 2

		TEST PIT / BORING NUMBER:	DATE:	SHEET 2 OF 2
Oakridge ENGINEERING OWNER:	MUNCELL MOTTLES A COLORS % COLORS	ABUNDANCE SIZE TYPE FEW FINE FAINT COMMON MINIMUM DISTING	LOCATION STRUCTURE PED SURFACE STRATIFIED IN-MATRIX LAMINATED	GEOLOGY ALLUVIUM SLOPE ALLUV
		MANY COARSE PROMIN	LOCATION BLOCKY PED SURFACE PRISMATIC TIN-MATRIX LENSED	COLLUVIUM GLACIAL TILL GLAC, LAKE SEI OUTWASH
APID MEDIUM MOIS	VERY SOFT GRAD	STRUCTURE DE SIZE TYPE FINE GRANULAR RATE MEDIUM I CRUMB COARSE ANGULAR VERY COARSE VERY COARSE	SUBANGULAR % BOULDERS	BEDROCK % GRAVEL
BOUNDARY INCTIVENESS TOPOGRAPHY	Silion	IG COARSE ANGULAH VERY COARSE	SINGLE GRAIN <u>% COBBLE</u> 3" to 12"	% FINES < #200
UPT SMOOTH AR WAVY DUAL IRREGULAR FUSE BROKEN	NOTES.			
DEPTH USCS SOIL TYP	DA COLORS % COLORS	FEW FINE DISTIN DISTIN	CT IN-MATRIX LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE SI OUTWASH RESIDUUM
IONE NONPLASTIC DRY SLOW LOW SLIG PAPID MEDIUM MOI	OISTURE VERY SOFT SITEM SOFT SITEM SITEM STRIU WEAK RY MOIST VERY HARD MODE STRO	STRUCTURE		% GRAVEL 1/4" to 3" % FINES
STINCTIVENESS TOPOGRAPH SMOOTH SAR WAVY ADUAL IRREGULAR	NOTES:		3" to 12"	< #200
NONE NONPLASTIC DR SLOW LOW SL RAPID MEDIUM MC	DA COLORS % COLORS OISTURE CONSISTENCY VERY SOFT GRA	FEW FINE FAINT OF THE COMMON MINIMUM DISTI COMMON MINIMUM DISTI COMMON MINIMUM DISTI COMMON MANY COARSE PROPERTY OF THE COMMON MINIMUM DISTI COARSE PROPERTY OF THE COARSE PROPERTY OF	PED SURFACE IN-MATRIX ROOT HAIR E LOCATION PED SURFACE BLOCKY IN-MATRIX IN-M	GLAC, LAKE SOUTWASH RESIDUMM US LOESS BEDROCK % GRAVEL 1/4" to 3"
V		JOTURELESS VERY FINE PLATY K FINE GRANULAI ERATE MEDIUM CRUMB ONG COARSE ANGULAR VERY COARSE	SINGLE GRAIN % COBBLE 3" to 12"	% FINES
DEPTH USCS SOIL TY &/OR US	SDA COLORS % COLORS	FEW	T PED SURFACE STRATIFIED IN-MATRIX LAMINATED MINENT ROOT HAIR FISSURGE PE LOCATION BLOCKY	ALLUVIUM SLOPE ALLU COLLUVIUM ED GLACIAL TILI GLAC LAKE OUTWASH RESIDUUM DUS LOESS
NONE NONPLASTIC DI SLOW LOW S	LIGH MOIST FIRM STE	STRUCTURE ADE SIZE TYPE IUCTURELESS VERY FINE PLATY AK FINE GRANULA	SUBANGULAR % BOULDERS	BEDROCK S % GRAVEL
HIGH V BOUNDARY	YERY MOIST VERY HARD MOI VET STR	DERATE MEDIUM CRUMB RONG COARSE ANGULAI VERY COARSE	PRISMATIC SINGLE GRAIN % COBBLE	% FINES
HIGH V	VERY MOIST VERY HARD MOI VET STR	DERATE MEDIUM CHUMB RONG COARSE ANGULAI	PRISMATIC	% FINES
BOUNDARY BOUNDARY BOUNDARY DISTINCTIVENESS TOPOGRAF SMOOTH WAVY HRADUAL HREGULAR HREGULAR HFFUSE BROKEN DEPTH USCS SOIL TO &/OR U	PHY NOTES: YPE MUNCELL MOTTL	DERATE MEDIUM CHUMB COARSE ANGULAI VERY COARSE ES ABUNDANCE SIZE TY FEW FINE COMMON MINIMUM DI MANY COARSE PR ABUNDANCE SIZE TY FEW FINE FEW FINE COMMON MINIMUM DI COMMON MINIMUM DI	PRISMATIC SINGLE GRAIN W COBBLE 3" to 12" PE LOCATION STRUCTU INT PED SURFACE IN-MATRIX AMINATED FISSURED SURFACE IN-MATRIX PED SURFACE IN-MATRIX IN-MATRIX IN-MATRIX IN-MATRIX LENSED	% FINES - <#200 RE GEOLOG' ALLUVIUM SLOPE ALLI COLLUVIUM

	Oakridge ENGINEERING OWNER: Jeff Sever TEST PIT / BORING NUMBER:
	Chippewa Falls, WI 54729 Www.OakridgeEng.com PROJECT: Hay Fac. 11-fay DATE: 3/21/2019
	ELEVATION: 980./
	SITE LOCATION: ADDRESS LOGGED BY: D. M. He
	Q 12 884 State Hay 48 Grantsburg ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
	Horitimo 2007 E Chorina
	COUNTY/STATE: Burnet Cty Wi LANDSCAPE GEOMETRY: Uniform
	DEPTH USCS SOIL TYPE MUNCELL & MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY ALLUVIUM SLOPE ALLUVIUM S
	MANY COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM ABUNDANCE SIZE TYPE LOCATION BLOCKEN-SIDED GLACIAL TILL ABUNDANCE SIZE TYPE LOCATION BLOCKEN-SIDED GLACIAL TILL
	FEW FINE FAINT PED SURFACE PRISMATIC OUTWASH COMMON MINIMUM DISTINCT IN-MATRIX LENSED BESIDIUM
	DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE
	RAPID SLIGH MOIST FIRM STRUCTURELESS VERY FINE PLATY SUBANGULAR MOIST HARD WEAK FINE GRANULAR COLUMNAR >12" (2) 1/4" 10.2" (2)
	HIGH VERY MOIST VERY HARD MODERATE MEDIUM CRUMB PRISMATIC VERY MOIST VERY HARD MODERATE MEDIUM CRUMB PRISMATIC STRONG COARSE ANGULAR SINGLE GRAIN 6 COBBLE 76 FINES
	DISTINCTIVENESS TOPOGRAPHY NOTES: This layer was frozen notes 3" to 12" 0 <#200 70-80
	CLEAR WAYY AREGULAR ARE From Small sample brought beat to
	DEPTH USCS SOILTYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY
	JOSAN SYS J.S.Y COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV. COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
	ABUNDANCE SIZE TYPE LOCATION BLICKEN SIDED GLACIA TILD SLOCKEN SLOCKEN SIDED GLACIA TILD SLOCKEN SIDED SLOCKEN SLOCKEN SIDED SLOCKEN SIDED SLOCKEN SIDED SLOCKEN SIDED SLOCKEN S
- A	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOESS
A	NONE NONPLASTIC DRY VERY SOFT GRADE STED TYPE SLOW LOW SLIGH, MOIST SOFT GRADE SUEEV FINE PLATFY SUBANCILLAR % BOULDERS % GRAVEL
- 7	HIGH VERY MOIST HARD WEAK FINE GRANULAR COLUMNAR >12" 1/4" to 3"
	BOUNDARY VERY COARSE <u>% COBOLE</u> <u>% FINES</u>
P. 140	ABRUPT CLEAR WAVY TURNS to 7.5/R 4/14. Les the fine black my the
	GRADUAL IRREGULAR DIFFUSE BROKEN 12 the upper port. (8)
	DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY &/OR USDA COLORS & COLORS FEW FINE FAINT PED SURFACE STRATIFIED ALLUVIUM COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV.
	MANY COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM ADJUNDANCE SIZE TYPE LOCATION SLICKEN-SIDED GLACIAL TILL
	FEW FINE FAINT PED SURFACE PRISMATIC OUTWASH COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM
	DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE NONE NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE % BOULDERS % GRAVEL
	HAPID MEDIUM MOIST FIRM STRUCTURELESS VERY FINE PLATY SUBANGULAR MOIST HARD WEAK FINE GRANULAR COLUMNAR >12"
	WET STRONG COARSE ANGULAR SINGLE GRAIN COBBLE SINGLE BOUNDARY WEY WEY STRONG WET STRONG STRONG WERY COARSE ANGULAR SINGLE GRAIN COBBLE STRONG STRONG WERY COARSE
	DISTINCTIVENESS TOPOGRAPHY NOTES: (2) It look like thore is ML 3" to 12" <#200_
	GLEAR GRADUAL IRREGULAR DIFFUSE BROKEN ON T SMELL Churchs and trought back all are (2)
	OVERALL NOTES:
	this was frozen super hard () as pits before
	to 10 inches polos, Observed meteriel as 15
	Wes executed all meterial below the frozen meternel
	Was Slightly moist to moist by tower and visual inspection
	a continued = hours blood CI tille at the office
	Commercial description of the state of the s
	SAMPLES TAKEN YES NO WATER OBSERVED: YES NO BEDROCK: YES (NO DEPTH OF BEDROCK / //
	SAMPLE ID: JS /S / 3 / 6 / TYPE: DEPTH: OR HOLE EXTENT: 16.0
	SAMPLE ID: JS 15,2 13 to 15ft TYPE: DEPTH: No Bedrock
	SAMPLE ID:
	File: WOAKRIDGE Infrasouries/Fedment/Solis/OKE SOIL LOG-2 FEV / 11-21-2018.dmg - Saved: Duane 1/127/2018 12:34 PM - Printed: Duane 3/7/2019:13 PM OKE SOIL LOG-2 FEV / 11-21-2018.dmg - Saved: Duane 1/127/2018 12:34 PM - Printed: Duane 3/7/2019:13 PM

Oakridg ENGINEERIN	e G OWNER:	PE MUNCELL		TEST PIT / BORII			E:		CONTINUED SHEET 2 OF 2
	&/OR US	OLOTHUDE CONSISTEN	MOTTLES COLORS	ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON MANY STRUCTUR	FINE MINIMUM DISCOARSE PERINE MINIMUM DISCOARSE PERINE MINIMUM DISCOARSE PERINE	STINCT IN-M ROMINENT ROO YPE LOO WINT PED STINCT IN-M	SURFACE SATRIX IN THAIR SURFACE ATRIX	AMINATED AMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	GEOLOGY ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC LAKE SEL OUTWASH RESIDUM LOESS BEDROCK
NONE SLOW RAPID BO	NONPLASTIC DE LOW SL MEDIUM MO HIGH VE	QY VERY SOFT SOFT SOFT SIGH. MOIST FIRM DIST HARD ERY MOIST VERY HARD ET	GRADE	E SIZE TÜRELESS VERY FIN FINE ATE MEDIUM G COARSE VERY CO	TYPE IE PLATY GRANU CRUMB ANGUL	LAR COLUMI	NAR >12 TIC GRAIN <u>%</u>	BOULDERS 9	% GRAVEL 1/4" to 3" % FINES
RUPT AR ADUAL FUSE	SMOOTH WAVY IRREGULAR BROKEN			1					
DILATANCY NONE SLOW RAPID	PLASTICITY M NONPLASTIC D LOW S MEDIUM M HIGH V	MOISTURE CONSISTE VERY SOFT SOFT FIRM HOIST HARD VERY MOIST VERY HARD	NCY GRAD	FEW COMMON MANY STRUCTL SIZE TURELESS FINE RATE MEDIUM IG COARS	FINE FINITUM DE COARSE PE FLATE FLAT	AINT PET INTINCT IN-TO-POMINENT RO PET INTINCT IN-TO-POMINENT RO SUBAN ULAR COLUM IB PRISM	OSURFACE MATRIX OT HAIR CATION OSURFACE MATRIX OT HAIR GULAR MATRIX ATRIC E GRAIN 9/4	STRUCTURE STRATIFIED STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS BOULDERS 12"	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK GRAVEL 1/4" to 3" % FINES
TADUAL FUSE DEPTH	IRREGULAR BROKEN	YPE MUNCELL	MOTTLES	ABUNDANCE	SIZE		OCATION	STRUCTURE STRATIFIED	GEOLOGY ALLUVIUM
NONE SLOW RAPID	Y PLASTICITY INONPLASTIC LOW MEDIUM HIGH	MOISTURE CONSISTI DRY VERY SOFT SLIGH, MOIST HARD VERY MOIST VERY HARD WET	COLORS ENCY GRA STRU WEAK MODE STRO	COMMON MANY - ABUNDANCE FEW COMMON MANY STRUCT DE SIZE CTURELESS VERY (FINE FINE FINE FINE FINE FINE FINE FINE	SIZE FINE MINIMUM	PROMINENT ROTATION OF THE PROMINE ROTATION OF THE PROMINENT ROTATION OF THE PROMINENT ROTATION O	NGULAR IMNAR MATIC LE GRAIN	LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS BOULDERS COBBLE 12" 16 12"	GLAC. LAKE SOUTWASH RESIDUUM LOESS BEDROCK GRAVEL 1/4" to 3" K FINES
ISTINCTIVE BRUPT LEAR RADUAL IFFUSE	NESS TOPOGRA SMOOTH WAVY IRREGULAR BROKEN	NOTES:						0 10 12	< #200
	USCS SOIL 1 &/OR	MOISTURE CONSIST DRY VERY SOF SLIGH. MOIST FIRM MOIST HARD VERY MOIST VERY HAR	ENCY GR/ STRI WEA MOD STRI	FEW COMMON MANY ABUNDANC FEW COMMON MANY STRUC ADE UCTURELESS VER K FINE BERATE MED ONG COMMON	FINE MINIMUM COARSE E SIZE FINE MINIMUM COARSE TURE TY FINE PLA GR UM GR AN Y COARSE	FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT PROMINENT PE TTY SUE ANULAR COL UMB PRI	OCATION PED SURFAC N-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX ROOT HAIR IMMULAR LUMNAR SMATIC GLE GRAIN	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDE BLOCKY	GLAC. LAKE OUTWASH RESIDUUM LOESS BEDROCK GRAVEL 1/4" to 3" % FINES
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN	1							
DILATAN NONE SLOW RAPID		MOISTURE CONSIS DRY VERY SOFT FIRM MOIST HARD VERY HAID	GF STF WE RD MO	FEW COMMON MANY ABUNDANC FEW COMMON MANY STRUCTURELESS AUCTURELESS VEF ALL DERAITE MERITANIA FEW COMMON MANY STRUCTURE FIN DERAITE MERITANIA STRUCTURE FIN DERAITE FIN DERAITE STRUCTURE FIN DERAITE FIN DERAITE STRUCTURE FIN DERAITE FIN DERAI	FINE MINIMUM COARSE FINE MINIMUM COARSE COARSE FINE FINE FINE FINE FINE FINE FINE FIN	RANULAR CO	LOCATION PED SURFA IN-MATRIX ROOT HAIR LOCATION PED SURFA IN-MATRIX ROOT HAIR BANGULAR BUMNAR BISMATIC NGLE GRAIN	CE STRATIFIED LAMINATED FISSURED SLICKEN-SIDI BLOCKY CE PRISMATIC LENSED	ALLUVIUM SLOPE ALL COLLUVIUM ED GLACIAL TII GLAC. LAKE OUTWASH HESIDUM LOESS BEDROCK 6 % GRAVE
í	BOUNDARY			VEI	RY COARSE				% FINES

Oakridge engineering owner: Jeff Sover	TEST PIT / BORING NUMBER:/6
Chippewa Falls, WI 54729 PROJECT: // S FEEL / 1 To	DATE: 3/28/2019
Www.OakridgeEng.com	ELEVATION: 979,6
SITE LOCATION: ADDRESS	LOGGED BY: D. Mitte
@ 12884 State Huy 48 Grantsburg	
12/ 2/2 - / 12 202 1/	LANDSCAPE POSITION: Toe slape
0 4 01 111	11-0
	LANDSCAPE GEOMETRY: Unique STRUCTURE GEOLOGY
&/OR USDA COLORS % COLORS FEW COMMON	FINE FAINT PED SURFACE STRATIFIED ALLUVIUM MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV
1 2 100	COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM SIZE TYPE LOCATION BLOCKY GLACIAL TILL BLOCKY GLAC LAKE SED
COMMON	FINE FAINT PED SURFACE PRISMATIC OUTWASH MINIMUM DISTINCT IN-MATRIX LENSED RESIDIUM
DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE	HOMOGENEOUS LOESS
SLOW TOWN SLIGH MOIST SOFT GHADE STRUCTURELESS VERY FINE	ODENHULAD COLUMNIA
HIGH VERY MOIST VERY HARD MODERATE MEDIUM	GRANULAR COLUMNAR CRUMB PRISMATIC >12 1/4" to 3" 1/4" t
BOUNDARY VERY COAL	RSE % COBBLE % FINES
AUTOF SMOOTH	3 to 12" - 1200 70-80
GRADUAL IRREGULAR DIFFUSE BROKEN The Office	ingere di cogni de le
DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE	SIZE TYPE LOCATION STRUCTURE GEOLOGY FAINT PED SURFACE STRATIFIED ALLUVIUM
16"/ - SIL 754/ 20 25Y MANY	MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV. COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
43 MC 100M 4/3 OU 31 ABUNDANCE FEW	SIZE TYPE LOCATION SLICKEN-SIDED GLACIAL TILL BLOCKY. FINE FAINT PED SURFACE BLOCKY. PED SURFACE PRISMATIC OLITINASH
4/6 6/0 COMMON MANY	FINE FAINT PED SURFACE PRISMATIC OUTWASH MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM COARSE PROMINENT ROOT HAIR HOMOGENEOUS COESS
NONE NONPLASTIC DRY VERY SOFT GRADE SIZE	E BEDROCK
RAPID MEDIUM MOIST FIRM STRUCTURELESS VERY FINE WEAK FINE	PLATY SUBANGULAR GRANULAR COLUMNAR >12"
WET STRONG COARSE	ANGULAR SINGLE GRAIN % CORRI E
DISTINCTIVENESS TOPOGRAPHY NOTES. The trained to	3" to 12" <#200 70 "80
ABRUPT SMOOTH NOTES. CLEAR WAYY GRADUAL IRREGULAR	
DIFFUSE BROKEN	
&/OR USDA COLORS % COLORS	SIZE TYPE LOCATION STRUCTURE GEOLOGY PEND FAINT PED SURFACE STRATIFIED ALLUVIUM
43"/ 10cm 54/2 99 2.54 GOMMON MANY	MINIMUM DISTINCE INMATERIA LAMINATED SLOPE ALLUV. COARSE PROMINENT ROOTHAIR FISURED COLLUVIUM SLICKEN-SIDED GLACIAL TILD
ABUNDANCE FEW	FINE FAINT PED SURFACE PRISMATIC OUTWASH
DILATANCY PLASTICITY MOISTLINE CONSISTENCY	MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM COARSE PROMINENT ROOT HAIR LOWGENEUUS LOESS
NONPLASTIC DRY VERY SOFT GRADE SIZE	TYPE % BOULDERS % GRAVEL
RAPID AT THE PROPERTY OF THE P	E PLATY SUBANGULAR GRANULAR COLUMNAR CRUMB PRISMATIC 1/4" to 3"
BOUNDARY STRONG COARSE VERY CO.	ANGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: HES a few areas of	1 600 wash 3" to 12" (#200 50-60)
CLEAR WAVY GRADUAL IRREGULAR CON Shed Covid	be a strong SC
DIFFUSE BROKEN BUT IT CISS ONS WE	
OVERALL NOTES: This was frozen hard	to 15 inches plus.
Observed material during excess	tion, Material below
the frozen meternel was stan	Ltl maist to moist by
touch and visual insper fine	No restored was upt
or saturated un seens obs	pripal.
) 102 386/23 882	7, 4
SAMPLES TAKEN: YES NO WATER OBSERVED: Y	
SAMPLE ID: JS /6, / 20-40 inchastype:	DEPTH OF BEDROCK
MARIE TS 1/2 1/2/04	OHHOLE EXTENT: 20,7
SAMPLE ID: J 3 76 - A 17-77 TYPE:	DEPTH: No Bear ock
	DEPTH: SHEET SIDE 1 OF 2
File: IIOAKRIDGE1/Resources/Fechnice/Solls/OKE SOIL LOG-2 REV 1 11-21-2018 dwg - Saved: Duane 11/27/2018 12:34 PM Printed: Duane 3/7/2019 3:13 PM	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 MUNCELL	COLORS FEW COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED COARSE PROMINENT PED SURFACE STRATIFIED IN-MATRIX LAMINATED IN-MATRIX LAMINATED FISSURED SLICKEN-SIDED FAINT PED SURFACE STRATIFIED IN-MATRIX LAMINATED FISSURED SLICKEN-SIDED SLICKEN-SI	GLAC, LAKE SED OUTWASH
NONE	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY SUBANGULAR WEAK FINE GRANULAR COLUMNAR MODERATE MEDIUM CRUMB PRISMATIC PRISMATIC PRISMATIC PRISMATIC PRISMATIC PRISMATIC	% GRAVEL 1/4" to 3" % FINES
RUPI SMOOTH EAR WAVY ADULAL IRREGULAR FUSE BROKEN		
DEPTH USCS SOIL TYPE MUNCELL COLORS % DILATANCY PLASTICITY MOISTURE VERY SOFT SOFT SOFT SOFT HIMM HIGH VERY MOIST HARD VERY MOIST WET SOFT SOFT SOFT SOFT SOFT SOFT SOFT SOF	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY SUBANGULAR WEAK FINE GRANULAR COLUMNAR >12"	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SEL OUTWASH RESIDUUM LOESS BEDROCK 6 GRAVEL 1/4" to 3" 6 FINES
DILATANCY PLASTICITY MOISTURE CONSISTE VERY MOIST HIGH VERY HARD BOUNDARY DISTINCTIVENESS TOPOGRAPHY STORE BOOKEN IRREGULAR BROKEN MUNCELL COLORS % CONSISTE PRIM MOIST FIRM MOIST HARD VERY HARD WET DISTINCTIVENESS TOPOGRAPHY SMOOTH	ABUNDANCE SIZE TYPE LOCATION BLOCKY FEW FINE FAINT PED SURFACE PRISMATIC COMMON MINIMUM DISTINCT IN-MATRIX LENSED MANY COARSE PROMINENT ROOT HAIR HOMOGENEOL NCY STRUCTURE	ALLUVIUM SLOPE ALLUV. COLLUVIUM SLOPE ALLUV. COLLUVIUM OF GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM USESS BEDROCK GRAVEL 1/4" 10 3" 96 FINES
DEPTH USCS SOIL TYPE WUNCELL COLORS % DILATANCY PLASTICITY MOISTURE CONSISTINONE NONELASTIC DRY SOFT SILGH. MOIST HARD WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY SMOTH WAYY MANUAL PROPERTY OF THE STORY OF THE STORY OF THE SOFT SOFT SOFT SOFT SOFT SOFT SOFT SOFT	GRADE SIZE TYPE % BOULDERS STRUCTURELESS VERY FINE PLATY SUBANGULAR WEAK FINE GRANULAR COLUMNAR >12"	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE SOUTWASH RESIDIUM LOESS 9EDROCK 6 % GRAVEL 1/4" to 3" % FINES
DEPTH USCS SOIL TYPE MUNCELL A/OR USDA COLORS % DILATANCY PLASTICITY MOISTURE CONSIST NONE NONPLASTIC DRY VERY SOFT SLOW LOW SLIGH MOIST FIRM	COMMON MINIMUM DISTINCT IN-MATHIX LAMINATED STRUCTURE COMMON MINIMUM DISTINCT IN-MATHIX LAMINATED SILCKEN-SIC SLICKEN-SIC SLOCKY FEW FINE FAINT PED SURFACE PROMINENT ROOT HAIR HOMOGENE ENCY STRUCTURE	ALLUVIUM SLOPE ALLU COLLUVIUM GLACIAL TILI GLACIAL TILI GLACIAL SAN OUTWASH RESIDUUM LOESS BEDROCK S % GRAVEL

	Oakridge ENGINEERING	OWNER: Jeff	Sover	TEST PIT / E	BORING NUMBER:
	Chippewa Falls, WI 54729	PROJECT: Hoc F	Tac 1 1th	DATE:	3/22/2019
	Www.OakridgeEng.com		/	ELEVATION:	978.7
	SITE LOCATION: ADD	BESS		LOGGED BY	D. Mitte
	@ 128		y 48 Grants	6016 ANY KARST FEATUR	RES WITHIN 1000 FEET: YES (NO)
	NORTHING 126		62463.0	/	ON: Toe slope
	COUNTY/STATE:	Rurne H Ory	Wi	LANDSCAPE GEOM	
İ	DEPTH USCS	SOIL TYPE MUNCELL	MOTTLES ABUNDANC	E SIZE TYPE LOCA	ATION STRUCTURE GEOLOGY
	O/ML	WOR USDA COLORS %	COLORS FEW COMMON MANY	FINE FAINT PED S MINIMUM DISTINCT IN-MA COARSE PROMINENT ROOT	
	10" -	10cm 3/2 100	ABUNDANO	E SIZE TYPE LOCA	SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC LAKE SED
			COMMON MANY	FINE FAINT PED S MINIMUM DISTINCT IN-MA COARSE PROMINENT ROOT	
	NONE PLASTI-	STIC DRY VERY SOFT	GRADE STRUC	TURE	BEDROCK
	RAPID MEDIUM HIGH	HARD	STRUCTURELESS VER	Y FINE PLATY SUBANGU GRANULAR COLUMNA	AR >12"
	BOUNDARY	VERY MOIST VERY HARD WET	MODERATE MED STRONG COA	IUM CRUMB PRISMATI RSE ANGULAR SINGLE G Y COARSE	C
	DISTINCTIVENESS TO	POGRAPHY NOTES: 75 15	lever wes	frozen, notes	3" to 12" 0 <#200 70-90
	CLEAR WAY	OOTH	ce from	smill semple	brought beck to
	DIFFUSE BRO	OKEN THE OF	F7C@	TURE LOO	ATION
	DEPTH USCS	SOIL TYPE MUNCELL COLORS %	MOTTLES ABUNDANC	CEINE FAINT PED S	ATION STRUCTURE GEOLOGY SURFACE STRATIFIED ALLUVIUM ATRIX LAMINATED SLOPE ALLUV.
	12/ m	5/1 3/3 85	MANY	COARSE PROMINENT ROO	THAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL
1	148	7.540 KS	7.4/2 ABUNDANG	FINE (PAINT) PED	ATION BLOCKY GLAC, LAKE SED SURFACE PRISMATIC OUTWASH RESIDUUM
10 A	DILATANCY PLAST		MANY		THAIR HOMOGENEOUS LOESS BEDROCK
No.	NONE NONPLA SLOW LOW RAPID MEDIUM	SHIGHT MOIST SOFT		Y FINE PLATY SUBANG	
-	HIGH	VERY MOIST VERY HARD	WEAK FINE MODERATE MED STRONG CO	E GRANULAR COLUMN DIUM CRUMB PRISMAT ARSE ANGULAR SINGLE (GRAIN according
*900	BOUNDARY	ABOODADUN	VEF	RY COARSE	3" to 12" C <#200 70 - 90
***		NOTES: NOTES:			3 (0 12" <#200 · · · · · · · · · · · · · · · · · ·
	GRADUAL IRF	REGULAR OKEN			
	DEPTH USCS	SOIL TYPE MUNCELL &/OR USDA COLORS %	MOTTLES ABUNDAN COLORS FEW		SURFACE STRUCTURE GEOLOGY ALLUVIUM
	48"	100m 58/ 100	COMMON MANY		MATRIX LAMINATED SLOPE ALLUV OT HAIR FISSURED COLLUVIUM
	15-11"-	7/4		FINE FAINT PED	SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC LAKE SED SURFACE PRISMATIC OUTWASH
	DILATANCY PLAST	TICITY MOISTURE CONSISTER	COMMON MÁNY	COARSE PROMINENT ROO	MATRIX LENSED RESIDUUM DT HAIR HOMOGENEOUS LOESS BEDROCK
	NONE NONPL	SHIPLI MOISTA SOFT	GRADE SIZ	CTURE ZE TYPE RY FINE PLATY SUBANG	% BOULDERS % GRAVEL
	RAPID MEDIUN HIGH	MOIST HARD VERY MOIST VERY HARD	WEAK FIN		NAR 312 O MILLON (3)
	BOUNDAR	WET		ARSE ANGULAR SINGLE RY COARSE	GRAIN % COBBLE % FINES
		MOOTH NOTES.	not see to	he coorse gre	3" to 12" <#200 50 GC
	GRADUAL IRI	AVY REGULAR ROKEN	metoriel	INCE THE 1	TO SRS TO BECKHOR
	OVERALL NOTES:	ONEN .	1	73 14016 171	a sur or waster
		This was fro	3en to 3	makes pr	is observed
	materia	1 as it was	execute	el, oll mat	ericl below the
	frozer	2 meteral w	ics slight	y moist to r	noist by text
	and vi	such inspecti	ion. No m	icterial was u	setor setureted
	no 500	ps observed	<u> </u>		
	_didnt	see the b	lect month	5	
	SAMPLES TAKEN YE	ESV NO	WATER OBSERV	/ED: VES (NO)	BEDROCK: YES (NO)
	T	7 /7/ 8-M	n/	Name of the last o	DEPTH OF BEDROCK
	SAMPLE ID:	3/11/0-10	TYPE:	DEPTH:	OR HOLE EXTENT :
	SAMPLE ID:	141 a 151 () () () () () () () () () (TYPE:	DEPTH:	No sedrock
	SAMPLE ID:		TYPE:	DEPTH:	21, 762,8
		SolslOKE SOIL LOG-2 REV 1 11-21-2018.dwg - Saved: Duane 1			SHEET SIDE 1 OF 2 OKE SOIL LOG-2 REV.3 11-27-2018

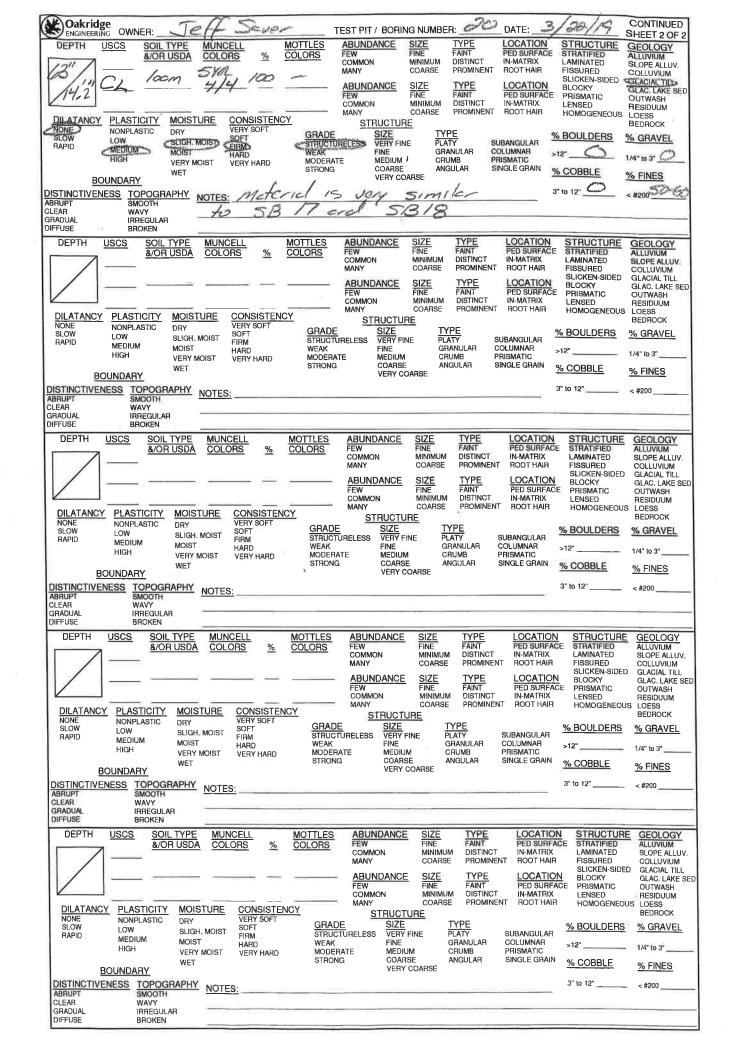
Oakridg ENGINEERIN	OWNER:			TEST PIT / BOR	ING NUMBER	R:[DATE:		CONTINU SHEET 2 (
	SCS SOIL TYP 8/OR US			COMMON MANY ARUNDANCE	MINIMUM COARSE SIZE	DISTINCT II PROMINENT F	N-MATRIX ROOT HAIR OCATION PED SURFACE N-MATRIX	LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC	ALLUVIUM SLOPE ALL COLLUVIUN GLACIAL TI GLAC, LAKI OUTWASH
DILATANCY NONE SLOW RAPID	PLASTICITY MONOPLASTIC DR LOW SL MEDIUM HIGH VE	OISTURE VERY: IGH, MOIST FIRM HARD ERY MOIST VERY! ET	SISTENCY SOFT GRAD STRUC WEAK HARD MODEL STRON	STRUCTL DE SIZE TURELESS VERY F FINE RATE MEDIUM IG COARS VERY C	IRE TYP INE PLAT GRAI GRAI CRUI E ANG	Y SUB NULAR COL MB PRIS ULAR SINC	ANGULAR UMNAR >1	BOULDERS 2"	BEDROCK GRAVE
DISTINCTIVENI ABRUPT CLEAR GRADUAL	ESS TOPOGRAPI SMOOTH WAVY IRREGULAR	HY NOTES:					3"	to 12"	< #200
DIFFUSE	BROKEN	DE MUNCEUL	MOTTLES	ABUNDANCE	SIZE	TYPE	LOCATION	STRUCTURE	GEOLOG
DILATANCY	PLASTICITY M	SDA COLORS	<u>%</u> <u>COLORS</u>	FEW COMMON MANY - ABUNDANCE FEW COMMON	FINE MINIMUM COARSE SIZE FINE MINIMUM	FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT PROMINENT	PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALI COLLUVIU GLACIAL T GLAC. LAK OUTWASH RESIDUUM LOESS BEDROCK
SLOW RAPID	LOW SI MEDIUM M	LIGH MOIST SOFT FIRM IOIST HARD ERY MOIST VERY VET	SISTENCY SOFT GRA STRU WOOK HARD STRO	CTURELESS VERY FINE ERATE MEDIL NG COAR	FINE PLA GR/ JM CRI SE ANG	ANULAR CO	BANGULAH LUMNAR >	% BOULDERS 12" % COBBLE	
DISTINCTIVEN	ESS TOPOGRAF			¥2111	COMINE		3	3" to 12"	< #200
ABRUPT CLEAR GRADUAL DIFFUSE	SMOOTH WAVY IRREGULAR BROKEN								
	<u>&/OR U</u>	YPE MUNCELL SDA COLORS	<u>% COLORS</u>	FEW COMMON MANY ABUNDANC FEW COMMON	FINE MINIMUM COARSE E SIZE FINE MINIMUM	TYPE FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT PROMINENT	ROOT HAIR	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS	SLOPE AL COLLUVIU GLACIAL GLAC. LAI OUTWASH RESIDUUI LOESS
<u>B</u>	HIGH	MOIST HARI VERY MOIST VER' WET	ISISTENCY Y SOFT T ISTRUCT O WEA Y HARD STRUCT STRUCT O S	K FINE ERATE MEDI ONG COAI	TURE FINE PL GRUM CF RSE ANY COARSE	RANULAH CI	JBANGULAR OLUMNAR RISMATIC INGLE GRAIN	% BOULDERS >12" % COBBLE	1/4" to 3" % FINES
DISTINCTIVE ABRUPT CLEAR GRADUAL DIFFUSE	NESS TOPOGRA SMOOTH WAVY IRREGULAR BROKEN	PHY NOTES:						3" to 12"	< #200
DEPTH	USCS SOIL T &/OR U		MOTTLE % COLORS	FEW COMMON MANY ABUNDANG FEW	FINE MINIMUM COARSE SIZE FINE	PROMINENT TYPE FAINT	LOCATION PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY DE PRISMATIC	SLOPE A COLLUVI GLACIAL GLAC. LA OUTWAS
DILATANC NONE SLOW RAPID	NONPLASTIC LOW MEDIUM	DRY SLIGH. MOIST MOIST HAF	M STE RD WEA	AK FINE DERATE MED	E T IY FINE P SOUM C	PROMINENT TYPE LATY GRANULAR CRUMB	ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC	LENSED HOMOGENEOU **BOULDERS** >12"	RESIDUU S LOESS BEDROC % GRAV
DISTINCTIVE ABRUPT CLEAR	NESS TOPOGRA SMOOTH WAVY	NOTES.	SIF		ARSE ARY COARSE	ANGULAR S	SINGLE GRAIN	% COBBLE 3" to 12"	% FINE:
GRADUAL DIFFUSE	IRREGULAR BROKEN		MOTTLE	O ADUNDAN	OF OIZE	TVDE	LOCATIO	M STRUCTUR	E CEOU
DEPTH	USCS SOIL &/OR	TYPE MUNCEL USDA COLORS			FINE MINIMUI COARSI	E PROMINEN TYPE FAINT M DISTINCT	PED SURFA IN-MATRIX T ROOT HAIR LOCATIO PED SURFA IN-MATRIX	LAMINATED LAMINATED FISSURED SLICKEN-SIDE BLOCKY PRISMATIC LENSED	ALLUVIL SLOPE A COLLUN D GLACIA GLAC L OUTWA RESIDU
DILATANO NONE SLOW RAPID	PLASTICITY NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH. MOIST MOIST HA	RM ST RD WE	STRU RADE SI RUCTURELESS VE EAK FIN DDERATE ME RONG CO	CTURE ZE RY FINE IE EDIUM	TYPE PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	% BOULDERS	BEDRO
	ENESS TOPOGR	APHY NOTES:						3" to 12"	- < #200 _
CLEAR GRADUAL	WAVY IRREGULAR	R							

Chippeway Falls, WI 54729 Www.OakridgeEng.com PROJECT: DATE: SITE LOCATION: ADDRESS LOGGED BY: ANY KARST FEATURES WITHIN 1000 FEET: YES NO NORTHING LANDSCAPE POSITION: LANDSCAPE GEOMETRY: LOCATION: ADDRESS STRUCTURE: PROMINENT ROOTHAIR NAMAY COARSE PROMINENT ROOTHAIR ROOTHAIR NORTHAIN NORTHING DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT WARY OWN NORTHAIN NAMAY COARSE PROMINENT ROOTHAIR ROOTHAIR NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NAMAY COARSE PROMINENT ROOTHAIR ROOTHAIR NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NAMAY COARSE PROMINENT ROOTHAIR ROOTHAIR NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NAMAY COARSE PROMINENT ROOTHAIR ROOTHAIR NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NORTHAIN NAMAY COARSE VERY PINE FINE FINE COMMON NAMAY COARSE VERY PINE PROMINENT ROOTHAIR NORTHAIN NAMAY COARSE VERY PINE PROMINENT ROOTHAIR NORTHAIN
SITE LOCATION: ADDRESS O JOSO SOLUTIVE MUNCELL AND SCAPE POSITION: SOLUTIVE SUPER MUNCELL AND SCAPE GEOMETRY: ON ORTHING JOSO SOLUTIVE MUNCELL AND SCAPE GEOMETRY: O JOSO STRUCTURE ST
NORTHING
DEPTH USCS SOIL TYPE MUNCELL SOLORS % COLORS FEW FINE COMMON MANY COMBS PROMINENT ROOT HAIR STRUCTURE FISSURED COMMON MANY COMBS PROMINENT ROOT HAIR STRUCTURE FISSURED SLOCKEN-SIDED BY VERY SOFT STRUCTURE STRUCTURE STRUCTURE FINE COMMON MANY COMBS PROMINENT ROOT HAIR ROOT HAIR ROOT HAIR SIDE STRUCTURE PROMINENT ROOT HAIR ROO
DEPTH USCS SOIL TYPE MUNCELL SOLORS % COLORS FEW FINE COMMON MANY COMBS PROMINENT ROOT HAIR STRUCTURE FISSURED COMMON MANY COMBS PROMINENT ROOT HAIR STRUCTURE FISSURED SLOCKEN-SIDED BY VERY SOFT STRUCTURE STRUCTURE STRUCTURE FINE COMMON MANY COMBS PROMINENT ROOT HAIR ROOT HAIR ROOT HAIR SIDE STRUCTURE PROMINENT ROOT HAIR ROO
DEPTH USCS SOIL TYPE MUNCELL & MOTTLES ABUNDANCE FINE FINE FRAIT DISTINCT COARSE PROMINENT DISTINCT COARSE PROMINENT DISTINCT COARSE PROMINENT DISTINCT COARSE PROMINENT DISTINCT COARSE DISTINCT DISTINCT COARSE DISTINCT COARSE DISTINCT DISTINCT COARSE DISTINCT DISTINCT COARSE DISTINCT DISTINCT DISTINCT COARSE DISTINCT DISTINCT COARSE DISTINCT DISTINCT DISTINCT DISTINCT COARSE DISTINCT DIS
ABUNDANCE SIZE TYPE FINE PLATT SUBANGULAR MOST HARD WET VERY HARD WET VERY HARD STRONG PROBLES TROOP ARE BOUNDARY DIETINCTIVENESS TOPOGRAPHY NOTES: ABUNDANCE SIZE TYPE FINE PLATY SUBANGULAR GRADULA IRREGULAR BROKEN DIETINCTIVENESS TOPOGRAPHY NOTES: ABUNDANCE SIZE TYPE COMMON MINIMUM MANY COARSE ABUNDANCE SIZE TYPE STRUCTURELESS VERY FINE PLATY SINGLE GRANULAR COLLUMNAR PRISMATIC COARSE ANGULAR SINGLE GRANULAR COLLUMNAR STROOP ARE ANGULAR SINGLE GRANULAR COLLUMNAR STROOP ANGULAR STROOP ANGULAR STRUCTURE STRUCTURELESS VERY FINE PLATY SUBANGULAR COLUMNAR WEAK FINE GRANULAR COLUMNAR STROOP ANGULAR S
ABUNDANCE FINE FINE FINE GRANULAR COLUMNAR HIGH WAVY GRADUAL BEAUTH LEAR GRADUAL BEAUTH LEAR GRADUAL BEAUTH WAVY GRADUAL BEAUTH WAVY GRADUAL BEAUTH GRANULAR GRADUAL BEAUTH GRANULAR GRADUAL GRANULAR GRADUAL GRANULAR GRADUAL GRANULAR GRADUAL GRANULAR GRADUAL GRANULAR GRANULA
DILATANCY PLASTICITY MOISTURE DRY VERY SOFT SLIGH, MOIST HARD WET VERY HARD DISTINCT IVERS BROKEN DISTINCTIVENESS TOPOGRAPHY MANY DISTINCTIVENESS TOPOGRAPHY MANY DISTINCTIVENESS SOIL TYPE BROKEN DEPTH USCS SOIL TYPE MUNCELL COLORS (COLORS SIZE TYPE SUBANGULAR STRUCTURE) ABRUPT CLEAR GRADULAR BROKEN DEPTH USCS SOIL TYPE MUNCELL COLORS (COLORS SIZE TYPE SUBANGULAR SINGLE GRAIN SINGLE GRAIN MANY COARSE PROMINENT ROOT HAIR RESIDUM HOMOGENEOUS LOESS BEDROCK (COLORS SIZE TYPE LOCATION PED SUBANGULAR SINGLE GRAIN SINGLE GRAIN (COLORS STRUCTURE SIZE TYPE LOCATION PED SUBANGULAR SINGLE GRAIN (COLORS SIZE TYPE SUBANGULAR SINGLE GRAIN SINGLE GRAIN (COLORS SIZE TYPE SUBANGULAR SINGLE GRAIN (COLORS SIZE TYPE SUBANGULAR SINGLE GRAIN (COLORS SIZE TYPE SUBANGULAR SINGLE GRAIN (COLORS SIZE SIZE SIZE SIZE SIZE SIZE SIZE SIZ
NONE SLOW TOWN ARIDIUM RAPID
HAPID MEDIUM HIGH MOIST HARD VERY MOIST VERY HARD WET WEAV MODERATE STRONG COARSE ANGULAR MODERATE STRONG COARSE ANGULAR MODERATE VERY COARSE
BOUNDARY VERY COARSE VERY COA
ABRUPT CLEAR WAVY GRADUAL DIFFUSE BROKEN DEPTH USCS SOIL TYPE WUNCELL COLORS & COLORS FEW FINE EAINT PED SURFACE STRATIFIED LAMINATED STRUCTURE GEOLOGY ALLUVIUM COLLUVIUM COLUVIUM COLLUVIUM SUSCINCT COARSE PROMINENT ROOT HAIR SURFACE STRATIFIED LAMINATED FISSURED COLLUVIUM COLLUVIUM GLACIAL TILL GLACIA
GRADUAL DIFFUSE BROKEN DEPTH USCS SOIL TYPE & MUNCELL COLORS & ABUNDANCE SIZE TYPE EAINT PED SURFACE STRATIFIED LAMINATED STRUCTURE GEOLOGY ALLUVIUM SUCCESSIVE FINE COMMON MINIMUM DISTINCT COARSE PROMINENT ROOT HAIR SUCCESSIVE FINE COLUVIUM SUCCESSIVE FINE CAIND PED SURFACE STRATIFIED LAMINATED FISSURED FISSURED SUCCESSIVE FINE CAIND PED SURFACE STRATIFIED LAMINATED FISSURED FISSURED SUCCESSIVE FINE CAIND PED SURFACE PRISMATIC OUTWASH DISTINCT SURFACE PRISMATIC SURFACE SURF
8/OR USDA COLORS % COLORS FEW COMMON MINIMUM DISTINCT TOWN BLOCKY OUTWASH COMMON MINIMUM DISTINCT TOWN BLOCKY OUTWASH COMMON MINIMUM DISTINCT TOWN BLOCKY OUTWASH OWN MINIMUM DISTINCT TOWN BLOCKY OUTWASH OUTWAS
MANY COARSE PROMINENT ROOTHAIR FISSURED COLLUVIUM 5/3 85 ABUNDANCE SIZE TYPE LOCATION BLOCKY GLAC, LAKE SED FINE FAIR PROMINENT DISTINCT SIZE PRISMATIC OUTWASH OUTWASH OUTWASH OUTWASH OUTWASH OUTWASH OUTWASH OUTWASH OUTWASH
7.5 YZ FEW FINE FAIND PED SURFACE PRISMATIC OUTWASH
DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE NONPLASTIC DRY VERY SOFT ORACLE PROMINENT HOOT HAIR HOMOGENEOUS CORSS. BEDROCK
SLOW LOW SLIGH MOIST SOFT STALE SIZE 11/E % BOULDERS % GRAVEL SUBANGULAR COLUMNAR CO
HIGH VERY MOIST VERY HARD MODERATE MEDIUM CRUMB PRISMATIC 1/4" to 3" 1/4" to
DISTINCTIVENESS ABRUPT SMOOTH
CLEAR WAVY GRADUAL IRREGULAR
DIFFUSE BROKEN DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY
&/OR USDA COLORS % COLORS FEW FINE FAINT PED SURFACE STRATIFIED ALLUVIUM SLOPE AL
ABUNDANCE SIZE TYPE LOCATION BLOCKY GLACIAL TILL BLOCKY GLACIAL TI
COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM ON ATANCY PLASTICITY MOISTURE CONSISTENCY MANY COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOESS
NONE NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE SLIGH MOST. SOFT GRADE SIZE TYPE SUBANCINAR & BOULDERS & GRAVEL
MOIST HARD WEAK FINE GRANULAR COLUMNAR >12" 1/4" to 3" 1/4" to 3" 1/4" to 3"
BOUNDARY VERY COARSE % FINES
ABRUPT SMOOTH CLEAR WAVY #3 SB / 7
GRADUAL IRREGULAR DIFFUSE BROKEN
OVERALL NOTES: This was forces to 40 whos observed
meterial as it was executed all meteral below
the frager meterial was slightly moist to moist by
touch and visual inspection. No Meterial unes weter
seturated, so seeps asserted
This Beckhoe pit is very similar to 5817
SAMPLES TAKEN: YES (NO) WATER OBSERVED: YES (NO) BEDROCK: YES (NO)
SAMPLE ID: JS 18.1 6494 TYPE DEPTH OF BEDROCK // "
OR HOLE EXTENT: / Co /
SAMPLE ID:
SAMPLE ID: TYPE: DEPTH: SHEET SIDE 1 OF 2 Files: IVOAKRIDGE INTeacources17 enhanced18 color/CRE SOIL LOG-2 REV. 1 IT-\$17-\$018 (cm.) - Sevend: Duane 11/27/2018 (2:34 PM - Photostic Duane 3/7/2019 3/13 PM OKE SOIL LOG-2 REV.3 11-27-2018

Oakridge ENGINEERING	OWNER:				rest PIT / BORI			DATE:	OTO: OTO:	CONTINUED SHEET 2 OF 2
DEPTH US	SCS SOIL	TYPE MUN USDA COLO	ORS %	COLORS	ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON	FINE MINIMUM COARSE SIZE FINE MINIMUM	TYPE FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	GEOLOGY ALLUVIUM SLOPE ALLUV, COLLUVIUM GLACIAL TILL GLAC, LAKE SEI OUTWASH RESIDUUM
LOW (APID I	NONPLASTIC LOW MEDIUM HIGH NDARY SS TOPOGH	MOISTURE DRY SLIGH, MOIST MOIST VERY MOIST WET	CONSISTEN VERY SOFT SOFT FIRM HARD VERY HARD			TYPI NE PLAT GRAM CRUM ANGL	E Y SU NULAR CC	IBANGULAR DLUMNAR IISMATIC NGLE GRAIN	HOMOGENEOUS % BOULDERS >12" % COBBLE 3" to 12"	BEDROCK % GRAVEL 1/4" to 3" % FINES
UPT AR DUAL USE	SMOOTH WAVY IRREGULAR BROKEN		<u>. </u>							
DILATANCY ONE STINCTIVENE	PLASTICITY NONPLASTIC LOW MEDIUM HIGH JNDARY SSS TOPOGF SMOOTH	MOISTURE DRY SLICH, MOIST WERY MOIST WET	CONSISTE VERY SOFT SOFT HARD VERY HARD	GRADE STRUCT WEAK	ATE MEDIU	COARSE SIZE FINE MINIMUM COARSE JRE TYP FINE PLA* GRA M CRU	PE TY S ANULAR C JMB P	LOCATION PED SURFAC IN-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX ROOT HAIR UBANGULAR OLUMNAR RISMATIC INGLE GRAIN	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE S OUTWASH ALOESS BEDROCK GRAVEL 1/4" to 3" % FINES
EAR ADUAL FUSE	WAVY IRREGULA BROKEN	R								
DILATANCY NONE SLOW RAPID		MOISTURE DRY SLIGH. MOIST WERY MOIST WERY MOIST WERY MOIST	VERY SOFT SOFT FIRM HARD VERY HARD	GRAD STRUC WEAK	TURELESS VERY FINE RATE MEDII	FINE MINIMUM COARSE SIZE FINE MINIMUM COARSE URE TY FINE PL GR JM CR	(PE ATY AANULAR BUMB	LOCATION PED SURFA IN-MATRIX T ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC	CE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY CE PRISMATIC LENSED	GLAC. LAKE SOUTWASH RESIDUUM LOESS BEDROCK GRAVEL 1/4" to 3"
	USCS SO		JNCELL DLORS %	MOTTLES COLORS	ABUNDANC FEW COMMON MANY ABUNDANC FEW COMMON	FINE MINIMUM COARSE	TYPE FAINT	IN-MATRIX	ACE STRATIFIED LAMINATED R FISSURED SLICKEN-SIDE DN BLOCKY ACE PRISMATIC	E GEOLOGY ALLUVIUM SLOPE ALLU COLLUVIUM GLACIAL TIL GLAC LAKE OUTWASH RESIDUUM
	NONPLASTIC LOW MEDIUM HIGH	DRY SLIGH, MOIS MOIST VERY MOIST WET	VERY SOFT SOFT FIRM HARD VERY HARD	GRAI STRUG WEAK	MANY STRUC DE SIZI CTURELESS VER FINE RATE MED NG COA	COARSE TURE TYFINE GUM COARSE		SUBANGULAP COLUMNAR PRISMATIC SINGLE GRAII	HOMOGENEO M BOULDERS >12" M COBBLE	US LOESS BEDROCK MARKET MARK
BRUPT LEAR RADUAL	VESS TOPOC SMOOTH WAVY IRREGUI	_AR	res:						3" to 12"	< #200
DEPTH DILATANCY NONE SLOW RAPID	8./	DR USDA C	VERY SOF SOFT FIRM HARD	TENCY T GRA STRI WEAL BD MOD	FEW COMMON MANY - ABUNDANI FEW COMMON MANY STRUC DE SIZ ICTURELESS VEI K K FRATE ME	FINE MINIMUM COARSE E SIZE FINE MINIMUM COARSE COARSE COARSE TO THE SIZE TO TH	TYPE FAINT M DISTINCT E PROMINE TYPE PLATY GRANULAR CRUMB	IN-MATRI ROOT HA LOCATI PED SUR IN-MATRI ROOT HA SUBANGULA COLUMNAR PRISMATIC	FACE AIR AIR FACE BION FACE BI	BEDROCK S % GRAVE 1/4" to 3"
		WET		STRO	JING CO	ARSE	ANGULAR	SINGLE GRA	THE RESERVE OF THE PARTY OF THE	% FINES

	Oakridge	OWNER:	Jeff	Saver	-		_ TEST	PIT / BORING	NUMBER:/	19
	Chippewa Falls, WI 54729 Www.OakridgeEng.com	PROJECT:	HOG 1	Eciln	4		DATE:	3	122/201	9
	www.CaknogeEng.com						ELEV	ATION:	977.7	7
	SITE LOCATION: AD		9 91 5	- 14		,	LOGG	ED BY: 🕖,	m. He	
	@ 12	884 .	State Hu			oury 1	ANY KARST F	EATURES WI	THIN 1000 FEET	YES/NO
	NORTHING 126	.37/;	EASTING	16260	98.9	١	LANDSCAPE	POSITION:	De 5/0x	
	COUNTY / STATE:	SOIL TYPE	MUNCELL	MOTTLES	ABUNDANCE	SIZE	TYPE	GEOMETRY: _	STRUCTURE	
	527 III <u>55555</u>	&/OR USDA	COLORS %	COLORS	FEW COMMON MANY	FINE MINIMUM COARSE	TYPE FAINT DISTINCT	PED SURFACE IN-MATRIX	STRATIFIED LAMINATED	GEOLOGY ALLUVIUM SLOPE ALLUV
	14" ML	Cep	104/2 100		ABUNDANCE FEW COMMON	<u>SIZE</u> FINE MINIMUM	TYPE FAINT DISTINCT	ROOT HAIR LOCATION PED SURFACE IN-MATRIX	LENSED	COLLUVIUM GLACIAL TILL GLAC, LAKE SED OUTWASH RESIDUUM
	DILATANCY PLAST	ASTIC DRY SLIGH.	VERY SOFT SOFT	GRADE	MANY STRUCTUI SIZE URIELESS VERY FIL		PROMINENT /PE ATY SI	ROOT HAIR OBANGULAR	HOMOGENEOUS BOULDERS	BEDROCK % GRAVEL
	RAPID MEDIUN HIGH BOUNDAR	MOIST VERY I WET	HARD	WEAK MODERA STRONG	FINE TE MEDIUM	GF CF AN	RANULAR CE RUMB PI	OLUMNAR RISMATIC	% COBBLE	1/4" to 3"
	DISTINCTIVENESS TO SERVER	_	NOTES: This	leger ,	was fro	sen,	notes		3" lo 12"	< #200 70-90
	GRADUAL IR	AVY REGULAR ROKEN	from:	miler	scriple 5		Top	- 1	te office	-
	DEPTH USCS	SOIL TYPE &/OR USDA	MUNCELL	MOTTLES COLORS	ABUNDANCE FEW	SIZE FINE	TYPE FAINT	LOCATION PED SURFACE	STRUCTURE STRATIFIED	GEOLOGY
	14"/ ML	SILT	2.5 Y/L 7	COLORS	COMMON MANY ABUNDANCE FEW	MINIMUM COARSE SIZE FINE		IN-MATRIX	LAMINATED FISSURED SLICKEN-SIDED BLOCKY	GLAC. LAKE SED
2.6	DILATANCY PLAS		TURE CONSISTE VERY SOFT		COMMON MANY STRUCTU	MINIMUM COARSE IRE	DISTINCT PROMINENT	IN-MATRIX	E PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM COESS BEDROCK
1.14	RAPID MEDIU HIGH	SLIGH M MOIST	MOIST SOFT	GRADE STRUCT WEAK MODER	URELESS VERY F	INE PL	RANULAR C	SUBANGULAR COLUMNAR PRISMATIC	% BOULDERS	% GRAVEL 1/4" to 3"
	BOUNDAR	<u>WET</u>		STRONG		E AI COARSE	NGULAR S	SINGLE GRAIN	% COBBLE	% FINES
		OPOGRAPHY MOOTH JAVY	NOTES: 15		but car	7 fee	101	1 THE	3" to 12" 0	<#200 <u>6090</u>
	GRADUAL IF	RREGULAR ROKEN	Very WE	gran	ym Ser	mple	brown	ht bec	K	
	DEPTH USCS	SOIL TYPE &/OR USDA	MUNCELL	MOTTLES COLORS	ABUNDANCE FEW	FINE	TYPE FAINT	LOCATION PED SURFACE	E STRATIFIED	ALLUVIUM
	33"/	lam	5/R 100)	COMMON	MINIMUM	PROMINENT		FISSURED SLICKEN-SIDED	SLOPE ALLUV COLLUVIUM GLACIAL TILE
	169		-/	-	ABUNDANCE FEW COMMON	SIZE FINE MINIMUN	TYPE FAINT DISTINCT	PED SURFACTION	BLOCKY DE PRISMATIC LENSED	GLAC, LAKE SED OUTWASH RESIDUUM
		TICITY MOIS	STURE CONSISTE		MANY STRUCTU	_		T ROOT HAIR	CHOMOGENEOD	S LOESS BEDROCK
	SLOW LOW RAPID CMEDIC	SLIGE	MOIST SOFT	GRAD STRUC WEAK	E SIZE TURELESS VERY FINE	FINE P		SUBANGULAR COLUMNAR	% BOULDERS	% GRAVEL 1/4" to 3"
	BOUNDA	WET	MOIST VERY HARD	NAME OF TAXABLE PARTY.	ATE MEDIU G COARS	M C	CRUMB	PRISMATIC SINGLE GRAIN	% COBBLE	1/4" to 3" % FINES
	DISTINCTIVENESS		NOTES: Very	SIM,	/ /		3/7 0	rel	3" to 12"	< #200 SC
	CLEAR V GRADUAL II	VAVY RREGULAR	5B /8	3	-11					
	OVERALL NOTES:	BROKEN	~	76		/				,
	7515	une 5	froze	, , , , ,	35 mc	1 11	0/05	. 06	Served	
	Materi	el 95	s it w	1	xceve.	test	, 0//	met	eriel be	e lord
	100 40	0380	materi	al wa	- 1 '	94114	MOI	Meter	Mois	7 64
	7000	turch	PUSUEL	1155	CECTION	se,	100	12/67	ref was	i wer
	-		, 110	See			UEU			
	SAMPLES TAKEN: Y	res(No)		WA	ATER OBSERVED	2: YES (No	3		DROCK: YES (NO	-
	SAMPLE ID:			TY	PE:	DEPTH	:		HOLE EXTENT	11 61
	SAMPLE ID:			TY	PE:	DEPTH	:	_ /	Vo Bedi	rock
	SAMPLE ID:			TY	PE:	DEPTH	:	E	1. 76/,	T SIDE 1 OF 2
	File: IOAKRIDGE NResources Technic	ellSoils OKE SOIL LOG-2 F	REV 11-21-2018.dwg Saved Duane	1 1/27/20 18 12,34 PM - Pri	nted: Duane 3/7/2019 3:13 PM					3-2 REV-3 11-27-2018

DEPTH US	OWNER:				EST PIT / BORIN			DATE:		CONTINUED SHEET 2 OF :
/	SCS SOIL TY	YPE MUNCI	ELL M RS % C	COLORS	FEW COMMON MANY ABUNDANCE FEW	MINIMUM COARSE SIZE FINE MINIMUM	TYPE FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT	IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	GEOLOGY ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC, LAKE SE OUTWASH
ONE N LOW L APID N	LOW S MEDIUM N HIGH V	DRY BLIGH. MOIST MOIST	CONSISTENCY VERY SOFT SOFT FIRM HARD VERY HARD	GRADE STRUCTUR WEAK MODERATI STRONG	STRUCTUR SIZE RELESS VERY FIN FINE E MEDIUM COARSE VERY CO	COARSE E TYP E PLAT GRAI CRUI ANG	PROMINENT PE TY SU NULAR CO MB PR ULAR SII	JBANGULAR S	HOMOGENEOUS **BOULDERS **>12" **COBBLE	LOESS BEDROCK GRAVEL
	SS TOPOGRAF SMOOTH WAVY	PHY NOTES:							3" to 12"	< #200
DUAL USE	BROKEN									
DILATANCY NONE SLOW PAPID	PLASTICITY NONPLASTIC LOW MEDIUM HIGH	MOISTURE DRY SLIGH, MOIST MOIST VERY MOIST WET	CONSISTENC VERY SOFT SOFT FIRM HARD VERY HARD	GRADE STRUCTU WEAK MODERAT STRONG	VERT O	SIZE FINE MINIMUM COARSE RE TYI NE GRA GRA GRA GRA GOARSE	PROMINENT TYPE FAINT DISTINCT PROMINENT PE TTY S ANULAR C UMB PR PR FAINT DISTINCT PROMINENT	IN-MATRIX ROOT HAIR LOCATION PED SURFACI IN-MATRIX ROOT HAIR SUBANGULAR SOLUMNAR	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLICKY	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE SI OUTWASH RESIDUUM LOESS BEDROCK GRAVEL 1/4" lo 3" % FINES
RUPT	SMOOTH WAVY	NOTES	<u>:</u>							11200
ADUAL FUSE	IRREGULAR BROKEN									
NONE SLOW RAPID BOI STINCTIVENE	PLASTICITY NONPLASTIC LOW MEDIUM HIGH UNDARY ESS TOPOGRI SMOOTH WAYY IRREGULAR BROKEN		HARD VERY HARD	GRADE STRUCT WEAK MODERA STRONG	COMMON MANY ABUNDANCE FEW COMMON MANY STRUCTLE SIZE VERY & VERY	FINE MINIMUM COARSE JRE TNE FINE FINE FINE FINE FINE FINE FINE FI	PROMINENT TYPE FAINT DISTINCT PROMINENT YPE ATY	LOCATION PED SURFACE	PRISMATIC LENSED HOMOGENEOU **BOULDERS >12"	GLAC. LAKE SOUTWASH RESIDUUM LOESS BEDROCK GRAVEL 1/4" to 3" FINES
DEPTH !			ICELL ORS %	MOTTLES COLORS	ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON	FINE MINIMUM COARSE	PROMINEN TYPE FAINT	LOCATIO PED SURFA IN-MATRIX	ACE STRATIFIED LAMINATED R FISSURED SLICKEN-SIDE BLOCKY PRISMATIC LENSED	ALLUVIUM SLOPE ALLU COLLUVIUM D GLACIAL TILI GLAC. LAKE OUTWASH RESIDUUM
DILATANCY NONE SLOW RAPID	&/OR			CY GRAD	ABUNDANCE FEW COMMON MANY STRUCT E SIZE TURELESS VERY FINE HATE MEDIL G COAR	FINE PINE	FAINT DISTINCT PROMINEN TYPE FAINT DISTINCT	PED SURFA IN-MATRIX NT ROOT HAIR LOCATIO PED SURFA IN-MATRIX	AGE STRATIFIED LAMINATED SISSURED SLICKEN-SIDE BLOCKY AGE PRISMATIC LENSED HOMOGENEOU **BOULDERS** **>12"	ALLUVIUM SLOPE ALLU COLLUVIUM GLACIAL TILI GLAC. LAKE OUTWASH LOESS BEDROCK % GRAVEL
DILATANCY NONE SLOW RAPID	PLASTICITY NONPLASTIC LOW MEDIUM HIGH	MOISTURE DRY SLIGH, MOIST WOIST VERY MOIST WET RAPHY NOTE	CONSISTEN VERY SOFT SOFT FIRM HARD VERY HARD	COLORS CY GRAD STRUC: WEAK MODER STRON	ABUNDANCE FEW COMMON MANY STRUCT E SIZE TURELESS VERY FINE HATE MEDIL G COAR	FINE MINIMUM COARSE SIZE FINE MINIMUM COARSE URE FINE GOARSE JM GOARSE JM GOARSE JM GOARSE JM GOARSE	FAINT DISTINCT PROMINEN TYPE FAINT DISTINCT PROMINEN PROMINEN TYPE SHANULAR SRUMB	PED SURFA IN-MATRIX NT ROOT HAIR LOCATIO PED SURFA IN-MATRIX NT ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC	AGE STRATIFIED LAMINATED RISSURED SLICKEN-SIDE BLOCKY PRISMATIC LENSED HOMOGENEOU BOULDERS S12"	SLOPE ALLU COLLUVIUM CLACIAL TILI GLAC. LAKE OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES
DILATANCY NONE SLOW RAPID BEOFIT BRUFT LEAR LEAR LEAR LEAR LEAR LEAR LEAR LEAR	PLASTICITY NONPLASTIC LOW MEDIUM HIGH DUNDARY JESS TOPOGE SMOOTH WAVY HREGULA BROKEN USCS SOIL &/OF	MOISTURE DRY SLIGH, MOIST WET RAPHY NOTE	CONSISTEN VERY SOFT SOFT FIRM HARD VERY HARD	COLORS CY GRAD STRUC WEAK MODER STRON MOTTLES COLORS	FEW COMMON MANY ABUNDANCE FEW COMMON MANY STRUCT E SIZE TURELESS FINE FINE MEDIL G COAR VERY	FINE MINIMUM COARSE SIZE FINE MINIMUM COARSE URE FINE PORT OF COARSE E SIZE FINE MINIMUM COARSE	FAINT I DISTINCT PROMINEN TYPE FAINT PROMINEN PYPE PARANULAR PROMINEN TYPE FAINT DISTINCT PROMINEN TYPE FAINT DISTINCT PROMINEN TYPE FAINT DISTINCT DISTINCT TYPE FAINT DISTINCT TYPE FAINT DISTINCT	PED SURFA IN-MATRIX ROOT HAIR LOCATIO PED SURFA IN-MATRIX ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN PED SURFA IN-MATRIX ROOT HAIR PED SURFA IN-MATRIX ROOT HAIR IN-MATRIX ROOT HAIR IN-MATRIX IN-MA	AGE STRATIFIED LAMINATED RISSURED SLICKEN-SIDE BLOCKY PRISMATIC LENSED HOMOGENEOUS STRUCTUFFACE STRATIFIED CAMINATED RISSURED SLICKEN-SIDION BLOCKY PRISMATIC LENSED SLICKEN-SIDION BLOCKY PRISMATIC LENSED PRISMATIC LENSED SLICKEN-SIDION BLOCKY PRISMATIC LENSED PRISMATIC LENSED SLICKEN-SIDION BLOCKY PRISMATIC LENSED PRISMATIC LEN	ALLUVIUM SLOPE ALLU COLLUVIUM GLACIAL TILI GLAC. LAKE OUTWASH RESIDUUM JS DEDROCK % GRAVEL 1/4" to 3" % FINES < #200 RE GEOLOG' ALLUVIUM SLOPE ALLU COLLUVIUM GLACIAL TIL GLAC. LAKE OUTWASH RESIDUUM



Oakridge engineering owner: Jeff S	ave/ T	EST PIT / BORING NUMBER:
Chippewa Falls, WI 54729 PROJECT: Hos Fox	1/1ty D	ATE: 3/20/ 80/9
www.OakridgeEng.com	E	LEVATION: 978 5
SITE LOCATION: ADDRESS	2 0	OGGED BY: D. M. He
@ 12884 State Hwy		IST FEATURES WITHIN 1000 FEET: YES NO
NORTHING 126 265, 2 EASTING 1626	LANDSC/	APE POSITION: Toe slope
COUNTY/STATE: BUrnett Cty L	E/MDOO/	APE GEOMETRY: CONTROL GEOLOGY
DEPTH USCS SOIL TYPE MUNCELL MOT COLORS % COLORS	ORS FEW FINE FAINT COMMON MINIMUM DISTING	PED SURFACE STRATIFIED ALLUVIUM ST. IN-MATRIX LAMINATED SLOPE ALLUV
0/11 Sift 1048 100 -	MANY COARSE PROMIN ABUNDANCE SIZE TYPE	IENT ROOT HAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL LOCATION BLOCKY GLAC, LAKE SED
	ABUNDANCE SIZE TYPE FEW FINE FAINT COMMON MINIMUM DISTING MANY COARSE PROMIN	PED SURFACE PRISMATIC OUTWASH CT IN-MATRIX LENSED RESIDUUM
DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT	STRUCTURE GRADE SIZE TYPE	BEDROCK
RAPID MEDIUM MOIST FIRM HARD	STRUCTURELESS VERY FINE PLATY WEAK FINE GRANULAR	SUBANGULAR COLUMNAR PRISMATIC **BOULDERS **GRAVEL **1/4" to 3" ***********************************
VERY MOIST VERY HARD WET BOUNDARY	MODERATE MEDIUM CRUMB STRONG COARSE ANGULAR VERY COARSE	SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: This level	er was frozen, no	3" to 12" <#200 <#200
CLEAR WAVY SRADUAL IRREGULAR MCFCICL'S BROKEN MCFCICL'S	Smell somple be	sulty than after out
DEPTH USCS SOIL TYPE MUNCELL MOT	TLES ABUNDANCE SIZE TYPE	
17"/ ML SITT 758R 90 51	COMMON MINIMUM DISTIN	CD IN MATRIX LAMINATED SLOPE ALLUV NENT ROOT HAIR FISSURED COLLUVIUM
37" - 10cm 3/3 - 4	ABUNDANCE SIZE TYPE FAINT	PED SURFACE PRISMATIC OUTWASH
DILATANCY PLASTICITY MOISTURE CONSISTENCY	COMMON MINIMUM DISTIN	ICT IN-MATRIX LENSED RESIDUUM
NONE NONPLASTIC DRY VERY SOFT	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY	SUBANGULAR % BOULDERS % GRAVEL
RAPID MEDIUM MOIST HARD HIGH VERY MOIST VERY HARD	WEAK FINE GRANULAR MODERATE MEDIUM CRUMB	COLUMNAR >12" 1/4" to 3"
BOUNDARY WET	STRONG COARSE ANGULAR VERY COARSE	SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY ABRUPT CLEAR WAVY NOTES: 5/1/9 5/15/1/9 5/15/1/9	1 1 4 6 1	the SI 1/3 3" to 12" (#200 70-90
GRADUAL IRREGULAR DIFFUSE BROKEN 15 /// MC	1 1 4 514	a previously seen
8/OR HEDA COLORS % CO.	TTLES ABUNDANCE SIZE TYPI ORS FEW FINE FAINT	PED SURFACE STRATIFIED ALLUVIUM
37"/ ML 51/4 544 60 5		MINENT ROOTHAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL
163 - 75/2 30	ABUNDANCE SIZE TYPI FEW FINE FAINT COMMON MINIMUM DISTI	PED SURFACE PRISMATIC OUTWASH
DILATANCY PLASTICITY MOISTURE CONSISTENCY NONPLASTIC DRY VERY SOFT	MÁNY COARSE PROM STRUCTURE	MINENT ROOT HAIR CHOMOGENEOUS LOESS BEDROCK
SLOW LOW SLIGH MOIST SOFT RAPID MEDIUM SLIGH MOIST FIRM	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLATY WEAK FINE GRANULAR	SUBANGULAR
HIGH VERY MOIST VERY HARD	MODERATE MEDIUM CRUMB STRONG COARSE ANGULAR	PRISMATIC SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: This Lev.	VERY COARSE	- 3 - 6 ave 3" to 12" - <#200 80.90
ABRUPT SMOOTH CLEAR WAVY GRADUAL IRREGULAR	CL but 1/5 51	It cop, not till
DIFFUSE BROKEN	other brownish for	el Sheeper in it.
OVERALL NOTES: This was frozen	to about 20,	nehes plus.
deserved meterial as	it was executi	ed, all meterial
below the frozen me	teriel was sli	ghtly moist to moist
by touch and visual	inspection. No	meterial was wet
or sctureted, no see	ps observed	
did not see the	bleete mottles)
SAMPLES TAKEN YES NO	WATER OBSERVED: YES (NO)	BEDROCK: YES (No
SAMPLE ID: J5 20./ 2-5F4	TYPE: DEPTH:	DEPTH OF BEDROCK
		AR PROLOCK
SAMPLE ID:	TYPE:DEPTH:	El. 964.3
SAMPLE ID: File: IIOAKRIIGGE 19leaguroeal Fechnical Spoils (OKE SOIL LOG-2 REV 11-21-2018.dwg - Sevedi: Duane 11/27/2019.	TYPE: DEPTH:	SHEET SIDE 1 OF 2 OKE SOIL LOG-2 REV.3 11-27-20:

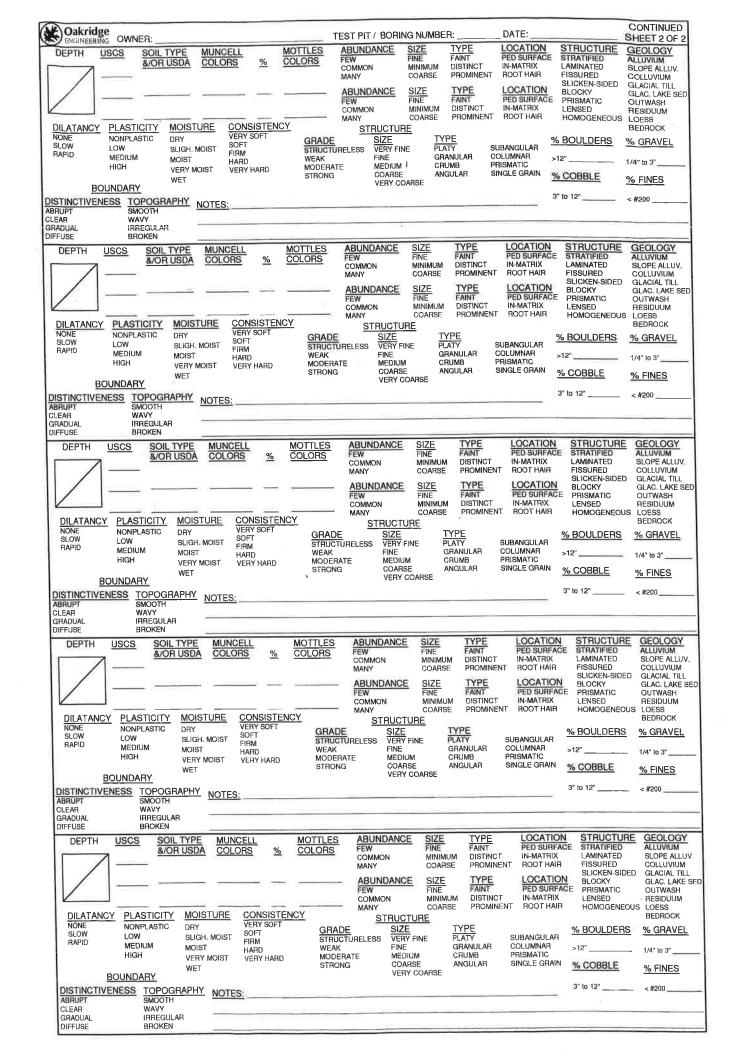
Oakridge engineering owner: Jeff San	Jer TEST PIT / BORING NUMBER: 3/
Chippewa Falls, WI 54729 PRO IECT: Hor Fee	1 ty DATE: 3/28/2019
www.OakridgeEng.com	ELEVATION: 983. O
SITE LOCATION: ADDRESS	LOGGED BY: D. M. He
@ 12884 State Hwy 4	8 Grantsburg ANY KARST FEATURES WITHIN 1000 FEET: YES (NO)
NORTHING 126474, 3 EASTING 1619	8 Grantsburg ANY KARST FEATURES WITHIN 1000 FEET: YES (NO) LANDSCAPE POSITION: SUM MIT
0 4 01	110.0
DEPTH USCS SOIL TYPE MUNCELL MOTTI	ES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOGY
8/OR USDA COLORS % COLOR 5// / / OYR CAL	S FEW FINE FAINT PED SURFACE STRATIFIED ALLUVIUM COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV.
1 ML 100 -	MANY COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM ABUNDANCE SIZE TYPE LOCATION BLOCKY GLAC, LAKE SED ABUNDANCE SIZE TYPE LOCATION BLOCKY GLAC, LAKE SED
10 3/2	FEW FINE FAINT PED SURFACE PRISMATIC OUTWASH COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM
DILATANCY PLASTICITY MOISTURE CONSISTENCY NONPLASTIC DRY VERY SOFT	STRUCTURE PHOMINENT HOUT HAIR HOMOGENEOUS COESS
RAPID MEDILIM SLIGH, MOIST SOFT S	RADE SIZE TYPE "BLATY SUBANGULAR "MOULDERS "GRAVEL FRUCTURELESS VERY FINE GRANULAR COLUMNAR 12" (")
HIGH VERY MOIST VERY HARD M	ODERATE MEDIUM CRUMB PRISMATIC 1/4" to 3" 1/
BOUNDARY 77 - /	VEHY COARSE 70 1 INCS
ABRUPT SMOOTH NOTES: /A/S /CY	er was tragen notes 3"to 12" - (#200/090)
GRADUAL IRREGULAR DIFFUSE BROKEN MY AFFICE	or the property seek to
DEPTH USCS SOIL TYPE MUNCELL MOTT &/OR USDA COLORS % COLO	
17"/ = 100 7,54h gr 7,5	COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV. MANY COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
1911 - 10cm 414 12 51	ABUNDANCE SIZE TYPE LOCATION SLICKEN-SIDED GLACIAL TILD BLOCKY GLAC LAKE SED
4/65	FEW FINE FAINT PED SURFACE PRISMATIC OUTWASH COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUM MANY COARSE PROMINENT ROOTHAIR FOMOGENEOUS LOESS
DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT SLOW LOW STORY SOFT SOFT SOFT SOFT SOFT SOFT SOFT SOFT	STRUCTURE BEDROCK BRADE SIZE TYPE % BOULDERS % GRAVEL
RAPID MEDIUM MOIST FIRM	TRUCTURELESS VERY FINE PLATY SUBANGULAR COLUMNAR STATE OF THE GRANULAR COLUMNAR STATE OF THE STA
WET VEHY HARD	ODERATE MEDIUM CRUMB PRISMATIC TRONG COARSE ANGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: This fil	1 15 5/16ht/2 d. Aferrant 3" to 12" 0 < 4200 4060
ABRUPT SMOOTH CLEAR WAYY GRADUAL IRREGULAR	, the last few hotes done
DIFFUSE BROKEN before 17	, chos ribbon well
DEPTH USCS SOIL TYPE MUNCELL COLORS % COLO	RS FEW FINE FAINT PED SURFACE STRATIFIED ALLUVIUM
	MANY COARSE PROMINENT ROOT HAIR FISSURED COLLUVIUM
	FEW FINE FAINT PED SURFACE PRISMATIC OUTWASH
DILATANCY PLASTICITY MOISTURE CONSISTENCY	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUM MANY COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOESS STRUCTURE BEDROCK
LOW SIGH MOIST COLL	GRADE SIZE TYPE % BOULDERS % GRAVEL STRUCTURELESS VERY FINE PLATY SUBANGULAR
MEDIUM MOIST HARD	NEAK FINE GRANULAR COLUMNAR >12" 1/4" to 3"
	STRONG COARSE ANGULAR SINGLE GRAIN <u>% COBBLE</u> <u>% FINES</u>
DISTINCTIVENESS TOPOGRAPHY NOTES: MOTH	5 contique all the 3" to 12" - < #200
CLEAR WAVY GRADUAL IRREGULAR WOY GOW	a die not see eny of the
OVERALL NOTES:	MOTTIES
This was froze	a hard to 45 inches plus.
Observed meterial de	irine exception. Meterial below
the frozen meterial we	s slightly moist to moist by
touch and visial ins	pertion. No metorial use met
or saturation	seens of securit
Ch loser could be a	120, 200 / 30
The societies with the	very general
SAMPLES TAKEN: (YES) NO	WATER OBSERVED: YES NO BEDROCK: YES NO
SAMPLE ID: 55 21,1 /5-18ff	TYPE: DEPTH: OR HOLE EXTENT: 19-11
	ON HOLE EXTENT : / //
SAMPLE ID:	TYPE: DEPTH: 1h Roofers In
SAMPLE ID:	TYPE:DEPTH:No Bedract

DILATANCY PLASTICITY MOISTURE VERY SOFT FIRM MOIST HARD VERY MOIST WARY DISTINCTIVENESS TOPOGRAPHY NOTES: DILATANCY PLASTICITY MOISTURE VERY HARD WAYY RAPID LOW SLIGH, MOIST HARD WAYY BRUPT WAYY BROWN SILT TYPE MUNCELL OF THE WAYY RAPID LOW SLIGH, MOIST HARD WAYY RAPID HIGH WAYY BROWN SLIGH, MOIST HARD WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY WAYY DISTINCTIVENESS TOPOGRAPHY WERY MOIST WERY HARD WERY MO	% MOTTLES COLORS STENCY OFT GRAI STRU WEAK ARD MODE STROI	ABUNDANCE FEW COMMON MANY STRUCTUR DE SIZE CTURELESS VERY FINI FINE RATE MEDIUM COARSE VERY CO. ABUNDANCE FEW COMMON MANY STRUCTUR COMMON MANY STRUCTU	INMINIMUM DISTINCT COARSE PROMINEN DISTINCT COARSE PROMINEN DISTINCT COARSE PROMINEN DISTINCT COARSE PLATY GRANULAR ANGULAR ANGULAR ANGULAR DISTINCT COARSE PROMINE DISTINCT C	LOCATION PED SURFACE IN-MATRIX NT ROOT HAIR LOCATION PED SURFACE IN-MATRIX NT ROOT HAIR SUBANGULAR COLUMNAR PED SURFACE IN-MATRIX ENT ROOT HAIR SUBANGULAR COLUMNAR PED SURFACE IN-MATRIX ROOT HAIR SUBANGULAR COLUMNAR PED SURFACE IN-MATRIX ENT ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR	LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS 6 BOULDERS 7 to 12" STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS 7 BOULDERS 7 to 12" 7 COBBLE 7 TO 12" 7 COBBLE 7 TO 12" 7 COBBLE 7 TO 12" 8 STRUCTURE FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS 7 BOULDERS 7 TO 12" 7 COBBLE 7 TO 12" 8 STRUCTURE FISSURED SLICKEN-SIDED LAMINATED FISSURED LAMINATED FISSURED SUICKEN-SIDED LAMINATED FISSURED SUICKEN-SIDED SUICKEN-SIDED LAMINATED FISSURED SUICKEN-SIDED	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES < #200 GEOLOGY ALLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES < #200 GEOLOGY ALLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES < #200 GEOLOGY ALLUVIUM SLOPE ALLUV. COLLUVIUM S
NONE NONPLASTIC DRY VERY SO SOFT FIRM HARD VERY MOIST VERY HAWT NOTES: DILATANCY PLASTICITY MOISTURE CONSINE NONPLASTIC DRY SOFT FIRM HARD VERY MOIST VERY HAWT NOTES: DILATANCY PLASTICITY MOIST VERY HAWT NOTES: SOFT FIRM HARD VERY MOIST VERY HAWT NOTES: SOFT PROBLEM NOTES: S	STENCY OFT GRAD STRUC WEAK MODER STRON MOTTLES COLORS STENCY OFT GRAI STRUC WEAK ARD MODE STRON MOTTLES COLORS	DE SIZE COMMON MANY ABUNDANCE FEW COMMON MANY STRUCTUR COARSE VERY CO ABUNDANCE FEW COMMON MANY STRUCTUR COARSE VERY CO SIZE COMMON MANY STRUCTUR COARSE VERY CO SIZE COMMON MANY ABUNDANCE FEW COMMON MANY	E PLATY GRANULAR GRANULAR GRANULAR ARSE SIZE TYPE FINE FAINT MINIMUM DISTINCT COARSE PROMINE E PLATY GRANULAR	LOCATION PED SURFACE IN-MATRIX ENT ROOT HAIR LOCATION PED SURFACE IN-MATRIX ENT ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN LOCATION PED SURFACE T IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR ROOT HAIR ROOT HAIR ROOT HAIR ROOT HAIR ROOT HAIR	STRUCTURE STRATIFIED LAMINATED FISSURED BLOCKY PRISMATIC LENSED HOMOGENEOUS **6 COBBLE 3" to 12" **5 COBBLE 3" to 12" **5 COBBLE 3" to 12" STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY **6 POULDERS **7 COBBLE **8 COBBLE **12" **10 12" STRUCTURE E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY E PRISMATIC LENSED HOMOGENEOUS **6 BOULDERS	GEOLOGY ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK GEOLOGY ALLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM SLOPE ALLUV. COLLUVIUM S
DEPTH USCS SOIL TYPE MUNCELL BOUNDARY BOUNDARY DILATANCY PLASTICITY MOISTURE CONSING MEDIUM MOIST HARD WET BOUNDARY DILATANCY PLASTICITY WET BOUNDARY BOUNDARY DILATANCY PLASTICITY MOIST VERY MOIST VERY MOIST VERY HARD WET BOUNDARY DILATANCY PLASTICITY MOISTURE CONSING MEDIUM MOIST HARD WET BOUNDARY DILATANCY PLASTICITY MOISTURE BOUNDARY DISTINCTIVENESS TOPOGRAPHY SMOOTH WAYY RADUAL IRREGULAR BROKEN DEPTH USCS SOIL TYPE MUNCELL DISTINCTIVENESS TOPOGRAPHY NONE NONPLASTIC DRY SHOW LOW SLIGH MOIST FIRM HARD WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY NOTES: BOUNDARY DISTINCTIVENESS TOPOGRAPHY WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY WAYY HIGH WAY HIGH W	MOTTLES COLORS STENCY OFT GRAI STRUC WEAK ARD MODE STROI	FEW COMMON MANY - ABUNDANCE FEW COMMON MANY STRUCTUR SIZE GTURELESS VERY FIX FINE COARSE VERY CO S ABUNDANCE FEW COMMON MANY - ABUNDANCE FEW COMMON MANY - ABUNDANCE FEW COMMON MANY	FINE MINIMUM DISTINGT PROMINE	LOCATION PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN LOCATION PED SURFAC IN-MATRIX NENT ROOT HAIR LOCATION PED SURFAC IN-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX ROOT HAIR ROOT HAIR ROOT HAIR ROOT HAIR ROOT HAIR ROOT HAIR	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED HOMOGENEOUS **BOULDERS >12" **COBBLE 3" to 12" STRUCTURE E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY E PRISMATIC LENSED HOMOGENEOUS **BOULDERS	GEOLOGY ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES < #200 GEOLOGY ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE SO OUTWASH RESIDUUM S OUTWASH RESIDUUM S GRAVEL % GRAVEL
DILATANCY PLASTICITY MOISTURE VERY MOIST HARD WAYY ADDUAL IRREGULAR BROKEN DILATANCY PLASTICITY MOIST FIRM HARD VERY MOIST VERY H. BOUNDARY STINCTIVENESS TOPOGRAPHY SMOOTH WAYY ADDUAL IRREGULAR BROKEN DEPTH USCS SOIL TYPE MUNCELL CONSIDERATION OF THE CONSI	% COLORS STENCY OFT GRAI STRUC WEAK ARD MODE STROI MOTTLES % COLORS	FEW COMMON MANY - ABUNDANCE FEW COMMON MANY STRUCTUR SIZE GTURELESS VERY FIX FINE COARSE VERY CO S ABUNDANCE FEW COMMON MANY - ABUNDANCE FEW COMMON MANY - ABUNDANCE FEW COMMON MANY	FINE MINIMUM DISTINGT PROMINE	PED SURFACE IN-MATRIX ENT ROOT HAIR LOCATION PED SURFACE IN-MATRIX ENT ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN LOCATION PED SURFACE T IN-MATRIX NENT ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR ROOT HAIR LOCATION PED SURFACE IN-MATRIX NENT ROOT HAIR	STRUCTURE STRATIFIED LAMINATED STRUCTURE ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES < #200 GEOLOGY ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE S OUTWASH RESIDUUM S OPERALUV S OUTWASH RESIDUUM S GRAVEL % GRAVEL	
DILATANCY PLASTICITY MOISTURE VERY SOFT FIRM MOIST HARD VERY MOIST VERY H. WET BOUNDARY BOUNDARY BOUNDARY BOUNDARY DILATANCY PLASTICITY MOIST HARD VERY MOIST VERY H. WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY MOIST VERY H. WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY MOIST FIRM MOIST HARD VERY WERY SOFT WERY H. WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY WAVY GRADULAR BROKEN BROKEN DEPTH USCS SOIL TYPE MUNCELL	% COLORS STENCY OFT GRAI STRUC WEAK ARD MODE STROI MOTTLES % COLORS	FEW COMMON MANY - ABUNDANCE FEW COMMON MANY STRUCTUR SIZE GTURELESS VERY FIX FINE COARSE VERY CO S ABUNDANCE FEW COMMON MANY - ABUNDANCE FEW COMMON MANY - ABUNDANCE FEW COMMON MANY	FINE MINIMUM DISTINGT PROMINE	IN-MATRIX ENT ROOT HAIR LOCATION PED SURFACE IN-MATRIX ENT ROOT HAIR SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN LOCATION PED SURFAC ET IN-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX ROOT HAIR ROOT HAIR ROOT HAIR ROOT HAIR ROOT HAIR	STRUCTURE STRATIFIED LAMINATED STRUCTURE ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL 1/4" to 3" % FINES < #200 GEOLOGY ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE S OUTWASH RESIDUUM SLOPE ALLUV. SLOPE SIDUUM SLOP	
BOUNDARY ISTINCTIVENESS TOPOGRAPHY SMOOTH LEAR WAYY RAPUD DEPTH USCS SOIL TYPE SLOW LOW RAPID BOUNDARY SMOOTH WET MOIST HARD VERY MOIST VERY H. MOIST HARD NOTES: MOTES: MUNCELL CONS SOIL TYPE BOUNDARY DISTINCTIVENESS BROKEN DEPTH USCS SOIL TYPE SLOW LOW RAPID MEDIUM MOIST HIGH VERY MOIST VERY H. MOIST MUNCELL CONS SOFT FIRM HARD VERY MOIST VERY H. WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY WAYY GRADUAL BROKEN MOIST HARD VERY MOIST VERY H. MOTES: MUNCELL ROTES MOTES: MUNCELL ROTES MONTH ROTES MUNCELL ROTES MUNCELL ROTES MONTH ROTES MONTH ROTES MONTH ROTES MUNCELL ROTES MUNCELL ROTES MUNCELL ROTES MUNCELL ROTES MONTH ROTES MO	MOTTLES % COLORS	S ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON MANY	GRANULAR CRUMB CAUMB ANGULAR OARSE SIZE TYPE FINE FINE MINIMUM COARSE PROMIN DISTING COARSE FINE MINIMUM COARSE PROMIN DISTING PROMIN SIZE FINE MINIMUM DISTING PROMIN PR	COLUMNAR PRISMATIC SINGLE GRAIN LOCATION PED SURFAC TIN-MATRIX NENT ROOT HAIR LOCATION PED SURFAC TIN-MATRIX NENT ROOT HAIR NENT ROOT HAIR NENT ROOT HAIR	% COBBLE 3" to 12" STRUCTURE E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY E PRISMATIC LENSED HOMOGENEOUS % BOULDERS	GEOLOGY ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SI OUTWASH RESIOUUM S DEDROCK GRAVEL
BRUPT LEAR INFRUSE DEPTH DILATANCY RAPID NONE SLOW LOW RAPID DISTINCTIVENESS DILATANCY PLASTICITY NONE NONPLASTIC LOW RAPID DEPTH MEDIUM MOIST HIGH VERY MOIST VERY MOIST WET BOUNDARY DISTINCTIVENESS ABRUPT CLEAR GRADUAL BREGULAR BROKEN DEPTH DISTINCTIVENESS ABRUPT CLEAR GRADUAL BREGULAR BROKEN DEPTH USCS SOIL TYPE MUNCELL CONS SOFT FIRM HARD VERY MOIST VERY MOIST VERY MOIST VERY MOIST VERY MOIST VERY MOIST MAY MOTES: MOTES: MUNCELL MAY MAY MAY MAY MAY BREGULAR BROKEN DEPTH USCS SOIL TYPE MUNCELL	% COLORS	FEW COMMON MANY ABUNDANCE FEW COMMON MANY	MINIMUM DISTINC COARSE PROMIN SIZE TYPE FAINT MINIMUM DISTINC COARSE PROMIN	LOCATION PED SURFAC TIN-MATRIX ROOT HAIR LOCATION PED SURFAC TIN-MATRIX NENT ROOT HAIR	STRUCTURE E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY DE PRISMATIC LENSED HOMOGENEOUS % BOULDERS	GEOLOGY ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SI OUTWASH RESIOUUM S LOESS BEDROCK % GRAVEL
LEAR WAVY RADUAL IRREGULAR BROKEN DEPTH USCS SOIL TYPE & MUNCELL COLORS DILATANCY PLASTICITY MOISTURE CONS NONE NONPLASTIC DRY VERYS SLOW LOW SLIGH MOIST FIRM HIGH WERY MOIST VERY HARD DISTINCTIVENESS TOPOGRAPHY SINCOTH WAVY DISTINCTIVENESS TOPOGRAPHY SMOOTH WAVY DISTINCTIVENESS TOPOGRAPHY SINCOTH WAVY DISTINCTIVENESS TOPOGRAPHY DISTINCTIVEN	% COLORS	FEW COMMON MANY ABUNDANCE FEW COMMON MANY	MINIMUM DISTINC COARSE PROMIN SIZE TYPE FAINT MINIMUM DISTINC COARSE PROMIN	IN-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX RENT ROOT HAIR	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY E PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV, COLLUVIUM GLACIAL TILL GLAC. LAKE OUTWASH RESIDUUM S LOESS BEDROCK % GRAVEL
DEPTH USCS SOIL TYPE MUNCELL COLORS DILATANCY PLASTICITY MOISTURE CONS NONE NONPLASTIC DRY SUIGH, MOIST HIRM MOIST HIRM MOIST HIRM MOIST HIRM WET WERY MOIST VERY MOIST VERY MOIST VERY MOIST VERY MOIST WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY SMOOTH WAVY GRADULAR BROKEN DEPTH USCS SOIL TYPE MUNCELL	% COLORS	FEW COMMON MANY ABUNDANCE FEW COMMON MANY	MINIMUM DISTINC COARSE PROMIN SIZE TYPE FAINT MINIMUM DISTINC COARSE PROMIN	IN-MATRIX ROOT HAIR LOCATION PED SURFAC IN-MATRIX RENT ROOT HAIR	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY E PRISMATIC LENSED HOMOGENEOUS	ALLUVIUM SLOPE ALLUV, COLLUVIUM GLACIAL TILL GLAC. LAKE OUTWASH RESIDUUM S LOESS BEDROCK % GRAVEL
NONE NONPLASTIC DRY VERY S SLOW LOW SLIGH. MOIST FIRM HARD VERY MOIST VERY HARD VERY	SISTENCY SOFT GRASTRIL WEAL HARD MOD STRC	COMMON MANY	MINIMUM DISTING	OT IN-MATRIX NENT ROOT HAIR	LENSED HOMOGENEOUS	RESIDUUM LOESS BEDROCK % GRAVEL
	MOTTLE	ES ABUNDANCE	// //		% COBBLE 3" to 12"	% FINES < #200
NONE NONPLASTIC DRY VERY SLOW LOW SLIGH MOIST SOFT	% COLORS SISTENCY SOFT GR		FINE FAINT DISTIN COARSE PROM INSTIN TOR COARSE	PED SURFA IN-MATRIX INENT ROOT HAIR LOCATIO PED SURFA	LAMINATED LAMINATED FISSURED SLICKEN-SIDEI BLOCKY ACE PRISMATIC LENSED	ALLUVIUM SLOPE ALLUV COLLUVIUM D GLACIAL TILL GLAC, LAKE OUTWASH RESIDUUM US LOESS BEDROCK
HIGH VERY MOIST HARD VERY MOIST VERY WET BOUNDARY	HARD MOI	DERATE MEDIL RONG COAR		R COLUMNAR PRISMATIC SINGLE GRAIN	>12"	% FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: ABRUPT SMOOTH WAVY GRADUAL IRREGULAR DIFFUSE BROKEN		5111				
DEPTH USCS SOIL TYPE MUNCELL COLORS	MOTTLE % COLOR		FINE FAIN DISTINUTE COARSE PROJECT FINE FAIN MINIMUM DIST	T PED SURF INCT IN-MATRIX MINENT ROOT HAI PE LOCATIO T PED SURF	ACE STRATIFIED (LAMINATED FISSURED SLICKEN-SIDE BLOCKY PRISMATIC LENSED	ALLUVIUM SLOPE ALLU COLLUVIUM ED GLACIAL TIL GLAC. LAKE OUTWASH RESIDUUM
NONE NONPLASTIC DRY VERY SLOW LOW SLIGH, MOIST FIRM RAPID MEDIUM MOIST HARI	D WE	RADE SIZE TRUCTURELESS VERY EAK FINE ODERATE MED TRONG COA	TURE E TYPE Y FINE PLATY E GRANULA HUM CRUMB	SUBANGULAF AR COLUMNAR PRISMATIC	% BOULDERS	BEDROCK S % GRAVE

Oakridge ENGINEERING	OWNER: Jeff	Sover	TEST PIT /	BORING NUMBER: 22
Chippewa Falls, WI 54729 Www.OakridgeEng.com	PROJECT: Has	Eccility	DATE:	3/20/2019
WWW.OzniugoEngloon			ELEVATION	981.9
SITE LOCATION: ADDI	RESS	110 0 1 /	LOGGED BY	: D. M. He
<u>e</u> 128	34 State HW	y 48 Grantsb.	ANY KARST FEATU	RES WITHIN 1000 FEET: YES/NO
NORTHING 196 3	Da. EASTING	62 003.2	LANDSCAPE POSIT	
COUNTY/STATE: DEPTH USCS	SOIL TYPE MUNCELL	MOTTLES ABUNDANCE	LANDSCAPE GEOM	17:01:
	&/OR USDA COLORS %	COLORS FEW COMMON MANY	FINE FAINT PED :	SURFACE STRATIFIED ALLUVIUM ATRIX LAMINATED SLOPE ALLUV.
10 ML	100m 3/1 to 10	ABUNDANCE	SIZE TYPE LOC	THAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC, LAKE SED
Z/7	3/&	FEW COMMON MANY	MINIMUM DISTINCT IN-MA	SURFACE PRISMATIC OUTWASH ATRIX LENSED RESIDUUM THAIR HOMOGENEOUS COESS
DILATANCY PLASTIC NONPLAS	TIC DRY VERY SOFT	GRADE SIZE	TYPE	% BOULDERS % GRAVE
RAPID MEDIUM HIGH	SLIGH. MOIST FIRM MOIST HARD VERY MOIST VERY HARD	STRUCTURELESS VERY FINE WEAK FINE MODERATE MEDIUM	IE PLATY SUBANG GRANULAR COLUMN CRUMB PRISMAT	AR 12"
BOUNDARY	WET	STRONG COARSE VERY CO	ANGULAR SINGLE	
DISTINCTIVENESS TOP SMO CLEAR WAV	OTH NOTES.	layer was f	11 Semple	3" to 12" <#200 70-90
	GULAR	office sme	11 semple	Oranghi Deck
	SOIL TYPE MUNCELL &/OR USDA COLORS %	MOTTLES ABUNDANCE COLORS	FINE FAINT PED	SURFACE STRUCTURE GEOLOGY ALLUVIUM
19%	100m 10m 30	2,57 COMMON MANY	COARSE PROMINENT HOC	ATRIX LAMINATED SLOPE ALLUV. PHAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TIEL
/18,0	58/2 70	ABUNDANCE FEW COMMON	FINE FAINT PED	SURFACE PRISMATIC OUTWASH
DILATANCY PLASTIC		NCY STRUCTU	COARSE PROMINENT ROO	OT HAIR HOMOGENEOUS LOESS BEDROCK
SLOW LOW RAPID MEDIUM	SLIGH MOIST SOFT	GRADE SIZE STRUCTURELESS VERY FI WEAK FINE	TYPE NE PLATY SUBANC GRANULAR COLUM	
HIGH	VERY MOIST VERY HARD WET	MODERATE MEDIUM STRONG COARSE	CRUMB PRISMA ANGULAR SINGLE	TIC 1/4" to 3"
BOUNDARY DISTINCTIVENESS TOP	POGRAPHY NOTES: 990	n could se	oarse	3" to 12" O <#200 #560
ABRUPT SMO CLEAR WAY GRADUAL IRRE	OTH	rel the some	larging bu	Fitribbons very
DEPTH USCS		MOTTLES ABUNDANCE	SIZE TYPE LO	CATION STRUCTURE GEOLOGY
	&/OR USDA COLORS %	COLORS FEW COMMON MANY	FINE FAINT PER MINIMUM DISTINCT IN-	SURFACE STRATIFIED ALLUVIUM MATRIX LAMINATED SLOPE ALLUV.
		ABUNDANCE	SIZE TYPE LO	OT HAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC, LAKE SED
DILATANCY PLASTIC	DITY MOISTING CONSISTS	COMMON MANY	MINIMUM DISTINCT IN-	DISURFACE PRISMATIC OUTWASH MATRIX LENSED RESIDUÚM OT HAIR HOMOGENEOUS LOESS
NONE NONPLAS		GRADE SIZE	TYPE	BEDROCK % BOULDERS % GRAVEI
RAPID MEDIUM HIGH	MOIST FIRM VERY MOIST VERY HARD	STRUCTURELESS VERY F WEAK FINE MODERATE MEDIUM	GRANULAR COLUM	GULAR INAR >12" 1/4" to 2"
BOUNDARY	WET	STRONG COARS VERY C	E ANGULAR SINGLE	GRAIN % COBBLE % FINES
DISTINCTIVENESS TOI SMC	POGRAPHY NOTES:	Leyer 15 V	128 miler	3" to 12" <#200
GRADUAL IRRE	EGULAR DKEN	esi Jo or	ds erd 11	
OVERALL NOTES:	The C	. 1. 11	40 10	- /-
1500	DIS WES Froz	en peres 10	10 inches	Material late
the for	son materia	June Ste	abtte most	Li moist h
touch	and visuel	inspection	No meto	ric luics wet
or s	turetod.	o seeps	26 served	
Black	no Hes an	ly in the u	oper port	of the Ch layer
SAMPLES TAKEN: YES	\$ (NO)	WATER OBSERVED	YES (NO)	BEDROCK: YES (NO
SAMPLE ID:		TYPE:	DEPTH:	DEPTH OF BEDROCK OR HOLE EXTENT: 8.0
SAMPLE ID:		TYPE:_	DEPTH:	No Barrack
SAMPLE ID:			DEPTH:	E1.963.9
	lsIOKE SOIL LOG-2 REV 1 11-21-2018.dwg - Saved: Duane 1		DEI III.	SHEET SIDE 1 OF 2 OKE SOIL LOG-2 REV.3 11-27-2018

Oakridge	e G OWNER:		· ·		TEST PIT / BOR	NG NUMBER		DATE:		CONTINUED SHEET 2 OF 2
The second division in the second	ISCS SOIL T	YPE MUNCE USDA COLOF	<u>LL</u> <u>S</u> <u>%</u>	MOTTLES COLORS	ABUNDANCE FEW COMMON MANY ABUNDANCE	FINE F MINIMUM D COARSE F SIZE	PROMINENT	IN-MATRIX ROOT HAIR	LAMINATED FISSURED SLICKEN-SIDED	SLOPE ALLUV
DII ATANCY NONE SLOW HAPID	NONPLASTIC LOW MEDIUM		CONSISTENC /ERY SOFT SOFT FIRM HARD /ERY HARD	GRADE STRUCT WEDER	COMMON STRUCTU SIZE URELESS VERY FINE ATE MEDIUM COARS VERY COARS	MINIMUM I COARSE I	DISTINCT PROMINENT	BANGULAR SMATIC >	PRISMATIC LENSED HOMOGENEOUS	OUTWASH RESIDUUM LOESS BEDROCK % GRAVEL
	UNDARY ESS TOPOGRA SMOOTH WAVY	APHY NOTES:		STRONG	COARS VERY	OARSE ANGU	JLAR SIN	GLE GRAIN		% FINES
ADUAL FUSE	IRREGULAR BROKEN				10/11/05	CITE	TVDE	LOCATION	STRUCTURE	OFOLOOV.
	PLASTICITY NONPLASTIC LOW MEDIUM		CONSISTENCE VERY SOFT		ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON MANY STRUCT E SIZE TURLESS FINE FINE G G COAR GCOCO GCOC	FINE MINIMUM COARSE SIZE FINE MINIMUM COARSE URE	TYPE FAINT DISTINCT PROMINENT TYPE FAINT DISTINCT PROMINENT PE TY SI NULLAR COLUMN C	IN-MATRIX ROOT HAIR LOCATION PED SURFACE IN-MATRIX ROOT HAIR JBANGULAR DLUMNAR	STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV. COLLUVIUM GLACIAL TILL GLAC. LAKE SE OUTWASH RESIDUUM LOESS BEDROCK 6 GRAVEL
	HIGH DUNDARY	VERY MOIST WET			RATE MEDIL IG COAR VERY	IM CRU SE ANG COARSE	JMB PE GULAR SI	NGLE GRAIN	% COBBLE 3" to 12"	% FINES
STINCTIVEN BRUPT LEAR RADUAL FFUSE	NESS TOPOGE SMOOTH WAVY IRREGULA BROKEN								3 10 12	< #200
	Y PLASTICITY NONPLASTIC	MOISTURE DRY		MOTTLES COLORS	FEW COMMON MANY - ABUNDANC FEW COMMON MANY	FINE MINIMUM COARSE E SIZE FINE MINIMUM COARSE	TYPE FAINT DISTINCT PROMINENT	LOCATION PED SURFAC IN-MATRIX ROOT HAIR	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE S OUTWASH RESIDUUM S LOESS BEDROCK
RAPID B	LOW MEDIUM HIGH BOUNDARY ENESS TOPOG SMOOTH WAVY IRREGUL BROKEN	,	FIRM HARD VERY HARD	STRU WEAK MODE STRO	STRUC DE SIZE CTURELESS VER ERATE MED NG COA VER	FINE PL/ GR IUM CR RSE AN Y COARSE	ATY S RANULAR G RUMB I IGULAR S	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" <u>% COBBLE</u> 3" to 12"	% FINES
DEPTH	USCS SO		ICELL ORS %	MOTTLES		FINE MINIMUM COARSE		LOCATIO PED SURFA IN-MATRIX ROOT HAIF LOCATIO PED SURFA	ACE STRATIFIED LAMINATED FISSURED SLICKEN-SIDE BLOCKY	SLOPE ALLU COLLUVIUM
DILATANO NONE SLOW RAPID	PLASTICITY NONPLASTIC LOW MEDIUM HIGH BOUNDARY	MOISTURE DRY SLIGH MOIST MOIST VERY MOIST WET	CONSISTE VERY SOFT SOFT FIRM HARID VERY HARID	GRA STRI WEA	COMMON MANY STRUCTURELESS VEI K FIN ERATE ME DONG CO	MINIMUM COARSE CTURE E T TY FINE P E G		IN-MATRIX IT ROOT HAIF SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	R LENSED HOMOGENEO **BOULDERS** **12" **	RESIDUUM LOESS BEDROCK MARTINIA
	ENESS TOPOO SMOOTH WAVY IRREGU BROKEN	LAR -	ES:						~ 3" to 12"	_ <#200
DEPTH			NCELL LORS %	MOTTLE		FINE MINIMUI COARSI	TYPE FAINT IM DISTINCT	LOCATI PED SUR IN-MATRI	FACE STRATIFIED X LAMINATED IR FISSURED SLICKEN-SIE BLOCKY FACE PRISMATIC X LENSED	SLOPE ALL COLLUVIUM
DILATAN NONE SLOW RAPID	CY PLASTICIT NONPLASTIC LOW MEDIUM HIGH BOUNDARY		VERY SOFT	GR STF WE MO	STRU IADE S PUCTURELESS VI AK FI DERATE M RONG C	ICTURE ZE ERY FINE NE EDIUM	TYPE PLATY GRANULAR CRUMB ANGULAR	SUBANGULA COLUMNAR PRISMATIC SINGLE GRA	R % BOULDER >12" IN % COBBLE	BEDROCK S % GRAVE — 1/4" to 3" % FINES
DISTINCTIN ABRUPT CLEAR GRADUAL DIEFLISE	VENESS TOPO SMOO WAVY IRREG	TH NOT	<u>ES:</u>						3" to 12"	< #200 <u></u>

Oakridge ENGINEERING	OWNER: Jeff So	Ver	TEST PIT / BORIN	NG NUMBER: 23
Chippewa Falls, WI 54729 www.OakridgeEng.com	PROJECT: Hag Fee	lity	DATE:	122/2019
www.Оакпадесполсоп	J	/	ELEVATION:	982,1
SITE LOCATION: ADD)RESS		LOGGED BY:	D. Mitte
@ 125	384 State Hww 4	8 Grantsburg		WITHIN 1000 FEET: YES NO
Nontilino /2/- 6	1/25 6 5107110 1/20	8 Great 36 urg		-1 11
NORTHING 1dlo	163.6 EASTING 1620	(1)	LANDSCAPE POSITION:	0-1
DEPTH USCS	SOIL TYPE MUNCELL MOTTLE	S ABUNDANCE SIZE	TYPE LOCATION	
	&/OR USDA COLORS % COLORS	FEW FINE COMMON MINIMUM	FAINT PED SURFAI I DISTINCT IN-MATRIX	
0/11 ML	5/14 104/L 100 -	MANY COARSE ABUNDANCE SIZE	PROMINENT ROOT HAIR TYPE LOCATION	FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL
/18	to 3/2	FEW FINE COMMON MINIMUM	FAINT PED SURFA OISTINCT IN-MATRIX	
DILATANCY PLASTI	ICITY MOISTURE CONSISTENCY	MANY COARSE STRUCTURE	PROMINENT ROOT HAIR	HOMOGENEOUS LOESS BEDROCK
NONE NONPLAS SLOW RAPID MEDIUM	SLIGH, MOIST SOFT GIRM STE	UCTURELESS VERY FINE F	YPE LATY SUBANGULAR	% BOULDERS % GRAVEL
HIGH	MOIST HARD WE VERY MOIST VERY HARD MO	DERATE MEDIUM (GRANULAR COLUMNAR CRUMB PRISMATIC	>12" 1/4" to 3"
BOUNDARY	WEI	IONG COARSE / VERY COARSE	ANGULAR SINGLE GRAIN	% COBBLE % FINES
ABRUPT SM	OPPOGRAPHY NOTES: /h/S /eye	r was froze	n notes	3" to 12" <#200
	REGULAR	a smell s	emple broi	5ht beck
DEPTH USCS	SOIL TYPE MUNCELL MOTTLE		TYPE LOCATIO	N STRUCTURE GEOLOGY
1011/	&/OR USDA COLORS % COLOR	COMMON MINIMU	FAINT PED SURFA	CE STRATIFIED ALLUVIUM LAMINATED SLOPE ALLU
18/14CL	10m 10/2 30 3.1	MANY COARSI ABUNDANCE SIZE	PROMINENT ROOT HAIR TYPE LOCATIO	SLICKEN-SIDED GLACIAL TIL
/18.11	5 /1 70	FEW FINE COMMON MINIMU	FAINT PED SURFA	ACE PRISMATIC OUTWASH LENSED RESIDUUM
DILATANCY PLAST	ICITY MOISTURE CONSISTENCY	STRUCTURE	E PROMINENT ROOTHAIR	HOMOGENEOUS LOESS BEDROCK
SLOW LOW RAPID MEDIUM	COUL	NADE SIZE VERY FINE	TYPE PLATY SUBANGULAR	% BOULDERS % GRAVEL
HIGH	VERY MOIST VERY HARD MO	DERATE MEDIUM	GRANULAR COLUMNAR CRUMB PRISMATIC	>12" 1/4" to 3"
BOUNDARY	<u>Y</u>	RONG COARSE VERY COARSE	ANGULAR SINGLE GRAIN	% FINES
ABRUPT SM	DPOGRAPHY NOTES: Could be	a very 99	00/52	3" to 12" < #200 5
GRADUAL IRF	REGULAR OKEN S S	en feet	TIS MAN	5 VO 4/11
DEPTH USCS	SOIL TYPE MUNCELL MOTTL	ES ABUNDANCE SIZE	TYPE LOCATION	
	&/OR USDA COLORS % COLOR	S FEW FINE COMMON MINIMU MANY COARS		LAMINATED SLOPE ALL
/	. 	- ABUNDANCE SIZE	E PROMINENT ROOT HAI TYPE LOCATIO	SLICKEN-SIDED GLACIAL TIL
		FEW FINE COMMON MINIMU		FACE PRISMATIC OUTWASH (LENSED RESIDUUM
DILATANCY PLAST	ASTIC DRY VERY SOFT	MANY COARS STRUCTURE		R HOMOGENEOUS LOESS BEDROCK
SLOW LOW RAPID MEDIUM	SLIGH MOIST SOFT G	RADE SIZE RUCTURELESS VERY FINE	TYPE PLATY SUBANGULAR	% BOULDERS % GRAVE
HIGH	VERY MOIST VERY HARD MO	EAK FINE DDERATE MEDIUM RONG COARSE	GRANULAR COLUMNAR CRUMB PRISMATIC ANGULAR SINGLE GRAII	>12" 1/4" to 3"
BOUNDAR	<u>Y</u>	VERY COARSE	ANGUERIT ONNOLE GITAII	% FINES
ABRUPT SN	OPOGRAPHY MOOTH AVY	d edge 70	1 L //	3" to 12" <#200
GRADUAL IRI	REGULAR OLECES I	chiseled a	t word t	Montsittea
OVERALL NOTES:		6 1	· · · · · · · · · · · · · · · · · · ·	,
	This was trozan	hered to 7	Dinches	plus.
Observa	I material aluni	ne executi	on met	oriel below
the fre	sen meterial u	KS Slighti	e moist to	e moist by
touch	end visual insu	pection . No	meterial	wes wet
00 50	tweters no s	cops mass	ar sail	
Blecke.	nother only in	the upper po	tof no	L leyer
SAMPLES TAKEN		WATER OBSERVED: YES	© E	BEDROCK: YES (NO
SAMPLE ID:	5 23.1 8-10F4	TYPE:DEPT	ш.	DEPTH OF BEDROCK
DAMBLE ID				Va Rodensky
SAMPLE ID:		TYPE:DEPT	н:/	E1 912 2
I				- / () () () () () () () () () (
SAMPLE ID:		TYPE:DEPT	H:	SHEET SIDE 1 OF 2



Oakridge engineering owner: Jeff	Sever	TEST PIT / BORING NUMBER:
Chippewa Falls, WI 54729 PROJECT:	111/4	DATE: 3/22/2019
Www.OakridgeEng.com		ELEVATION: 980-2
SITE LOCATION: ADDRESS		LOGGED BY: D. Mitte
	Grentshur .	NY KARST FEATURES WITHIN 1000 FEET: YES (NO)
0/2884 State Huy 48 NORTHING /26538, 7 EASTING 162.	199 4	r.1-1
0 -1/01	A J	ANDSCAPE GEOMETRY
DEPTH USCS SOIL TYPE MUNCELL MC	OTTLES ABUNDANCE SIZE	ANDSCAPE GEOMETRY:
8/OR USDA COLORS % CC	DLORS FEW FINE COMMON MINIMUM	FAINT PED SURFACE STRATIFIED ALLUVIUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV
0/11 ML 100m 3/140 100	MANY COARSE ABUNDANCE SIZE	PROMINENT ROOT HAIR FISSURED COLLUVIUM TYPE LOCATION SLICKEN-SIDED GLACIAL TILL
1/2 3/2	FEW FINE COMMON MINIMUM	FAINT PED SURFACE PRISMATIC OUTWASH DISTINCT IN-MATRIX LENSED RESIDIUM
DILATANCY PLASTICITY MOISTURE CONSISTENCY NONE NONPLASTIC DRY VERY SOFT	MANY COARSE STRUCTURE	PHOMINENT HOOT HAIR HOMOGENEOUS CLOESS BEDROCK
SLOW SLIGH, MOIST SOFT FIRM	GRADE SIZE TYPE STRUCTURELESS VERY FINE PLA	TY SUBANGULAR 78 GRAVEL
HIGH VERY MOIST VERY HAND	MODERATE MEDIUM CRU	NULLAR SINGLE CRAIN
BOUNDARY WET	VERY COARSE	% COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: 7/15 / ABRUPT SMOOTH CLEAR WAVY	yer was tragen	notes 3" to 12" 0 <#200 70-80
GRADUAL IRREGULAR DIFFUSE BROKEN THE	e smell so	mple didge come
	OTTLES ABUNDANCE SIZE FINE	TYPE LOCATION STRUCTURE GEOLOGY FAINT PED SURFACE STRATIFIED ALLUVIUM
12"/ - 51/ 104/2 1 90	3.54 COMMON MINIMUM COARSE	PROMINENT ROOT HAIR FISSURED SLOPE ALLUY.
/16" MIL LOOM 3/2 to 5/3 10	ABUNDANCE SIZE	TYPE LOCATION BLOCKY GLAC, LAKE SED PRISMATIC OUTWASH
5/6/0		PROMINENT ROOT HAIR HOMOGENEOUS COES
DILATANCY PLASTICITY MOISTURE CONSISTENCY NONE NONPLASTIC DRY STOW OWN SOFT	STRUCTURE GRADE SIZE TY	BEDROCK
RAPID MEDIUM MOIST FIRM HARD	STRUCTURELESS VERY FINE PLA WEAK FINE GR	ATY SUBANGULAR ANULAR COLUMNAR 312 O
WET VERY HARD		UMB PRISMATIC GULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY NOTES: 7315		1 2 300
ABRUPT SMOOTH CLEAR WAVY RD SECON	1	3305 but not
DIFFUSE BROKEN VERY Thic	K '	A.
	OTTLES ABUNDANCE SIZE OLORS COMMON MINIMUM	TYPE LOCATION STRUCTURE GEOLOGY FANT PED SURFACE STRATIFIED DISTINCT MATRIX LAMINATED SLOPE ALLUVIUM
	MANY COARSE	PROMINENT ROOT HAIR FISSURED COLLUVIUM
16.7	ABUNDANCE SIZE EINE COMMON MINIMUM	FAIN PED SURFACE PRISMATIC OUTWASH
DILATANCY PLASTICITY MOISTURE CONSISTENCY	MANY COARSE STRUCTURE	PROMINENT ROOTHAIR HOMOGENEOUS LOESS BEDROCK
NONE NONPLASTIC DRY VERY SOFT SLIGH MOIS SOFT FIRM	GRADE SIZE TY	/PE ATY SUBANGULAR % BOULDERS % GRAVEL
RAPID MEDIUM MOIST HARD HIGH VERY MOIST VERY HARD	WEAK FINE GF	SOBNIGOLAR SANULAR COLUMNAR >12"
BOUNDARY WET	STRONG COARSE AN VERY COARSE	IGULAR SINGLE GRAIN % COBBLE % FINES
DISTINCTIVENESS TOPOGRAPHY SMOOTH NOTES: COVID A	be a very good	SC 3" to 120 <#200 45-60
CLEAR WAVY GRADUAL IRREGULAR	110- fu 53 23	s, dent see the
OVERALL NOTES:	me nes , mo m	es only in sporte 1-1/ 12/21
This was from	en hard to t	10 inches plus
Observed meterial	during excevet	ion. Metonel below
the forezen meterial	wes slightly	moist to moist by
touch and visual 1	aspection 1	Vo meterial was wet
or saturated. No	seeps of sa	rual.
,	/	
SAMPLES TAKEN: YES NO	WATER OBSERVED: YES NO	BEDROCK: YES (NO)
SAMPLE ID: JS 24.1 15-161	7 TYPE:DEPTH:	DEPTH OF BEDROCK
CAMDIE ID.		M. 20 Acril
SAMPLE ID:	TYPE:DEPTH:	F1 963.6
SAMPLE ID:		SHEET SIDE 1 OF 2
File: IIOAKRIDGE11Rescoreet Fechnical/SoilsIOKE SOIL LOG-2 REV 1 11-21-2018.dwg - Seved: Duana 11/27/20	18 12:34 PM - Printed; Duane 3/7/2019 3:13 PM	OKE SOIL LOG-2 REV.3 11-27-2018

DEPTH L	e G OWNER:	PE MUNCELL	M	OTTLES	EST PIT / BOR ABUNDANCE	SIZE	TYPE FAINT	LOCATION	STRUCTURE	GEOLOGY
	&/OR US	SDA COLORS	<u>%</u> <u>C</u>	OLORS	FEW COMMON MANY ABUNDANCE FEW COMMON	MINIMUM	DISTINCT PROMINENT TYPE FAINT DISTINCT	LOCATION PED SURFACE IN-MATRIX	LAMINATED FISSURED SLICKEN-SIDED BLOCKY PRISMATIC LENSED	GLAC, LAKE S OUTWASH RESIDUIM
DILATANCY NONE SLOW RAPID	LOW S MEDIUM M HIGH V		SISTENCY SOFT HARD	GRADE STRUCTU WEAK MODERAT STRONG	BELESS VERY F	RE TY INE PL/ GR CR E AN	PE TY S	SUBANGULAR COLUMNAR	HOMOGENEOUS	LOESS BEDROCK % GRAVEL
DISTINCTIVEN ABRUPT CLEAR GRADUAL	UNDARY ESS TOPOGRAF SMOOTH WAVY IRREGULAR	***			VERY (OARSE			3" to 12"	
DEPTH	USCS SOIL T &/OR U	YPE MUNCELL ISDA COLORS	%	MOTTLES COLORS	ABUNDANCE FEW COMMON MANY ABUNDANCE FEW	FINE MINIMUM COARSE		IN-MATRIX T ROOT HAIR LOCATION	E STRUCTURE E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY E PRISMATIC	SLOPE ALLU COLLUVIUM
DILATANCY NONE SLOW RAPID	LOW S	MOISTURE DRY SLIGH, MOIST HAR	ISISTENC 7 SOFT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	GRADE STRUCTI WEAK	COMMON MANY STRUCT SIZE URELESS VERY	MINIMUM COARSE URE	DISTINCT PROMINEN YPE ATY RANULAR	IN-MATRIX IT ROOT HAIR SUBANGULAR COLUMNAR	LENSED HOMOGENEOUS **BOULDERS >12"	RESIDUUM LOESS BEDROCK % GRAVEL
DISTINCTIVEN ABRUPT CLEAR	OUNDARY NESS TOPOGRA SMOOTH WAVY	WEI	Y HARD	MODERA STRONG	FINE TE MEDIL COAR VERY	M C SE A COARSE	RUMB NGULAR	PRISMATIC SINGLE GRAIN	% COBBLE 3" to 12"	% FINES
GRADUAL DIFFUSE	IRREGULAR BROKEN									
DEPTH	USCS SOIL 1 &/OR I	TYPE MUNCELI USDA COLORS	<u>%</u> - —		ABUNDANCI FEW COMMON MANY ABUNDANC FEW COMMON MANY	FINE MINIMUM COARSE SIZE FINE MINIMUM COARSE	TYPE FAINT OUT DISTINCT	IN-MATRIX ROOT HAIR LOCATIO PED SURFA	CE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY CE PRISMATIC LENSED	ALLUVIUM SLOPE ALLU COLLUVIUM GLACIAL TII GLAC, LAKE OUTWASH RESIDUUM S LOESS
NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY VERY MOIST VERY MOIST VERY WET	RY SOFT FT M	GRADI	STRUC SIZE FURELESS VERY FINE ATE MED G COA	FINE I	TYPE PLATY GRANULAR CRUMB ANGULAR	SUBANGULAR COLUMNAR PRISMATIC SINGLE GRAIN	>12" % COBBLE	1/4" to 3" % FINES
DISTINCTIVE ABRUPT CLEAR GRADUAL DIFFUSE	NESS TOPOGRA SMOOTH WAVY IRREGULAR BROKEN								3" to 12"	< #200
DEPTH		TYPE MUNCEL USDA COLORS		MOTTLES COLORS	ABUNDANG FEW COMMON MANY ABUNDANG FEW COMMON MANY	FINE MINIMU COARS	E PROMIN TYPE FAINT JM DISTING	LOCATION PED SURFIT IN-MATRIX	ACE STRATIFIED LAMINATED R FISSURED SLICKEN-SIDE BLOCKY PRISMATIC LENSED	ALLUVIUM SLOPE ALL COLLUVIUI D GLACIAL T GLAC. LAK OUTWASH RESIDUUM
DILATANO NONE SLOW RAPID	PLASTICITY NONPLASTIC LOW MEDIUM HIGH	DRY VE SLIGH, MOIST FII MOIST HA	DNSISTEN RY SOFT FT RM RD RY HARD	GRAD	STRUC DE SIZ CTURELESS VEF FIN: RATE MEI	ETURE E Y FINE E DIUM ARSE	TYPE PLATY GRANULAR CRUMB ANGULAR	SUBANGULAF COLUMNAR PRISMATIC SINGLE GRAI	% BOULDERS >12"	BEDROCK % GRAVE 1/4" to 3" % FINES
DISTINCTIVI ABRUPT CLEAR GRADUAL DIFFUSE	BOUNDARY ENESS TOPOGE SMOOTH WAVY IRREGULA BROKEN	NOTES:			VE	RY COARSE			3" to 12"	<#200
DEPTH		TYPE MUNCE RUSDA COLOR		MOTTLES COLORS	FEW COMMON MANY - ABUNDAN FEW COMMON	FINE MINIM COAF	FAINT IUM DISTIN ISE PROMI TYPE FAINT IUM DISTIN	PED SUR CT IN-MATR NENT ROOT HA LOCAT PED SUR CT IN-MATR	FACE STRATIFIED X LAMINATED FISSURED SLICKEN-SIDI BLOCKY FACE PRISMATIC IX LENSED	ALLUVIUM SLOPE AL COLLUVIU ED GLACIAL GLAC, LAI OUTWASI RESIDUUI
DILATANI NONE SLOW RAPID	NONPLASTIC LOW MEDIUM HIGH	DRY V SLIGH MOIST S MOIST H	ONSISTEN ERY SOFT OFT RM ARD ERY HARD	GRA STRU WEAH	DE SI CTURELESS VE (FII ERATE ME ONG CO	COAF CTURE ZE RY FINE IE DIUM DARSE RY COARSE	TYPE PLATY GRANULAR CRUMB ANGULAR	SUBANGULA	% BOULDERS	BEDROCI
DISTINCTIV	BOUNDARY /ENESS TOPOG SMOOTH WAVY	RAPHY NOTES:							3" to 12"	<#200

Oakridge ENGINEERING	OWNER: Jeff So	ver	TEST PIT / BORING NUMBER: 25
Chippewa Falls, WI 54729	PROJECT: Has Fac	-1/1/2	DATE: 3/22/2019
Www.QakridgeEng.com	7		ELEVATION: 978.9
SITE LOCATION: ADD	IDESS		LOGGED BY: D. Mitte
@ 128	394 State Hall	48 Gran Blung	
12/-	487 (2242.4	ANY KARST FEATURES WITHIN 1000 FEET: YES (NO
NORTHING /d.Co	A 1/ 44	1010.1	LANDSCAPE POSITION: Foot Slope
COUNTY / STATE:	SOIL TYPE MUNCELL M	OTTLES ABUNDANCE SIZE	LANDSCAPE GEOMETRY: CARLEY TYPE LOCATION STRUCTURE GEOLOGY
	&/OR USDA COLORS % C	OLORS FEW FINE COMMON MINIM	FAINT PED SURFACE STRATIFIED ALLUVIUM JUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV
1 mc	SIF 104R 100	MANY COAR ABUNDANCE SIZE	RSE PHOMINENT HOOTHAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL
127	to 3/2	FEW FINE	FAINT PED SURFACE PRISMATIC QUITWASH
DILATANCY PLASTIN		MANY COAL STRUCTURE	RSE PROMINENT ROOT HAIR HOMOGENEOUS LOESS BEDROCK
SLOW LOW RAPID MEDIUM	SLIGH. MOIST SOFT	GRADE SIZE STRUCTURELESS VERY FINE	TYPE 9LATY SUBANGULAR % BOULDERS % GRAVEL
HIGH	MOIST HARD VERY MOIST VERY HARD	WEAK FINE MODERATE MEDIUM	GRANULAR COLUMNAR >12" 1/4" to 3"
BOUNDARY		STRONG COARSE VERY COARSE	ANGULAR SINGLE GRAIN % COBBLE % FINES
	DOTH NOTES.	yer was froze	7, notes ere 3" to 12" (#200 10000)
	EGULAR //	nell Scriple	brought back to office
DEPTH USCS	SOIL TYPE MUNCELL M	OTTLES ABUNDANCE SIZE	
22"/	&/OR USDA COLORS % C	OLORS CEW COMMON MINI	FAINT PED SURFACE STRATIFIED ALLUVIUM MUM DISTINCT IN MATRIX LAMINATED SLOPE ALLUV.
1 mL		MANY COA BUNDANCE SIZI	TYPE LOCATION SLICKEN-SIDED GLACIAL TILL
/73	5/6 10	SYL COMMON SMINI	FAINT PED SURFACE PRISMATIC OUTWASH MUM DISTINCT RESIDUE M
DILATANCY PLASTI		MANY COA STRUCTURE	RSE PROMINENT ROOT HAIR HOMOGENEOUS DESS BEDROCK
SLOW COW MEDIUM	SLIGHT MOIST SOFT	GRADE SIZE STRUCTURELESS VERY FINE	TYPE PLATY SUBANGULAR % BOULDERS % GRAVEL
HIGH	VERY MOIST VERY HARD	WEAK FINE MODERATE MEDIUM STRONG COARSE	GRANULAR COLLUMNAR CRUMB PRISMATIC ANGULAR SINGLE GRAIN % CORRI E
BOUNDARY		VERY COARSE	A COBOLE % FINES
ABRUPT SM	OOTH NOTES: /cye/	DICKS Up a little	1 10 12" <#200 10 - 80
	REGULAR From 650	ve - Typical	S/ M- Cap
DEPTH <u>USCS</u>		OTTLES ABUNDANCE SIZ	
13"/		COLORS COMMON MIN	FAINT PED SURFACE STRATIFIED ALLUVIUM DISTINCT INMATHIX LAMINATED SLOPE ALLUV. ARSE PROMINENT HOOTHAIR FISSURED COLLUVIUM
1/2/1CL	(6)	ABUNDANCE SIZ	E TYPE LOCATION SLICKEN-SIDED GLACIAL TILL BLOCKY GLAC LAKE SED
1601	·		MUMO DISTINCT IN MATERIX LENSED RESIDIUM
DILATANCY PLAST	STIC DRY VERY SOFT	<u>STRUCTURE</u>	BEDROCK
RAPID LOW MEDIUM	SLICH, MOIST SOFT	GRADE SIZE STRUCTURELESS VERY FINE WEAK FINE	TYPE PLATY SUBANGULAR GRANULAR COLUMNAR STATE **BOULDERS STRAVEL **GRAVEL
HIGH	VERY MOIST VERY HARD WET	MODERATE MEDIUM STRONG COARSE	CRUMB PRISMATIC 1/4" to 3"
BOUNDARY DISTINCTIVENESS TO	<u> </u>	VERY COARSE	- 10 (2) 45-C1
ABRUPT SM	NOTES: COULD NOTES:	he a very good	send groins but again
GRADUAL IRF	REGULAR IF risbons	s well, a/so =	see a four whiteish fine
OVERALL NOTES:	0 /		mottles in the upper port
1/4	15 was frozen to	40 inches johns	of the kyer
and from	p herel. Ma	terial was a	served during
excevet	en ord wes	slightly mo	ist to moist by touch
and UIS	vel inspection	. No Meter	icl wes wet or
Satura	ted, no se	eps observe	<i>l</i> .
- mottle	y only in the	ie yoper p	ert of the Chleyer
SAMPLES TAKEN: YE	SONO	WATER OBSERVED: YES	BEDROCK: YES NO
SAMPLE ID:		TYPE: DE	DEPTH OF BEDROCK
			OR HOLE EXTENT: 26.7
SAMPLE ID:		TYPE:DEF	PTH: No Breside 2
Lampier		TYPE: DEI	PTH:
SAMPLE ID:	SpisiOKE SOIL LOG-2 REV 1 11-21-2018,dwg - Seved: Duane 11/27/2		SHEET SIDE 1 OF 2

Oakridge OWNER:	TEST PIT / BORING NUMBER: DATE:	CONTINUED SHEET 2 OF 2
BOILATANCY PLASTICITY MOISTURE CONSISTEN	MOTTLES COLORS PEW COMMON MANY ABUNDANCE FEW COMMON MANY ABUNDANCE FEW COMMON MINIMUM MANY COARSE TYPE FINE PROMINENT PED SURFACE FINE FINE FINE PROMINENT PED SURFACE FINE FINE FINE FINE PROMINENT PED SURFACE FINE FINE FINE FINE FINE FINE FINE FIN	O SLOPE ALLUV, COLLUVIUM GLACIAL TILL GLAC, LAKE SED OUTWASH RESIDUM LOESS BEDROCK
NONE	STRUCTURELESS VERY FINE PLATY SUBANGULAR WEAK FINE GRANULAR COLUMNAR >12" MODERATE MEDIUM CRUMB PRISMATIC STRONG COARSE VERY COARSE VERY COARSE	——————————————————————————————————————
SHUPT SMOOTH EAR WAVY ABUUAL IRREGULAR FFUSE BROKEN		
DILATANCY PLASTICITY MOISTURE CONSISTENT VERY SOFT SLOW HAPID HIGH VERY MOIST VERY HARD WET BOUNDARY DISTINCTIVENESS SOIL TYPE MUNCELL COLORS % MOISTURE CONSISTENT VERY SOFT SLIGH MOIST FIRM HARD VERY MOIST VERY HARD WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY NOTES:	COLORS FEW COMMON MINIMUM DISTINCT IN-MATRIX COARSE PROMINENT PROMINENT PROBLEMANT COARSE PROMINENT PROMINENT PROBLEMANT ABUNDANCE SIZE TYPE LOCATION PED SURFACE SILCKEN- FEW FINE FAINT PED SURFACE SILCKEN- COMMON MINIMUM DISTINCT IN-MATRIX FEW FINE FAINT PED SURFACE SILCKEN- PROMINENT PED SURFACE SILCKEN- NIMMATRIX FOR FAINT PED SURFACE SILCKEN- PROMINENT PED SURFACE SILCKEN- PED SURFACE SILCKEN- PED SURFACE SILCKEN- SILCKEN- PED SURFACE SILCKEN- SILCKEN- PED SURFACE SILCKEN- SILCKEN- PED SURFACE SILCKEN- PED SURFACE SILCKEN- PED SURFACE SILCKEN- SILCKEN- PED SURFACE SILCKEN- SILCKEN- SILCKEN- PED SURFACE SILCKEN- SILCKEN- PED SURFACE SILCKEN- SILCKEN- SILCKEN- PED SURFACE SILCKEN- SILC	ED SLOPE ALLUV. COLLUVIUM SIDED GLACIAL TILL GLAC. LAKE SEC OUTWASH RESIDUM NEOUS LOESS BEDROCK ERS % GRAVEL 1/4" to 3"
LEAR WAVY IRADUAL IRREGULAR IFFUSE BROKEN		
DEPTH USCS SOIL TYPE MUNCELL COLORS % DILATANCY PLASTICITY MOISTURE CONSISTE VERY SOFT SILOW LOW SLIGH, MOIST HARD WET WET WERY HARD WET	COLORS	ED SLOPE ALLUV. DD COLLUVIUM GLACIAL TILL GLAC, LAKE SE OUTWASH RESIDUUM LOESS BEDROCK DERS % GRAVEL 1/4" to 3"
DISTINCTIVENESS TOPOGRAPHY SMOOTH CLEAR WAVY GRADUAL IRREGULAR DIFFUSE BROKEN	3" to 12"	< #200 <u></u>
DEPTH USCS SOIL TYPE MUNCELL COLORS % DILATANCY PLASTICITY MOISTURE CONSISTINATION NONPLASTIC DRY VERY SOFT SLOW LOW SLIGH, MOIST HARD WET WET VERY HARD WET BOUNDARY DISTINCTIVENESS TOPOGRAPHY NOTES:	COLORS FEW COMMON MINIMUM DISTINCT IN-MATRIX LAMIN/ MANY COARSE PROMINENT ROOT HAIR FISSUF FEW FINE FAINT PED SURFACE PROMINENT ROOT HAIR FISSUF FEW COMMON MINIMUM DISTINCT IN-MATRIX LENSE ENCY STRUCTURE GRADE SIZE TYPE LOCATION PED SURFACE PRISM. MANY COARSE PROMINENT ROOT HAIR ROOT	NTED SLOPE ALLUV IED COLLUVIUM IN-SIDED GLACIAL TILL Y GLAC. LAKE S ATIC OUTWASH DERS BEDROCK DERS % GRAVEL 1/4" to 3"
ABRUPT SMOOTH CLEAR WAYY GRADUAL IRREGULAR DIFFUSE BROKEN		
DEPTH USCS SOIL TYPE MUNCELL A/OR USDA COLORS MUNCELL COLORS MUNCELL COLORS MUNCELL COLORS MOISTURE CONSIST VERY SOF SLOW RAPID MEDIUM MIST HIGH VERY MOIST WET WET WET	COLORS FEW COMMON MINIMUM DISTINCT IN-MATRIX LAMIN PROBLEM FINE FINE PROMINENT PED SURFACE STRACE AND DISTINCT IN-MATRIX LAMIN PED SURFACE PROMINENT PED SURFACE PRISM COMMON MINIMUM DISTINCT IN-MATRIX LENS MANY COARSE PROMINENT PED SURFACE PRISM LENS PROMINENT PLATY SUBANGULAR WEAK FINE GRANULAR COLUMNAR >12"	ATED SLOPE ALLU'REN
BOUNDARY DISTINCTIVENESS TOPOGRAPHY SMOOTH CLEAR WAYY GRADUAL IRREGULAR		<#200

Oakridge	OWNER:	Jeft :	Selver			TEST	PIT / BORING	NUMBER:	6
Chippewa Falls, WI 54729	PROJECT:	Hos Fo	cility			DATE	3/	122/2019	,
www.OakridgeEng.com	111002011	7	/				ATION:	980.5	
DITE I CONTION ADD	DE00						ED BY: D	Mitte	
SITE LOCATION: ADD	HESS U <-	La 41.	490				11413413	11/11/ No.	
C 1000	110 1	at / in		rentsbu				THIN 1000 FEET	YES /(NO)
NORTHING /d6	17.1	EASTING/	6231	7,0	LA	ANDSCAPE	POSITION:	1 5/0p	30
COUNTY / STATE:	BURNE	MUNICITY	WI	ADUNDANOE			GEOMETRY:	unifor	77
DEPTH USCS	&/OR USDA	MUNCELL COLORS %	COLORS	ABUNDANCE FEW COMMON	SIZE FINE MINIMUM	TYPE FAINT DISTINCT	PED SURFACE IN-MATRIX	STRUCTURE STRATIFIED LAMINATED	GEOLOGY ALLUVIUM SLOPE ALLUV.
0/11/11/	Silt	3/2 100		MANY	COARSE	PROMINENT	ROOT HAIR	FISSURED SLICKEN-SIDED	COLLUVIUM GLACIAL TILL
117"	2000	-		ABUNDANCE FEW COMMON	SIZE FINE MINIMUM	TYPE FAINT DISTINCT	LOCATION PED SURFACE IN-MATRIX		GLAC, LAKE SED OUTWASH
DILATANCY PLASTI	CITY MOISTU	IRE CONSISTEN	CY	MANY	COARSE	PROMINENT	ROOT HAIR	LENSED HOMOGENEOUS	RESIDUUM OESS BEDROCK
NONE NONPLAS		VERY SOFT	GRADE STRUCTU	SIZE			UBANGULAR -	% BOULDERS	% GRAVEL
RAPID MEDIUM HIGH	MOIST VERY MO	HARD	WEAK MODERAT	FINE		NULAR C		>12"	1/4" to 3"
BOUNDARY	WET	VEIT HAID	STRONG	COARSE VERY CO	ANG		INICI E ODANI	% COBBLE	% FINES
DISTINCTIVENESS TO	DOCDADUN	OTES: This	legar	was fro	3700	nok	5	3" to 12"	< #200 <u>70-80</u>
CLEAR WAY		are fro	مير ه	Somel	5.00	mple	brown	ht by	76
DEPTH USCS	SOIL TYPE	MUNCELL	MOTTLES	ABUNDANCE	617E	TYPE	LOCATION	CTDUOTURE.	OFFIC COLL
TIETH MA	8/OR USDA	COLORS %	COLORS	FEW COMMON	SIZE FINE MINIMUM	FAINT DISTINCT	PED SURFACI	STRUCTURE STRATIFIED LAMINATED	GEOLOGY ALLUVIUM SLOPE ALLUV.
1711/	Sitt	4/3 95		MANY	COARSE	PROMINENT	ROOT HAIR	FISSURED SLICKEN-SIDED	COLLUVIUM
121" -		OYB, 5	-	ABUNDANCE FEW	SIZE FINE MINIMUM	TYPE FAINT DISTINCT	PED SURFACE		GLAC. LAKE SED OUTWASH
DILATANCY PLAST	CITY MOISTL	JRE CONSISTEN	ICY	COMMON MANY STRUCTU	COARSE	PROMINENT	IN-MATRIX ROOT HAIR	LENSED HOMOGENEOUS	RESIDUUM BEDROCK
NONE NONPLA	STIC DRY SLIGH, M	VERY SOFT SOFT	GRADE	SIZE	<u>TY</u>		NIDANOUS AD	% BOULDERS	% GRAVEL
RAPID MEDIUM HIGH	MOIST VERY MO	HARD	STRUCTU WEAK MODERA	FINE	GR/	ANULAR (SUBANGULAR COLUMNAR PRISMATIC	>12"	1/4" to 3" <u></u>
BOUNDARY	WET	NOT VEHT HAND	STRONG	COARSE VERY C	E ANG		SINGLE GRAIN	% COBBLE	% FINES
DISTINCTIVENESS TO	POGRAPHY	NOTES: do	lase.	Some f	Cons	From)	3" to 12"	< #200 Co-70
CLEAR WA	UUTH	upper	loyer	but'	5 5	5/11	a m	KS, H	000
DIFFUSE BR	OKEN	MINOSII	HOTTLES	ADUNDANCE	OUTE	7.05			
DEPTH USCS	SOIL TYPE &/OR USDA	MUNCELL COLORS %	COLORS	ABUNDANCE FEW COMMON	SIZE	TYPE FAINT DISTINCE	PED SURFACE		ALLUVIUM
21/10	10cm	54R 100	2,54	MANY	COARSE	PROMINEN	T ROOT HAIR	FISSURED SLICKEN, SIDER	SLOPE ALLUV. COLLUVIUM CLACIAL TILLS
15.8		4/4	3//	ABUNDANCE FEW.	SIZE FINE	TYPE FAINT	LOCATION PED SURFACE	BLOCKY E PRISMATIC	GLAC, LAKE SEC OUTWASH
DILATANCY PLAST	ICITY MOIST	URE CONSISTE	NCY	COMMON MÁNY	MINIMUM	DISTINCT PROMINEN	IN-MATRIX T ROOT HAIR	LENSED HOMOGENEOU	RESIDUUM S LOESS
NONE NONPLA		VERY SOFT	GRADE	STRUCTU SIZE	<u>TY</u>	/PE		% BOULDERS	% GRAVEL
RAPID MEDIUM	MOIST	SIARD	WEAR	URELESS VERY F	GF	RANULAR	SUBANGULAR COLUMNAR	>12"	1/4" to 3"
BOUNDAR'	VERY MO WET	OIST VERY HARD	MODERA	COARS		RUMB IGULAR	PRISMATIC SINGLE GRAIN	% COBBLE	% FINES
DISTINCTIVENESS TO	POGRAPHY	NOTES: A a	and C	4 real	411.	Con	-feel	3" to 12"	< #200 50-6
CLEAR WA	IOOTH AVY REGULAR	cay so	nel a	ains	16/0	ck /	no He	5 10/	20
	OKEN	upper	helpo	fitte.	leye	00	27/4		
OVERALL NOTES:	7 -	0		1. 1/m		100	1.0		
06===	nig w	77/03	PA P	90	1769	25 /	n/ 1	11	
JUSE/U	ed me	CHECKEL C	durin	CXCC	Ve Tre	07.	ricte.	11a/ 50	low
140 Tro	zen m	aterial	WES	Slight	y me	215/	TO MY	0157 6	//
Touch	eres y	JISyal /	nspec	Trans	No	MET	eric/	wes we	21
00 50	Yurete	ed, n	0 5	0005	06:	SPALC	al		
		MX.							
SAMPLES TAKEN: YE	es Min		10/0	TER OBSERVED	VEC INTO)	pci	DROCK: VEC 14	
SAIN CES TAKEN. YE	.5 (10)		WA	LIN OBSERVED	LES (NO			DROCK: YES (NO PTH OF BEDROO	
SAMPLE ID:			TYF	E:	DEPTH:			HOLE EXTENT	15,8
SAMPLE ID:			TYF	PE:	DEPTH:		N	6 Barli	exclus
SAMPLE ID:			TYF					El. 96	4.8

Oakridge	OWNER:			TEST PIT / BORIL	NG NUMBER:	DATE:		CONTINUED SHEET 2 OF 2
DEPTH USC:	S SOIL TYPE	MUNCELL	MOTTLES	ABUNDANCE FEW COMMON MANY	SIZE TYPE FINE FAINT MINIMUM DISTIN COARSE PROM	LOCATION PED SURFACE IN-MATRIX INENT ROOT HAIR	STRUCTURE STRATIFIED LAMINATED FISSURED SLICKEN-SIDED	GEOLOGY ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL
DILATANCY PL		TURE CONSISTEN	ICY	ABUNDANCE FEW COMMON MANY STRUCTUR	RE	PED SURFACE ICT IN-MATRIX INENT ROOT HAIR	LENSED HOMOGENEOUS	GLAC, LAKE SED OUTWASH RESIDUUM LOESS BEDROCK
SLOW LOV RAPID ME HIG	DIUM MOIST SH VERY I WET		GRAD STRUC WEAK MODER STRON	E SIZE TURELESS VERY FINE RATE MEDIUM G COARSE VERY CO	TYPE NE PLATY GRANULAR CRUMB ANGULAR		% BOULDERS >12" % COBBLE	1/4" to 3"
BOUNE STINCTIVENESS BRUPT EAR	TOPOGRAPHY SMOOTH WAVY	NOTES:		VEHI 00	,,,,,,,		3" to 12"	
FUSE	IRREGULAR BROKEN			101110	OLZE TVD	E LOCATION	STOUGTURE	0501001
DEPTH USC	&/OR USDA		MOTTLES	ABUNDANCE FEW COMMON MANY - ABUNDANCE FEW COMMON MANY	FINE FAIN DISTI COARSE PROPERTY FAIN FAIN MINIMUM DISTI	PED SURFACE IN-MATRIX MINENT ROOT HAIR LOCATION PED SURFACE	E STRATIFIED LAMINATED FISSURED SLICKEN-SIDED BLOCKY	ALLUVIUM SLOPE ALLUV COLLUVIUM GLACIAL TILL GLAC. LAKE SED OUTWASH RESIDUUM
NONE NO SLOW LC RAPID ME HI	EDIUM MOIST GH VERY WET		GRAD STRUC WEAK	RATE MEDIUN	TYPE INE PLATY GRANULA CRUMB	PRISMATIC	% BOULDERS >12" % COBBLE	1/4" to 3"
	DARY TOPOGRAPHY SMOOTH WAVY IRREGULAR BROKEN	NOTES:		VERT	OANGE.		3" lo 12"	
DILATANCY P. NONE N. SLOW L. RAPID N.	PLASTICITY MOI IONPLASTIC DRY OW SLIG MEDIUM MOIS	STURE CONSISTE VERY SOFT H. MOIST STHAM HARD	7	FEW COMMON MANY ABUNDANCE FEW	FINE FAIR MINIMUM DIS COARSE PRO SIZE TY FINE FAIR MINIMUM DIS	TINCT PED SURFAI IN-MATRIX DMINENT ROOT HAIR PE LOCATION PED SURFAI IN-MATRIX IN-MATRIX IN-MATRIX IN-MATRIX	STRATIFIED LAMINATED FISSURED SLICKEN-SIDEU BLOCKY CE PRISMATIC LENSED HOMOGENEOL 8 BOULDERS >12"	BEDROCK <u>% GRAVEL</u>
BOU	NDARY SS TOPOGRAPH' SMOOTH WAYY IRREGULAR BROKEN		STRO	NG COAR VERY	SE ANGULA COARSE	R SINGLE GRAIN	% COBBLE 3" to 12"	
DEPTH US	SOIL TYP a/OR USE		MOTTLE		FINE MINIMUM DI COARSE PE E SIZE FINE MINIMUM DI	PE LOCATIC INT PED SURF. STINCT IN-MATRIX ROMINENT PED SURF. STINCT PED SURF. ROMINENT ROOT HAIR ROMINENT ROOT HAIR ROMINENT ROOT HAIR ROMINENT ROOT HAIR	ACE STRATIFIED LAMINATED FISSURED SLICKEN-SIDE BLOCKY ACE PRISMATIC LENSED	ALLUVIUM SLOPE ALLUV COLLUVIUM ED GLACIAL TILL, GLAC. LAKE S OUTWASH RESIDUUM
NONE SLOW RAPID	NONPLASTIC DRY LOW SLIG MEDIUM MOI	GH, MOIST SOFT FIRM IST HARD RY MOIST VERY HARI	GRA STR WEA MOD	AK FINE DERATE MED IONG COA	FINE PLATY GRANU UM CRUME	LAR COLUMNAR PRISMATIC	>12"	
Name of the Control o	SS TOPOGRAPH SMOOTH WAVY IRREGULAR BROKEN	NOTES:					3" to 12"	<#200
DEPTH U	SCS SOIL TYP &/OR US		MOTTLE COLORS		FINE FINE FOR THE PROPERTY OF	YPE LOCATI AINT PED SUR DISTINCT IN-MATRI PROMINENT ROOT HA FAINT PED SUR DISTINCT IN-MATRI	FACE STRATIFIED X LAMINATED III FISSURED SLICKEN-SIE BLOCKY FACE PRISMATIC X LENSED	ALLUVIUM SLOPE ALLU COLLUVIUM
DILATANCY NONE SLOW RAPID	NONPLASTIC DE LOW SL MEDIUM MC HIGH VE	OISTURE CONSIS VERY SOF IGH. MOIST FIRM DIST HARD VERY MOIST ET	GF STI WE RD MO	MANY STRUCTURELESS VER EAK FIN DDERNATE MET HONG CO.	COARSE FOR TYPE TYPE TYPE TYPE TYPE TYPE TYPE	PROMINENT ROOT HATELED TO SUBANGULA COLUMNAR IB PRISMATIC	MR HOMOGENE % BOULDER >12"	EOUS LOESS BEDROCK S % GRAVEL
	UNDARY TOPOGRAP SMOOTH WAVY IRREGULAR BROKEN	HY NOTES:			211		3" lo 12"	<#200

	Oakridge ENGINEERING OWNER: Jeff Saver	TEST PIT / BORING NUMBER: 27
	Chippewa Falls, WI 54729 PROJECT: HOS Facility	DATE: 3/80/2019
	Www.OakridgeEng.com	ELEVATION: 980.7
	SITE LOCATION: ADDRESS	LOGGED BY: D. MIHE
	@ 12884 State Huy 48 Grantsburg NORTHING 126014, 8 EASTING 162649, 5	ANY KARST FEATURES WITHIN 1000 FEET: YES NO
	NORTHING 126014, 8 EASTING 162649, 5	LANDSCAPE POSITION: Footslope
	COUNTY/STATE: BURNEH Cty Wi	LANDSCAPE GEOMETRY: Uniform
	DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE FINE COMMON MINIMU	TYPE LOCATION STRUCTURE GEOLOGY FAINT PED SURFACE STRATIFIED ALLUVIUM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV.
	MANY COARSI	E PROMINENT ROOT HAIR FISSURED COLLUVIUM SLICKEN-SIDED GLACIAL TILL
	FEW FINE COMMON MINIMU MANY COARS	FAINT PED SURFACE PRISMATIC OUTWASH M DISTINCT IN-MATRIX LENSED RESIDURIM
	DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT CRADE SIZE	BEDROCK
	RAPID SLIGH MOIST FIRM STRUCTURELESS VERY FINE MEDIUM MOIST HARD WEAK FINE	PLATY SUBANGULAR GRANULAR COLUMNAR
	VERT WOOD VEHT HARD WOODLINGE WEDIOM	CRUMB PRISMATIC ANGULAR SINGLE GRAIN % COBBLE % FINES
	ABRUPT SMOOTH NOTES: This lever was frozen	en, notes 3" 10 12" 0 < 4200 70-80
	CLEAR WAYY GRADUAL IRREGULAR DIFFUSE BROKEN THE OFFICE SME	emple brought by to
	DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE COLORS FEW FINE	TYPE LOCATION STRUCTURE GEOLOGY FAINT PED SURFACE STRATIFIED ALLUVIUM
	16"/ SITT 10YR OF COMMON MINIMUL COARS	JM DISTINCT IN-MATRIX LAMINATED SLOPE ALLUV SE PROMINENT ROOT HAIR FISSURED COLLUVIUM
	107.B. SIZE FEW FINE	TYPE LOCATION BLOCKY GLACIAL TILL PED SURFACE PRISMATIC OUTWASH OUTWASH
	DILATANCY PLASTICITY MOISTURE CONSISTENCY STRUCTURE	JM DISTINCT IN-MATRIX LENSED RESIDUUM DE PROMINENT ROOT HAIR HOMOGENEOUS (LOESS) BEDROCK
Q** ;	STOW SLIGH, MOIST FIRM STRUCTURELESS VERY FINE	TYPE PLATY SUBANGULAR % BOULDERS % GRAVEL
3	MEDIUM MOIST HARD WEAK FINE HIGH VERY MOIST VERY HARD MODERATE MEDIUM WET STRONG COARSE	GRANULAR COLUMNAR >12" 1/4" to 3" 0 1/4" to
	BOUNDARY DISTINCTIVENESS TOPOGRAPHY NOTES: /S SIMILE 42 SECTION	MITTED TO THE STATE OF THE STAT
N	ABRUPT SMOOTH NOTES. CLEAR WAVY 53 36 IRREGULAR IRREGULAR	7094 117
	DEPTH USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE	TYPE LOCATION STRUCTURE GEOLOGY
	&OR USDA COLORS % COLORS COMMON MINIM	FAINT PED SURFACE STRATIFIED ALLUVIUM UN DISTINCE INFMATRIX LAMINATED SLOPE ALLUV.
	ABUNDANCE SIZE	TYPE LOCATION SLICKEN-SIDED GLACIAL TICL BLOCKY GLAC LAKE SED
	FEW FINE COMMON MINIM MANY COAR MANY COAR	
	DILATANCY PLASTICITY MOISTURE CONSISTENCY VERY SOFT SIZE SUM STRUCTURE SIZE SUM	TYPE % BOULDERS % GRAVEI
	RAPID MEDIUM MOIST FIRM STRUCTURELESS VERY FINE MOIST WEAK FINE MEDIUM	PLATY SUBANGULAR GRANULAR COLUMNAR >12- 1/4* to 3*
	BOUNDARY WET STRONG COARSE VERY COARSE	ANGULAR SINGLE GRAIN % COBBLE % FINES
	DISTINCTIVENESS TOPOGRAPHY NOTES: /S SIMILE / R. The ABRUPT CLEAR WAYY 10 SB 36 block me	Ch leyer 3" to 12" <#200 50-60
	GRADUAL IRREGULAR DIFFUSE BROKEN UPDET Lalf of the	eyer are only in the
	OVERALL NOTES:	1 - 1 - 1 -
	Observed meters to see to	ches plus.
	below the frazen meterial was	slightly moist to moist
	by touch and visual inspection	. No Meteral was
	wet or seturited, No seeps	observed.
	This Backhoe is very similar to	5826
	SAMPLES TAKEN: (ES) NO WATER OBSERVED: YES	NO BEDROCK: YES (NO
		DEPTH OF BEDROCK
		AL D. A.
	SAMPLE ID: DEP	TH: 100 500 (Octo
	SAMPLE ID: TYPE: DEP File: NOMERIOGE PRESSURCEST Forbreak Solid OKE SOIL LOG-2 REV 11-21-3016 days - Seved: Duane 1/27/2018 12:34 PM - Printed: Duane 3/7/2019 3/3 PM	TH: SHEET SIDE 1 OF 2 OKE SOIL LOG-2 REV.3 11-27-2018

Oakridge ENGINEERING	OWNER: TEST PIT / BORING NUMBER: DATE: SHEET 2 SCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLOG
DEPTH U	&/OR USDA COLORS % COLORS COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE AL
/ -	SLICKENSIDED
/ -	FEW FINE FAINT PED SURFACE PRISMATIC OUTWASS
DILATANCY	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDUUT MANY COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOESS
NONE	NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE % BOULDERS % GRAV
RAPID	LOW SLIGH MOIST FIRM STRUCTURELESS VERY FINE PLATY SUBMIGLIAR COLUMNAR >12" 1/4" to 3" HIGH VERY MOIST HARD WEAK FINE GRANULAR COLUMNAR >12" 1/4" to 3" STRONG COARSE ANGULAR SINGLE GRAIN CORRER OF CORRE COMMON CORRER OF COARSE ANGULAR SINGLE GRAIN CORRER OF COARSE COA
DISTINCTIVEN	SS TOPOGRAPHY SMOOTH SMOOTH STOPOGRAPHY SMOOTH SMOO
CLEAR GRADUAL	WAYY IRREGULAR
DEPTH	BROKEN JSCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLO REPORT OF THE PROPERTY OF
DEPTH	8/OR USDA COLORS % COLORS FEW FINE FAINT PED SURFACE STRATIFIED ALLUVIU COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPE A
	MANY COARSE PROMINENT ROOT HAIR FISSURED COLLUVI
	ABUNDANCE SIZE TYPE LOCATION BLOCKY GLACILY
	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESIDU
DII ATANCY	PLASTICITY MOISTURE NONPLASTIC DRY VERY SOFT SOFT SIGH, MOIST FIRM FIRM FIRM FIRM FIRM FIRM FIRM FIRM
NONE	NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE SUBANGULAR % BOULDERS % GRAY STRUCTURELESS VERY FINE PLATY SUBANGULAR
RAPID	LOW SLIGH MOIST FIRM STRUCTURELESS VERY FINE PLATY SUBANGULAR MEDIUM MOIST HARD WEAK FINE GRANULAR COLUMNAR >12" 1/4" to 3".
	VERY MOIST VERY HARD MODERATE MEDICINE COARSE ANCILLAR SINCE E GRAIN
Bo	WET STRONG COARSE WET WET VERY COARSE WET VERY COARSE WET STRONG COA
	IESS TOPOGRAPHY NOTES: 3" to 12" <#200
ABRUPT CLEAR	SMOOTH WAVY
GRADUAL	IRREGULAR
DEPTH	USCS SOIL TYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEOLE
DEPTH	8/OR LISDA COLORS % COLORS FEW FINE FAINT PED SURFACE STRATIFIED ALLUVI
	COMMON MINIMUM DISTINCT IN-MARTINE CAVINATED SLOPE MANY COARSE PROMINENT ROOTHAIR FISSURED COLLU-
$/$ $ $	SLICKEN-SIDED GLACIA ABUNDANCE SIZE TYPE LOCATION BLOCKY GLAC,
$\parallel \parallel \parallel \parallel \parallel$	FEW FINE FAINT PED SURFACE PRISMATIC OUTWA
	FEW FINE FAINT PED SURFACE PRISMATIC OUTW. COMMON MINIMUM DISTINCT IN-MATRIX LENSED ROMANY COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOESS
DILATANC'	PLASTICITY MOISTURE CONSISTENCY VERY SOFT SIGH, MOIST HARD HARD WEAK FINE GRANULAR COLUMNAR HIGH VERY MOIST WET VERY HARD WET VERY HARD WET VERY HARD WET VERY FINE STRUCTURE STRUCTURE STRUCTURE STRUCTURE STRUCTURE SIZE TYPE SUBANGULAR COLUMNAR PRISMATIC COLUMNAR ANGULAR SINGLE GRAIN COBBLE WEAK FINE GRANULAR COLUMNAR PRISMATIC STRONG COARSE VERY COARSE VERY COARSE VERY COARSE VERY COARSE
SLOW	NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE % BOULDERS % GRACE LOW SLIGH. MOIST FIRM STRUCTURELESS VERY FINE PLATY SUBANGULAR
RAPID	MEDIUM MOIST HARD WEAK FINE GRANULAR COLUMNAR >12" 1/4" to 3
	HIGH VERY MOIST VERY HARD MODERATE MEDIUM CHUMB PHISMATIC WET STRONG COARSE ANGULAR SINGLE GRAIN <u>% COBBLE</u> % FIN
DISTINCTIVE	NESS TOPOGRAPHY
CLEAR	WAVY
GRADUAL DIFFUSE	IRREGULAR BROKEN
DEPTH	USCS SOILTYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEO
	&/OR USDA COLORS % COLORS FEW FINE FAINT PED SURFACE STRATIFIED ALLUV COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLOPI
11 /	MANY COARSE PROMINENT ROOT HAIR FISSURED COLLI SLICKEN-SIDED GLAC
	ABUNDANCE SIZE TYPE LOCATION BLOCKY GLAC
	FEW FINE FAINT PED SURFACE PRISMATIC OUTV COMMON MINIMUM DISTINCT IN-MATRIX LENSED RESID
DIL ATALK	MANY COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOES
NONE	Y PLASTICITY MOISTURE CONSISTENCY STRUCTURE NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE % BOULDERS % GRADE SIZE TYPE
SLOW RAPID	LOW SLIGH MOIST SOFT STRUCTURELESS VERY FINE PLATY SUBANGULAR
HAFID	MICHUM MOIST HARD WEAK FINE GHANITIAH CULUMINAH >12"
1	VERT HARD STRONG COARSE ANGULAR SINGLE GRAIN % COBBLE % EI
1011-10-4-11	BOUNDARY VERY COARSE
DISTINCTIV	ENESS TOPOGRAPHY NOTES:
CLEAR	WAVY
GRADUAL DIFFUSE	IRREGULAR Broken
DEPTH	USCS SOILTYPE MUNCELL MOTTLES ABUNDANCE SIZE TYPE LOCATION STRUCTURE GEO
021111	8/OR USDA COLORS % COLORS FEW FINE FAINT PED SURFACE STRATIFIED ALLU COMMON MINIMUM DISTINCT IN-MATRIX LAMINATED SLO
11 /	MANY COARSE PROMINENT ROOT HAIR FISSURED COL
	ABUNDANCE SIZE TYPE LOCATION BLOCKY GLA FEW FINE FAINT PED SURFACE PRISMATIC OUT
	FEW FINE FAINT PED SURFACE PRISMATIC OUT
	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RES MANY COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOE
DILATAN	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RES CY PLASTICITY MOISTURE CONSISTENCY STRUCTURE COMMON MINIMUM DISTINCT IN-MATRIX LENSED RES HOMOGENEOUS LOE BED
NONE SLOW	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RES CY PLASTICITY MOISTURE CONSISTENCY NONPLASTIC DRY VERY SOFT GRADE SIZE TYPE OW SLICH MOIST SOFT GRADE SIZE TYPE WERNSUL FOR SOFT SOFT SOFT SOFT SOFT SOFT SOFT SOFT
NONE	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RES HOMOGENEOUS LOE COARSE PROMINENT ROOT HAIR ROOT HAI
NONE SLOW	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RES HOMOGENEOUS LOE COARSE PROMINENT ROOT HAIR HOMOGENEOUS LOE BED HOMOGENEOUS LOE BE
NONE SLOW	COMMON MINIMUM DISTINCT IN-MATRIX LENSED RES HOMOGENEOUS LOE COARSE PROMINENT ROOT HAIR ROOT HAI
NONE SLOW RAPID	COMMON MINIMUM DISTINCT IN-MATRIX ROOT HAIR RO
NONE SLOW RAPID DISTINCTI ABRUPT	CY PLASTICITY MOISTURE CONSISTENCY VERY SOFT STRUCTURELESS VERY FINE PLATY SUBANGULAR MODERATE STRUCTURELESS VERY FINE GRANULAR COLUMNAR HIGH VERY MOIST VERY HARD WET STRONG COARSE VERY COARSE BOUNDARY VENESS TOPOGRAPHY NOTES: COMMON MINIMUM DISTINCT IN-MATRIX ROOT HAIR RO
NONE SLOW RAPID	COMMON MINIMUM DISTINCT IN-MATRIX COARSE PROMINENT ROOT HAIR ROOT

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
			Grain Size Analysis	At	terberg Li	mits	Sampled Water	Proctor Max. Dry	r Density Optimum	Coefficient	
Date Sampled	Sample Number	Sample Location	%Fines %Clay <#200 <.005	Liquid	Plastic Limit	Plasticity Index		•	Water (%)	Permeability (cm/sec)	U.S.C.S
•											
3/21/19	TP-7 S-1	Test Pit 7	55.2			NP	3.9				8.61
3/21/19	TP-8 S-2	Test Pit 8	45.6	26.9	17.5	9.4	3. <i>9</i> 14.6				ML
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 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.			D69	913		D4318		D2216				D2487
				ı Size Iysis	Att	erberg Lii	mits	Sampled Water	Proctor Max. Dry	r Density Optimum	Coefficient	
Date Sampled	Sample Number	-	%Fines		Liquid Limit	Plastic Limit	Plasticity Index		-	Water (%)	Permeability (cm/sec)	U.S.C.S.
Minimum:			40.2		23.8	14.2	7.5	0.8				
Maximum:			63.9		32.0	20.8	15.8	14.6				
Average: Project Req	uirements:		47.9		26.9	17.5	9.4	9.3				

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

Date Tested:	December 27-31 2019
Test Performed By:	AES
4 Hrs. Turn Around:	NO

24 Hrs. Turn Around:	NO		
Washed Gradation:	YES	Dry Weight of Soil (gms):	578.8

Sieve	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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: Polit & Rouse	Remarks:	
DATE REVIEWED: ///6/26		

U.S. Standard Sieve Sizes #16 #10 #40 #50 #200 100 100 90 90 80 80 **S**hown 20 Shown Size 60 60 Size Than 50 50 Percent 1 30 30 20 20 10 10 -0.02 0.002 100 10 1 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 0.6% 1.3% 8.6% 34.3% 55.2%

· · · · · · · · · · · · · · · · · · ·	Soil C	assification: SANDY SILT, ligh	yellowish brown (ML)				· · · · · · · · · · · · · · · · · · ·		
	Location	on Sampled: Test Pit 7		Elevation or Depth: 12'-19' Date Sa			npled: 3/21/19		
	Sam	ple Number: TP-7 S-1		Sampled Moistu	Report No.				
	San	ple Source:		CQM, INC.					
Atterberg Limits: L	.L=	PL=	PI= NP	Client:	Oakridge Engineering				
	Munsell	Color Code: 10YR 6/4			Suidae Health Suida-01-19		Page:	2	
Date Received: 12/26/19				Prepared by:	Robert J. Peeters		Date:		
	(Coefficients: Cc= Cu	=	Checked by:	Polest & Row	1.0	<u> </u>	1/15/2	

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

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	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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:	Robert & Rouse	Remarks:
DATE REVIEWED:	1/16/20	

U.S. Standard Sieve Sizes 1" 3/4" 1/2" 3/8" #16 #40 #50 #10 #200 100 #100 100 90 90 80 80 Size Shown Shown 60 Than Size Than 50 Percent Finer Percent 1 30 30 20 20 10 10 0.05 0.005 0.02 0.002 0 100 10 1 0.1 0.01 0.001 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 litt	le gravel, light yellowish browi	n (SC)			
	Location Sampled: Test Pit 8				Elevation or Depth: 12'-13' Date Sampled:			
	Sample Number: TP-8 S-2			Sampled Moisture Content (%): 14.6 Report N			d: 3/21/19 b.: TP8 S-2	
	Sa	imple Source:			CQM, INC.	· · · · · · · · · · · · · · · · · · ·		
Atterberg Limits:	LL= 26.9	PL= 17.5	PI= 9.4	Client	Oakridge Engineering			
	Munsell Color Code: 10YR 6/4				Suidae Health Suida-01-19		Page:	2
	Date Received: 12/26/19				Robert J. Peeters		Date:	1/15/20
		Coefficients: Cc=	Cu=	Checked by:	Robert R Rouse		Date:	

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

Date Tested:	December 27-31, 2019
Test Performed By:	

24 Hrs. Turn Around:	NO		
Washed Gradation:	YES	Dry Weight of Soil (gms):	601.6

Sieve	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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: Rolest Roses	Remarks:	
DATE REVIEWED: 1/16/20		

U.S. Standard Sieve Sizes 1" 3/4" 1/2" 3/8" #30 #16 #40 #50 #10 #200 100 100 90 80 80 Shown 20 Size Shown Size 60 60 L Fan Than Percent Finer 50 Percent Finer 30 30 20 20 10 -0.02 -0.0b2 0 100 10 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 1.8% 2.3% 10.1% 38.4% 47.4%

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

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

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	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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 Rossa	Remarks:
DATE REVIEWED:	11.1	

U.S. Standard Sieve Sizes 1/2" 3/8" #10 #40 #50 #200 100 100 90 80 80 Size Shown Than Size Shown 60 Than 50 50 Percent Finer Percent 1 30 30 20 20 10 10 0.05 0.005 0.02 0.0b2 100 10 1 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 3.8% 2.3% 10.1% 38.5% 45.3%

	Loca	ation Sampled: Test Pit 13		Elevation or Depth: 15'-16' Date Sa			Sampled: 3/22/19		
	Sa	mple Number: TP-13 S-1		Sampled Moistu	re Content (%): 1.0	Report No.: TP13 S1			
,	S	ample Source:			CQM, INC.		<u> </u>		
Atterberg Limits:	LL= 25.1	PL= 15.8	PI= 9.3	Client	Oakridge Engineering				
	Munse	ell Color Code: 10YR 6/4			Suidae Health Suida-01-19		Page:	2	
		Date Received: 12/26/19		Prepared by:	Robert J. Peeters		Date:	1/15/2	
		Coefficients: Cc= C	u=	Checked by:	Robert R. Rouse	***************************************		1/161	

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENERAL DATA:	G	E	N	E	R	A	L	D	Α	T	A	:
---------------	---	---	---	---	---	---	---	---	---	---	---	---

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	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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		

	Remarks:	Robert R Pouse	REVIEWED BY:
DATE REVIEWED: 1/16/20		1/16/20	DATE REVIEWED:

U.S. Standard Sieve Sizes 1" 3/4" 1/2" 3/8" #16 #10 #40 #50 #200 100 100 90 90 80 80 Than Size Shown 70 Shown # Size Than ! Percent Finer Percent F 30 30 20 20 10 10 0.005 0.02 0.0b2 100 10 1 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 6.9% 2.6% 9.5% 37.9% 43.1%

	Loca	ation Sampled: Test Pit 15		Elev	Date Sampled:	e Sampled: 3/21/19			
	Sample Number: TP-15 S-2 Sample Source:				re Content (%): 0.8	Report No.:	Report No.: TP15 S-2		
······································					CQM, INC.				
Atterberg Limits: LL= 23.8 PL= 15.1 Pl= 8.7 Client: Oakridge Engineering					Oakridge Engineering				
	Munsell Color Code: 10YR 6/4 Date Received: 12/26/19				Suidae Health Suida-01-19	······································	Page:	2	
				Prepared by:	Robert J. Peeters		Date:	1/15/	
		Coefficients: Cc=	Cu=	Checked by:	Robert a Row		 	1/16/	

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GEN	ERAL	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
4 Hrs. Turn Around:	NO

YES

Washed Gradation:

Dry Weight of Soil (gms):

528.7

Sieve	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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: Refer of Rouse	Remarks:	
DATE REVIEWED: 1/16/20		

U.S. Standard Sieve Sizes 1/2" 3/8" #16 #10 #40 #50 #200 100 100 90 80 80 Than Size Shown Than Size Shown Percent Finer 50 **Percent Finer** 30 30 20 20 10 10 -0:02 0.002 0 100 10 1 0.1 0.01 0.001 Grave! 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, lig	ht yellowish brown (SC)				
*****	Location Sampled: Test Pit 16				Elevation or Depth: 11'-14' Date Sample		ed: 3/22/19	
	Sample Number: TP-16 S-2					Report No.:	A	
	S	ample Source:			CQM, INC.			
Atterberg Limits:	LL= 26.7	PL= 15.9	PI= 10.8	Client: Oakridge Engineering				
	Munse	ell Color Code: 10YR 6/4			Suidae Health Suida-01-19		Page:	2
		Date Received: 12/26/19		Prepared by:	Robert J. Peeters		Date:	1/15/20
		Coefficients: Cc= C	u=	Checked by:	Robert R Row	208 -		

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	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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: Rolet & Rouse	Remarks:
DATE REVIEWED: 1/16/20	

U.S. Standard Sieve Sizes 1.5" 1" 3/4" #30 1/2" 3/8" #16 #40 #50 #200 100 -100 90 90 80 80 Nown 70 Than Size Shown Size 60 60 Than 50 50 Percent Finer Percent Finer 30 30 20 20 10 0.005 0.02 0.002 100 10 1 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 3.3% 1.4% 9.5% 41.2% 44.6%

Location Sampled: Test Pit 17				Elevation or Depth: 8'-10' Date Sampled: 3/22/19					
Sample Number: TP-17 S-1			Sampled Moistu	Report No.:	Report No.: TP17 S1				
	Sa	ample Source:		CQM, INC.					
Atterberg Limits:	LL= 29.8	PL= 16.1	PI= 13.7	Client: Oakridge Engineering					
	Munse	ll Color Code: 10YR 6/4			Suidae Health Suida-01-19		Page:	2	
	D	ate Received: 12/26/19		Prepared by:	: Robert J. Peeters		Date:	1/15/2	
		Coefficients: Cc=	Cu=	Checked by:	Robert R Rouse		Date:	7	

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GENE	RAL	DAT	Ά:
------	-----	-----	----

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	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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	Remarks:	
DATE REVIEWED: 1/16/20		

U.S. Standard Sieve Sizes 1" 3/4" #16 #10 #40 #50 #200 100 100 90 90 80 80 Than Size Shown 20 20 70 Percent Finer Than Size Shown 60 30 30 20 20 10 10 0.005 0.02 0.0b2 100 10 1 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 1.7% 2.3% 9.8% 39.7% 46.5% Soil Classification, OLAVEY CAND, 6

Location Sampled: Test Pit 18 Sample Number: TP-18 S-1 Sample Source:			Elevation or Depth: 6'-7' Sampled Moisture Content (%): 1.3		Date Sampled: 3/22/19			
					Report No.:	Report No.: TP18 S-1		
			CQM, INC.					
Atterberg Limits:	LL= 32.0	PL= 16.2	Pl= 15.8	Client:	Oakridge Engineering		***************************************	
Munsell Color Code: 10YR 6/4			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:	alest R Roc		Date:	,

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GEN	1ER	AL	DA	TA:

Client	Oakridge Engineering
Cherit.	Oakinge Lingineering
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:	

24 Hrs. Turn Around: NO
Washed Gradation: YES Dry Weight of Soil (gms): 632.8

Sieve	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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:	Potest & Rouse	Remarks:	
DATE REVIEWED:	Potest & Rouse		

U.S. Standard Sieve Sizes 1/2" 3/8" #16 #10 #40 #50 #200 100 100 90 90 80 80 70 Shown Than Size Shown Size 60 60 Than 50 50 Percent Finer Percent 6 # 30 30 20 20 0.5 0.3 10 5 10 0.05 0.02 0.0b2 100 10 1 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 10.3% 2.4% 9.6% 37.5% 40.2%

GRAIN SIZE DISTRIBUTION CURVE

	Loca	ation Sampled: Test Pit 21		Elevation or Depth: 15'-18' Date Sar Sampled Moisture Content (%): 0.9 Repo			sampled: 3/22/19	
	Sa	ample Number: TP-21 S-1					rt No.: TP21 S-1	
	S	ample Source:			CQM, INC.	·		****
Atterberg Limits:	LL= 24.9	PL= 16.9	PI= 8.0	Client:	Oakridge Engineering			
**************************************	Munse	ell Color Code: 10YR 6/4			Suidae Health Suida-01-19		Page:	2
Date Received: 12/26/19				Prepared by:	Robert J. Peeters	···	Date:	
		Coefficients: Cc=	u=	Checked by:	Robert a Roces		Date:	

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

G	F	ħ	ı	F		Δ	1	n	Λ	T	٨	
v	ᆫ	•	ŧ		ı١		_	v	m		m	

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	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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		

	Robert R Rouse	Domarko	
REVIEWED BY:	Colet Crouse	Remarks:	
DATE REVIEWED:	1/16/20		

U.S. Standard Sieve Sizes 3/4" 1/2" 3/8" #16 #40 #50 #200 100 100 90 90 80 80 Shown 20 Than Size Shown Than Size 9 60 Percent Finer 1 50 **Percent Finer** 30 30 20 20 10 10 0.05 0.02 0.002 100 10 1 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 10.0% 1.8% 1.2% 5.3% 17.8% 63.9%

GRAIN SIZE DISTRIBUTION CURVE

	Soil	Classification: SANDY LEAN C	LAY, a little gravel, light yellow	vish brown (CL)				
Location Sampled: Test Pit 23				Elevation or Depth: 8'-10' Date Sampled: 3/22/19			3/22/19	
Sample Number: TP-23 S-1				Sampled Moisture Content (%): 0.8 Report No.: TP23 S-1				
	S	ample Source:			CQM, INC.	· · · · · · · · · · · · · · · · · · ·		
Atterberg Limits:	LL= 30.4	PL= 16.4	PI= 14.0	Client: Oakridge Engineering				
	Munsell Color Code: 10YR 6/4				Suidae Health Suida-01-19		Page:	2
		ate Received: 12/26/19		Prepared by:	Robert J. Peeters		Date:	1/15/20
		Coefficients: Cc= C	:u=	Checked by:	Robert R Bou		Date:	

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GEI	NER	AL D	ATA:

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

1			
24 Hrs. Turn Around:	NO		
Washed Gradation:	YES	Dry Weight of Soil (gms):	640.2

Sieve	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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: Lohat Colors	Remarks:	
DATE REVIEWED: 1/16/20		

U.S. Standard Sieve Sizes 1" 3/4" #16 #40 #50 #10 #200 100 100 90 80 80 Shown 20 Shown Size 9 Size Than 50 Than (Percent Finer Percent Finer 30 30 20 20 10 10 0.005 0.02 0.0b2 100 10 1 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 4.6% 2.4% 10.0% 38.4% 44.6%

GRAIN SIZE DISTRIBUTION CURVE

	Soil	Classification: CLAYEY SAND,	fine to medium grained, a little	e gravel, light yellowish brow	n (SC)			
Location Sampled: Test Pit 24				Elevation or Depth: 15'-16' Date Sampled:			3/22/19	
	Sa	mple Number: TP-24 S-1	Sampled Moisture Content (%): 1.2 Report N			o.: TP24 S-1		
	Sa	ample Source:			CQM, INC.			
Atterberg Limits:	LL= 28.3	PL= 20.8	Pl= 7.5	Client: Oakridge Engineering				
	Munsell Color Code: 10YR 6/4				Suidae Health Suida-01-19	***	Page:	2
	D	ate Received: 12/26/19		Prepared by	: Robert J. Peeters	***************************************	Date:	1/15/20
Coefficients: Cc= Cu=				Checked by	Robert R Roccas	>	Date:	

CQM, INC.

SIEVE ANALYSIS OF COARSE TO FINE AGGREGATES (ASTM D6913)

GEN	ERA	L D/	ATA:

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	Weight	%	%	Project Specification	Source of Specification
Size	Retained	Retained	Passing	% Passing by Weight	
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: about & Rouse	. Remarks:
DATE REVIEWED: 1/16/20	

GRAIN SIZE DISTRIBUTION CURVE U.S. Standard Sieve Sizes #16 #30 #10 #40 #50 #200 100 100 90 90 -80 80 Nown Shown Percent Finer Than Size Shown Size 60 Than 50 50 Percent P 30 30 20 20 10 10 0.005 0.02 0.002 100 10 0.1 0.01 0.001 Gravel Sand Coarse Fine Coarse Medium Fine Silt - Clay 2.5% 2.6% 8.7% 32.2% 54.0% Soil Classification: CANDV LEAR OLAY Bally and Control

Location Sampled: Test Pit 27			Elevation or Depth: 12'-16' Sampled Moisture Content (%): 1.1		Date Sampled: 3/22/19			
Sample Number: TP-27 S-1 Sample Source:		Report No.: TP27 S-1						
		CQM, INC.						
Atterberg Limits:	LL= 27.4	PL= 14.2	PI= 13.2	Client:	Oakridge Engineering			
Munsell Color Code: 10YR 6/4			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			1/16/2



VRCS

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



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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Contents

Preface	2
Soil Map	
Soil Map	
Legend	7
Map Unit Legend	8
Map Unit Descriptions	8
Burnett County, Wisconsin	10
152A—Alstad loam, 0 to 3 percent slopes	10
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.



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

ဖ

Blowout

 \boxtimes

Borrow Pit

Ж

Clay Spot

 \Diamond

Closed Depression

Š

Gravel Pit

...

Gravelly Spot

Ø

Landfill

٨

Lava Flow

Marsh or swamp

_

Maion or owarn

Mine or Quarry

Miscellaneous Water

0

Perennial Water
Rock Outcrop

 \vee

Saline Spot

~

Sandy Spot

0 0

Severely Eroded Spot

Λ

Sinkhole

Ø.

Sodic Spot

Slide or Slip

8

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

Water Features

_

Streams and Canals

Transportation

ransp

Rails

~

Interstate Highways

__

US Routes



Major Roads



Local Roads

Background

Marie Control

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.

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

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

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

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