

APPENDIX P
ROOT ZONE INVESTIGATION DOCUMENTATION



State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 5/12/25	Location: T-01					
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene								
Latitude: 30.184036		Longitude: -92.622975		Datum: NAD83		Other Info:					
TREE SPECIES: Quercus nigra - Water Oak											
				Circumference: 45.5"		DBH: 14.5"					
Root Number	Total Length (Inches)	Distance to deepest point (Inches)	Depth BLS (Inches)	Random Distance (RD) (Inches)	Depth BLS (Inches)	Root Number	Total Length (Inches)	DDP (Inches)	Depth BLS (Inches)	RD (Inches)	Depth BLS (Inches)
1	89	67	4.5	89	4	10	50	43	2.5	28	1
1A	102	98	6.75	51	4.5	10A	59	59	3.5	39	1
2	56	41	5.5	31	4.5	11	43	30	3	25	4.5
3	91	79	6	43	3.5						
4	77	58	4.5	41	3.5						
5	48	33	9	23	9						
6	102	92	4	37	4						
6A	50	32	8	50	7.5						
7	36	27	11.5								
8	100	36	3.5	75	Surface						
8A	85	68	4	43	3						
9	91	37	12	59	3						
Illustration:						ROOT ZONE INTERPRETATION					
						Depth BLS (Inches)	Root Mass Abundance	Remarks			
						0-2	Abundant	Effective Root Zone			
						2-7	Many				
						7-12	Common				
						12-16	Sparse				
						16-28	Very Sparse to None				
Remarks: • Hand Auger from 0" to 28"											
SOIL PROFILE PROPERTIES											
Soil Type: Crowley silt loam											
Depth BLS (inches)	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value	
	Color (moist)	%	Color (moist)	%	Type	Loc					
0-6	10YR 4/3	100					Silt loam	A		0.75	
6-16	10YR 5/3	80	10YR 6/8	20	C	M	Silt loam	E		0.73	
16-28	10YR 4/2	60	10YR 5/8	40	C	M	Silty clay	Bt	Increase clay content	<0.70	
Additional Colors:											
Restrictive Layer(if observed):		Type:		Depth (inches):							

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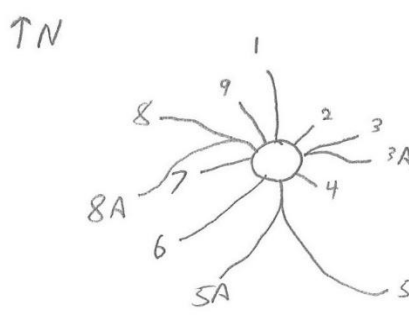




Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 5/12/25	Location: T-02
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene			
Latitude: 30.185094		Longitude: -92.622439		Datum: NAD83		Other Info:

TREE SPECIES: Quercus nigra - Water Oak					Circumference: 20.5"			DBH: 6.5"			
Root Number	Total Length	Distance to deepest point	Depth BLS	Random Distance (RD)	Depth BLS	Root Number	Total Length	DDP	Depth BLS	RD	Depth BLS
	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)		(Inches)	(Inches)	(Inches)	(Inches)	(Inches)
1	31	23	4								
2	14	14	7								
3	16	16	5								
3A	22	22	10								
4	9	9	5								
5	59	20	2	59	1						
5A	61	61	1	37	1						
6	51	23	7	51	1						
7	27	17	3.5								
8	45	40	3	16	3						
8A	34	24	3.5								
9	25	25	2.5								

Illustration: 	ROOT ZONE INTERPRETATION		
	Depth BLS (Inches)	Root Mass Abundance	Remarks
	0-2	Abundant	Effective Root Zone
	2-6	Many	
	6-10	Common	
	10-24	Sparse	
	24-30	Very Sparse to None	One root at 24"
Remarks: • Hand Auger from 0" to 30"			

SOIL PROFILE PROPERTIES													
Soil Type: Crowley silt loam													
Depth BLS (inches)	Matrix		Redox Features				Texture	Horizon	Remarks		N-Value		
	Color (moist)	%	Color (moist)	%	Type	Loc							
0-5	10YR 4/3	100					Silt loam	A			0.75		
5-16	10YR 5/3	80	10YR 6/8	20	C	M	Silt loam	E			0.73		
16-30	10YR 4/2	60	10YR 5/8	40	C	M	Silty clay	Bt	Increase clay content		<.70		
Additional Colors:													
Restrictive Layer(if observed):		Type:		Depth (inches):									

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 17	Township: 10S	Range: 02W	Date: 5/12/25	Location: T-03					
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene								
Latitude: 30.179509		Longitude: -92.617058		Datum: NAD83		Other Info:					
TREE SPECIES: Quercus phellos - Willow Oak											
				Circumference: 36"		DBH: 11.5"					
Root Number	Total Length (Inches)	Distance to deepest point (Inches)	Depth BLS (Inches)	Random Distance (RD) (Inches)	Depth BLS (Inches)	Root Number	Total Length (Inches)	DDP (Inches)	Depth BLS (Inches)	RD (Inches)	Depth BLS (Inches)
1	43	43	11	26	11	11	48	43	12.5	47	8
2	50	50	10.5	38	8.5	12	32	32	14	21	5.5
3	65	44	8	27	1						
4	48	24	1	14	1						
4A	44	44	4.5	25	1						
5	55	39	16	24	14						
6	31	31	1	23	1						
7	61	33	1.5	61	1						
8	52	45	16	18	4.5						
9	55	50	10	21	1						
10	44	30	8	16	1						
10A	38	32	14	12	4.5						
Illustration:						ROOT ZONE INTERPRETATION					
						Depth BLS (Inches)		Root Mass Abundance		Remarks	
						0-1		Abundant		Effective Root Zone	
						1-7		Many			
						7-13		Common			
						13-25		Sparse		Small root layer at 24"	
						25-32		Very Sparse to None			
Remarks:											
• Hand Auger from 0" to 32"											
SOIL PROFILE PROPERTIES											
Soil Type: Acadia silt loam											
Depth BLS (inches)		Matrix Color (moist)		%		Redox Features Color (moist)		%		Type Loc	
0-7		10YR 6/6		100		7.5YR 5/8		40		C M	
7-14		10YR 6/4		60		10YR 5/6		40		C M	
14-32		10YR 6/2		60							
Additional Colors:											
Restrictive Layer(if observed):		Type:		Depth (inches):							

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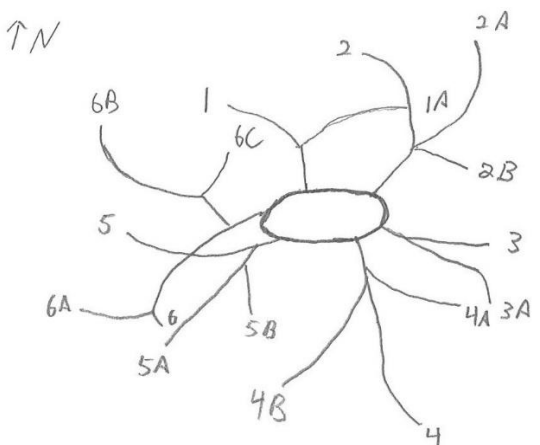


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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 17	Township: 10S	Range: 02W	Date: 5/13/25	Location: T-04					
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene								
Latitude: 30.179595		Longitude: -92.617385		Datum: NAD83		Other Info:					
TREE SPECIES: Quercus michauxii - Swamp Chestnut Oak											
				Circumference: 41.5"		DBH: 13.2"					
Root Number	Total Length (Inches)	Distance to deepest point (Inches)	Depth BLS (Inches)	Random Distance (RD) (Inches)	Depth BLS (Inches)	Root Number	Total Length (Inches)	DDP (Inches)	Depth BLS (Inches)	RD (Inches)	Depth BLS (Inches)
1	53	41	1.5	19	Surface	5B	35	36	1	30	1
1A	66	66	Surface	32	Surface	6	80	80	12	70	Surface
2	71	60	7	44	Surface	6A	116	116	1	90	Surface
2A	80	58	11	32	1	6B	96	54	6.5	90	1
2B	36	27	5.5	20	Surface	6C	56	56	1	50	Surface
3	51	36	2	26	Surface						
3A	80	75	2.5	42	1						
4	100	90	1	44	Surface						
4A	52	35	7	55	1						
4B	96	72	1	48	1						
5	80	73	1	56	Surface						
5A	64	48	3.5	36	Surface						
Illustration:						ROOT ZONE INTERPRETATION					
						Depth BLS (Inches)		Root Mass Abundance		Remarks	
						0-2		Abundant		Effective Root Zone	
						2-5		Many			
						5-14		Common			
						14-24		Sparse			
						24-28		Very Sparse			
Remarks:											
• Hand Auger from 0" to 28"											
SOIL PROFILE PROPERTIES											
Soil Type: Acadia silt loam											
Depth BLS (inches)		Matrix Color (moist)		%		Redox Features Color (moist)		%		Type Loc	
0-4		10YR 5/3		100							
4-16		10YR 6/2		60		10YR 6/6		40		C M	
16-28		10YR 6/1		60		10YR 6/8		40		C M	
Additional Colors:											
Restrictive Layer(if observed):		Type:		Depth (inches):							

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State: LA	Parish: Jefferson Davis	Section: 17	Township: 10S	Range: 02W	Date: 5/13/25	Location: T-05
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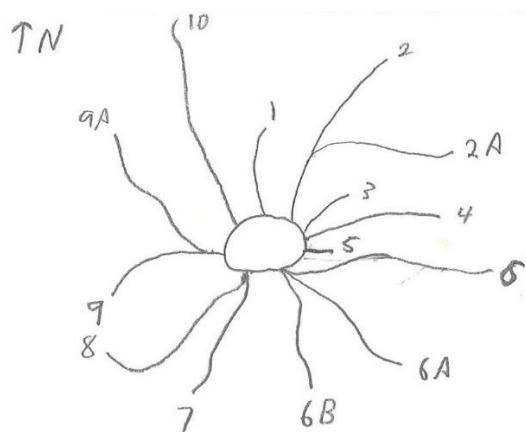
Project/Site: Castex (1009.A75)	Investigator(s): Matthew Greene
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Latitude: 30.183322	Longitude: -92.616044	Datum: NAD83	Other Info:
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TREE SPECIES: Ulmus americana - American Elm	Circumference: 38.5"	DBH: 12.3"
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Root Number	Total Length (Inches)	Distance to deepest point (Inches)	Depth BLS (Inches)	Random Distance (RD) (Inches)	Depth BLS (Inches)	Root Number	Total Length (Inches)	DDP (Inches)	Depth BLS (Inches)	RD (Inches)	Depth BLS (Inches)
1	56	45	1.5	32	0	9A	96	66	6.5	36	2
2	108	78	1	50	0	10	142	52	1.5	96	1
2A	84	85	0.5	48	0.5						
3	34	30	1	20	0.5						
4	40	36	3	20	1						
5	12	6	5.5								
6	87	87	0.5	46	Surface						
6A	62	62	6.5	42	1						
6B	90	90	1	40	0.5						
7	62	55	2.5	37	1						
8	88	44	2	68	1						
9	64	52	2.5	32	4						

Illustration:



ROOT ZONE INTERPRETATION

Depth BLS (Inches)	Root Mass Abundance	Remarks
0-2	Abundant	Effective Root Zone
2-4	Many	
4-9	Common	
9-13	Sparse	
13-17	Very Sparse to None	

Remarks:

- Soil spoon from 0" to 17"

SOIL PROFILE PROPERTIES

Soil Type: Mowata silt loam											
Depth BLS (inches)	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value	
	Color (moist)	%	Color (moist)	%	Type	Loc					
0-2.5	10YR 3/2	100					Muck	A1			0.85
2.5-7	10YR 4/3	100					Silt loam	A2			0.75
7-12	10YR 5/2	100					Silt loam	B1			0.73
12-17	10YR 5/2	90	10YR 5/8	10	C	M	Silty clay	B2t	Increase clay content		<.70

Additional Colors:

Restrictive Layer(if observed):	Type:	Depth (inches):	
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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 17	Township: 10S	Range: 02W	Date: 5/14/25	Location: T-06
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene			
Latitude: 30.182084		Longitude: -92.61398		Datum: NAD83		Other Info:

TREE SPECIES: Liquidambar styraciflua - Sweet-Gum					Circumference: 34"			DBH: 10.8"			
Root Number	Total Length	Distance to deepest point	Depth BLS	Random Distance (RD)	Depth BLS	Root Number	Total Length	DDP	Depth BLS	RD	Depth BLS
	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)		(Inches)	(Inches)	(Inches)	(Inches)	(Inches)
1	53	20	5	45	5	11	53	53	3	27	3
2	80	30	6	55	2.5	11A	58	35	6	58	5
3	80	30	5	55	Surface						
4	36	36	2.5								
5	80	38	3	62	1						
5A	78	46	7.5	78	1						
6	90	80	1	65	1						
7	30	30	4								
8	56	52	2	27	1						
9	72	38	4	22	1.5						
10	52	48	1	33	1						
10A	68	30	2	45	1						

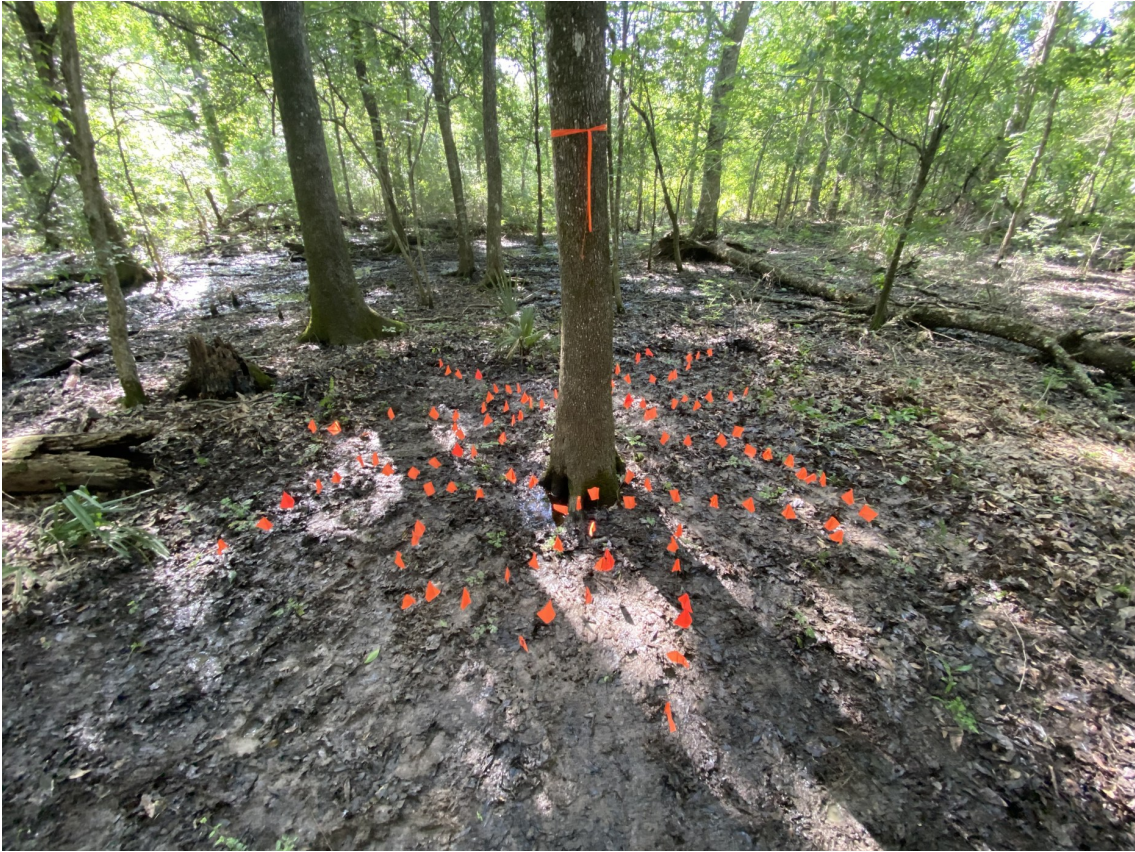
Illustration: 	ROOT ZONE INTERPRETATION		
	Depth BLS (Inches)	Root Mass Abundance	Remarks
	0-2	Abundant	Effective Root Zone
	2-4	Many	
	4-8	Common	
	8-12	Sparse	
	12-24	Very Sparse to None	
Remarks: • Hand Auger from 0" to 24"			

SOIL PROFILE PROPERTIES											
Soil Type: Mowata silt loam											
Depth BLS (inches)	Matrix		Redox Features				Texture	Horizon	Remarks		N-Value
	Color (moist)	%	Color (moist)	%	Type	Loc					
0-1	10YR 3/2	100					Muck	A1			0.85
1-5	10YR 5/2	100					Silt loam	A2			0.73
5-24	10YR 5/3	90	10YR 5/8	10	C	M	Silty clay	Bt	Increase clay content		<.70
Additional Colors:											
Restrictive Layer(if observed):		Type:		Depth (inches):							

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State: LA	Parish: Jefferson Davis	Section: 17	Township: 10S	Range: 02W	Date: 5/14/25	Location: T-07
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene			
Latitude: 30.18215		Longitude: -92.61404		Datum: NAD83		Other Info:

TREE SPECIES: Quercus nigra - Water Oak					Circumference: 27.5"			DBH: 8.8"			
Root Number	Total Length	Distance to deepest point	Depth BLS	Random Distance (RD)	Depth BLS	Root Number	Total Length	DDP	Depth BLS	RD	Depth BLS
	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)		(Inches)	(Inches)	(Inches)	(Inches)	(Inches)
1	77	55	1	30	Surface	11	128	46	2.5	100	0.5
2	58	50	1	27	Surface	12	80	80	0.5	50	Surface
3	84	80	0.5	40	Surface	13	50	50	1.5	50	0.5
4	80	72	1	48	Surface						
5	100	64	2	35	0.5						
6	84	53	3	32	1						
7	90	42	4	72	0.5						
8	75	50	4.5	64	0.5						
8A	95	85	0.5								
9	36	36	0.5								
10	200	140	0.5	93	0.5						
10A	128	90	1	125	0.5						

Illustration: 	ROOT ZONE INTERPRETATION		
	Depth BLS (Inches)	Root Mass Abundance	Remarks
	0-1.5	Abundant	Effective Root Zone
	1.5-3	Many	
	3-12	Common	
	12-16	Sparse	
	16-21	Very Sparse to None	
Remarks: • Hand Auger from 0" to 21"			

SOIL PROFILE PROPERTIES											
Soil Type: Mowata silt loam											
Depth BLS (inches)	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value	
	Color (moist)	%	Color (moist)	%	Type	Loc					
0-1	10YR 3/2	100					Muck	A1		0.85	
1-5	10YR 5/2	100					Silt loam	A2		0.73	
5-21	10YR 5/3	90	10YR 5/8	10	C	M	Silty clay	Bt	Increase clay content	<.70	
Additional Colors:											
Restrictive Layer(if observed):		Type:		Depth (inches):							

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State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 5/15/25	Location: T-08
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene			
Latitude: 30.178177		Longitude: -92.62038		Datum: NAD83		Other Info:

TREE SPECIES: Pinus taeda - Loblolly Pine					Circumference: 33"			DBH: 10.5"			
Root Number	Total Length	Distance to deepest point	Depth BLS	Random Distance (RD)	Depth BLS	Root Number	Total Length	DDP	Depth BLS	RD	Depth BLS
	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)		(Inches)	(Inches)	(Inches)	(Inches)	(Inches)
1	70	58	1	48	1	10	65	24	8.5	52	5
1A	48	77	1	23	1	11	20	20	9		
2	88	36	5	68	4	12	70	60	1	50	1
2A	53	53	4								
3	53	16	11	40	4						
4	38	24	2	12	1						
5	58	22	1.5	44	1.5						
6	82	22	7	45	5.5						
6A	24	18	12								
7	44	41	9	24	8						
8	48	20	2	40	2						
9	27	27	10								

Illustration: 	ROOT ZONE INTERPRETATION		
	Depth BLS (Inches)	Root Mass Abundance	Remarks
	0-2	Abundant	Effective Root Zone
	2-5	Many	
	5-13	Common	
	13-18	Very Sparse to None	
Remarks: • 18" x 18" x 18" Trench • Tap root depth = $\sqrt{30^2 - 18^2}$ • Tap root depth = 24"			

SOIL PROFILE PROPERTIES											
Soil Type: Crowley silt loam											
Depth BLS (inches)	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value	
	Color (moist)	%	Color (moist)	%	Type	Loc					
0-4	10YR 4/3	100					Silt loam	A		<.70	
4-18	10YR 6/2	80	10YR 5/8	20	C	M	Silty clay	Bt	Increase clay content	<.70	
Additional Colors:											
Restrictive Layer(if observed):		Type:		Depth (inches):							

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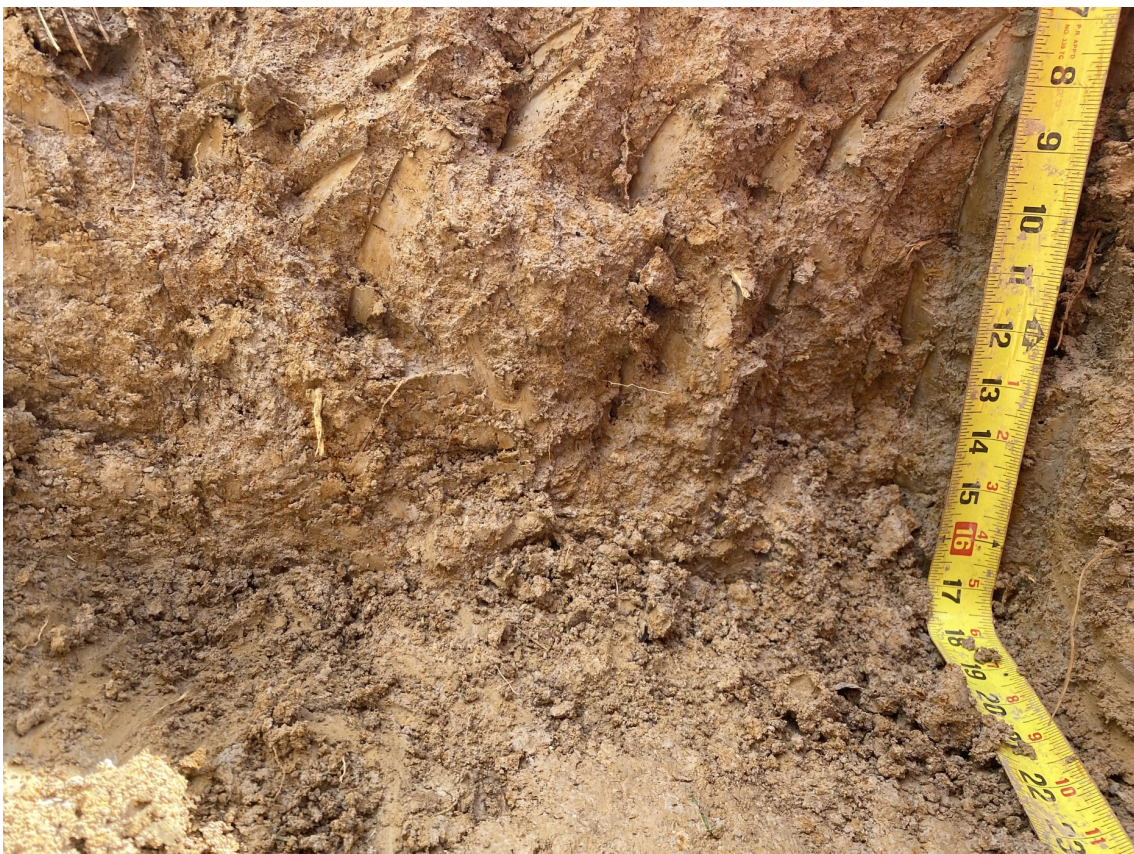
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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 5/15/25	Location: T-09									
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene												
Latitude: 30.181865		Longitude: -92.622526		Datum: NAD83		Other Info:									
TREE SPECIES: Quercus nigra - Water Oak															
				Circumference: 23"		DBH: 7.3"									
Root Number	Total Length	Distance to deepest point	Depth BLS	Random Distance (RD)	Depth BLS	Root Number	Total Length	DDP	Depth BLS	RD	Depth BLS				
	(Inches)	(Inches)	(Inches)	(Inches)	(Inches)		(Inches)	(Inches)	(Inches)	(Inches)	(Inches)				
1	45	25	5	45	3	12	58	12	6	36	5.5				
2	24	12	6	24	1	13	70	56	7	28	3.5				
3	48	40	2.5	21	1	13A	18	18	3.5						
4	48	20	4	30	3										
5	24	12	Surface	20	Surface										
5A	27	24	4	27	3										
6	30	30	4	16	2										
7	36	24	4.5	12	4										
8	28	12	13.5	19	11										
9	40	14	8	32	7										
10	32	15	5.5	26	3										
11	41	14	2.5	32	1										
Illustration:						ROOT ZONE INTERPRETATION									
						Depth BLS (Inches)		Root Mass Abundance		Remarks					
						0-2		Abundant		Effective Root Zone					
						2-7		Many							
						7-13		Common							
						13-16		Sparse							
						16-20		Very Sparse to None							
Remarks:															
• 18" x 18" x 20" Trench															
SOIL PROFILE PROPERTIES															
Soil Type: Crowley silt loam															
Depth BLS		Matrix		Redox Features				Texture		Horizon		Remarks		N-Value	
(inches)		Color (moist)		%		Color (moist) % Type Loc									
0-6		10YR 4/3		100				Silt loam		A				<.70	
6-13		10YR 5/3		100				Silt loam		E				<.70	
13-20		10YR 3/1		100				Silty clay		Bt		Increase clay content, small shell		<.70	
Additional Colors:															
Restrictive Layer(if observed):				Type:				Depth (inches):							

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 17	Township: 10S	Range: 02W	Date: 5/14/25	Location: S-01				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.182032		Longitude: -92.613875		Datum: NAD83		Other Info:				
HERBACEOUS SPECIES- [plot size = 5 feet radius]			ROOT ZONE INTERPRETATION							
Sabal minor - Dwarf Palmetto			Depth BLS (Inches)	Root Mass Abundance	Remarks					
			0-2	Abundant	Effective Root Zone					
			2-8	Many						
			8-12	Common						
			12-16	Sparse						
			16-21	Very Sparse to None						
SOIL PROFILE PROPERTIES										
Soil Type: Mowata silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-1	10YR 3/2	100					Muck	A1		0.85
1-5	10YR 5/2	100					Silt loam	A2		0.73
5-21	10YR 5/3	90	10YR 5/8	10	C	M	Silty clay	Bt	Increase clay content	<.70
Additional Colors:										
Restrictive Layer(if observed):		Type:		Depth (inches):						
Remarks: 1. Inspection trench dimensions: 22" long x 18" wide x 21" deep 2. 1" water accumulated in trench										

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 4/25/25	Location: R-01				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.18326159		Longitude: -92.62378393		Datum: NAD83	Other Info:					
HERBACEOUS SPECIES- [plot size = 5 feet radius]			ROOT ZONE INTERPRETATION							
Oryza sativa - Cultivated Rice			Depth BLS (Inches)	Root Mass Abundance	Remarks					
			0-2	Abundant	Effective Root Zone					
			2-4.5	Many						
			4.5-6	Common						
			6-9	Very Sparse						
			9-16	None						
SOIL PROFILE PROPERTIES										
Soil Type: Crowley silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-5	10YR 5/3	100					Silt loam	Ap		<.70
5-16	10YR 5/4	60	10YR 5/8	40	C	M	Silt loam	E		<.70
Additional Colors:										
Restrictive Layer(if observed):		Type: Plow Pan		Depth (inches): 7						
Remarks: 1. Core profile from 0" to 16" 2. Average rice height of 6" 3. No standing water										

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 4/25/25	Location: R-02				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.183273		Longitude: -92.624333		Datum: NAD83	Other Info:					
HERBACEOUS SPECIES- [plot size = 5 feet radius]				ROOT ZONE INTERPRETATION						
Oryza sativa - Cultivated Rice				Depth BLS (Inches)	Root Mass Abundance	Remarks				
				0-1	Abundant	Effective Root Zone				
				1-3	Many					
				3-5	Common					
				5-9	Sparse					
				9-16	None					
SOIL PROFILE PROPERTIES										
Soil Type: Crowley silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-4	10YR 5/3	100					Silt loam	Ap		<.70
4-16	10YR 5/4	60	10YR 5/8	40	C	M	Silt loam	E		<.70
Additional Colors:										
Restrictive Layer(if observed):		Type: Plow Pan		Depth (inches): 5						
Remarks: 1. Core profile from 0" to 16" 2. Average rice height of 7" 3. No standing water										

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 4/25/25	Location: R-03				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.18468532		Longitude: -92.62463427		Datum: NAD83	Other Info:					
HERBACEOUS SPECIES- [plot size = 5 feet radius]			ROOT ZONE INTERPRETATION							
Oryza sativa - Cultivated Rice			Depth BLS (Inches)	Root Mass Abundance	Remarks					
			0-2	Abundant	Effective Root Zone					
			2-4	Many						
			4-6	Common						
			6-10	Sparse						
			10-18	None						
SOIL PROFILE PROPERTIES										
Soil Type: Crowley silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-4	10YR 5/3	100					Silt loam	Ap		<.70
4-18	10YR 5/4	60	10YR 5/8	40	C	M	Silt loam	E		<.70
Additional Colors:										
Restrictive Layer(if observed):		Type: Plow Pan		Depth (inches): 5						
Remarks: 1. Core profile from 0" to 18" 2. Average rice height of 7" 3. No standing water										

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 4/25/25	Location: R-04				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.18686259		Longitude: -92.62324198		Datum: NAD83	Other Info:					
HERBACEOUS SPECIES- [plot size = 5 feet radius]			ROOT ZONE INTERPRETATION							
Oryza sativa - Cultivated Rice			Depth BLS (Inches)	Root Mass Abundance	Remarks					
			0-1.5	Abundant	Effective Root Zone					
			1.5-3	Many						
			3-5	Common						
			5-8	Sparse						
			8-15	Very Sparse to None						
SOIL PROFILE PROPERTIES										
Soil Type: Crowley silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-5	10YR 5/3	100					Silt loam	Ap		<.70
5-15	10YR 5/4	60	10YR 5/8	40	C	M	Silt loam	E		<.70
Additional Colors:										
Restrictive Layer(if observed):		Type: Plow Pan		Depth (inches): 5.5						
Remarks: 1. Core profile from 0" to 15" 2. Average rice height of 7" 3. No standing water										

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 4/24/25	Location: H-01				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.18261771		Longitude: -92.623616		Datum: NAD83		Other Info:				
HERBACEOUS SPECIES- [plot size = 5 feet radius]			ROOT ZONE INTERPRETATION							
Carex tribuloides - Blunt Broom Sedge			Depth BLS (Inches)	Root Mass Abundance	Remarks					
Iva annua - Annual Marsh-Elder			0-2	Abundant	Effective Root Zone					
Ambrosia artemisiifolia - Annual Ragweed			2-4	Many						
			4-7	Common						
			7-14	Sparse						
			14-18	Very Sparse						
			18-24	None						
SOIL PROFILE PROPERTIES										
Soil Type: Crowley silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-6	10YR 4/3	100					Silt loam	Ap		<.70
6-24	10YR 5/3	60	2.5YR 4/6	40	C	M	Silty clay loam	Bt	Increase clay content	<.70
Additional Colors:										
Restrictive Layer(if observed):		Type: Plow Pan		Depth (inches): 7						
Remarks: 1. Inspection trench dimensions: 24" long x 24" wide x 24" deep 2. Area plowed following investigation										

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 4/24/25	Location: H-02				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.18220414		Longitude: -92.62298842		Datum: NAD83		Other Info:				
HERBACEOUS SPECIES- [plot size = 5 feet radius]			ROOT ZONE INTERPRETATION							
Ambrosia artemisiifolia - Annual Ragweed			Depth BLS (Inches)	Root Mass Abundance	Remarks					
Geranium sp. - Crane's Bill			0-1	Abundant	Effective Root Zone					
Verbena incompta - Brazilian Vervain			1-3	Many						
Setaria pumila - Yellow Bristle Grass			3-7	Common						
			7-12	Sparse						
			12-16	Very Sparse						
			16-24	None						
SOIL PROFILE PROPERTIES										
Soil Type: Vidrine silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-7	10YR 4/3	100					Silt loam	Ap		<.70
7-11	10YR 5/3	70	2.5YR 5/4	30	C	M	Silty clay loam	E	Increase clay content	<.70
11-24	2.5Y 5/4	100					Silty clay	Bt	Increase clay content, Ca concretions	<.70
Additional Colors:										
Restrictive Layer(if observed):		Type: Plow Pan		Depth (inches): 7						
Remarks: 1. Inspection trench dimensions: 24" long x 20" wide x 24" deep 2. Area plowed following investigation										

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Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 4/24/25	Location: H-03				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.18347846		Longitude: -92.62293295		Datum: NAD83	Other Info:					
HERBACEOUS SPECIES- [plot size = 5 feet radius]				ROOT ZONE INTERPRETATION						
Sorghum halepense - Johnson Grass				Depth BLS (Inches)	Root Mass Abundance	Remarks				
Geranium sp. - Crane's Bill				0-2	Abundant	Effective Root Zone				
Cynodon dactylon - Bermuda Grass				2-4	Many					
Verbena incompta - Brazilian Vervain				4-7	Common					
Diodia virginiana - Virginia Buttonweed				7-17	Sparse					
				17-32	Very Sparse					
				32-36	None					
SOIL PROFILE PROPERTIES										
Soil Type: Crowley silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-5	10YR 3/3	100					Silt loam	Ap		<.70
5-11	10YR 6/3	100					Silt Loam	E		<.70
11-23	10YR 4/2	100					Silty clay loam	B1t	Increase clay content	<.70
23-36	10YR 4/1	80	2.5YR 4/6	20	C	M	Silty clay	B2	Increase clay content	<.70
Additional Colors:										
Restrictive Layer(if observed):		Type:		Depth (inches):						
Remarks: 1. Inspection trench dimensions: 24" long x 24" wide x 24" deep 2. Hand auger from 24" to 36"										

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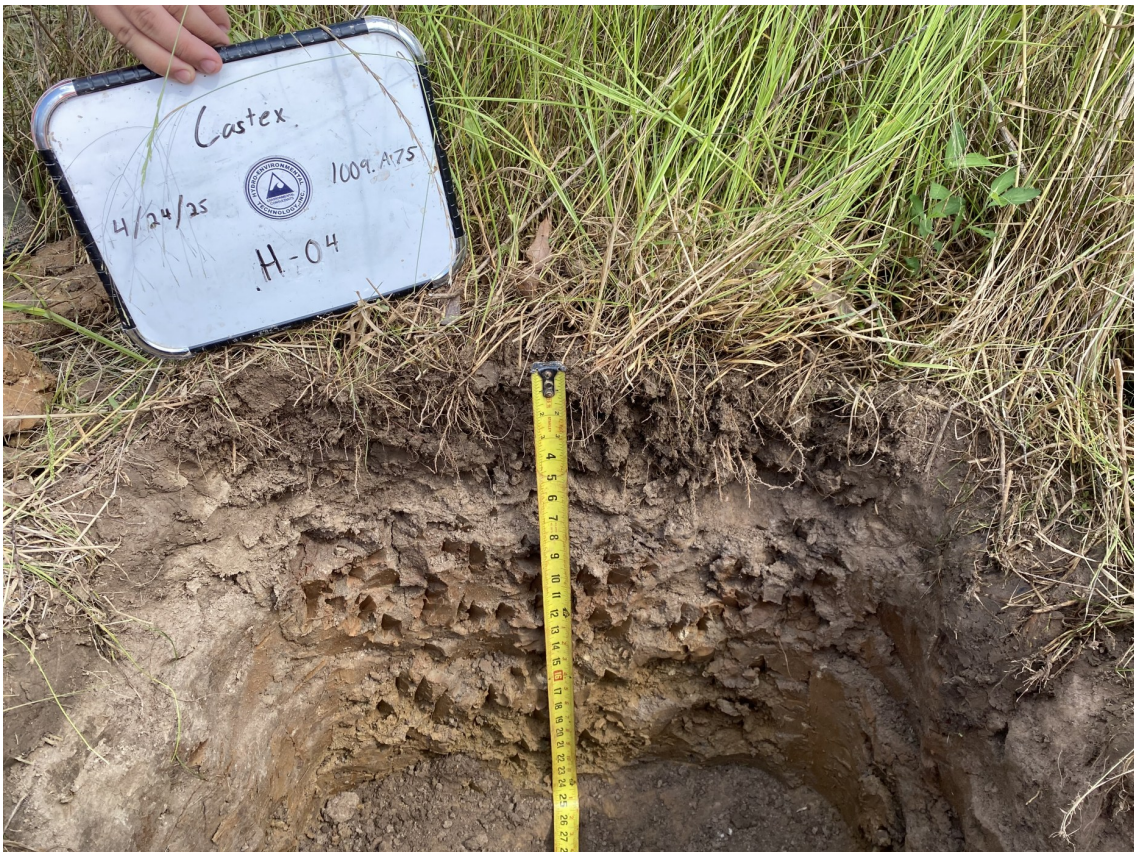




Root Zone Data Form

State: LA	Parish: Jefferson Davis	Section: 39	Township: 10S	Range: 03W	Date: 4/24/25	Location: H-04				
Project/Site: Castex (1009.A75)			Investigator(s): Matthew Greene							
Latitude: 30.1826002		Longitude: -92.62139229		Datum: NAD83	Other Info:					
HERBACEOUS SPECIES- [plot size = 5 feet radius]				ROOT ZONE INTERPRETATION						
Lolium perenne - Perennial Rye Grass				Depth BLS (Inches)	Root Mass Abundance	Remarks				
Agrostis scabra - Rough Bent				0-2	Abundant	Effective Root Zone				
Cyperus virens - Green Flat Sedge				2-4	Many					
Verbena incompta - Brazilian Vervain				4-6	Common					
Carex tribuloides - Blunt Broom Sedge				6-12	Sparse					
				12-17	Very Sparse					
				17-24	None					
SOIL PROFILE PROPERTIES										
Soil Type: Vidrine silt loam										
Depth BLS	Matrix		Redox Features				Texture	Horizon	Remarks	N-Value
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc				
0-6	10YR 3/3	100					Silt loam	Ap		<.70
6-8	10YR 6/3	100					Silt loam	E		<.70
8-17	10YR 5/2	60	2.5YR 4/6	40	C	M	Silty clay	Bt1	Increase clay content	<.70
17-24	10YR 5/4	100					Silty clay	Bt2	Increase clay content	<.70
Additional Colors:										
Restrictive Layer(if observed):		Type: Plow Pan		Depth (inches): 7						
Remarks: 1. Inspection trench dimensions: 24" long x 20" wide x 24" deep 2. Area plowed following investigation										

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