SOIL

Profile Desc	ription: (Describe t	o the dep	th needed to docun	nent the i	ndicator	or confirm	the absence	of indicato	rs.)	
Depth	Matrix		Redo	x Features	6					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-4	10YR 3/2	100					SIL			
4-16	10YR 4/1	90	2.5YR 3/6	10	С	Μ	SCL			
·										
						<u> </u>				
	oncentration, D=Deple			-Maakad	Sand Cr		² Location:	DI =Doro Li	ining, M=Matri	
	Indicators: (Applica					ans.			matic Hydric	
Histosol			Polyvalue Be			PP S T III			-	
	bipedon (A2)		Thin Dark Su					luck (A3) (L	•	
	stic (A3)		Loamy Mucky							MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye							(LRR P, S, T)
Stratified	d Layers (A5)		 Depleted Mat 	rix (F3)			Anoma	lous Bright	Loamy Soils (F20)
-	Bodies (A6) (LRR P,		Redox Dark S	•	,		(MLF	RA 153B)		
	icky Mineral (A7) (LR		·					arent Materi		
	esence (A8) (LRR U)		Redox Depre		3)				Surface (TF1	2)
	ick (A9) (LRR P, T)	(Marl (F10) (L			-4)	Other (Explain in F	Remarks)	
-	d Below Dark Surface	(A11)	Depleted Och				-) ³ India	otoro of bud	Irophytic ycro	tation and
	ark Surface (A12) rairie Redox (A16) (M	I PA 150/	Iron-Mangane Umbric Surfa					-	Irophytic vege ogy must be pi	
	lucky Mineral (S1) (L		A) Umbric Surfa Delta Ochric			, 0)		-	d or problema	
-	Bleyed Matrix (S4)	uu 0, 0,	Reduced Ver			0A. 150B)	unic		a or problema	
-	Redox (S5)		Piedmont Flo				A)			
-	Matrix (S6)		Anomalous B					153D)		
Dark Su	rface (S7) (LRR P, S,	T, U)		-						
Restrictive I	Layer (if observed):									
Туре:										
Depth (ind	ches):						Hydric Soil	Present?	Yes 🖌	No
Remarks:										



Photo 1 Wetland data point wjoe004f_w facing south



Photo 2 Wetland data point wjoe004f_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: _	ohnston County	Sampling Date: <u>1/13/2016</u>
Applicant/Owner: Dominion		State: NC	_ Sampling Point: <u>wjoe004_u</u>
Investigator(s): CG, AS	Section, Town	ship, Range: <u>No PLSS in this a</u>	
Landform (hillslope, terrace, etc.): slope		oncave, convex, none): <u>none</u>	•
Subregion (LRR or MLRA): P	Lat: <u>35.5892555</u>	Long: <u>-78.20417782</u>	Datum: WGS 1984
Soil Map Unit Name: Nason silt loam, 8 to 15 percent slo	opes	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances'	" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology	_ naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS Attach site ma	n chowing compling	noint locations transact	te important foaturos oto

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes _ ✔ Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U) Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres along Living R Sediment Deposits (B2) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7)	 Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No _ Depth (inches): Water Table Present? Yes No _ Depth (inches): Saturation Present? Yes No _ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes No
Remarks: NO HYDROLOGY	

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: <u>wjoe004_u</u>

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)		Species?		Number of Dominant Species
1. Pinus taeda	90	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Deminent
3				Total Number of Dominant Species Across All Strata: 3 (B)
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	90	= Total Cov		
50% of total cover: 45	20% of	total cover:	18	$\begin{array}{c} \text{FACW species} \\ 127 \\ 291 \\ \end{array}$
Sapling/Shrub Stratum (Plot size: 15)				FAC species x 3 =
1 Carpinus caroliniana	30	Yes	FAC	FACU species x 4 = 8
2. Ilex opaca	5	No	FAC	UPL species $0 \times 5 = 0$
	5			Column Totals: 134 (A) 399 (B)
3. <u>Celtis laevigata</u>		No	FACW	
4. Juniperus virginiana	2	No	FACU	Prevalence Index = B/A = 2.97
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
				\checkmark 2 - Dominance Test is >50%
8	40			\checkmark 3 - Prevalence Index is ≤3.0 ¹
21		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:21	20% of	total cover:	8.4	
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must
1. Smilax rotundifolia	2	Yes	FAC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
		= Total Cov		
50% of total cover:1	20% of	total cover:	0.4	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0				Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations belo	vv).			

SOIL

Profile Des	cription: (Describe to	o the dep	th needed to docur	nent the in	dicator	or confirm	the absence of in	ndicators.)		
Depth	Matrix			x Features	1	2	- .	_		
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u> 5	Type'		Texture	Re	emarks	
0-16	10YR 6/3	95	10YR 4/6	5	С	M	LFS			
				·		·				
		. <u> </u>		·						
				·						
	oncentration, D=Deple					ains.	² Location: PL=			•
Hydric Soil	Indicators: (Applica	ble to all	LRRs, unless other	rwise note	d.)		Indicators for	Problematic	Hydric So	oils³:
Histoso	· · /		Polyvalue Be	low Surfac	e (S8) (L	.RR S, T, U)	1 cm Muck	(A9) (LRR C))	
Histic E	pipedon (A2)		Thin Dark Sι					(A10) (LRR		
	istic (A3)		Loamy Muck			l O)				.RA 150A,B)
	en Sulfide (A4)		Loamy Gleye	•	-2)			-loodplain So		
	d Layers (A5)		Depleted Ma				Anomalous	-	ny Soils (F2	20)
	Bodies (A6) (LRR P,		Redox Dark		,		(MLRA 1			
	ucky Mineral (A7) (LRI							t Material (TF	,	
	resence (A8) (LRR U)		Redox Depre)			ow Dark Surfa		
	uck (A9) (LRR P, T)	(Marl (F10) (L				Other (Exp	lain in Rema	rks)	
-	d Below Dark Surface	(A11)	Depleted Oc				5) 3leadiaataa	a af buduau bu		in a nod
	ark Surface (A12)	DA 450	Iron-Mangan		• • •			s of hydrophy	-	
	rairie Redox (A16) (M /lucky Mineral (S1) (Lf					, 0)		hydrology m		
		KK U, SJ	Delta Ochric			04 1500)	uniess	disturbed or p	lopiematic	-
-	Gleyed Matrix (S4) Redox (S5)		Reduced Ver Piedmont Flor				(A)			
-	d Matrix (S6)						A 149A, 153C, 153	וחצ		
	Inface (S7) (LRR P, S,	тт		ngni Luan	iy 3013 ((145A, 155C, 15	50)		
	Layer (if observed):	1, 0)								
_										
Type:										N. 1
	ches):						Hydric Soil Pre	sent? Yes	·	No
Remarks:										



Photo 1 Upland data point wjoe004_u facing east



Photo 2 Upland data point wjoe004_u facing north

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Project/Site:	_ City/County: Sohnston Samp	oling Date: 8/5/14
Applicant/Owner: Drwiniph	State: NL Samp	Ding Point: WODDITE-W
	Section. Township. Range:	
andform (hillslope, terrace, etc.): h(1)510(4/		10 Sione (%): D-4
	5,5856 Long: -18.21240	Datum: W6-584
soii Map Unit Name: <u>Norfolk lowny Send</u> ;		
Are climatic / hydrologic conditions on the site typical for this time		
Are Vegetation, Soil, or Hydrology signific	ntly disturbed? Are "Normal Circumstances" preser	nt? Yes No
Are Vegetation, Soil, or Hydrology natural	problematic? (If needed, explain any answers in F	Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point locations, transects, im	portant features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No		No
Remarks: Rain within Pust 48 hrs		
HYDROLOGY		
Wetland Hydrology Indicators:		(minimum of two required)
Primary Indicators (minimum of one is required: check all that a		cks (B6) ted Concave Surface (B8)
Surface Water (A1)	a (B13) Sparsely vegeta (B15) (LRR U) Drainage Patterr	
	Ifide Odor (C1)	
	zospheres along Living Roots (C3)	
	Reduced Iron (C4)	
	Reduction in Tilled Soils (C6) 🛛 📃 Saturation Visibl	le on Aerial Imagery (C9)
Algal Mat or Crust (B4)	urface (C7) 📃 Geomorphic Po	sition (D2)
	in in Remarks)	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Te	
Water-Stained Leaves (B9)	Sphagnum mos	is (D8) (LRR T, U)
Field Observations:	inches): NA	
Surface Water Present? Yes No Depth	inches):2	1
	inches): Wetland Hydrology Present?	Yes No
(includes capillary fringe)		
Describe Recorded Data (stream gauge. monitoring well, aer	al photos, previous inspections), if available:	
Remarks:		
INCINGING.		
•		
	•	
	▶	
1		

VEGETATION (Four Strata) - Use scientific names of plants.

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Sampling Point: WJOP 017f-w

Bitalium (Piot size:		Absolute			Dominance Test worksheet:
List if O kenders 10 Y PHCU That Are OBL, FACW, or FAC: S (A) Total Number of Derivative Set in Tue in the Are OBL, FACW, or FAC: S (A) Total Number of Derivative Set in Set	ee Stratum (Plot size: <u>30,30</u>)				Number of Dominant Species
Other Advances of Loominant Species (B) Percent of Dominant Species (B) Percent of Dominant Species (D2.5) That Are OBL, FACW, or FAC: (D2.5) SOB = Total Cover (APB) SOB = Total Cover (APB) FACW species X 2 =	Lividention tuliditera				That Are OBL, FACW, or FAC: (A)
Species Across Al Strata: (B) Percent of Dominant Species (D2) That Are OBL, FACW, or FAC: (D2) S0% of total cover: 100 S0% of total cover: 100 S0% of total cover: 100 Artex Number Soft Noncomment 100 Artex Number Soft S0% of total cover: 100 S0% of total cover: 100 <td>Linuidambar Stunieiflua</td> <td></td> <td><u> </u></td> <td>PAC 1</td> <td>Total Number of Dominant</td>	Linuidambar Stunieiflua		<u> </u>	PAC 1	Total Number of Dominant
Percent of Dominant Species That Are OBL, FACW. OF FAC: Lo2_S (APB) Prevalence Index worksheet: Total Cover Total Species X1 =					
Providence Index worksheet: That are of BLE, FACW or FAC: Lo2LS_(ARB) S0% of total cover: S0% of total cover: S0% of total cover:				ļ	
Prevalence Index worksheet: Total Cover S0% of total cover: $_15$ S0% of total cover: $_15$ S0% of total cover: $_15$ Colspan="2">Colspan="2">Multiply by: Colspan="2">Colspan="2">Colspan="2" Colspan="2">Colspan="2" Colspan="2">Colspan="2" Colspan="2">Colspan="2" Colspan="2" Provalence Index = B/A =					Percent of Dominant Species
Prevalence index workset: Multiply by: 50% of total cover: 50% of total cover: 0 50% of total cover: 10 20% of total cover: 0 Attac 0 barrow 10 y 10 Attac 0 barrow 10 10 10 Attac 0 barrow 10 2 0 10 Attac 0 barrow 10 10 10 10 10 Attac 0 barrow 10 10 10 10 10 10 Attac 10				·	That Are OBL, FACW, or FAC:(A/B)
Prevalence index workset: Multiply by: 50% of total cover: 50% of total cover: 0 50% of total cover: 10 20% of total cover: 0 Attac 0 barrow 10 y 10 Attac 0 barrow 10 10 10 Attac 0 barrow 10 2 0 10 Attac 0 barrow 10 10 10 10 10 Attac 0 barrow 10 10 10 10 10 10 Attac 10				·	
$\frac{50\% \text{ of total cover: } 50\% of total c$			-		Total % Cover of: Multiply by:
FACW species x 2 = FACW species x 2 = FACW species x 3 = Collin Control Lift control y FACW species x 4 = UPL species x 4 = UPL species x 5 = Colume Totals: (A) (B) Forderoclindex is 30 Total Cover Sof% of total cover: 10 20 = Total Cover Colspan= Total Cover Sof% of total cover: 10 N PHU Sof% of total cover: 10 N PHU Definitions of Four Vegetation Multant hydrology must be species 10 Indicators of hydre splits 10 N PHU Sof% of total cover: 10 N PHU Definitions of Four Vegetation Multant		20			OBL species x 1 =
by an it of all cover:					
Patient Stratum (Plot size: 30 x 20 x 10 x 10 x 10 x 10 x 10 x 10 x 1			total cove		
Callic and a conventional of the second s	apling/Shrub Stratum (Plot size: $30x30$)	_			
Ater No P Y HK Off. Species X 0 = Column Totals: (A) (B) Ly(10 Acodyn huli piters 5 Y Field Column Totals: (A) (B) Ly(10 Acodyn huli piters 5 Y Field Column Totals: (A) (B) Ly(10 Acodyn huli piters 5 Y Field Column Totals: (A) (B) Ly(10 Acodyn huli piters 5 Y Field		5	Υ	FAW	
Livio Anna Mipitan 5 Y Prevalence Index = 5/4 =		9	Ý	1/H	UPL species x 5 =
Prevalence Index = B/A =	REAL VUIN UT	<u> </u>			Column Totals: (A) (B)
Hydrophytic Vegetation Indicators: Image: Constraint of the intervent of the	Lindrendrin Willpitur				/
Hydrophytic Vegetation Indicators: Image: Constraint of the intervent of the					Prevalence Index = B/A =
Image: Solution of total cover:					
20 = Total Cover 50% of total cover: 10 20 = Total Cover 3 - 1 - 10 - 11 - 12 - 14 - 10 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 16 - 17 - 18 - 19 - 10 - 10 - 10 - 11 - 12 - 10 - 11 - 12 - 13 - 14 - 15 - 16 - 17 - 18 - 19 - 10 - <					<u> </u>
20 = Total Cover 50% of total cover: 20% of total cover: 9 10 10 10 11 10 12 10 13 Problematic Hydrophytic Vegetation (Explain) 11 10 12 10 14 10 15 10 10 15 11 10 12 10 13 10 14 10 15 10 16 10 17 10 18 10 19 10 10 10 10 10 11 10 12 10 13 10 14 10 15 10 160 = Total Cover 50% of total cover: 20% of total cover: 12 10 13 - Mathematic Addition 14 - Mathematic Addition 150% of total cover:					
$\frac{20}{50\% \text{ of total cover: } 10} = \text{Total Cover} 20\% \text{ of total cover: } 4 \\ \frac{1}{20\% \text{ of total cover: } 20\% \text{ of total cover: } 4} \\ \frac{1}{1 \text{ ndicators of hydric soil and wetland hydrology must}} = \frac{30\% \text{ soil } 10\% \text{ meria} \text{ cover} 30\% \text{ soil } 15\% \text{ meria} \text{ cover} 30\% \text{ soil } 15\% \text{ meria} \text{ cover} 30\% \text{ soil } 15\% \text{ meria} \text{ cover} 30\% \text{ soil } 15\% \text{ meria} \text{ cover} 10\% \text{ more in diameter at breast height (DBH), regardless of height.} 10\% \text{ more in diameter} 10\% \text{ cover} 12\% \text{ more in diameter} 10\% \text$	·		• ••••		
50% of total cover: 10 20% of total cover: 1 1 1 1 1 1 1 10 10 10 10 10 1 10 10 10 10 10 10 1 10 10 10 10 10 10 10 1 10 <td>·</td> <td></td> <td></td> <td></td> <td>- 1 3 - Prevalence Index is ≤3.0¹</td>	·				- 1 3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 10 20% of total cover: 1 ierb Stratum (Plot size: 30×30) 1 1			_ = Total C	over	Problematic Hydrophytic Vegetation ¹ (Explain)
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 1. Microstegium vimineum 2.5 Y Present, unless disturbed or problematic. 2. Iboen meria Cylindrica 15 Y Present, unless disturbed or problematic. 3. Onoclea sensibilis 10 N. Present Definitions of Four Vegetation Strate: 3. Onoclea sensibilis 10 N. Present Tree - Woody plants, excluding vines, 3 in (7,6 cm) or more in diameter at breast height (DBH), regardless of height. 5.	50% of total cover:	10 20%	of total cov	rer: 4	
Microstegium Viminium Zs Viscolar 2. boenmeria Cylindrica 15 Y Philu Definitions of Four Vegetation Strata: 3. Onoclea sensibilis 10 N. Philu Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. 5.	Last Christian (Distained SOX30)				
Image: Stratum Som Som<	Herb Stratum (Plot size: <u>Je Ace</u>)	-1	N	TAM	Indicators of hydric soil and wetland hydrology flust
S. Dnoclea sensibilis to N PMLW 3. Dnoclea sensibilis to N PMLW 4. Physerbolic procession nore in diameter at breast height (DBH), regardless of height. 5.					
$\frac{P_{ND} + P_{ND} +$	2. <u>Boehmeria</u> Cylindrica				
4. Pworthel. of early role by factors role and strategy function of the strategy function of the strategy function. 5.	3. Onoclea sensibilis		_ <u>N</u>	مكتمنين م	- I Tree - Woody plante eycluding vines 310 (7.5 CB) Ol
5.	· Prosthel oteric rovaburace	ensis 10	N	PAK	more in diameter at breast height (DBH), regardless of
6					
7.	5				-
8.	6				Sapling/Shrub – Woody plants, excluding vines, less
9 of size, and woody plants less than 3.28 ft tall. 10 of size, and woody plants less than 3.28 ft tall. 11 LO = Total Cover 50% of total cover: <u>30</u> 20% of total cover: <u>12</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 X 30</u>) 1. <u>Smr1ax</u> <u>mtmdifolra</u> <u>10</u> <u>Y</u> <u>FML</u> 2 3 4 5 <u>10</u> = Total Cover 50% of total cover: <u>2</u> <u>Hydrophytic</u> Vegetation Present? <u>Yes</u> <u>No</u>	7				- than 3 m, DBH and greater than 3.28 m (1 m) tail.
9 of size, and woody plants less than 3.28 ft tall. 10 of size, and woody plants less than 3.28 ft tall. 11 LO = Total Cover 50% of total cover: <u>30</u> 20% of total cover: <u>12</u> <u>Woody Vine Stratum</u> (Plot size: <u>30 X 30</u>) 1. <u>Smr1ax</u> <u>mtmdifolra</u> <u>10</u> <u>Y</u> <u>FML</u> 2 3 4 5 <u>10</u> = Total Cover 50% of total cover: <u>2</u> <u>Hydrophytic</u> Vegetation Present? <u>Yes</u> <u>No</u>	8.				- Herb - All berbaceous (non-woody) plants, regardless
$10. _ \\ 10. _ \\ 11. _ \\ 12. _ \\ 50\% \text{ of total cover: } 30 \times 30 \\ 1. 60 \\ 50\% \text{ of total cover: } 30 \times 30 \\ 1. 60 \\ 50\% \text{ of total cover: } 12 \\ 10 \\ 1. 90\% \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ $					
11 height. 12					
12					
12	11				height.
$50\% \text{ of total cover:} \underline{30} 20\% \text{ of total cover:} \underline{12}$ $\underline{Woody \text{ Vine Stratum (Plot size: } \underline{30 \times 30})}$ 1. <u>Smilax volundifolica</u> <u>10 Y FAL</u> 2 3 4 5 <u>10</u> = Total Cover Hydrophytic Vegetation Present? Yes <u>No</u>		60	🕽 = Total	Cover	
$\frac{Woodv Vine Stratum (Plot size: 30 X 30)}{1. Smitax withdifolra 10 Y FAL}$ $\frac{10 Y FAL}{3. }$ $\frac{10 = Total Cover}{50\% of total cover: 5 20\% of total cover: 2}$ $\frac{10 = Total Cover}{20\% of total cover: 2}$					
$1. \underline{Smilax withdifolder} 10 \underline{Y} \underline{Ht}$ $2. $ $3. $ $4. $ $5. $ $10 = Total Cover Vegetation Present? Yes \underline{Veg} No $ $10 = Total Cover Vegetation Present? Yes \underline{Veg} No $			o or totar c	over. <u> </u>	[
$\frac{1}{2} \underbrace{10}_{\text{resent}} $)		5-01	
$3. _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _$	1. Smitax ntunditolia	<u> </u>	<u> </u>		<u> </u>
3 4 5 5 50% of total cover: 5 20% of total cover: 2 Hydrophytic Vegetation Present? Yes $Veg VegetationVegetation$	2		•		
4					
5 Hydrophytic 50% of total cover: 5 20% of total cover: 2 Hydrophytic Vegetation Present? Yes V No					
50% of total cover: 20% of total cover: Vegetation Present? Yes No	4				\
50% of total cover: _520% of total cover: _2Vegetation S0% of total cover: _2Vegetation Present? Yes No	5				— Hydrophytic
50% of total cover: Present? Yes No		(C) = Tota	al Cover	
	1			-	Breent? Von V
Remarks: (If observed, list morphological adaptations below).		S 00		cover:	
	50% of total cover	r: <u>5</u> 20	70 01 10101		
			<u>// or toter</u>		
),,,,,,
			<u> </u>		

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SOIL

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Sampling Point: wjop017f-w

Profile Descr	iption: (Describe t	o the depth	n needed to docu	iment the ir	ndicator	or confirm	the absence of in	dicators.)
Depth	Matrix			ox Features		·····	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	<u>Type'</u>	_Loc ²	Texture	Remarks
0-2	1072312	100				<u> </u>	<u></u>	
1-8	25143	106					<u>_SL</u>	
8-14	2.5145	95	10725/6	5	C	PL	SL	
14-20	2.5 14/1.	46	107256		L	PL	5	
1100			10 11 10					
						• ••••		
					. <u>.</u>		·	
				<u> </u>		<u> </u>		
¹ Type: C=Co	oncentration, D=Dep	letion, RM=	Reduced Matrix.	MS=Maskec	d Sa <u>nd</u> G	rains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all L	LRRs, unless oth	nerwise not	ed.)		Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue	Below Surfa	ice (S8) (LRR S, T,	U) 🛄 1 cm Muck	(A9) (LRR O)
	pipedon (A2)		Thin Dark	Surface (S9) (LRR S	, T, U)		(A10) (LRR S)
Black Hi	istic (A3)			icky Mineral		RO)		/ertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		= /	eyed Matrix	(F2)			Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted I					s Bright Loamy Soils (F20)
	Bodies (A6) (LRR P		=	rk Surface (•			
	ucky Mineral (A7) (L			Dark Surface				nt Material (TF2) Iow Dark Surface (TF12)
	resence (A8) (LRR U	7)	Mari (F10	pressions (F	-8)			plain in Remarks)
	uck (A9) (LRR P, T) d Below Dark Surfac	ο (Δ11)		Ochric (F11)		151)		plant writemarkey
in the second se	ark Surface (A12)	56 (F11)		ganese Mas			P. T) ³ Indicato	rs of hydrophytic vegetation and
	Prairie Redox (A16) (MLRA 150/		urface (F13)	• •			d hydrology must be present,
	Mucky Mineral (S1)			nric (F17) (N			unless	disturbed or problematic.
	Gleyed Matrix (S4)	•		Vertic (F18)	(MLRA	150A, 150	B)	
	Redox (S5)		Piedmon	t Floodplain	Soils (F1	9) (MLRA	149A)	
Strippe	d Matrix (S6)	•	🔟 Anomaio	us Bright Lo	amy Soil	s (F20) (MI	LRA 149A, 153C, 1	53D)
	urface (S7) (LRR P,		<u> </u>					
Restrictive	E Layer (if observed	l):						
Type:								
Depth (i	inches):						Hydric Soil P	resent? Yes V No No
Remarks:								
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Atlantic and Gulf Coastal Plain Region - Version 2.0



Wetland data point wjop017f_w facing west southwest.

, WETLAND DETERMIN	ATION DATA FORM	I – Atlantic and	Gulf Coastal Pl	ain Region	
iject/Site: ACP	City/Co	ounty: Johns	ton	Sampling Date:	<u>15/14</u>
Montioumor Danaliai			State: N	Sampling Point: W	<u>10p017-</u>
estigator(s): ESF (LRoper)	Sectio	п. Township, Range:	NA		
ofform (hillstone terrace etc.): hillstop	🖌 Local	relief (concave, conve	ex. none): CON	Jex Slope (%): <u>1)-</u> 4
bregion (LRR or MLRA): LPP	Lat: 35,58	561 Long	-18.2123	53 Datum	W65
I Map Unit Name: Norfolk loan	1 and 2-6	STORED	NWI classifi		•
e climatic / hydrologic conditions on the site typi	Les this time of your?		/if po, explain in l	Romarke)	,
			mal Circumstances"		No
e Vegetation, Soil, or Hydrology					_ 110
e Vegetation, Soil, or Hydrology			d, explain any answ		
JMMARY OF FINDINGS – Attach sit	te map showing san	pling point loca	ations, transect	s, important fea	tures, et
lydrophytic Vegetation Present? Yes _	No	Is the Sampled Ar	09	/	
	No	within a Wetland?		No	
Netland Hydrology Present? Yes _	No	within a rectand.			
Remarks:					
Lain within 48hrs					
۳ .			•		
YDROLOGY					
Wetland Hydrology Indicators:			Secondary Inc	licators (minimum of t	wo require
Primary Indicators (minimum of one is required	: check all that apply)		Surface S	foil Cracks (B6)	
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely	Vegetated Concave S	Surface (B8
High Water Table (A2)	Marl Deposits (B15) (L	RR U)	🔲 Drainage	Pattems (B10)	
Saturation (A3)	Hydrogen Sulfide Odor	(C1)	🛄 Moss Tri	m Lines (B16)	
U Water Marks (B1)	Oxidized Rhizosphere			son Water Table (C2)	
Sediment Deposits (B2)	Presence of Reduced		= ·	Burrows (C8)	
Drift Deposits (B3)	Recent Iron Reduction			on Visible on Aerial Im	agery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C	-		phic Position (D2)	
Iron Deposits (B5)	Other (Explain in Rem	arks)	=	Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)			The second se	utral Test (D5) um moss (D8) (LRR 1	- 01
Water-Stained Leaves (B9)			j Spragni		, 0)
Field Observations:	Dawih Jinahaatt	NA			
	Depth (inches):	>20			
	o Depth (inches): _		tland Hydrology Pi	acant? Vac	No V
Saturation Present? Yes N (includes capillary fringe)	o Depth (inches): _	We	tianu nyurology Pi		
Describe Recorded Data (stream gauge, mor	nitoring well, aerial photos.	previous inspections), if available:		
Remarks:			•		
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Sampling Point: Wjop D17f_4

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EGETATION (Four Strata) – Use scientific n	ames of pl	ants.		Sampling Point: WJOP 0174
4-470		Dominant		Dominance Test worksheet:
ree Stratum (Plot size: <u>30,30</u>)	<u>% Cover</u>	Species?		Number of Dominant Species
Liriodendron tulipifera	30_	<u></u>	PHCU	That Are OBL, FACW, or FAC: (A)
Liquidamber styraciflua.	_ 10_	<u> </u>	PAC	Total Number of Dominant
				Species Across All Strata:(B)
				Percent of Dominant Species 57% (A/B)
·				That Are OBL, FACW, or FAC: 5 10 (AVB)
·				Prevalence Index worksheet:
·			·	
•				
	<u>40</u>	= Total Co	ver	OBL species x 1 =
50% of total cover:	LO 20% c	of total cove	<u>. 8</u> .	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: <u>30, 30</u>)				FAC species x 3 =
Liviohndron tulialara	15	N	PARU	FACU species x 4 =
	<u> </u>	N	PM	UPL species x 5 =
Pren nibnm	$-\frac{10}{10}$		CAR	Column Totals: (A) (B)
. Lightidamber stimptiflen				
1. Ligestrim sinese	<u> </u>	<u>N</u>	PAC	Prevalence Index = B/A =
5. Callicopa Americana		<u> </u>	PALL	Hydrophytic Vegetation Indicators:
6			<u>. </u>	Rapid Test for Hydrophytic Vegetation
7				- 2 - Dominance Test is >50%
8				- 1 3 - Prevalence Index is ≤3.0 ¹
0		_ = Total C		
50% of total cover:				Problematic Hydrophytic Vegetation ¹ (Explain)
	<u></u> 20%	of total cov	er: <u>10</u>	-
Herb Stratum (Plot size: <u>30×30</u>)		•	-	¹ Indicators of hydric soil and wetland hydrology must
1. Microzim Viminera	~ 12		- FAC	
2. Asplenium platimeum	<u> </u>	<u> Y </u>	PAR	Definitions of Four Vegetation Strata:
				The state state and with the size 2 in (7.6 cm) of
4				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless o
· · · · · · · · · · · · · · · · · · ·				height.
5				-
6				 Sapling/Shrub – Woody plants, excluding vines, less than 3 in, DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardles
9				of size, and woody plants less than 3.28 ft tall.
10				
11.				height.
12	- 70			—
		2= lotal	Cover	
50% of total cover:	<u>11.5</u> 20	% of total c	over: 🔼	
Woody Vine Stratum (Plot size: 30×30)	l			
1. none]
2				
				<u> </u>
3				<u> </u>
4	<u> </u>	-		— [
5				— Hydrophytic
	<u>_</u>	<u>/</u> = Tota	al Cover	Vegetation
50% of total cover	: 2	0% of total	cover:	Present? Yes Ves No
Remarks: (If observed, list morphological adaptation	JINS DEIOW).			
1				
1				
1 ·				
1				

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Color (moist) % Color (moist) % Type' Loc² Texture Remarks -10 1.5 1/2 100	rofile Descr	iption: (Describe	to the depth n	eeded to document the indicator or confirm	the absence of ind	icators.)	
10 1.5 10 100 51 11.5 100 51 51 51 11.5 100 51 51 51 11.5 100 51 51 51 11.5 100 51 51 51 11.5 100 100 51 100 11.5 100 100 100 100 100 11.5 100 100 100 100 100 100 11.5 100 100 100 100 100 100 100 11.5 100	epth			Redox Features	— .	De ses sites	
Q - 10 L-5 100 SL ype: C-Concentration. D=Depletion. RM=Reduced Matrix. MS=Masked Sand Grains. ² Location: PL=Pore Lining. M=Matrix. ydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Histos Epipedon (A2) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Black Histic (A3) Depleted Matrix (F2) 2 cm Muck (A10) (LRR S) Stratified Layers (A5) Depleted Matrix (F2) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) MLRA 1538) Stratified Layers (A5) Depleted Matrix (F2) Very Stalbow Dark Surface (TF12) I cm Muck (A9) (LRR P, T, U) Redox Dark Surface (F7) Redox Dark Surface (F7) Stadige Layers (A5) Depleted Matrix (F17) (LRR O, P, T) Very Stalbow Dark Surface (TF12) U cost Prairie Redox (A16) (MLRA 150A) Depleted Orbit (F11) (MLRA 151) Very Stalbow Dark Surface (TF12) Sandy Mineral (S1) (LRR O, S) Peletonorh Floodplain Soils (F20) (MLRA 149A) Sandy Redox (S5) Peletomorh Floodplain Soils (F20) (MLRA 149A) Sandy Redox (S5) Peletocothric (F11) (MLRA 150A, 150B) Peletocothric (F13) (MLRA 149A) Sandy Redox (S5) S	<u>iches)</u>			Color (moist) N Type'Loc		Remarks	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix. yrici Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ¹ : Histosol (A1) Polyvalue Below Surface (S9) (LRR S, T, U) I orn Muck (A9) (LRR O) Black Histic (A3) Learny Mucky Mineral (F1) (LRR O, T, U) Reduced Vertic (F16) (outside MLRA 150A Hydrogen Sulfide (A4) Learny Mucky Mineral (F1) (LRR O) Reduced Vertic (F16) (outside MLRA 150A) Yorganic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F2) Matriate (F1) 1 cm Muck (A9) (LRR P, T) Redox Dark Surface (F1) Red Parenti Material (TF2) 1 cm Muck (A9) (LRR P, T) Redox Dark Surface (F1) Red Parenti Material (TF2) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Urbric Surface (F12) (LRR 0, F1) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR 0, S) Delia Ochric (F17) (MLRA 150A, 150B) Pledmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D) Sandy Mucky Mineral (S1) (LRR 0, S) Pledmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D) Pledmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Sandy Glegee Matrix (S6) Pledmont Floodplain Soils (F20		15 2					
dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Learny Mucky Mineral (F1) (LRR O) Reduced Vetic (F18) (outslide MLRA 150A Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Matrix Surface (F7) Red Parent Material (TF2) Muck (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Dork Surface (F11) (MLRA 151) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Ion-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. S andy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark	0-20	2.5744	<u> 100 </u>		<u>></u>		
dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Learny Mucky Mineral (F1) (LRR O) Reduced Vetic (F18) (outslide MLRA 150A Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Matrix Surface (F7) Red Parent Material (TF2) Muck (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Dork Surface (F11) (MLRA 151) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Ion-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. S andy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark			<u> </u>				
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dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Learny Mucky Mineral (F1) (LRR O) Reduced Vetic (F18) (outslide MLRA 150A Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Matrix Surface (F7) Red Parent Material (TF2) Muck (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Dork Surface (F11) (MLRA 151) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Ion-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. S andy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark		<u> </u>					
dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Learny Mucky Mineral (F1) (LRR O) Reduced Vetic (F18) (outslide MLRA 150A Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Matrix Surface (F7) Red Parent Material (TF2) Muck (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Dork Surface (F11) (MLRA 151) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Ion-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. S andy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark	<u> </u>	<u></u>					
dric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Learny Mucky Mineral (F1) (LRR O) Reduced Vetic (F18) (outslide MLRA 150A Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Matrix Surface (F7) Red Parent Material (TF2) Muck (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Dork Surface (F11) (MLRA 151) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Ion-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. S andy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark						<u> </u>	
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR O) Black Histic (A3) Loarny Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR P) Stratified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T, U) S cm Mucky Mineral (A7) (LRR P, T, U) Redox Dark Surface (F7) Redox Dark Surface (F7) Muck (A9) (LRR P, T, U) Depleted Dark Surface (F7) Redox Dark Surface (F7) Muck (A9) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F13) (LRR P, T, U) S cm Mucky Mineral (A7) (LRR O, S) Depleted Below Dark Surface (A11) Depleted Ochric (F13) (MLRA 151) Indicators of hydrophytic vegetation and wetland hydrology must be present, surface (K16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loarny Soils (F20) (MLRA 149A) Anomalous Bright Loarny Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loarny Soils (F20) (MLRA 149A), 153C, 153D) Piedmont Floodplain Soils (F20)	ype: C=Co	oncentration, D=De	pletion, RM=Re	educed Matrix, MS=Masked Sand Grains.			
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A) Hydrogen Suffide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, TO) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) S cm Mucky Mineral (A7) (LRR P, T, U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Depleted Dark Surface (F1) Redox Dark Surface (F12) 1 cm Muck (A9) (LRR P, T) Depleted Obric (F11) (MLRA 151) Thick Dark Surface (A11) Depleted Obric (F13) (LRR O, P, T) Depleted Below Dark Surface (A11) Depleted Obric (F13) (LRR P, T, U) Werts of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. S andy Mucky Mineral (S1) (LRR O, S) Beid Cochric (F13) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Derleter Sortic (F13) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Reduced Vertic (F18) (MLRA 149A, 153C, 153D) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Remarks: Hydric Soil Present? Yes No	-		cable to all LR		r	-	Sons :
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR 0) Reduced Vertic (F18) (outside MLRA 150A Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) for Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) for Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red vark Surface (F6) for Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red vark Surface (TF12) for Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Urbark Surface (TF12) for Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Urbark Surface (TF12) for Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F13) URR P, T, U) bepleted Dark Surface (A11) Depleted Dark Surface (F13) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Indecators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Delta Ochric (F17) (MLRA 150A, 150B) Delta Ochric (F17) (MLRA 150A, 153C, 153D) Dark Surface (S7)							
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) 1 cm Muck (A9) (LRR P, T) Depleted Dark Surface (F7) Red Parent Material (TF2) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Cohric (F11) (MLRA 151) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Cohric (F11) (MLRA 151) 1 cm Auck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Cohric (F13) (LRR O, P, T) 3 cost Prairie Redox (A16) (MLRA 150A) Umbric Surface (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Detta Ochric (F13) (MLRA 150A, 150B) Sandy Redox (S5) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) 2 bert ctrue Layer (if observed): Type:	- ·	•					MLRA 150A.
Strattlidel Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Depleted Below Dark Surface (A11) Depleted Ochric (F13) (LRR P, T, U) Other (Explain in Remarks) Depleted Matrix (S4) Depleted Cohric (F17) (MLRA 151) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delite Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S6) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Remarks: Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Remarks:							
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parenti Material (TF2) Mucky Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Delow Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Inon-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Detleta Ochric (F13) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Remarks: Hydric Scil Present? Yes No No						•	
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) other (Explain in Remarks) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Deplet (inches): Hydric Soil Present? Yes No Remarks:			P, T, U)	Redox Dark Surface (F6)			
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) muless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) momalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:		• • • •					40
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:							12)
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:						annin Remarksj	,
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type:			ace (ATT)		, T) ³ indicator	s of hydrophytic veg	etation and
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type:			(MLRA 150A)		· •		
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No					unless	isturbed or problem	natic.
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	=	-					
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No						נסל	
Restrictive Layer (if observed): Type:			ати		.KA 149A, 1550, 15	50)	
Type: Depth (inches): No No Remarks:							
Depth (inches): Hydric Soil Present? Yes No Remarks:			-,-				
Remarks:	•• –			· 	Hydric Soil Pre	esent? Yes	No
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Upland data point wjop017_u facing east.

Project/Site: ACP	City/County:	Uhnston	Sampling Date: <u>7/1.7/1</u> Sampling Point: <u>WjOP 001</u> F.
pplicant/Owner: DOM: nich		State: N (Sampling Point: WjOp OOLF.
nvestigator(s): ESI (K. Marphiley)	Section, Towns	hip, Range: NA	
andform (hillslope, terrace, etc.): Flot			ne Slope (%): 0-2
Subregion (LRR or MLRA): LRR P	1at 35, 57942	Long -78.21	385 Datum: W6584
Soil Map Unit Name: Rains sandy		Long:	ssification: PFO
		_ No (If no, explain	
Are climatic / hydrologic conditions on the site typical for			
vre Vegetation, Soil, or Hydrology			es" present? Yes No
Are Vegetation, Soil, or Hydrology		(If needed, explain any ar	
SUMMARY OF FINDINGS – Attach site ma	ap showing sampling p	oint locations, transe	ects, important features, etc.
Hydrophytic Vegetation Present? Yes	No Is the S		
Hydric Soil Present? Yes	No Is the S	ampled Area	
Wetland Hydrology Present? Yes	No Within a	a Wetland? Yes	NO
Remarks:			
HYDROLOGY		<u> </u>	
Wetland Hydrology Indicators:		Secondary	Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check	all that apply)	_	e Soil Cracks (B6)
Surface Water (A1)	atic Fauna (B13)	🛄 Sparse	ly Vegetated Concave Surface (B8)
High Water Table (A2)	l Deposits (B15) (LRR U)	🛄 Drainaç	ge Pattems (B10)
	irogen Sulfide Odor (C1)		rim Lines (B16)
	dized Rhizospheres along Livi		ason Water Table (C2)
	sence of Reduced Iron (C4)		h Burrows (C8) tion Visible on Aerial Imagery (C9)
	cent Iron Reduction in Tilled Son Muck Surface (C7)		orphic Position (D2)
	er (Explain in Remarks)		w Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-N	eutral Test (D5)
Water-Stained Leaves (B9)		🔲 Sphag	num moss (D8) (LRR T, U)
Field Observations:			1
Surface Water Present? Yes No	Depth (inches): NO	-	
	Depth (inches): $20^{\prime\prime}$		
Saturation Present? Yes V No No V No V No V No V No V No V No	Depth (inches):	Wetland Hydrology F	Present? Yes <u> </u>
Describe Recorded Data (stream gauge, monitoring v	vell, aerial photos, previous in	spections), if available:	
Remarks:		M. 11 d	1
Revisited on 12/3/14. Observe	d saturation at 1	the soil surface a	nd water table at sin,
1			
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VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: W1010001 f-W

Tree Stratum (Plot size: 30'X30)		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>JUNSU</u>) 1. A CEV VUV(UM)	<u>% Cover</u>	<u>Species?</u>	Status FAC	Number of Dominant Species 7
	$\frac{30}{20}$	<u> </u>	FACW	That Are OBL, FACW, or FAC: (A)
2. Persea borbonia 3. PINUS taedo	$\frac{30}{10}$	<u> </u>	FAC	Total Number of Dominant
			<u>rnc</u>	Species Across All Strata: / (B)
4			<u> </u>	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 % (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	-70	••		OBL species x1 =
~/		= Total Cov		FACW species x 2 =
50% of total cover: <u>35</u>	20% of	total cover	<u> </u>	FAC species x3 =
Sapling/Shrub Stratum (Plot size: 30, ×30)	2.1			
1. Ilex opaca	<u>30</u>	<u> </u>	FAC	FACU species X 4 =
	10	<u>_rv</u> _	FACW	UPL species X 5 =
3. Persea workenia	15	<u> </u>	EACW	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5	·			Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				\square 3 - Prevalence Index is <3.0 ¹
	55	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 27.				
<u>Herb Stratum</u> (Plot size: $30' \times 30'$)			•	1. The state of th
1. Clethro Alaifolia	えひ	У	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Vaccinum corymbosam	10	$\frac{1}{}$	FACW	Definitions of Four Vegetation Strata:
		/		Deminions of Four Vegetation officia.
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
		= Total Co		
50% of total cover:) 20% c	of total cove	er: <u>6</u>	
<u>Woody Vine Stratum</u> (Plot size: $\overline{\mathcal{Z}\mathcal{U}' \times \mathcal{Z}\mathcal{U}'}$)	/	V		
1. Smilax rotundifulia	<u> </u>	<u> </u>	FAC	
2				
3		<u> </u>		
4				
5		_	_	Hydrophytic
	- 5	= Total C	over	Vegetation
50% of total cover: <u>2</u>	5 20% (of total cove	er: (Present? Yes No No
Remarks: (If observed, list morphological adaptations be				
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SOIL

Sampling Point: wjop 001f-w

Profile Desc	ription: (Describe	to the dept	h needed to docun	nent the i	ndicator	or confirm	n the absence of indi	cators.)	_~
Depth	Matrix		Color (moist)	x Features		Loc ²	Texture	Remarks	
<u>(inches)</u> 0-7	<u>Color (moist)</u> 104R 2/1	% /00		%	<u>Type</u>	Loc		Kemarks	
			Laurela			<u> </u>	SCL -		<u> </u>
7-12	104R 3/1	80	104R5/2	20	<u>1)</u>	<u>M</u>			
12-18	104R 4/2	98	104R.5/4	2	<u> </u>	<u>M</u>	SCL		
18-20	104R5/2_	90	104R 6 16	10	<u> </u>	<u>M</u>	<u>sc</u>		
	·		·	-					
	_								
¹ Type: C=C	oncentration, D=Dep	 letion. RM=		S=Masked	I Sand Gr	ains.	² Location: PL=P	ore Lining, M=Matrix	ς.
	Indicators: (Applic							oblematic Hydric S	
Histoso	I (A1)		Polyvalue Be	elow Surfa	ce (S8) (l	.RR S, T, I	υ) 🔲 1 cm Muck (/	49) (LRR O)	
	pipedon (A2)		Thin Dark Su		-		2 cm Muck (/		
	istic (A3)		Loamy Muck	-		र 0)		tic (F18) (outside M	
	en Sulfide (A4)		Loamy Gleye		(F2)			oodplain Soils (F19) Bright Loamy Soils (I	
	d Layers (A5) : Bodies (A6) (LRR P	, т IN	Redox Dark	• •	-6)		(MLRA 15:		20)
	ucky Mineral (A7) (LI							Material (TF2)	
	resence (A8) (LRR L		🔲 Redox Depr	essions (F	8)		Very Shallow	Dark Surface (TF1	2)
	uck (A9) (LRR P, T)		Marl (F10) (I				Other (Expla	in in Remarks)	
	d Below Dark Surfac	e (A11)	Depleted Oc		-			of hydrophytic vegel	tation and
	eark Surface (A12) Prairie Redox (A16) (MI PA 150	Iron-Mangar 🛄 A) 🚺 Umbric Surf:					iydrology must be pi	
	Mucky Mineral (S1) (• •	•	•		sturbed or problema	
	Gleyed Matrix (S4)	,	Reduced Ve						
Sandy	Redox (S5)		Piedmont FI						
	d Matrix (S6)		Anomalous	Bright Loa	my Soils	(F20) (ML	RA 149A, 153C, 153I))	
	urface (S7) (LRR P, Layer (if observed)								
	Layer (il observed,).					1		_
Type:	nches):						Hydric Soil Pres	ent? Yes 🔽	No
Remarks:									
i Nemaino.									
1									
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1									
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Wetland data point wjop001f_w facing southwest.

Project/Site: <u>ACP</u>	_ City/County: JUhn State: N _ Sampling Date: 7/17/14
Applicant/Owner: DOMINION	
Investigator(s): ESI (IK, MUTPhiley)	Section, Township, Range: NA
Landform (hillslope, terrace, etc.): <u>F (Q+</u>	
Subregion (LRR or MLRA): LRR P Lat: 35.	Local relief (concave, convex, none): <u>relief</u> Slope (%): S7966 Long: <u>78,2\370</u> Datum: N6589 AMNWI classification: <u>NA</u>
Soil Map Unit Name: Rains Sandy Lo	A MAR alexalitación NA
,	
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significan	
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesNo	
Hydric Soil Present? Yes <u>No</u>	Is the Sampled Area within a Wetland? Yes No
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	
L Surface Water (A1) High Water Table (A2)	
High Water Table (A2) Marl Deposits (I) Saturation (A3) Hydrogen Sulfid	
	spheres along Living Roots (C3) Dry-Season Water Table (C2)
	educed Iron (C4)
	duction in Tilled Soils (C6) 🔲 Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	face (C7)
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	NA
Surface Water Present? Yes No Depth (inc	shes): <u>Noh</u> shes): <u>720</u>
	thes): <u>15</u> Wetland Hydrology Present? Yes No
(includes capillary fringe)	4
Describe Recorded Data (stream gauge, monitoring well, aerial p	photos, previous inspections), if available:
Remarks:	
	с ^с
	in the second
	······································

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VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: Wiop001-4

	AL	0	1.	
Tree Stratum (Plot size: <u>30'X 30'</u>)		Dominant Species?		Dominance Test worksheet:
<u>Thee Stratum</u> (Plot size. <u></u>		<u>opeciesr</u>		Number of Dominant Species
1. Liquidambar styrociflua	10		FAC	That Are OBL, FACW, or FAC: (A)
2. A cer rubium	20	<u> Y </u>	FAC	
3 Ilex OPO(O	31)	$\langle \rangle$	FAC	Total Number of Dominant Species Across All Strata: 7 (B)
	10		FAC	Species Across Air Strata (b)
4. Quercus albo	<u> </u>	<u> N</u>	<u>Fuc</u>	Percent of Dominant Species 1(57) 91
5			. <u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				、
				Prevalence index worksheet:
7				Total % Cover of: Multiply by:
8				
_	_70_	= Total Co	/er	OBL species x 1 =
50% of total cover: 35	20% of	total cover	. 14	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X 30)	20 /0 01		· <u> </u>	FAC species x 3 =
	(Λ)	V	TACL	
1. Clethra alagelia	60		FACW	
2. IIRX OPOCO	20	V I	FAC	UPL species x 5 =
				Column Totals: (A) (B)
3				
4			<u> </u>	Prevalence Index = B/A =
5				
				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	-40	= Total Co	ver	
HC HC)			Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 40	20% 0	f total cove	r: <u>10</u>	
Herb Stratum (Plot size: 30 X 30)	. ~			¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	Y	FACW	be present, unless disturbed or problematic.
2. Vaccinium Corymbusum	·	$\overline{}$	FACW	Definitions of Four Vegetation Strata:
2. Voicement (Dignacon)		·		Definitions of Four vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
				height.
5				
5 6				Sapling/Shrub – Woody plants, excluding vines, less
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6 7	- <u></u>		- <u> </u>	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6 7 8.				than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – Ali herbaceous (non-woody) plants, regardless
6 7 8.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6 7 8 9				than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6 7 8 9 10				 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11				than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6 7 8 9 10				 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12	25			 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12	25			 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12 50% of total cover: 12	25			 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6	20%		Dver Ser: _S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12 50% of total cover: 12	25			 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6	20%		Dver Ser: _S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12 <u>Woody Vine Stratum</u> (Plot size: <u>30 × 30</u>) 1. <u>Solitox</u> (of und Folio)	20%		Dver Ser: _S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12 <u>Woody Vine Stratum</u> (Plot size: <u>30 × 30</u>) 1. <u>Solitox</u> (of und Folio)	20%		Dver Ser: _S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12 <u>Woody Vine Stratum</u> (Plot size: <u>30 × 30</u>) 1. <u>Solitox</u> (of und Folio)	20%		Dver Ser: _S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12 Woody Vine Stratum (Plot size: $30^{\circ} \times 30^{\circ}$) 1. $Smilox (odunt); Eolion$ 2 3	20%		Dver Ser: _S	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6 7 8 9 10 11 12 Woody Vine Stratum (Plot size: $30^{\circ} \times 30^{\circ}$) 1. $Smilox (odunt); Eolion$ 2 3	20%	= Total Cove	over er: <u>S</u> FAC	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6	2.5 .5 20% (10	= Total Cove	over S	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6 7 8 9 10 11 12 Woody Vine Stratum (Plot size: $30^{\circ} \times 30^{\circ}$) 1. $Smilox (odunt); Eolion$ 2 3	2.5 .5 20% (10	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	2.5 5 20% (10 10 20%	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	2.5 5 20% (10 10 20%	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	2.5 5 20% (10 10 20%	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	2.5 5 20% (10 10 20%	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	2.5 5 20% (10 10 20%	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	2.5 5 20% (10 10 20%	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	2.5 5 20% (10 10 20%	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	2.5 5 20% (10 10 20%	= Total Cove	over S	 than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

SOIL

Sampling Point: wipp001-4

Profile Description: (Describe to the depth	needed to docum	ent the indicat	or or confirm	the absence of in	ndicators.)
Depth <u>Matrix</u>		Features	1	Tavé	Domadu
$\frac{\text{(inches)}}{\upsilon - 4} = \frac{\frac{\text{Color}(\text{moist})}{2.54 \text{ R} 2.5/ } \frac{\%}{100}$	Color (moist)	<u>% Type</u>	E Loc ²	<u> Texture </u>	Remarks
		<u> </u>		<u> </u>	
4-20 104R6/2 100 _					
		• ·			
·					
			<u></u>		
					_
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix. MS		Grains.	² Location: PL:	=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LF					Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Be	low Surface (S8) (LRR S, T, U) 🛄 1 cm Mucl	(A9) (LRR O)
Histic Epipedon (A2)		rface (S9) (LRR			< (A10) (LRR S)
Black Histic (A3)		y Mineral (F1) (I	_RR 0)		/ertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T)
Hydrogen Sulfide (A4) Stratified Layers (A5)	Loamy Gleye	• •			s Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark			(MLRA	
5 cm Mucky Mineral (A7) (LRR P, T, U)		k Surface (F7)			nt Material (TF2)
Muck Presence (A8) (LRR U)					low Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Mari (F10) (L	.RR 0) hric (F11) (MLR	A 151)		plain in Remarks)
Thick Dark Surface (A12)		ese Masses (F1		T) ³ Indicato	rs of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	=	ice (F13) (LRR		•	d hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)		(F17) (MLRA 1			disturbed or problematic.
Sandy Gleyed Matrix (S4)		rtic (F18) (MLR			
Sandy Redox (S5)		oodplain Soils (F Bright Loamy So		19A) XA 149A, 153C, 15	53D)
Dark Surface (S7) (LRR P, S, T, U)				,	,
Restrictive Layer (if observed):					
Туре:					
Depth (inches):				Hydric Soil Pr	esent? Yes V No No
Remarks:					

T



Upland data point wjop001_u facing north.

Project/Site: ACP	City/County: JOhn StonState:	Sampling Date: 7/17/14
Applicant/Owner: DOMINION	State: N	C Sampling Point: WIOP002F-W
Investigator(s): ESI (K. MU(Phrid)	Section, Township, Range: NA	
Landform (hillslope, terrace, etc.): F(A+	Local relief (concave, convex, none):	006 Slope (%): U-2
Subregion (LRR or MLRA):	5.57614 Long: -78.21	
soil Map Unit Name: Rains Sandy LUB		assification: PFO
Son Map Unit Name: <u>190363 Sou 1997</u>		
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes No (If no, explai	
Are Vegetation, Soil, or Hydrology signific		ices" present? Yes <u>No</u> No
Are Vegetation, Soil, or Hydrology natural	y problematic? (If needed, explain any a	answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point locations, trans	ects, important features, etc.
Hydrophytic Vegetation Present? Yes No		
Hydric Soil Present? YesNo	Is the Sampled Area within a Wetland? Yes	No
Wetland Hydrology Present? Yes Ves No	within a wettand r, res	· NO
Remarks:		
HYDROLOGY		,
Wetland Hydrology Indicators:	Secondary	Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that a		e Soil Cracks (B6)
Surface Water (A1)		ely Vegetated Concave Surface (B8)
		age Pattems (B10)
		Trim Lines (B16) eason Water Table (C2)
		sh Burrows (C8)
		ation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	rface (C7) 📃 Geom	norphic Position (D2)
		w Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		Neutral Test (D5)
Heat Water-Stained Leaves (B9) Field Observations: Image: Comparison of Compa		gnum moss (D8) (LRR T, U)
Surface Mater Present? Yes No. Denth (i	ches): NA	
Water Table Present? Yes No Depth (i	iches): >20,''	
Saturation Present? Yes Vo Depth (i	ches): Wetland Hydrology	Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aeria	photos, previous inspections), if available:	
Describe recorded Data (stream gauge, mornoring wen, cond		
Remarks:		the state of the second
Remarks: Revisited site on 12/3/14; Saturation 0	oserved at soil surface and	Water Table observed
at 6 inches depth.		

Sampling Point: wjop002f_w

VEGETATION (Four Strata) – Use scientific names of plants.

31'221'	Absolute	Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $30' \times 30'$)		<u>Species?</u>		Number of Dominant Species
1. Acer rabram	-20		FAC	That Are OBL, FACW, or FAC: (A)
2. Pinus taeda	10	<u></u>	FAC	Total Number of Dominant
3. Ilex Opacon	50	<u> </u>	FAC	Species Across All Strata: (B)
4		<u> </u>		Percent of Dominant Species $1/(5/2)^{O_{L}}$
5	<u> </u>		•	Percent of Dominant Species 100° (A/B) That Are OBL, FACW, or FAC: 100° (A/B)
6				Press lange heter werden er te
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		= Total Co	ver	OBL species x 1 =
50% of total cover: 40) 20% of	f total cover	r. <u>16</u>	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 50' ×30')		V		FAC species x 3 =
1. Acer, rubrum	10	У	FAC	FACU species x 4 =
2. SUMPLOCOS + inctorio	25	Y	FAC	UPL species x 5 =
3 Persea burbunia	10	Y	FACW	Column Totals: (A) (B)
4			<u> </u>	
т				Prevalence Index = B/A =
5			·	Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	11	·		I 3 - Prevalence Index is ≤3.0 ¹
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	<u>_7</u> >	= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 22.	<u>&gt;</u> 20% o	f total cove	с. <u>Ч                                   </u>	
Herb Stratum (Plot size: 30' × 30')	~ <	$\mathbf{N}$	Trail	¹ Indicators of hydric soil and wetland hydrology must
1. SUMPIO(OS tin CTORIO	23	. <u> </u>	FACW	be present, unless disturbed or problematic.
2. Osmundastrum cinnamomeum	<u> </u>	<u>N</u>	FACW	Definitions of Four Vegetation Strata:
3		,	<b>_</b>	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tail.
9				or size, and woody plants loss than size it tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	2 ()		<u> </u>	
	,	_= Total C	r	
50% of total cover:	<b>&gt;</b> _ 20% (	of total cove	er: <u>0</u>	
Woody Vine Stratum (Plot size: 30' X 30')	1	<b>.</b> .	Th/	
1. SMILON Cotunditolias		<u> </u>	- FAC	
2. Toxicodend ton radican	<u>5_5</u>	<u>    Ý    </u>	<u>FAC</u>	
3.				
4.				
5.				Hudronhudio
	- 15	_ = Total C		Hydrophytic Vegetation
50% of total cover:	5 2000	of total cov	~	Present? Yes V No
			ы. <u> </u>	·
Remarks: (If observed, list morphological adaptations be	now).			

ofile Desc	cription: (Describe	to the dep	oth needed to docun	nent the i	ndicator	or confirm	the absence o	findicator	s.)	wjop 0021
epth	Matrix			K Features		<u> </u>			- ·	
: <u>hes)</u>	Color (moist)	%	Color (moist)	%	<u>Type</u>	Loc ²	<u>Texture</u>		Remarks	<u> </u>
<u>-0</u>	104RZ/2	100				<u> </u>	Organics_	Foot	mat	
<u>- 6'</u>	104R 3/1	100	·			<u> </u>	<u> </u>			
- 16	104R 5/2	60	104R 3/1	30	D	<u>M</u>	56			
			104R5/6	10	۷_	M				
- 19	2.54 5/2	90	104R6/6	10	С	Μ	sC			
-20	104R 6/2	90	104R6/6	10	C	M				
	<u></u>					•				
		nlotion DM	I=Reduced Matrix, MS		4 Sand C		² l ocation: I		ning, M≂Mati	
			I LRRs, unless other			auis.	Indicators f			
Histoso			Polyvalue Be			_RR S. T. U		uck (A9) (Ll	-	
	pipedon (A2)		Thin Dark Su					uck (A10) (		
	listic (A3)		Loamy Muck	y Mineral	(F1) (LRI	R O)		-		MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)				-	) (LRR P, S, T)
	d Layers (A5)		Depleted Ma		50			-	Loamy Soils	(F20)
-	c Bodies (A6) (LRR lucky Mineral (A7) (I		J) Depleted Da	•	•			A 153B) rent Materia	al (TE2)	
	resence (A8) (LRR		Redox Depre						Surface (TF	12)
	iuck (A9) (LRR P, T)		Marl (F10) (1		-,			Explain in F	-	,
	ed Below Dark Surfa		Depleted Oc		(MLRA 1	151)				
	ark Surface (A12)		🔲 Iron-Mangar				•	-	rophytic veg	
	Prairie Redox (A16)							-	ogy must be j	
-	Mucky Mineral (S1)	(LRR O, S						ess disturde	d or problem	auc.
	Gleyed Matrix (S4)		Reduced Ve	ittic (F 18)						
-			Piedmont FI	oodolain S	Sails (F19	) /MI RA 14	(9A)			
Sandy	Redox (S5)		Piedmont FI					153D)		
Sandy Strippe		S, T, U)					19A) XA 149A, 153C,	153D)		
Sandy Strippe Dark S	Redox (S5) ed Matrix (S6)							153D)		
Sandy Strippe Dark S	Redox (S5) ed Matrix (S6) eurface (S7) (LRR P							153D)		
Sandy Strippe Dark S strictive	Redox (S5) ed Matrix (S6) eurface (S7) (LRR P	i):							Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No
Sandy Strippe Dark S strictive Type: Depth (i	Redox (S5) ed Matrix (S6) urface (S7) (LRR P a Layer (if observed	i):					XA 149A, 153C,		Yes	No



Wetland data point wjop002f_w facing southwest.

Project/Site: <u>ACP</u>	City/(	County: JUhnste	<u>ه مر</u>	Sampling Date: 7/17/14 Sampling Point: wjop002-4
Applicant/Owner: DOM inion			State: NC 8	Sampling Point: W10 p002-4
Investigator(s): ESI(K,MC	(Ph/Ph) Secti	ion, Township, Range: <u>1</u>	VA A	
Landform (hillslope, terrace, etc.):	DH Loca	l relief (concave, convex,	none): NONF	Slope (%): U-2
Subregion (LRR or MLRA): LRR	8 1= 35,5	7623 Long -	78,216	Slope (%): <u>0-2</u> 74 Datum: <b>W658</b>
Soli Map Unit Name: Rains	Sandy LOAM	Long,	NIM clossifics	tion:NA
Are climatic / hydrologic conditions on th		Yes No	(If no, explain in Re	
Are Vegetation, Soil, or			I Circumstances" pro	
Are Vegetation, Soil, or	Hydrology naturally problem	natic? (If needed, e	explain any answers	in Remarks.)
SUMMARY OF FINDINGS - A	ttach site map showing sar	npling point locatio	ons, transects,	important features, etc.
Hydrophytic Vegetation Present?	Yes No			
Hydric Soil Present?	Yes No	Is the Sampled Area	Yes_	
Wetland Hydrology Present?	Yes No	within a Wetland?	res	NO
Remarks:		- · ·		
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum of one is	s required: check all that apoly)		Surface Soil (	
Surface Water (A1)	Aquatic Fauna (B13)		F	etated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LI	RR U)	Drainage Pat	
Saturation (A3)	Hydrogen Sulfide Odor	(C1)	🔲 Moss Trim Lii	nes (B16)
Water Marks (B1)	Oxidized Rhizospheres	along Living Roots (C3)		Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced I		Crayfish Burr	
Drift Deposits (B3)	Recent Iron Reduction			sible on Aerial Imagery (C9) Position (D2)
Algal Mat or Crust (B4)	Thin Muck Surface (C7	•	Shallow Aqui	
Inundation Visible on Aerial Imag			FAC-Neutral	
, Water-Stained Leaves (B9)			🔲 Sphagnum m	noss (D8) (LRR T, U)
Field Observations:		. (A		
Surface Water Present? Yes	No Depth (inches):			
Water Table Present? Yes	—— · · · · –	$\frac{720}{15''}$ Wetland		
Saturation Present? Yes(includes capillary fringe)	V No Depth (inches):	UD/Wetland	Hydrology Preser	nt? Yes No
Describe Recorded Data (stream gat	uge, monitoring well, aerial photos, p	previous inspections), if av	vailable:	
			<u>.</u>	
Remarks:				
,				
1				

### VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: wion 002-u

301420		Dominant		Dominance Test worksheet:
$\frac{\text{Tree Stratum}}{P_{\text{Constrainty}}} (\text{Plot size:} \frac{30' \times 30'}{20})$	<u>% Cover</u> ろい	Species?		Number of Dominant Species
1. Pinus taedo		<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2. A Cer rubram	12	<u>Y</u>	PAC	Total Number of Dominant
3				Species Across All Strata: (B)
4			<u> </u>	Percent of Dominant Species 5.3% (A/B)
5		<u></u>		That Are OBL, FACW, or FAC:
6				Development to develop to a feature of the
7		<u></u>		Prevalence Index worksheet:
8				Total % Cover of:Multiply by:
	45	= Total Cov	er a	OBL species x 1 =
50% of total cover; 22,				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: <u>30'K30'</u> )				FAC species x 3 =
1 LIEX UPACA	20	У	FAC	FACU species x 4 =
2 Persea burbonia	20	ý	FACW	UPL species x 5 =
3 COVAUS FLUVIDA	$\overline{0}$	<del>V</del>	FACU	Column Totals: (A) (B)
		_/	· · ·	
4		<b></b>	<b></b>	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7	·			2 - Dominance Test is >50%
8	<0			3 - Prevalence Index is ≤3.0 ¹
25		= Total Co	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2	<u>)</u> 20% o	f total cover	<u>: 10</u>	
Herb Stratum (Plot size: 30 x 30)				¹ Indicators of hydric soil and wetland hydrology must
1. none				be present, unless disturbed or problematic.
2			<u> </u>	Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				
				Woody vine – All woody vines greater than 3.28 ft in height.
11				
12		- <u></u>		
		= Total Co		
50% of total cover:	20% (	of total cove	r:	
Woody Vine Stratum (Plot size: 30' X30')	د	$\vee$	FAC	
1. Smild X rotandiania		/	<u></u>	.]
2				
3				
4				
5				- Hydrophytic
	5_	_ = Total Co	over	Vegetation
50% of total cover: 2.	5 20%	- of total cove	er: I	Present? Yes No
Remarks: (If observed, list morphological adaptations be			<u></u>	<u> </u>
1				

Profile Desc	ription: (Describe to th	e depth needed to d	ocument the inc	licator or confir	m the absence of inc	licators.)
Depth	Matrix	F	Redox Features	T		Demode
(inches)		Color (moist	)%	Type ¹ Loc ²	_ <u>Texture</u>	Remarks
North -		<u>v</u>				· · · · · · · · · · · · · · · · · · ·
12-15	7,54R431	· · · · · · · · · · · · · · · · · · ·			<u></u>	
15-20	104RG/3 11	<u>٥</u>				
				<u> </u>		· · · · · · · · · · · · · · · · · · ·
	oncentration. D=Depletio					Pore Lining, M=Matrix.
	ndicators: (Applicable	_		-	<b>F1</b>	roblematic Hydric Soils ³ :
Histosol	, ,		ie Below Surface rk Surface (S9) (	: (S8) (LRR S, T,		A9) (LRR O) (A10) (LRR S)
Black Hi	bipedon (A2) stic (A3)		Nucky Mineral (F			ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Gleyed Matrix (F:			oodplain Soils (F19) (LRR P, S, T)
	i Layers (A5)		d Matrix (F3)	,		Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, T,	U) 🔲 Redox I	Dark Surface (F6	) .	(MLRA 15	
	icky Mineral (A7) (LRR P		d Dark Surface (			Material (TF2)
	esence (A8) (LRR U)	=	Depressions (F8)			w Dark Surface (TF12)
	ick (A9) <b>(LRR P, T)</b> d Below Dark Surface (A		10) (LRR U) d Ochric (F11) (I	A 151)		ain in Remarks)
·	ark Sufface (A12)	· <b>–</b> ·		s (F12) (LRR O, I	P.T) ³ Indicators	of hydrophytic vegetation and
	rairie Redox (A16) (MLR		Surface (F13) (L			hydrology must be present,
	lucky Mineral (S1) (LRR		chric (F17) (MLF		unless d	isturbed or problematic.
	Gleyed Matrix (S4)			LRA 150A, 150		
	Redox (S5)			ils (F19) (MLRA		
	I Matrix (S6) rrface (S7) (LRR P, S, T,		ous Bright Loan	y Solis (P20) (Mi	LRA 149A, 153C, 153	D}
	Layer (if observed):	0)			<u> </u>	
Type:						
	ches):				Hydric Soil Pres	sent? Yes No
Remarks:					1	
rtemanta.						
						,

I



Upland data point wjop002_u facing northeast.

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region City/County: Johnston Sampling Date: 7/21/14 ACP Proiect/Site: NC Sampling Point: wjoo Ollf-W Applicant/Owner: Dominion State: Investigator(s): ESI - J. Benton Section, Township, Range: N/A Local relief (concave, convex, none): CONCAVC Slope (%): 0-2 Landform (hillslope, terrace, etc.): ______F(a+ Subregion (LRR or MLRA): LRR P Lat: 35, 57562 Long: ~78, 22614 Datum: WGS 8 PFO loam Soil Map Unit Name: Kains sandy NWI classification: No _____ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🤜 Are "Normal Circumstances" present? Yes 🔜 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No Is the Sampled Area Hydric Soil Present? No _____ Yes X No _____ within a Wetland? Wetland Hydrology Present? Yes No Remarks: HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6) ____ Sparsely Vegetated Concave Surface (B8) ____ Aquatic Fauna (B13) ____ Surface Water (A1) ___ High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Saturation (A3) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) ____ Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) ___ Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) ____ Algai Mat or Crust (B4) ____ Thin Muck Surface (C7) ___ Other (Explain in Remarks) ___ Iron Deposits (B5) Shallow Aquitard (D3) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) K Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: $_{N_{o}} \times$ Depth (inches): Surface Water Present? Depth (inches): Water Table Present? っ20 Wetland Hydrology Present? Yes X No Saturation Present? No > Depth (inches); Yes (includes capillary fringe) Describe Recorded Data (stream cauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

#### **VEGETATION (Four Strata)** – Use scientific names of plants.

# Sampling Point: wjouOIIf-w

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $30 \times 30$ )		Species?		
1. Pinus taeda	40		FAC	Number of Dominant Species
1. FINUS Idead		-		That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	20	<u> </u>	FAC	Total Number of Dominant
3. Liquidambar styraciflua	20	. Y _	FAC	Species Across All Strata:
· · · · · · · · · · · · · · · · · · ·				
4		<del></del>	·	Percent of Dominant Species (0D
5		. <u> </u>	<u> </u>	That Are OBL, FACW, or FAC: (A/B)
6		<b></b>		
7			,	Prevalence Index worksheet:
			<u>_</u>	Total % Cover of: Multiply by:
8				
	80	= Total Cov	/er	OBL species x 1 =
50% of total cover: 40		f total cover		FACW species x 2 =
		,	•	FAC species x 3 =
Sepling/Shrub Stretum (Plot size: <u>30×30</u> )		· · · · · · ·	CAR	FACU species x 4 =
1. Acer rubrum	_ 15	<u> </u>	FAC	
2. Liquidambar styraciflua	15	Y	FAC	UPL species x 5 =
3. Ilex opaca	10		FAC	Column Totals: (A) (B)
	·	_ <u></u>		
4. Magnolia virginiana	<u> 0</u>	. <u> </u>	FACW	Prevalence Index = B/A =
5				
· · · · · · · · · · · · · · · · · · ·				Hydrophytic Vegetation Indicators:
6			·	1 - Rapid Test for Hydrophytic Vegetation
7			·	2 - Dominance Test is >50%
8				
0	50		•	3 - Prevalence Index is ≤3.01
0 <i>T</i>		= Total Co	10	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 25	20% d	of total cove	г. <u> 10</u>	
Herb Stratum (Plot size: 30 × 30)				
1. Arundinaria gigantes	5	$\sim$	FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				be present, unless disturbed of problematic.
2. Liquidambar styraciflua	<u> </u>	<u> </u>	FAC	Definitions of Four Vegetation Strata:
3				
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				<ul> <li>Woody vine – All woody vines greater than 3.28 ft in</li> </ul>
11				height.
12				
		_ = Total C		
			~	
50% of total cover:	20%	of total cov	er: 🗲	-
Woody Vine Stratum (Plot size: 30 x 30)				
1. Smilax rotundifolia	5	$\checkmark$	FAC	
1. Smilax Forunditoria				-
2				_
3.				
	<u> </u>			-
4				-
5				- Hydrophytic
	5	= Total C	Cover	Vegetation
50% of total cover: 2.5	5			Present? Yes <u>No</u>
50% of total cover:	20%	of total cov	/er:	-
Remarks: (If observed, list morphological adaptations be	elow).			

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SOIL

## Sampling Point: WJ00001 f-W

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Profile Desc	ription: (Describe	to the dept	h needed to docu	nent the Ir	ndicator	or confirm	n the absence	of Indicators.)
Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type'	_Loc ²	<u> </u>	Remarks
0-6	2.5 4 3/1	00	-		. <u> </u>		<u>lo,</u>	
6-20	2.54 5/2	90	7.5 YR 5/8	10	С	M	sa.cl.lo.	
	<b></b>				<u> </u>		·	
	oncentration, D=De	nietion RM=	Reduced Matrix M	 IS=Masked	Sand Gr	ains	² Location:	PL=Pore Lining, M=Matrix.
	Indicators: (Appli					unis.		for Problematic Hydric Solis ³ :
Histoso			Polyvalue B			RR S. T.		Auck (A9) (LRR O)
	pipedon (A2)		Thin Dark S		• • •		• • • •	Auck (A10) (LRR S)
	istic (A3)		Loamy Muc					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley	ed Matrix (	F2)		Piedm	ont Floodplain Soils (F19) (LRR P, S, T)
, <u> </u>	d Layers (A5)		C Depleted M					alous Bright Loamy Solls (F20)
	Bodies (A6) (LRR		Redox Dark	-				RA 153B)
	ucky Mineral (A7) (1							arent Material (TF2)
	resence (A8) (LRR		Redox Depi		0)			Shallow Dark Surface (TF12) (Evolution in Remarks)
	uck (A9) (LRR P, T) d Below Dark Surfa		Marl (F10) ( Depleted O		(MIRA '	51)		(Explain in Remarks)
· - ·	ank Surface (A12)		Iron-Manga		•	•	P.T) ³ India	cators of hydrophytic vegetation and
	Prairie Redox (A16)	(MLRA 150)				-		tland hydrology must be present,
. —	Mucky Mineral (S1)	•	·	c (F17) (MI	LRA 151		uni	less disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced V					
	Redox (S5)		Piedmont F					
	d Matrix (S6)		Anomalous	Bright Loa	my Soils	(F20) (ML	.RA 149A, 1530	C, 153D)
	urface (S7) (LRR P						-	
	Layer (if observed	a):						
Type:			<u> </u>					Il Present? Yes X No
	nches):		<u></u>				Hydric Soi	il Present? Yes <u>No</u> No
Remarks:								
1								
1								



Wetland data point wjoo011f_w facing northwest.

roject/Site: ACP		Citv/Co	ounty: Jol	nston		Sampling Date:	7/21/14
roject/Site: <u>ACP</u> pplicant/Owner: <u>Dominio/1</u>	' L	, <u></u> _ ,		Sta	ate: NC	Sampling Point:	W100011f.
vestigator(s): <u>ESI-</u>	Benton	Sectio	n. Township, F	ange: Ni	IA		
andform (hillslane terrace etc.):	Flat		relief (concave	convex pr	ne). Conca	ve slor	ne (%): 0 - 2
andform (hillslope, terrace, etc.): ubregion (LRR or MLRA):	<u>ι</u> ρ	1 at 35.575	57 N	Long 7	8,27598		tum WOS - 198
oil Map Unit Name: <u>Rains</u>	Sundy las		<u> </u>			ication: Vplon	
re climatic / hydrologic conditions							·
re Vegetation, Soil						present? Yes 🚬	
re Vegetation, Soil	1				. , .	vers in Remarks:)	actures ato
UMMARY OF FINDINGS					is, transect		
Hydrophytic Vegetation Present?	Yes X	No	Is the Samp	ed Area			
Hydric Soil Present?	Yes		within a Wet	land?	Yes	№_ <u>_×</u>	_
Wetland Hydrology Present?	Yes	No					
Remarks:							1
		,					
	<u> </u>				Secondary Ind	icators (minimum (	of two required)
Wetland Hydrology Indicators		all that apply				oil Cracks (B6)	<u>or two requiredr</u>
Primary Indicators (minimum of					=	•••	e Surface (B8)
Surface Water (A1)		Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Marl Deposits					
High Water Table (A2) Saturation (A3)		rogen Sulfide Odor (			<b>—</b> ·	1 Lines (B16)	
Water Marks (B1)		lized Rhizospheres		nots (C3)	_	on Water Table (C	2)
Sediment Deposits (B2)		sence of Reduced In				Burrows (C8)	_,
Drift Deposits (B3)		ent Iron Reduction i		26)	= '	Visible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)		,		hic Position (D2)	•••
Iron Deposits (B5)		er (Explain in Rema			_	quitard (D3)	
Inundation Visible on Aeria			й <b>ж</b>		FAC-Neu	tral Test (D5)	
Water-Stained Leaves (B9)			•		Sphagnu	m moss (D8) (LRF	ιΤ, U)
Field Observations:							
Surface Water Present?	Yes No _X	Depth (inches):	NA				
Water Table Present?	Yes No _X						
Saturation Present?	Yes No <u>_</u>	Depth (inches): 1	720	Wetland F	iydrology Pre	sent? Yes	No <u>X</u>
(includes capillary fringe) Describe Recorded Data (strea	m naune monitoring v	vell aerial photos p	revious inspec	tions) if ava	ailable.		
	in gaage, mericeniig i	ron, cond. priotoo, p					
Remarks:							
		۰.					
1							

### Sampling Point: WjooOll-u

VEGETATION	(Four Strata) -	Use scientific	names of plants.
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2020	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 x 30</u> )		<u>Species?</u>	Status	Number of Dominant Species //
1. Acer Nbrum	20	<u> </u>	FAC.	That Are OBL, FACW, or FAC: (A)
2. Pinus treda	20	<u> </u>	FAC	Total Number of Dominant
3. Lithidam bar sturacifha	15	<u> </u>	FAC	Total Number of Dominant //( (B)
4. Quarws phellos	15	Υ –	trew	
				Percent of Dominant Species That Are OBL, FACW, or FAC: (20 (A/B)
5		····		That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
45		= Total Cov		FACW species x 2 =
50% of total cover: <u>35</u>	20% o	f total cover	: 17	
Sapling/Shrub Stratum (Plot size: 30 × 30)			~	FAC species x 3 =
1. Acer rubrum	10	<u> </u>	FAC	FACU species x 4 =
2. Ilex apaca	10	<u> </u>	FAC	UPL species x 5 =
3. Liquidambar styracition	5	Ý	FAC	Column Totals: (A) (B)
		• – –		Developer Index DIA -
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			·	2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 12,5	20%	of total cove	r: <u> </u>	
Herb Stratum (Plot size: 30 x 30)	,		_	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	1	FACW	be present, unless disturbed or problematic.
2. MICrostenium Vimineum	15	- <del>- Ý</del>	FAC	Definitions of Four Vegetation Strata:
		(		
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				<ul> <li>more in diameter at breast height (DBH), regardless of height.</li> </ul>
5				- Incigniti
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tail.
8				- Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Not a structure All was during a greater than 2.29 ft in
				<ul> <li>Woody vine – All woody vines greater than 3.28 ft in</li> <li>height.</li> </ul>
11				
12	- 25			-
17		= Total C		
50% of total cover: $\frac{12}{2}$	20%	of total cov	er:	-
<u>Woody Vine Stratum</u> (Plot size: $30 \times 30$ )		. 1	EL.	
1. Smilax rotunditolia	_ 10	<u> </u>	<u> </u>	
2. Lonicera japonica	<u> </u>	4_	_ <u>FAC</u>	_ ]
3				_
4				
5				
	15	= Total (		─ Hydrophytic Vegetation
		= Total co	_	Present? Yes <u>No</u>
50% of total cover: 7		6 of total co	ver:	
Remarks: (If observed, list morphological adaptations b	elow).			
		-		

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# Sampling Point: WjooOll_u

Depth	inpuon: (Describe	e to the de	pth needed to	aucument the	maicator	or contin	n the absence of ind	icators.	
	Matrix			Redox Feature	<u>s</u>		<b>-</b> .		
(inches) 0 ~ 8	Color (moist)	%	<u>Color (m</u>	oist) <u>%</u>	Type	Loc ²		Remarks	
	104R2/1	(00				· <del></del>	Sa, 10,	<b></b>	
8-14	2.54 513	<u>qo</u>	7.5YR		<u> </u>	<u>M</u>	<u>sa.cl. lo.</u>		
14-20	254512	90	754R	13 10	C	м	sa. cl. lo.		
<u></u>							·		
<u> </u>									
. <u> </u>	· · · · · · · · · · · · · · · · · · ·						·		
	· · · · · · · · · · · · · · · · · · ·								
	oncentration, D=De	Di	In Dodwood M	otriv MS-Maska	d Sand C		² l opation: Pl -P	ore Lining, M=Matri	×
	Indicators: (Appl					iailis.		roblematic Hydric	
•								-	501151
Histosol				value Below Surf	• • •			A9) (LRR O) A10) (LRR S)	
	pipedon (A2)			Dark Surface (S ny Mucky Minera				rtic (F18) (outside l	
	istic (A3)			ny Mucky Minera ny Gleyed Matrix		K Uj		oodplain Soils (F19)	
	en Sulfide (A4) d Layers (A5)			eted Matrix (F3)	. (1 2)			Bright Loamy Soils (	
	Bodies (A6) (LRR	<b>рт</b> 11)	· · ·	ox Dark Surface	(E6)		(MLRA 15		, 20)
	ucky Mineral (A7) (			eted Dark Surface				Material (TF2)	
	resence (A8) (LRR			ox Depressions (			7-7	w Dark Surface (TF	12)
=	uck (A9) (LRR P, T			(F10) (LRR U)	,			ain in Remarks)	·
	ed Below Dark Surfa	•		leted Ochric (F1	I) (MLRA	151)		,	
= '	ark Surface (A12)			Manganese Mas			P, T) ³ Indicators	of hydrophytic vege	etation and
	Prairie Redox (A16)	(MLRA 15	50A) 🔲 Umb	pric Surface (F13	) (LRR P,	T, U)	wetland	hydrology must be p	present
	Mucky Mineral (S1)			a Ochric (F17) (I	MLRA 151	)	unless d	isturbed or problem	atic.
	Gleyed Matrix (S4)			uced Vertic (F18	) (MLRA [·]	150A, 150	В)		
Sandy	Redox (S5)		🔲 Piec	imont Floodplain	Soils (F.19	9) (MLRA	149A)		
Strippe	d Matrix (S6)		🛄 Ano	malous Bright Lo	oamy Soils	(F20) <b>(M</b>	LRA 149A, 153C, 153	D)	
🗌 Dark S	urface (S7) (LRR P	ν, S, T, U)							
Restrictive	Layer (if observe	d):							
Type:									. 1
	nches):						Hydric Soil Pres	sent? Yes	NoX
Remarks:							-		
Contanto.									
			•						
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Upland data point wjoo011_u facing southeast.

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

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Project/Site: <u>ACP</u>	City/County: JOHNSTEIN Sampling Date: 7/17/14 State: NC Sampling Point: Wjop 003F-4
Applicant/Owner: Dominion	State: NC Sampling Point: W100003F-4
Investigator(s): ESICIS, MUIPHIES)	Section, Township, Range: NA
Landform (hillslope, terrace, etc.): Flat	Local relief (conceive convex none): NONE Slone (%): 0-2
Subregion (LRR or MLRA): LRR P Lat: 35	Local relief (concave, convex, none): <u>NONE</u> Slope (%): <u>0-2</u> .57571 Long: <u>-78, 23146</u> Datum: WES84
	Long: Long: Datum: WESO
Soil Map Unit Name: Grantham Silt Loan	
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes Ves No	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	
Aquatic Fauna (B	
High Water Table (A2)	
Saturation (A3)	Odor (C1)       Image: Constraint Lines (B16)         wheres along Living Roots (C3)       Image: Constraint Lines (B16)
U     Water Marks (B1)     U     Oxidized Rhizosp       Sediment Deposits (B2)     Presence of Redu	
	uction in Tilled Soils (C6)
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	.()
Surface Water Present? Yes No Depth (inche	es): <u>NA</u>
Water Table Present? Yes No Depth (inche	es): <u>&gt;20</u>
Saturation Present? Yes Ves No Depth (inche	es): <u>IO</u> Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	
	:

.

#### VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: wjop003f-w

2,142.1	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30'X30')		Species?		Number of Dominant Species $9$ (A)
1. <u>persea</u> borbunia 2. Pinus taeda	$\frac{10}{20}$	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
	$\frac{a0}{10}$	<u> </u>	FAC	Total Number of Dominant
			<u>Fire</u>	Species Across All Strata: (B)
4		. <u> </u>		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (UO /o (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	40	= Total Co		OBL species x 1 =
50% of total cover: _ <u>ス</u> シ	·		× /	FACW species x 2 =
Sonling/Shrub Stratum (Plot size: 30 X 30 )	20 % 0.			FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30'X 30') 1. ACEV (Ub/CM)	20	У	FAC	FACU species x 4 =
2. Liquidamber Styracislua	30	Ý	FAC	UPL species x 5 =
3		-/		Column Totals: (A) (B)
1			• •	
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 Rapid Test for Hydrophytic Vegetation
8	• •	•	<u> </u>	$\square$ 2 - Dominance Test is >50%
	50	= Total Co		$3$ - Prevalence index is $\leq 3.0^{1}$
, 50% of,total cover: <u>25</u>	20% 0	f total cove	10	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: $\frac{30^{1} \times 30^{1}}{410^{10} \times 30^{1}}$ )	20700		····	1
1. CLETHRO ALAIBUIGM	60	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Vaccinicim corymbosum	20		FACN	Definitions of Four Vegetation Strata:
		/		
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10		-		Woody vine - All woody vines greater than 3.28 ft in
11				height.
12		<u> </u>		,
(+	<u>-750</u>	) = Total C		
50% of total cover: 4	20%	of total cov	er:	
Woody Vine Stratum (Plot size: 301×30)	4	Y	FAC	
1. Smilax votundiscita				
2. Dnilera Japonica	5	<u> </u>	FAC	
3				
4				-
5				- Hydrophytic
	10	_ = Total C	over	Vegetation
50% of total cover:	20%	of total cov	/er: <u>2</u>	Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations be	low).			
	-			
1				

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-	chpuon. (Describe)	o die depti in	eueu to uocun		urcator	or commu	he absence of indicate	Jis.)
Depth	Matrix			Features	<u> </u>		<b>_</b>	
(inches)	Color (moist)		color (moist)		Type	Loc ²	Texture	Remarks
0-12	2,54 (2.5/1	100					<u>sl</u>	
12-15	7.5GR3/1	150					SL	
15-20.	104R5/2	40 a,	54R5/8	70	5	M	SCL	
<u> </u>			· /.				·······	
·	·					<del>-</del>		
				· <u> </u>	<u>-</u>	·	·	
	Concentration, D=Dep	letion RM=Rer	fuced Matrix MS	S=Masked	Sand Gr	ains -	² Location: PL=Pore I	ining M=Matrix.
Hydric Soil	Indicators: (Applic	able to all LRF	s. unless other	wise note	d.)	un 13.	Indicators for Proble	
Histoso		с ст. с	Polyvalue Be			RR S. T. 10		
	Epipedon (A2)		Thin Dark Su				2 cm Muck (A10)	-
Tenne -	listic (A3)	1	Loamy Muck		-			F18) (outside MLRA 150A,B)
	en Sulfide (A4)	Ĩ	Loamy Gleye			•		lain Soils (F19) (LRR P, S, T)
	ed Layers (A5)	[	Depleted Ma		-		L Anomalous Brigh	t Loamy Soils (F20)
🔲 Organi	c Bodies (A6) (LRR P	, τ, υ) [	Redox Dark	Surface (Fi	3)		(MLRA 153B)	
	lucky Mineral (A7) (Li		Depleted Da				Red Parent Mate	
	Presence (A8) (LRR L	ו) א	Redox Depre		9			rk Surface (TF12)
	luck (A9) (LRR P, T)	1	Marl (F10) (L			-4)	Other (Explain in	Remarks)
	ed Below Dark Surfac	e(A11) [	Depleted Oc			-	³ Indicators of b	drophytic vegetation and
	Dark Surface (A12) Prairie Redox (A16) (I		Iron-Mangan			-		blogy must be present,
	Mucky Mineral (S1) (		Delta Ochric			•	-	bed or problematic.
	Gleyed Matrix (S4)		Reduced Ve				diffeed distant	iou or problemato.
	Redox (S5)	-	Piedmont Fl				)A)	
	ed Matrix (S6)	]		-		-	A 149A, 153C, 153D)	
	Surface (S7) (LRR P,	S, T, U)						
Restrictive	e Layer (if observed)	•					1	
		-						
Type: _			_					
	inches):	-	-				Hydric Soil Present?	Yes No
		• 	-				Hydric Soil Present?	Yes <u>No</u> <u>No</u>
Depth (			-				Hydric Soil Present?	Yes <u>No</u>
Depth (			-				Hydric Soil Present?	Yes <u>No</u>
Depth (			-				Hydric Soil Present?	Yes <u>No</u>
Depth (			_				Hydric Soil Present?	Yes <u>No</u>
Depth (			-				Hydric Soil Present?	Yes <u>No</u>
Depth (							Hydric Soil Present?	Yes <u>No</u>
Depth (							Hydric Soil Present?	Yes <u>No</u>
Depth (			-				Hydric Soil Present?	Yes <u>No</u>
Depth (		• 					Hydric Soil Present?	Yes <u>No</u>
Depth (		• 	_				Hydric Soil Present?	Yes <u>No</u>
Depth (		• 	_				Hydric Soil Present?	Yes <u>No</u>
Depth (			_				Hydric Soil Present?	Yes <u>No</u>
Depth (			_				Hydric Soil Present?	Yes <u>No</u>
Depth (			_				Hydric Soil Present?	Yes <u>No</u>
Depth (							Hydric Soil Present?	Yes <u>No</u>
Depth (							Hydric Soil Present?	Yes No
Depth (			_				Hydric Soil Present?	Yes No
Depth (			_				Hydric Soil Present?	Yes No
Depth (			_				Hydric Soil Present?	Yes No
Depth (			_				Hydric Soil Present?	Yes No
Depth (		• •	_				Hydric Soil Present?	Yes No
Depth (							Hydric Soil Present?	Yes No
Depth (			_				Hydric Soil Present?	Yes No



Wetland data point wjop003f_w facing southwest.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>	City/County: JUKA Ston Sampling Date: 7/17/14 State: NC Sampling Point: wjop 003 - U
Applicant/Owner: Dominion	State: NC Sampling Point: wop 003 - U
Investigator(s): FSI (1<, MU(PG(PG))	Section, Township, Range:
Landform (hillslope, terrace, etc.): $f(\alpha + \beta)$	Local relief (concave, convex, none): NONE Slope (%): 2-4
Subregion (LRR or MLRA): LRR P Lat: 35,	57585 Long: -78.23129 Datum: W658
Subregion (LRR or MLRA): $C \cap C$ Lat: $D \cap C$	
soil Map Unit Name: Grantham silt Luam	
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       No	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	
Image: Surface Water (A1)     Image: Aquatic Fauna (B)       Image: High Water Table (A2)     Image: Aquatic Fauna (B)	
High Water Table (A2) Marl Deposits (B ² Saturation (A3) Hydrogen Sulfide	
	heres along Living Roots (C3)
Sediment Deposits (B2)	
	uction in Tilled Soils (C6)
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
U Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:         Surface Water Present?         Yes         No         V         Depth (inchestion)	MA I
Surface Water Present?     Yes No Depth (inche)       Water Table Present?     Yes No Depth (inche)	$\frac{1}{2}$
Saturation Present? Yes No Depth (inchi	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	
· · ·	

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## VEGETATION (Four Strata) – Use scientific names of plants.

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## Sampling Point: wjop 003- u

2(1/2)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30'X30') 1. ACEN (NOUM)	<u>% Cover</u> えい	<u>Species?</u>	Status FAC	Number of Dominant Species (A)
2. Pinus talda	10	<del>- Ý</del> -	FAC	mat are OBL, FACW, of FAC (A)
3. Persea borwinia	15	Ý	FACW	Total Number of Dominant Species Across All Strata: (6) (B)
4				Percent of Dominant Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC: $40^{\circ}/_{\circ}$ (A/B)
6				Prevalence Index worksheet:
7	·	·	·	Total % Cover of: Multiply by:
8			·	OBL species x1 =
<b>) )</b>		= Total Co		FACW species x 2 =
50% of total cover: $\frac{22}{2}$	<u></u> 20% of	total cove	r: <u> </u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30 x 30)	30	У	FAC	FACU species x 4 =
2. persea borbonia		-V-	FACW	UPL species x 5 =
3. QUERCUS N'SRON	$-\frac{1}{10}$	N	FAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
δ		= Total Co	- <u> </u>	3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	$) - \frac{\sqrt{3}}{2000}$	f total cove		Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: <u>30 x 30</u> )	<u> </u>	r total cove	er: <u> </u>	
1. CIETURA QUIEVIO	40	У	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Vaccinium colymoosum	20	·	FACW	Definitions of Four Vegetation Strata:
				Definitions of Four vegetation Strata.
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
89				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11			<u> </u>	height.
12				
		= Total C		
50% of total cover: 30	20%	of total cov	er: <u>(</u> ス	
Woody Vine Stratum (Plot size: 30 x 30)	. <	$\mathbf{v}$	FAC	
1. Smilox ruturdisulia	$-\frac{1}{2}$		- Fric	
2. Vitis Ortugalisation		<u> </u>	FAC	
3				
4		<u> </u>		.]
5				Hydrophytic
	<u>_25</u>	_ = Total C	over	Vegetation
50% of total cover: <u>I</u>	<u>, 5</u> 20%	of total cov	ver: <u> </u>	Present? Yes No No
Remarks: (If observed, list morphological adaptations be	elow).			<u> </u>

## Sampling Point: wjop 003 - U

Profile Des	cription: (Describe	to the dept	th needed to docur	nent the in	dicator	or confirm	the absence	of indicator	s.)	
Depth	Matrix			x Features		<del></del>	_			
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture		Remarks	
0-6	2.54R3/1	100	<u></u>			<u> </u>	<u></u>			
6-20	7.54R5/4	90	2.54R5/6	10	C	Μ	SL			
			<u> </u>			·				
	·			• •						
										<u>-</u>
			· · · · · · · · · · · · · · · · · · ·			·	<u> </u>			
	· ···· ··· ··· ···		. <u> </u>							
	Concentration, D=De					ains.		PL=Pore Li		
Hydric Soil	Indicators: (Appli	cable to all	LRRs, unless othe	rwise note	d.)			for Problem	-	Soils':
Histoso			Polyvalue B				·	Muck (A9) (L		
	pipedon (A2)		Thin Dark Si					Muck (A10) (1		
=	listic (A3)		Loamy Mucł			R O)				MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley		2)			-	• •	) (LRR P, S, T)
	ed Layers (A5)		Depleted Ma	• •	-			alous Bright I	Loamy Soils	(F20)
	c Bodies (A6) (LRR		Redox Dark	•	•			RA 153B) Parent Materia		
	iucky Mineral (A7) (L		) Depleted Da					Shallow Dark		12)
	Presence (A8) (LRR luck (A9) (LRR P, T)		Mari (F10) (		''			(Explain in F	•	
	ed Below Dark Surfa		Depleted Or			51)		(=option in t	(aniano)	
	ark Surface (A12)		Iron-Mangai	• • •			T) ³ Indi	cators of hyd	rophytic year	etation and
	Prairie Redox (A16)	(MLRA 150				-		tland hydrold		
3.000	Mucky Mineral (S1)	•				-		less disturbe		
	Gleyed Matrix (S4)		Reduced Ve						•	
	Redox (S5)		Piedmont F							
	d Matrix (S6)		🔟 Anomalou's	Bright Loan	ny Soils	(F20) (MLR	A 149A, 153	C, 153D)		
Strippe	ed Matrix (S6) Furface (S7) (LRR P,	S, T, U)	🔟 Anomalous	Bright Loan	ny Soils	(F20) (MLR	A 149A, 153	C, 153D)		
Dark S			Anomalou's	Bright Loan	ny Soils	(F20) (MLR	A 149A, 153	C, 153D)		·
Dark S	urface (S7) (LRR P,		Anomalouš	Bright Loan	ny Soils	(F20) (MLR	A 149A, 153	C, 153D)		
Strippe	urface (S7) (LRR P, Layer (if observed	i):	Anomalouš	Bright Loan	ny Soils 	(F20) (MLR		C, 153D) 	Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P,	i):	Anomalouš	Bright Loan	ny Soils	(F20) (MLR			Yes	No
Strippe	urface (S7) (LRR P, Layer (if observed	i):	Anomalouš	Bright Loan	ny Soils	(F20) (MLR			Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalouš	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils	(F20) (MLR			Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils 				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalouš	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No <u>/</u>
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No <u>/</u>
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No <u></u>
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No <u></u>
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No <u></u>
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No <u></u>
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils				Yes	No <u></u>
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils		Hydric So		Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils		Hydric So		Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils		Hydric So		Yes	No
Strippe Dark S Restrictive Type: Depth (i	urface (S7) (LRR P, Layer (if observed	i):	Anomalou's	Bright Loan	ny Soils		Hydric So		Yes	No



Upland data point wjop003_u facing northeast.

## WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

ACP       City/County:       Johnsbn       Sampling Date:       7/21/14         upplicant/Owner:       Date:       NC       Sampling Point:       Mgo 0/14F_w         nvestigator(s):       EST       SBentwn       State:       NC       Sampling Point:       Mgo 0/14F_w         nvestigator(s):       EST       SBentwn       Section, Township, Range:       M/A       Sampling Point:       Mgo 0/14F_w         Subregion (LRR or MLRA):       ERR P       Lat:       35, 57258       Long:       TB: 232, 32, 32, 32, 32, 32, 32, 32, 32, 33, 33
nvestigator(s):
andform (hillslope, lerrace, etc.):       Flaft       Local relief (concave, convex, none):       CA(AV-C       Slope (%):       Slope (%):       Ø-2         Subregion (LRR or MLRA):       LRR P       Lat:       35, 57258       Long:       B222 (92)       Datum:       Datum:       V(05-/18 (4))         Soli Map Unit Name:       Kath S       Soli / Loavn       NVI classification:       FFO         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes       No       No       No         Are Vegetation       Soli or Hydrology       istificantly disturbed?       Are "Normal Circumstances" present? Yes       No         SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrohytic Vegetation Present?       Yes       No       Is the Sampled Area         within a Wetland?       Yes       No       Surface Soil Cracks (86)         Primary Indicators (minimum of one is required: check all that apply)       Surface Soil Cracks (86)       Surface Soil Cracks (86)         Sturface Water (A1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surface (83)       Drainage Patterns (B10)         Surface Water (A1)       Aquatic Fauna (B13)       Drainage Patterns (B10)       Drainage Patterns (B10)       Drainage Patterns (B10)       Drainage Patterns (B10)
Subregion (LRR or MLRA):       LKLY       Lat:       33,5 f25 g       Long:       43-22 G       Datum:       Datum:       Datum:       W002716 f         Soli Map Unit Name:       Kath S       SMAL       Load       NVI classification:       PFO         Are climatic / hydrologic conditions on the site typical for this time of year? Yes       No       (if no. explain in Remarks.)         Are Vegetation       Soil       or Hydrology       isginificatily disturbed?       Are "Normal Circumstances" present? Yes       No         Are Vegetation       Soil       or Hydrology       naturally problematic?       (if needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.       Hydrophytic Vegetation Present?       Yes       No         Hydrophytic Vegetation Present?       Yes       No       is the Sampled Area       within a Wetland?       Yes       No         Hydrology Indicators:       Present?       Yes       No       Surface Soil Cracks (86)       Spresely Vegetated Concave Surface (88)         Burdace Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (86)       Drainage Patterns (B10)       Moss Trim Lines (B16)       Drainage Pat
Are climatic / hydrologic conditions on the site typical for this time of year? Yes
Are climatic / hydrologic conditions on the site typical for this time of year? Yes
Are Vegetation
Are VegetationSoil or Hydrology naturally problematic?       (If needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       YesNo
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       Yes       No
Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Hydric Soil Present?       Yes       No       within a Wetland?       Yes       No         Remarks:       No       No       No       No       No       No         Remarks:       No       No       No       No       No       No         Wetland Hydrology Present?       Yes       No       No       No       No       No         Remarks:       No       No       Secondary Indicators (minimum of two required)       Indicators (minimum of two required)       Surface Soil Cracks (B6)       Surface (B8)       Drainage Patterns (B10)       Mos Trim Lines (B10)       Mos Trim Lines (B10)       Mos Trim Lines (B10)       Mos Trim Lines (B16)       Dry-Season Water Table (C2)       Crayfish Burrows (C3)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)       Saturation Visible on Aerial Imagery (C9)
Hydric Soil Present?       Yes       No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply)         Surface Water (A1)         High Water Table (A2)         Marl Deposits (B1)         Saturation (A3)         Hydrogen Sulfide Odor (C1)         Sediment Deposits (B2)         Presence of Reduced Iron (C4)         Drift Deposits (B3)         Algal Mat or Crust (B4)         Thin Muck Surface (C7)         Iron Deposits (B5)         Other (Explain in Remarks)         Inundation Visible on Aerial Imagery (B7)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required: check all that apply)       Surface Soil Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Vater Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)
Primary Indicators (minimum of one is required: check all that apply)
Surface Water (A1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)
High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)
Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         FAC-Neutral Test (D5)       FAC-Neutral Test (D5)
Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         FAC-Neutral Test (D5)       FAC-Neutral Test (D5)
Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)
Image: Algal Mat or Crust (B4)       Image: Thin Muck Surface (C7)       Image: Crust (B4)       Image: Cru
Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)
Field Observations:
Surface Water Present? Yes No X Depth (inches):NA
Water Table Present? Yes No X Depth (inches): 72.0
Saturation Present? Yes No Depth (inches): 720 Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:

VEGETATION (Four Strata) - Use scientific names of plants.

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Sampling Point: wjvoD12F-W

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Tree Stratum (Plot size: 39 × 30)		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $29 \times 30$ )	<u>% Cover</u> 6 D	<u>Species?</u>		Number of Dominant Species 7
1. Pinus taeda		<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidanbar styraciflua	20	<u> </u>	FAC	Total Number of Dominant
3		·		Species Across All Strata:(B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x1 =
		= Total Co		FACW species x 2 =
50% of total cover: <u>40</u>	20% of	f total cover	: <u> </u>	
Sapling/Shrub Stratum (Plot size: 30 × 30 )				FAC species x 3 =
1. Ligudanbar Styraciflun	15	Y	FAC	FACU species x 4 =
2. Acer rubrum		<u> </u>	FAC	UPL species x 5 =
				Column Totals: (A) (B)
3			· —	
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				$\square$ 3 - Prevalence Index is $\leq 3.0^{1}$
• · · · · · · · · · · · · · · · · · · ·	25	= Total Co	ver	
50% of total cover: 12.	5 20%		5	Problematic Hydrophytic Vegetation ¹ (Explain)
$50\%$ of total cover: $\underline{1-1}$	<u> </u>	or lotar cove	a. <u> </u>	
<u>Herb Stratum</u> (Plot size: $30 \times 30$ )	5		OBL	¹ Indicators of hydric soil and wetland hydrology must
1. Woodwardin areolata	<u> </u>	- — — —		be present, unless disturbed or problematic.
2	,		<u> </u>	Definitions of Four Vegetation Strata:
3		_		Tree Meady electric evolution vince 2 in (7.6 cm) or
4				<ul> <li>Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or</li> <li>more in diameter at breast height (DBH), regardless of</li> </ul>
				height.
5				-
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				- Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
				<ul> <li>Woody vine – All woody vines greater than 3.28 ft in</li> <li>height.</li> </ul>
11				
12				- 1
1	5_	= Total C		
50% of total cover: Z	<u>^</u> 20%	of total cov	/er: [	_
Woody Vine Stratum (Plot size: $33 \times 30$ )				
1 Smilax ratandifolia	10	4	FAC	
2 Vitis rotunditalia		- <u>-</u>	FAT	<u>-</u>
2			_ <u> ~ </u>	<u> </u>
3				_ \
4				_
5				_ Hydrophytic
	15	= Total (	Cover	Vegetation
50% of total cover: 7	5 200	6 of total co	2	Present? Yes <u>No</u>
1			ver	— I
Remarks: (If observed, list morphological adaptations	below).			

Profile Desc	ription: (Describe	to the depth				or confirm	n the absence	of indicators.)
Depth	Matrix			x Feature	s Type ¹	Loc ²	Tovturo	Remarks
$\frac{(\text{inches})}{() - }$	<u>Color (moist)</u>	95 2	<u>Color (moist)</u> 7,57R 518		<u>Type</u>	<u>LOC</u>	<u>Texture</u>	
	- / /					<u>M</u>	<u>sa.c.l.lo.</u>	
8-20	2,54 512	95	7.54R 518	5.	c	<u>p_</u>	Saichilo.	Oxidized rhizospheres
	·		I			•		
					•			
	·							·
<u></u>							•	
							<u> </u>	·
¹ Type: C=C	concentration, D=De	pletion, RM=	Reduced Matrix, M	IS=Maske	d Sand G	rains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appl	icable to all L	RRs, unless othe	erwise no	ted.)		Indicators	for Problematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue B	elow Surfa	ace (S8) (	LRR S, T,	U) 1 cm M	Muck (A9) (LRR O)
	pipedon (A2)		🔲 Thin Dark S	urface (S9	9) (LRR S	, T, U)		Muck (A10) (LRR S)
	liştic (A3)	•	Loamy Muc	•		R 0)		ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley		(F2)			nont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)	<b>D T</b> ( <b>D</b> -	Depleted M					alous Bright Loamy Soils (F20) RA 153B)
	c Bodies (A6) (LRR lucky Mineral (A7) (		Redox Dark					Parent Material (TF2)
	Presence (A8) (LRR		Redox Dep		. ,			Shallow Dark Surface (TF12)
	luck (A9) (LRR P, T		Marl (F10)		,			(Explain in Remarks)
	ed Below Dark Surf		Depleted O	•	) (MLRA	151)	—	
	Dark Surface (A12)	• •	Iron-Manga	nese Mas	ses (F12)	(LRR O, I		cators of hydrophytic vegetation and
Coast	Prairie Redox (A16)	(MLRA 1504		• •	•	· ·		atland hydrology must be present,
	Mucky Mineral (S1)		Delta Ochri					less disturbed or problematic.
Designed and the second s	Gleyed Matrix (S4)							
	Redox (S5)		Piedmont F				149A) LRA 149A, 153	C 153D)
	ed Matrix (S6) Surface (S7) (LRR P	(II T 2 I		s prigrit Lu	arriy Sola	s (F20) (IVII	LKA 149A, 199	6, 1336)
	e Layer (if observe						<u> </u>	
	e Layer (il Obscive	ω).						
Type: _	inchos):						Hydric So	il Present? Yes X No
	inches):			_			- Ingane ou	
Remarks:								
1								
1								
1								
1								
1								

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Wetland data point wjoo012f_w facing southwest.

## WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>	City/County:	ahnston	Sampling	Date: <u>7/21/14</u> Point: <u>Wj00012-</u> 4
Applicant/Owner: Dominion		State:		Point: W100012-4
LST - Theatra	Ocalica Terrahi	$\lambda / / A$		
Landform (hillslope, terrace, etc.): <u><u><u>Pine</u> Fut</u> Subregion (LRR or MLRA): <u><u>LRR</u> <u>P</u> Lat: Soil Map Unit Name: <u><u>Rains</u> Sandy Loan</u></u></u>	Local relief (conc 35.57274	ave, convex, none):	CON(AVR 23285 VI classification:	_ Slope (%): <u>0-2</u> _ Datum: <u>WOS-19</u> 84- pland
Are climatic / hydrologic conditions on the site typical for this tin				
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed?	Are "Normal Circum	stances" present?	res <u>X</u> No
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed, explain a	any answers in Rema	irks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling po	int locations, tr	ansects, import	ant features, etc.
Hydrophytic Vegetation Present?       Yes X       No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       Yes	X     Is the Sar       X     within a V	npled Area Vetland?	Yes <u> </u>	<u>×</u>
HYDROLOGY				
Wetland Hydrology indicators:		Secon	dary Indicators (minin	mum of two required)
Primary Indicators (minimum of one is required; check all that	(apply)	🖸 si	urface Soil Cracks (B	6)
Surface Water (A1)			parsely Vegetated Co	
	sits (B15) (LRR U)		rainage Patterns (B1	
	Sulfide Odor (C1)		oss Trim Lines (B16)	
	hizospheres along Living of Reduced Iron (C4)		ry-Season Water Tat rayfish Burrows (C8)	
	n Reduction in Tilled Soils		aturation Visible on A	
	Surface (C7)		eomorphic Position (	
	lain in Remarks)		hallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)		F	AC-Neutral Test (D5)	1
Water-Stained Leaves (B9)		<u> </u>	phagnum moss (D8)	(LRR T, U)
Field Observations:	(inches);			
Surface Water Present? Yes No X Depth		-		
Water Table Present?     Yes No _X Depth       Saturation Present?     Yes No _X Depth		- Wetley of Usedan I		No 🗡
(includes capillary fringe)	(		ogy Present? Yes	
Describe Recorded Data (stream gauge, monitoring well, ae	rial photos, previous insp	ections), if available:		
Remarks:				
				1

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## **VEGETATION (Four Strata)** – Use scientific names of plants.

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Sampling Point: WJ00012-U

Tree Stratum (Plot size: 30 > 30)		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Pinvs taeda	60	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Lighdanbar Styraciflua	20	<u> </u>	FAC	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5		·		That Are OBL, FACW, or FAC: [00 (A/B)]
6				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	80	= Total Cov		OBL species x 1 =
50% of total cover: 40	20% of	total cover:		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: <u>39 × 30</u> )	20/00	total cover.		FAC species x 3 =
1. Liandanbar styraitha	20	м	FAC	FACU species x 4 =
+18, -0.6	10	$\frac{1}{\sqrt{2}}$	FAC	UPL species x 5 =
		<u> </u>	Inc.	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5		. <u> </u>		Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8		<u> </u>		$\boxed{1}$ 3 - Prevalence Index is $\leq 3.0^{1}$
	30	= Total Cov	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 15				
Herb Stratum (Plot size: 30 × 30)			·	
1NONC				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
2				Demitions of Pour Vegetation Strata.
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				neight.
6		·		Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9			. <u> </u>	of size, and woody plants less than 3.28 ft tall.
10	<b>.</b>			Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.				
	0	= Total Co	ver	
50% of total cover:0	20% (	of total cove		
Woody Vine Stratum (Plot size: $30 \times 30$ )				
1. Smilax rotuncifolia	10	4	FAR	
2. Vitis rotundifelia	- <u>-</u>	- <u>'</u>	F4.	·
3 Lonicera, juponica	- <u>-</u>		FAC	
3. Critical Oxformed		- —{—	<u>inc</u>	
4		·		
5				- Hydrophytic
	20	_ = Total Co	over	Vegetation Present? Yes X No
50% of total cover: 10	20% (	of total cove	er: <u> </u>	Present? Yes X No
Remarks: (If observed, list morphological adaptations be	low).			
1				
۲ <u>ــــــــــــــــــــــــــــــــــــ</u>				· · · · · · · · · · · · · · · · · · ·

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## Sampling Point: wjoo012-u

Profile Desc	cription: (Describe	e to the dept	h needed to docu	ment the i	indicator	or confirm	n the absence of i	ndicators.)	
Depth	Matrix	·		ox Feature			<b>.</b> .	<b>_</b> ·	
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type ¹			Remarks	
0-14	2.57 5/3		7.54R5/8		<u> </u>	<u>M</u>	<u>cl.lo.</u>		
14-20	2.545/2	95	7.54R 5/8	5	C	M	3a. Cl. 10.		
	·	•	· · · · · · · · · · · · · · · · · · ·				· <u> </u>		
———									
	<u></u>								
	oncentration, D=De					rains.		=Pore Lining, M=Mat	
Hydric Soil	Indicators: (Appli	icable to all	LRRs, unless othe	erwise not	ed.)		_	Problematic Hydric	Soils':
Histoso	l (A1)		Polyvalue B					k (A9) <b>(LRR O)</b>	
	pipedon (A2)		🔲 Thin Dark S					k (A10) <b>(LRR S)</b>	
=	istic (A3)		Loamy Muc	-		R 0)		Vertic (F18) <b>(outside</b>	
	en Sulfide (A4)		Loamy Gley		(F2)			Floodplain Soils (F19	
	d Layers (A5)		Depleted Ma	. ,				is Bright Loamy Soils	(F20)
	Bodies (A6) (LRR		Redox Dark					•	
	ucky Mineral (A7) (							nt Material (TF2)	4.0
	resence (A8) (LRR		Redox Depr		-8)			llow Dark Surface (TF plain in Remarks)	17 <b>2)</b>
	uck (A9) (LRR P, T d Below Dark Surfa	-	Marl (F10) (			151)		piam in Remarks)	
	ark Surface (A12)	ace (ATT)	Iron-Manga				T) ³ Indicato	ors of hydrophytic veg	etation and
	Prairie Redox (A16)	(MERA 150)			• •	•		id hydrology must be	
	Mucky Mineral (S1)		Delta Ochri					disturbed or problem	
	Gleyed Matrix (S4)	(=:::: 0, 0)	Reduced V						
	Redox (S5)		Piedmont F						
	d Matrix (S6)				-		.RA 149A, 153C, 1	53D)	
	urface (S7) (LRR P	. S. T. U)		5	-			,	
	Layer (if observe	-							
Type:	•	,							
	nches):						Hydric Soil Pr	esent? Yes	No_X_
	nones).						Tiyune Son Fi		
Remarks:									
							·		
1									
1									
1									
i									



Upland data point wjoo012_u facing northeast.

#### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

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Project/Site: ACP	city/County: John	iston	_ Sampling Date: <u>7/21/14</u> _ Sampling Point: <u>wjo o 013f-</u> w
Applicant/Owner: Dominion		State: NC	Sampling Point: W 100013f-W
Investigator(s): ESI - JBenton	Section, Township, Ra	ange: N/A	
andform (hillslope, terrace, etc.);	Local relief (concave.	convex. none): Carlo	Slope (%): 0-2
Subregion (LRR or MLRA): <u>LRR P</u> Lat:	35,57056	Long: -78.2370	9 Deturity $OS \cdot 19P4$
Soil Map Unit Name: Kan's Sondy Loan		NWI classi	fication: PFO
Are climatic / hydrologic conditions on the site typical for this tim		NVVI classi	Pomarke )
Are Vegetation, Soil, or Hydrology signif		-	" present? Yes $\times$ No
Are Vegetation, Soil, or Hydrology signification, Soil, or Hydrology natur			
SUMMARY OF FINDINGS – Attach site map sho		eeded, explain any answ	·
· · · · · · · · · · · · · · · · · · ·	is the cample		
Wetland Hydrology Present? Yes <u>Yes</u> No		and? Yes 🔽	<u>×No</u>
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:			icators (minimum of two required)
Primary Indicators (minimum of one is required: check all that			oil Cracks (B6)
Surface Water (A1)			/egetated Concave Surface (B8)
	its (B15) <b>(LRR U)</b> Sulfide Odor (C1)		Patterns (B10) I Lines (B16)
	hizospheres along Living Roo		on Water Table (C2)
	f Reduced Iron (C4)		surrows (C8)
Drift Deposits (B3)	Reduction in Tilled Soils (C6	) 🔲 Saturation	Visible on Aerial Imagery (C9)
	Surface (C7)		nic Position (D2)
	ain in Remarks)	<b></b>	quitard (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)		<b>—</b>	ral Test (D5) n moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No X Depth	(inches): IVA		
Water Table Present? Yes No X Depth	(inches):		
Saturation Present? Yes X No Depth	(inches): <u>10</u> "	Vetland Hydrology Pres	sent? Yes <u>×</u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aeri	ial photos, previous inspectio	ns) if available:	
		noj, a oranabio.	
Remarks:			
• •			
<u> </u>			

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## **VEGETATION (Four Strata)** – Use scientific names of plants.

# Sampling Point: wjoo 013f_w

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Tree Stratum (Plot size: ろつメ 30)	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: <u>50 × 30</u> ) 1. ACCF (Vbrun	<u>% Cover</u>	Species?	_	Number of Dominant Species
2. Lirisdentron tulipitary	10	<u>_N</u>	<u>FAr</u>	That Are OBL, FACW, or FAC: (A)
	10	<u>_N</u>	<u>FAC</u>	Total Number of Dominant 5 (B)
3. Liquidambar Styracitha	<u> </u>	<u>_N</u>	FAC	Species Across All Strata: (B)
4. Ligustrun sinense		<u> </u>	FAC	Percent of Dominant Species
5		<u> </u>		That Are OBL, FACW, or FAC: (A/B)
6				Brevelenes Index workshoots
7			<u> </u>	Prevalence Index worksheet:
8	<u></u>			Total % Cover of: Multiply by:
	<u> </u>	= Total Cov	/er	OBL species x 1 =
50% of total cover: <u>45</u>	20% of	f total cover	: 18	FACW species x 2 =
<u>Sapling/Shrub Stratum</u> (Plot size: $50 \times 30$ )				FAC species x 3 =
1. Ligustrum sinchse	60	<u> </u>	FAC	FACU species x 4 =
2. Magnolia Vichiniana		N	FACW	UPL species x 5 =
3. Morella Cérifera	10	$\sim$	FAC	Column Totals: (A) (B)
4				Dravelance Index - D/A -
5				Prevalence index = B/A =
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8		·	·	2 - Dominance Test is >50%
8		= Total Co		3 - Prevalence Index is ≤3.0 ¹
.50% of total cover: <u>40</u>		f total cover		Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: $30 \times 30$ )	20% 0	i total cover		
100.00				¹ Indicators of hydric soil and wetland hydrology must
1. <u>ND 1</u> .				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4			·	more in diameter at breast height (DBH), regardless of
5				height.
6			•	Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tail.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.		_		
	Ð	= Total Co	ver	- 
50% of total cover:O	20%	- of total cove	_	
Woody Vine Stratum (Plot size: 30 × 30)				·
1. Notis cotondiBlia	0	V	FAR	
2 Smilax rotunditolia	5	- <u>'</u>	<u> </u>	•
3. Lonicera Japonica			FAC	-
		{	<u> </u>	- ]
4				-
5				- Hydrophytic
	20	_ = Total Co		Vegetation Present? Yes X No
50% of total cover: <u>10</u>		of total cove	er: <u> </u>	
Remarks: (If observed, list morphological adaptations be	low).			

Sampling Point: Wj00013f-W

Profile Des	cription: (Describe	to the dept	h needed to docum	nent the i	ndicator	or confirm	n the absence of inc	dicators.)
Depth	Matrix			K Feature	<u>s</u>		Tester	Democratic
<u>(inches)</u> 0 - 6	<u>Color (moist)</u> 2,57 ³ /1	<u>%</u>	Color (moist)	%	Type	Loc ²		Remarks
		100						
<u>6-10</u>	2,574/1	95	7.54R*/6 104R518	5	<u> </u>	M	10.	
10-20	2.54 6/1	95_	[UYR 5/8	5	С	M	lo.sa.	
								· · · · · · · · · · · · · · · · · · ·
· · · · · ·					·	·	· ·	
	· · · · · · · · · · · · · · · · · · ·			·	·		· ·	
	·				·			·
	oncentration, D=Dep					ains.		Pore Lining, M=Matrix.
-	Indicators: (Applic	cable to all I	_				<b>11</b>	roblematic Hydric Soils ³ :
Histosc			Polyvalue Be					(A9) (LRR O)
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)
	listic (A3)		Loamy Mucky	-		<b>RO</b> )		ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4) ed Layers (A5)		Loamy Gleye		(FZ)			loodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20)
	c Bodies (A6) (LRR I	от II)	Redox Dark		-6)		(MLRA 15	
	ucky Mineral (A7) (L							Material (TF2)
	resence (A8) (LRR I		Redox Depre					w Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, T)		Mari (F10) (L	.RR U)			Other (Expl	ain in Remarks)
Deplete	ed Below Dark Surface	ce (A11)	Depleted Oc	hric (F11)	(MLRA 1	i51)	_	
	ark Surface (A12)		📋 Iron-Mangan					of hydrophytic vegetation and
	Prairie Redox (A16) (	-						hydrology must be present,
	Mucky Mineral (S1) (	(LRR O, S)						isturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ver     Piedmont Flo					
	d Matrix (S6)			•	•		RA 149A, 153C, 153	וחי
	urface (S7) (LRR P,	S. T. U)			any oono	(1 20) (112		,
	Layer (if observed							
Type: _							1	
Depth (i	nches):						Hydric Soil Pres	sent? Yes 🔀 No
Remarks:								
								·
								-14
]								
	i.							
1								
1								
1								



Wetland data point wjoo013f_w facing west.

### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>		City/County: 54	phaston	Sampling Date: 7/21/14
Applicant/Owner: Dominion	Power	<u> </u>	State NC	Sampling Date: <u>7/21/14</u> Sampling Point: <u>Wj00013 -</u> и
Investigator(s): ESI-JBe	inton	Section Township	Range: N/A	Company 7 on a
Landform (hillslope, terrace, etc.):		Geolon, Township,		CAVE Slope (%): U-2
Landform (nillslope, terrace, etc.): _1	ρ	= Edga relief (concave) $=$ 57056 A(	$ze_{72}z_{2}$	5 W Datum: <u>w 65 - 19</u> 74
Subregion (LRR or MLRA):		2 2 2 2 2 2 2	Long: <u></u>	
Soil Map Unit Name: <u>601356</u>				
Are climatic / hydrologic conditions o	n the site typical for this time o			
Are Vegetation, Soil,	or Hydrology significa	antly disturbed?	Are "Normal Circumstanc	es" present? Yes <u>X</u> No
Are Vegetation, Soil,	or Hydrology naturally	y problematic? (	lf needed, explain any ar	iswers in Remarks.)
SUMMARY OF FINDINGS -	Attach site map show	ing sampling poi	nt locations, transe	ects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes X No Yes No Xo	Is the Sam		No <u>×</u>
			ı	
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary I	ndicators (minimum of two required)
Primary Indicators (minimum of on				Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna			y Vegetated Concave Surface (B8)
High Water Table (A2)		(B15) (LRR U)		e Patterns (B10)
Saturation (A3)	Hydrogen Sulf	ide Odor (C1) ospheres along Living F		rim Lines (B16) ason Water Table (C2)
Water Marks (B1)		educed Iron (C4)		n Burrows (C8)
Drift Deposits (B3)		eduction in Tilled Soils		ion Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Su			rphic Position (D2)
Iron Deposits (B5)	🔲 Other (Explair	n in Remarks)	Shallov	Aquitard (D3)
Inundation Visible on Aerial In	nagery (B7)		🔲 FAC-N	eutral Test (D5)
Water-Stained Leaves (B9)			Sphagr	num moss (D8) (LRR T, U)
Field Observations:	./	. 14-	-	
Surface Water Present? Ye	es No 🗶 Depth (in	ches): <u>Vr</u>		
	es No X Depth (in	iches):		resent? Yes No 🔀
(includes capillary fringe)	es No X Depth (in		Wetland Hydrology P	resent? Yes No
Describe Recorded Data (stream	gauge, monitoring well, aerial	photos, previous inspec	ctions), if available:	2
Remarks:				
			•	

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## **VEGETATION (Four Strata)** – Use scientific names of plants.

Sampling Point:	wj00013_4
owning i ond	

Tree Stratum (Plot size: 30 × 30 )		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:) 1. Ligystrum sinense	<u>% Cover</u> そう	<u>Species?</u> Y	<u>Status</u> FAC	Number of Dominant Species
2. All rubrum	<u> </u>	- <u>-</u>	FAC	(A) = (A)
3				Total Number of Dominant 7 Species Across All Strata: (B)
4				
5				Percent of Dominant Species 36 (A/B)
6				
7				Prevalence Index worksheet:
8			. <u> </u>	Total % Cover of: Multiply by:
	<u>    80   </u>	= Total Cov	/er	OBL species x 1 =
50% of total cover: 40	20% of	total cover	: 16	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 × 30 )		. (	<b>—</b> .	FAC species x 3 =
1. Lightrum sinense	<u> </u>	<u> </u>	FAC	FACU species x 4 =
2. Khus copallinum	15	<u> </u>	<u>upl</u>	UPL species x 5 =
3. Acer rubrum	10	<u>N</u>	FAic	Column Totals: (A) (B)
4				Prevalence index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			<u> </u>	2 - Dominance Test is >50%
8				☐ 3 - Prevalence Index is ≤3.0 ¹
27.0	<u>_++5</u> _	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>37</u> ,5	20% 0	f total cove	r: 15	
<u>Herb Stratum</u> (Plot size: $30 \times 30$ )	<i>_</i>		<b>C</b> 4 - 2	¹ Indicators of hydric soil and wetland hydrology must
1. Viola sordria	5	· _¥	FAC	be present, unless disturbed or problematic.
2		·	·	Definitions of Four Vegetation Strata:
3	<b></b>		•	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5	•		·	height.
6	. <u> </u>	·	·	Sapling/Shrub - Woody plants, excluding vines, less
7	- <u></u>			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10		· · · · · · ·		Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	_5	= Total Co		
50% of total cover: $\frac{2.5}{2}$	20% c	of total cove	er:(	
Woody Vine Stratum (Plot size: <u>30 x 30</u> )			<u> </u>	
1. Vittis rotunditalia	10	<u> </u>	FAC	,
2. Dmilax rotunditolia		<u> </u>	FAC	
3. Lonicora japonica	<u> </u>	4	FAC	
4				
5				Hydrophytic
	_25	_ = Total C	-	Vegetation Present? Yes X No
50% of total cover: 12,5	20%	of total cov	er: <u>5</u>	Present? Yes X No
Remarks: (If observed, list morphological adaptations bel	ow).			

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# Sampling Point: wjoo013_u

Profile Des	cription: (Describe	to the depth r	needed to docur	nent the i	ndicator	or confirm	n the absence of inc	licators.)
Depth	Matrix		Redo	x Features	3		_	_
<u>(inches)</u> 0 - 8	Color (moist)		Color (moist)	%	Type	Loc ²	Texture	Remarks
	101R 3/3		1 - 051			·	<u>sa, lo,</u>	
8-18	2.54 3/3	95 7	F,54R548	5	C	<u></u>	Salo.	
8-20:	2.5431	95 7	2,5YR518	5	C.	M	30.10.	
			4					
					-			
						·		
					••••••			
								·····
	oncentration, D=De					rains.		Pore Lining, M=Matrix.
<u> </u>	Indicators: (Appli	cable to all LR					<b></b>	roblematic Hydric Soils ³ :
Histoso	i (A1) Epipedon (A2)	-	Polyvalue Be					(A9) (LRR O) (A10) (LRR S)
	listic (A3)	-	Loamy Muck			•		ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			,		oodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					Bright Loamy Soils (F20)
= -	Bodies (A6) (LRR		Redox Dark	-	•		(MLRA 15	
	ucky Mineral (A7) (L		Depleted Da					Material (TF2)
	Presence (A8) (LRR luck (A9) (LRR P, T)		Redox Depri		8)			w Dark Surface (TF12) ain in Remarks)
	ed Below Dark Surfa		Depleted Oc	•	(MLRA	151)		an in remarks)
	ark Surface (A12)		Iron-Mangar				,T) ³ Indicators	of hydrophytic vegetation and
	Prairie Redox (A16)		🔲 Umbric Surf	ace (F13)	(LRR P,	T, U)	wetland I	hydrology must be present,
	Mucky Mineral (S1)	(LRR 0, \$)	Delta Ochric			•		isturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve				•	
	Redox (S5) d Matrix (S6)		Piedmont Fl				RA 149A, 153C, 153	ס
	urface (S7) (LRR P,	S, T, U)		Digitized	ing cono	(1 20) (1112	101 1407, 1000, 100	5)
	Layer (if observed							
Type:			_					
Depth (i	nches):		_				Hydric Soil Pres	sent? Yes No $\times$
Remarks:								
1								



Upland data point wjoo013_u facing east.

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>	City/County: Johnston Sampling Date: 7/22/14
Applicant/Owner: DOMINION	City/County: Johnston Sampling Date: 7/22/14 State: <u>NC</u> Sampling Point: <u>wjoo 0145-</u> W
Investigator(s); ESI - JBanton	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): depression	Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>0-2</u> 5, 57023 N Long: <u>78, 24079 W</u> Datum: <u>W65-199</u> 4
Subregion (LRR or MLRA): LRR P Lat: 35	5. 57023 N Long: 78,24079W Datum: WES-1984
Soil Map Unit Name: <u>Granthan Silt Joan</u>	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of	vear? Yes X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significan	
Are Vegetation, Soil, or Hydrology naturally	•
	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       No	within a Wetland? Yes X No
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	N) Secondary Indicators (minimum of two required)
Sediment Deposits (B2)       Presence of Re         Drift Deposits (B3)       Recent Iron Re         Algal Mat or Crust (B4)       Thin Muck Surf         Iron Deposits (B5)       Other (Explain)         Inundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)	(B13)       Sparsely Vegetated Concave Surface (B8)         B15) (LRR U)       Drainage Patterns (B10)         de Odor (C1)       Moss Trim Lines (B16)         spheres along Living Roots (C3)       Dry-Season Water Table (C2)         cduced Iron (C4)       Crayfish Burrows (C8)         duction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         ace (C7)       Geomorphic Position (D2)
Field Observations: Surface Water Present? Yes No X Depth (inc	had had
Surface Water Present?       Yes No _X Depth (inc         Water Table Present?       Yes No _X Depth (inc         Saturation Present?       Yes No _X Depth (inc         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial p	hes): 720 hes): 720 Wetland Hydrology Present? Yes X No
Remarks:	
<b></b>	

#### VEGETATION (Four Strata) - Use scientific names of plants.

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Sampling Point: WJ000145-W

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 ×30</u> )		Species?		Number of Dominant Species
1. ACer rubrum	<u>lo</u>	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2				T ( ) M ( ) ( D ( ) ( )
3				Total Number of Dominant T (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: [JO (A/B)
				That Are OBL, FACW, or FAC: [00 (A/B)
6				Prevalence Index worksheet:
7	<u> </u>			Total % Cover of: Multiply by:
8	10			OBL species x 1 =
L.		= Total Cov		FACW species x2 =
50% of total cover:	20% of	f total cover	:	FAC species x 3 =
<u>Sapling/Shrub Stratum</u> (Plot size: $30 \times 30$ )	× .		<b>-</b> 1 .	FACU species x4 =
1. Ligustrum sinense	50	<u> </u>	FAC	
2. Acer rubrun	15	<u> </u>	FAC	UPL species x 5 =
3. Liquidamber styraciflum	_10_	<u>N</u>	FAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7	·			2 - Dominance Test is >50%
8	75	= Total Co		3 - Prevalence Index is ≤3.0 ¹
27 <b>-</b>				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $37.5$	20% o	f total cove	r: <u>19</u>	
Herb Stratum (Plot size: 30 × 30)			<i>—</i> • •	¹ Indicators of hydric soil and wetland hydrology must
1. Rubus argutus	0		FAC	be present, unless disturbed or problematic.
2		·	• •	Definitions of Four Vegetation Strata:
3				The literate state with the size of in (7.0 err) of
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				<ul> <li>Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</li> </ul>
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10		<u> </u>		Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				_ 1
	0	= Total Co	over	
50% of total cover: 5	20%	- of total cove	er: Z	
Woody Vine Stratum (Plot size: 30 × 30)			···	-
1. Smilax rotunditalia	10	Ч	FAr	
2. Lonicera japonica			- TAC	-
3 Vitis Istunditolia	5		$-\frac{r}{\Gamma 4r}$	-
3. VIID INTONEITOIM			- FAC	-
4				_ \
5		<u> </u>		- Hydrophytic
	20	_ = Total C	over	Vegetation
50% of total cover: <u>[0</u>	20%	- of total cove	er:_4	Present? Yes No
Remarks: (If observed, list morphological adaptations be				- I
· ·				

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the i	ndicator	or confirm	n the absence of	findicators.)
Depth	Matrix			x Features	3	<b></b>		_
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	<u> </u>	Remarks
0-8	104R44	100					sa.b.	
8-20	2.545/2	90	104R 5/8	10	C	M	Sa, clilo.	
			<u>(- )</u>					
	. <u> </u>				· · · · ·			
			· ·				· <del></del> -	
<del>_</del>	F-1-1-1				· · · · · · · · · · · · · · ·	·		
							<b></b> _	
¹Type: C≕C	oncentration, D=Dep	pletion, RM	=Reduced Matrix, M	S=Masked	Sand G	ains.	² Location: F	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applie	cable to all	LRRs, unless othe	erwise not	ed.)		Indicators for	or Problematic Hydric Soils ³ :
∏ Histosol	l (A1)		Polyvalue B	elow Surfa	ce (S8) (I	LRR S, T,	<b>U)</b> 1 cm Μι	uck (A9) (LRR O)
	pipedon (A2)		Thin Dark S					ick (A10) (LRR S)
	istic (A3)		Loamy Mucl					d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley	ed Matrix (	(F2)		🛄 Piedmor	nt Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Ma	atrix (F3)			Anomale	ous Bright Loamy Soils (F20)
🔲 🔲 Organic	Bodies (A6) (LRR I	P, T, U)	🔲 Redox Dark	Surface (F	-6)			A 153B)
	ucky Mineral (A7) (L		) 🔲 Depleted Da	ark Surface	e (F7)			rent Material (TF2)
Muck P	resence (A8) (LRR I	U)	Redox Depr	ressions (F	8)			allow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (				Uther (E	Explain in Remarks)
	d Below Dark Surfa	ce (A11)	Depleted O					
	ark Surface (A12)		Iron-Manga					tors of hydrophytic vegetation and
	Prairie Redox (A16)							and hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)						ss disturbed or problematic.
	Gleyed Matrix (S4)							
	Redox (S5)		Piedmont F					4500
	d Matrix (S6)	о <b>т</b> ну	Anomalous	Bright Loa	my Solis	(F20) (ME	RA 149A, 153C,	1530)
	urface (S7) (LRR P,							
	Layer (if observed	i):						
Type:								1
Depth (ii	nches):						Hydric Soil I	Present? Yes <u>X</u> No
Remarks:								
1								
1								
1								
1								



Wetland data point wjoo014s_w facing west.

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Johns	ston	Sampling Date: 7/22/14
Applicant/Owner: Dominion		State: //C	Sampling Point: wjoo 014_u
EST - Theaton	Section Township Pane	no: N/A	
Landform (hillslope, terrace, etc.):hillslope Subregion (LRR or MLRA):RR_PLat:5	Local relief (concave, co	invex none); Con Ca	ve slope (%): 0-2
Subracion (I PP or MI PA): LRR P	57019 N	ng: 78,2407	2 W Datum: WG5-1984
Soil Map Unit Name: (DOldsboro Smdy Loam, O-2	- Sloves	NIAA classifi	cation: voligad
Are climatic / hydrologic conditions on the site typical for this time of the			Comorks )
			present? Yes X No
Are Vegetation, Soil, or Hydrology significant	-		
Are Vegetation, Soil, or Hydrology naturally p		eded, explain any answe	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point lo	cations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes No _X	<ul> <li>Is the Sampled a</li> </ul>	Атеа	
Hydrophytic Vegetation Present?       Yes No _X         Hydric Soil Present?       Yes No _X	- within a Wetland		No <u>×</u>
Wetland Hydrology Present? Yes No _X			
Remarks:			
HYDROLOGY		O	
Wetland Hydrology Indicators:			cators (minimum of two required)
Primary Indicators (minimum of one is required: check all that appl			il Cracks (B6)
Image: Line Surface Water (A1)     Image: Line Surface Water (A1)       Image: Line Surface Water Table (A2)     Image: Line Surface Water (A1)			egetated Concave Surface (B8) Patterns (B10)
			Lines (B16)
	pheres along Living Roots		n Water Table (C2)
Sediment Deposits (B2)			urrows (C8)
	luction in Tilled Soils (C6)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		🔲 Geomorph	ic Position (D2)
Iron Deposits (B5)	n Remarks)		quitard (D3)
Inundation Visible on Aerial Imagery (B7)		=	ral Test (D5)
Water-Stained Leaves (B9)	<u> </u>	Sphagnum	n moss (D8) (LRR T, U)
Field Observations:	LIA		
Surface Water Present?       Yes No Depth (inclusion of the sector)         Water Table Present?       Yes No Depth (inclusion of the sector)	1es):72		
		etland Hydrology Pres	sent? Yes No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial pl	notos, previous inspections	s), if available:	
Remarks:	<u> </u>		
Tenano.			
		<u> </u>	

## VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: wj00014-4

      			Number of Dominant Species That Are OBL, FACW, or FAC:       4       (A)         Total Number of Dominant Species Across All Strata:       8       (B)         Percent of Dominant Species That Are OBL, FACW, or FAC:       50       (A/B)         Prevalence index worksheet:
      			Total Number of Dominant Species Across All Strata:       8       (B)         Percent of Dominant Species That Are OBL, FACW, or FAC:       50       (A/B)         Prevalence Index worksheet:
    			Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B) Prevalence Index worksheet: <u>Total % Cover of:</u> <u>Multiply by:</u>
  			That Are OBL, FACW, or FAC:      O       (A/B)         Prevalence index worksheet:      O
  			That Are OBL, FACW, or FAC: (A/B) Prevalence index worksheet:
0 20% of 15	= Total Co	ver	Total % Cover of: Multiply by:
0 20% of	- Total Co	ver	Total % Cover of: Multiply by:
0 20% of 15		_	
) 20% of		_	
15		r A	FACW species x2 =O
		·· <u></u>	FAC species $40 \times 3 = 120$
	7	FACU	FACU species $35 \times 4 = 140$
15	7	FAC	UPL species $30$ x 5 = $150$ Column Totals: 105 (A) $410$ (B)
30	<u> </u>	UPL	
			Prevalence Index = B/A =3.9
	· ·		Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
			Problematic Hydrophytic Vegetation ¹ (Explain)
20%0		··· <u> </u>	¹ Indicators of hydric soil and wetland hydrology must
15	Y	FACU	be present, unless disturbed or problematic.
10		FAC	Definitions of Four Vegetation Strata:
			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
			more in diameter at breast height (DBH), regardless of
			height.
			Sapling/Shrub – Woody plants, excluding vines, less
			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
			Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
			Woody vine – All woody vines greater than 3.28 ft in height.
25	_ = Total C	over	
<u>2.5</u> 20% (	of total cov	er: <u>5</u>	
	,		
<u> </u>			
	7	<u> </u>	
20			- Hydrophytic Vegetation
	_		Present? Yes No X
		·····	·
		$\frac{60}{20\% \text{ of total cove}} = \text{Total Cove}$ $\frac{15}{10} = \frac{1}{7}$ $\frac{10}{7} = \frac{1}{7}$ $\frac{25}{20\% \text{ of total cov}} = \text{Total Cov}$ $\frac{10}{5} = \frac{7}{7}$ $\frac{5}{5} = \frac{7}{7}$ $\frac{20}{5} = \text{Total Cov}$	$\frac{60}{20\% \text{ of total cover}} = \text{Total Cover}$ $\frac{2}{20\% \text{ of total cover}} = \frac{12}{10}$ $\frac{15}{7} + \frac{FAC}{FAC}$ $\frac{10}{7} + \frac{FAC}{FAC}$ $\frac{25}{20\% \text{ of total cover}} = \frac{25}{20\% \text{ of total cover}} = \frac{5}{7}$ $\frac{10}{5} + \frac{7}{FAC}$

,

Profile Desc	ription: (Describe	to the depth	needed to docur	nent the i	ndicator	or confirm	the absence of indicate	rs.)	
Depth	Matrix	=		x Features	<u>s</u>			_	
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	<u></u>
0-6	104R 4/4	<u> 00</u> _					Sarlor		
6-20	104R 5/6	98 .	7.54R 518	Ζ.	C	M	sa, cl. b.		
			· · · · · · · · · · · · · · · · · · ·						
					·				<u> </u>
<u></u>			·						
						. <u></u>	<u></u>		
<u> </u>						·			
1							<u> </u>		
	oncentration, D=De					ains.	² Location: PL=Pore L		
	Indicators: (Applie	cable to all L					Indicators for Proble	-	IS :
Histoso			Polyvalue Be						
	pipedon (A2)		Thin Dark Su				2 cm Muck (A10)		
1 <del>_</del>	istic (A3)					τO)	Reduced Vertic (F		
	en Sulfide (A4)		Loamy Gley		(F2)			ain Soils (F19) (LF	
	d Layers (A5)		Depleted Ma	• •	-0		Anomalous Bright	Loamy Solis (F2L	1)
	: Bodies (A6) <b>(LRR I</b> ucky Mineral (A7) (L	•	Redox Dark	•			(MLRA 153B) Red Parent Mater		
	resence (A8) (LRR		Redox Depr				Very Shallow Dar		
	uck (A9) (LRR P, T)	•	Mari (F10) (I		0)		Other (Explain in		
	d Below Dark Surfa		Depleted Oc			(51)		( contanto)	
I = I	ark Surface (A12)		Iron-Mangar		-		T) ³ Indicators of hy	drophytic vegetati	on and
	Prairie Redox (A16)	(MLRA 150A)	=		• •	•		logy must be pres	
	Mucky Mineral (S1)		Delta Ochric				unless disturb	ed or problematic.	,
	Gleyed Matrix (S4)		Reduced Ve	ertic (F18)	(MLRA 1	50A, 150B)	)		
Sandy	Redox (S5)		Piedmont Fl	oodplain S	Soils (F19	) (MLRA 14	49A)	•	
Strippe	d Matrix (S6)		Anomalous	Bright Loa	my Soils	(F20) (MLF	RA 149A, 153C, 153D)		
	urface (S7) (LRR P,								
Restrictive	Layer (if observed	):							
Type:									
Depth (ii	nches):						Hydric Soil Present?	Yes I	No <u>×</u> _
Remarks:							1		
								·	
1									
1									



Upland data point wjoo014_u facing east.

## WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>		City/County:	Johnston		Sampling Date: 7/22/14
Applicant/Owner: Dominion	<b>)</b> . ( .	_ , , , _	Sta	ate: NC	Sampling Date: 7/22/14 Sampling Point: Wjoo 015f-
Investigator(s): <u>EST - </u>					
Landform (billolong, torrage, etc.):	headwater		none conver no	(1) $(2)$ $(2)$	· C Slope (%): <u>O - 2</u>
Landform (millslope, terrace, etc.).	20 P	- LOCATERIER (CC	11cave, wilvex, 11c	ックレリンタ	W Datum: WGS 199
Subregion (LRR or MLRA):	<u></u> Lat: <u></u>	31 30 113 14	Long: <u></u>	0,21701	
Soil Map Unit Name: <u>Gran H</u>					cation: PFO
Are climatic / hydrologic condition					
Are Vegetation, Soil	, or Hydrology significa	ntly disturbed?	Are "Normal C	ircumstances"	present? Yes X No
Are Vegetation, Soil	, or Hydrology naturally	problematic?	(If needed, exp	plain any answe	ers in Remarks.)
SUMMARY OF FINDINGS	<ul> <li>Attach site map show</li> </ul>	ing sampling	point location	s, transects	s, important features, etc.
Hydrophytic Vegetation Present		1 13 11 5 1	Sampled Area		
Hydric Soil Present?	Yes <u>X</u> No		a Wetland?	Yes 📝	<u> </u>
Wetland Hydrology Present? Remarks:	Yes X No	<u> </u>		<u> </u>	- 
		·			
HYDROLOGY					
Wetland Hydrology Indicators	5:		S	Secondary Indic	ators (minimum of two required)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aeria Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Presence of R Recent Iron Re Thin Muck Sur Other (Explain I Imagery (B7)	(B13) (B15) (LRR U) de Odor (C1) ospheres along Lived educed Iron (C4) eduction in Tilled S face (C7) in Remarks) ches):	ing Roots (C3)	Sparsely Ve Drainage P Moss Trim I Dry-Seasor Crayfish Bu Saturation V Geomorphi Shallow Aq Shallow Aq Z FAC-Neutra Sphagnum	Lines (B16) n Water Table (C2) nrows (C8) Visible on Aerial Imagery (C9) c Position (D2) uitard (D3)
Remarks:					

٠

## VEGETATION (Four Strata) - Use scientific names of plants.

<u>Tree Stratum</u> (Plot size: $30 \times 30$ )		Dominant Species?		Dominance Test worksheet:
				Number of Dominant Species 9
1. Acer rubrum	<u>46</u>		FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidamber styraciflua	.30,		FAC	Total Number of Dominant
3. Movy taeda	10	<u>N</u>	FAC	Species Across All Strata:[0 (B)
4				
				Percent of Dominant Species $q_{\mathcal{D}}$ (A/P)
5		·		That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7			•	
, 8.				Total % Cover of: Multiply by:
	80	= Total Cov		OBL species x 1 =
50% of total cover: <u>40</u>				FACW species x 2 =
	20% 0	t total cover	:	FAC species x 3 =
Sapling/Shrub_Stratum (Plot size: 15 X 15 )			<i>-</i> .	
1. Liquidambar sturaciflua	15	<u> </u>	FAC	FACU species x 4 =
2. Querars milaray		Ч	FAC	UPL species x 5 =
3. Ilex opaca			FAC	Column Totals: (A) (B)
1	-			
4		·	<b>p.</b>	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				
				2 - Dominance Test is >50%
8	- 12	· <u>· · · · · · · ·</u>	·	3 - Prevalence Index is ≤3.0 ¹
		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>17,5</u>	20% 0	of total cove	r: <u>+</u>	
Herb Stratum (Plot size: <u>5×う</u> )				Indicators of budgie pail and watland budgelagy must
1. DSmunda spectabilis	5	N ·	OBL	³ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Only an producting	· <u> </u>			
2. Athyrium aspleniodes	(0	- —7—	FAC	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6		·		Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	15	_ = Total Co	over 🖌	
50% of total cover: 7.	5 20%	of total cove		
Woody Vine Stratum (Plot size: 30 x 30)				•
1. Vitis rotudifolia	F	$\checkmark$	-11	
	- 5_		FAC	-
2. Toxicodendron radicans	5	<u> </u>	FAC.	-
3. Parthenocissus quinquetolia	ib.	<u>··Y</u>	<u>FACU</u>	
4.				
	-			-
5				- Hydrophytic
	20	_ = Total C	over	Vegetation
50% of total cover: 13	20%	of total cov	er: <u>4</u>	Present? Yes <u>X</u> No
Remarks: (If observed, list morphological adaptations be	elow)			
1				

# Sampling Point: wj00015f-w

Profile Desc	ription: (Describe	to the depth	needed to docur	ment the i	ndicator	or confirm	n the absence of	findicators.)	
Depth	Matrix		Redox Features Color (moist) % Type ¹ Loc ²		Texture	Remarks			
(inches)	<u>Color (moist)</u> 2,5934	45	<u>Color (moist)</u> 7,5YR 44	<u>%</u> 5	<u> </u>		Sa, 10.	remaiks	
0-16									
16-20	2.54511	(	07R 4/6	<u> </u>	<u> </u>	M	Sn. 10,	· · · · · · · · · · · · · · · · · · ·	
					·				
			1						
177					A Cond Ci		² l costion: 6	L=Pore Lining, M=Matrix.	
	oncentration, D=De Indicators: (Appli					ains.		or Problematic Hydric Soils	3
Histoso	• • • •		Polyvalue B			RR S. T.	<b></b>	uck (A9) (LRR O)	
	pipedon (A2)		Thin Dark S					uck (A10) (LRR S)	
	istic (A3)		Loamy Much			-		d Vertic (F18) (outside MLR/	A 150A,B)
	en Sulfide (A4)		Loamy Gley		(F2)			nt Floodplain Soils (F19) (LR	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	d Layers (A5)		Depleted Ma					ous Bright Loamy Soils (F20)	
	: Bodies (A6) (LRR ucky Mineral (A7) (I		Redox Dark					A 153B) rent Material (TF2)	
	resence (A8) (LRR		Redox Depr					allow Dark Surface (TF12)	
	uck (A9) (LRR P, T)		Marl (F10) (		-,			Explain in Remarks)	
Deplete	d Below Dark Surfa	ice (A11)	Depleted O		-				
	ark Surface (A12)		Iron-Manga			•	· · ·	tors of hydrophytic vegetatio	
	Prairie Redox (A16)		Umbric Surl					and hydrology must be prese ss disturbed or problematic.	nu,
	Mucky Mineral (S1) Gleyed Matrix (S4)	(LKK 0, 5)			-			ss disturbed of problematic.	
	Redox (S5)		Piedmont F						
	d Matrix (S6)		Anomalous	Bright Loa	amy Soils	(F20) (ML	RA 149A, 153C,	153D)	
	urface (S7) (LRR P								
1	Layer (if observed	i):							
Type:	<u> </u>							X	
Depth (i	nches):						Hydric Soil	Present? Yes <u>×</u> N	°
Remarks:									
1									
1		,							
1									



Wetland data point wjoo015f_w facing northeast.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>		City/County: Jok	inston	Sampling Date: 7/22/14
Applicant/Owner: Dominion	Λ ·		State: NC	_ Sampling Date: <u>7/22/14</u> _ Sampling Point: <u>Wj&amp;o DI5_u</u>
Investigator(s): FST- J	Therton	Section Township F	Pange N/A	
andform (hillslone terrace etc.):	hillsloop	Local relief (concave	convex none): $C\partial \Omega$	ave Slope (%): 0-2
Cubrasian (LDD as MLDA);	RRP Lat 35	56987 N	Long: 38 7 4412	W Datum: WOS-19.74
Subregion (LRR of MLRA):	$\frac{ X }{ X } = \frac{ X }{ X } = \frac{ X }{ X }$	· · · ·		fication: <u>'upland</u>
Soil Map Unit Name: <u>NOFFO</u>	N 10my Sonz, U-2	<u>~ 78 310p~3</u>		
	s on the site typical for this time of y		(If no, explain in	Remarks.)
	, or Hydrology significant			" present? Yes <u>X</u> No
Are Vegetation, Soil	, or Hydrology naturally p	problematic? (If	needed, explain any ansv	vers in Remarks.)
SUMMARY OF FINDINGS	<ul> <li>Attach site map showin</li> </ul>	ng sampling point	locations, transect	ts, important features, etc.
Hydrophytic Vegetation Present Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No 🔀	<ul> <li>Is the Sample</li> <li>within a Wet</li> </ul>		<u>No X</u>
HYDROLOGY				
Wetland Hydrology Indicators				icators (minimum of two required)
	one is required; check all that appl		=	oil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (I	-		Vegetated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (E			Pattems (B10) n Lines (B16)
Saturation (A3)		spheres along Living Ro		on Water Table (C2)
Sediment Deposits (B2)	Presence of Rec			Burrows (CB)
Drift Deposits (B3)	Recent Iron Rec	duction in Tilled Soils (0	<ol> <li>Saturation</li> </ol>	n Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surfa			hic Position (D2)
Iron Deposits (B5)	Other (Explain i	n Remarks)	=	Aquitard (D3) tral Test (D5)
Inundation Visible on Aeria				m moss (D8) (LRR T, U)
Field Observations:	)			
Surface Water Present?	Yes No K Depth (inch	hes): NA		
Water Table Present?	Yes No X Depth (inch	hes): 720		
Saturation Present? (includes capillary fringe)	Yes No X Depth (incl	hes): 720	Wetland Hydrology Pre	sent? Yes No 🔀
	ini gauge, monitoring weil, aenar pi	notos, previous inspeci	ions), il avaliable.	
Remarks:		<b></b>		
		1		

### VEGETATION (Four Strata) - Use scientific names of plants.

30×30		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30×30) 1. Liguidanbas styra ciFha	<u> </u>	Species?	<u>_Status</u> FAC	Number of Dominant Species That Are OBL, FACW, or FAC:O (A)
2. Acer rubrum	20		FAC	
3. Qverus nigra	15	<u> </u>	FAC	Total Number of Dominant Species Across All Strata: 13 (B)
4		·		
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 77 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	75	= Total Co		OBL species x 1 =
50% of total cover: <u>37.5</u>	20% 0	f total cover	. 15	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: $15 \times 15$ )				FAC species x 3 =
1. Liavidanbar Styracifwa	5	Ч	FAC	FACU species x 4 =
2. Lightrum Shense			FAC	UPL species x 5 =
2. 1210/strum Salense	<u> </u>		FAC	Column Totals: (A) (B)
3. <u>altrus nigra</u>	<u> </u>	· <u> </u>		
4. <u>Ilex Opacn</u>		1		Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7		·		2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 25	20% o	f total cove	r:_10	
Herb Stratum (Plot size: <u>5×5</u> )			_	¹ Indicators of hydric soil and wetland hydrology must
1. Aspenium platyneuron		1	FACU	be present, unless disturbed or problematic.
2. Pytolacca americana	5	Ч	FACU	Definitions of Four Vegetation Strata:
3. Microstraium vimineum	15	Ý	FAC	
4		4		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Ounting (Ohm the Manakantanta availading vines lass
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				of size, and woody plants less than 5.26 it tail.
10				Woody vine - All woody vines greater than 3.28 ft in
11	_			height.
12				
		_ = Total Co		
50% of total cover: 12,6	<u>)</u> 20%	of total cove	er: <u> </u>	
<u>Woody Vine Stratum</u> (Plot size: $30 \times 30$ )				
1. Toxicodendron radicans	(o	<u> </u>	FAC	
2. Partnenocissus quinquefolia		<u> </u>	<u>FACU</u>	-
3. Vitis rotunditoling	5	<u> </u>	FAC	
4.				
5.				- Hydrophytic
·····	25	_ = Total C	over	Vegetation
50% of total cover: 12.5		of total cov		Present? Yes <u>X</u> No
				-
Remarks: (If observed, list morphological adaptations be	:iuw).			

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Profile Desc	ription: (Describe	to the depth				or confirm	the absence o	of indicators.)		
Depth	Matrix		Redo	x Features	s	1 - 2	<b>T</b>	· -	)	
(inches)	Color (moist)		Color (moist)	%	Type	Loc ²	<u>Texture</u>	F	Remarks	<u> </u>
0-10	2,543/1	100			·	·	Sa, lo,			
10-20	104R'2/3		7.5YR 4/6	5	<u> </u>	M	Salo.			
	,									
			· ·							
					·	·				
					·	·				
				<u> </u>	·					
	oncentration, D=De					rains.		PL=Pore Lining		
Hydric Soil	Indicators: (Appli	cable to all L	RRs, unless othe	rwise not	ed.)		<u> </u>	for Problemat	=	oils ³ :
🔲 Histoso	I (A1)		Polyvalue Be				U) 📙 1 cm N	luck (A9) (LRR	0)	
	pipedon (A2)		Thin Dark St					luck (A10) (LR		<b></b>
	listic (A3)		Loamy Muck			R 0)		ed Vertic (F18)		
	en Sulfide (A4)				(F2)			ont Floodplain		
	d Layers (A5)	D T 1N	Depleted Ma		E6)			alous Bright Loa RA 153B)	uny 5005 (F2	-0)
	: Bodies (A6) (LRR ucky Mineral (A7) (I		Redox Dark		•			arent Material (	TF2)	
	resence (A8) (LRR		Redox Depr		• •			hallow Dark SL		
	uck (A9) (LRR P, T)		Marl (F10) (I	•	-1			(Explain in Ren		
	ed Below Dark Surfa		Depleted Oc		(MLRA	151)				
	ark Surface (A12)	. ,	Iron-Mangar	nese Mass	ses (F12)	(LRR O, P		ators of hydrop		
	Prairie Redox (A16)	•			•			iland hydrology		
	Mucky Mineral (S1)	(LRR 0, S)	Delta Ochric					ess disturbed o	r problemati	D.
	Gleyed Matrix (S4)									
	Redox (S5)		Piedmont Fl				49A) RA 149A, 153C	153D)		
	d Matrix (S6) urface (S7) (LRR P,	STIN		Dright Loa	any Sons	(F20) (ML	INA 149A, 1930	, 1330)		
	Layer (if observed									
Type:										
1	nches):						Hydric Soil	I Present? Y	'es	No <u>X</u>
Remarks:										
1										



Upland data point wjoo015_u facing southwest.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

.

Project/Site: <u>ACP</u>	City/County:	nston	_ Sampling Date: <u>7/22/14</u> _ Sampling Point: <u>אן טט 166-</u> ש
Applicant/Owner: Denihion		State: NC	Sampling Point: W100016f-W
Investigator(s): <u>FST</u> JBCA-DA	Section, Township, R	ange: N/A	
Landform (hillslope, terrace, etc.): _floodplain			v€ Slope (%): 0-2
Subregion (LRR or MLRA): Lat: Lat:	35.56823 N	Long: 28.246	2.W Datum: W(95-1484
Subregion (LRR of MLRA): Cal Cal Cal	20100(12)11	Long. <u>-7-0/22 (0)</u>	Easting: PEO
Soil Map Unit Name: Rains Sandy loan			
Are climatic / hydrologic conditions on the site typical for this time			
Are Vegetation, Soil, or Hydrology signifi			" present? Yes 📈 No
Are Vegetation, Soil, or Hydrology natura	ally problematic? (If	needed, explain any ansv	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point	locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       Yes No	within a Wetl	ed Area and? Yes	× No
HYDROLOGY			
Wetland Hýdrology Indicators:			icators (minimum of two required)
Primary Indicators (minimum of one is required; check all that			oil Cracks (B6)
Surface Water (A1)	na (B13) its (B15) <b>(LRR U)</b>		Vegetated Concave Surface (B8) Patterns (B10)
	ulfide Odor (C1)		n Lines (B16)
	izospheres along Living Ro		on Water Table (C2)
	Reduced Iron (C4)		Burrows (C8)
	Reduction in Tilled Soils (C		1 Visible on Aerial Imagery (C9)
	Surface (C7)		hic Position (D2)
	ain in Remarks)		Aquitard (D3) tral Test (D5)
Inundation Visible on Aerial Imagery (B7)		=	m moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No X_ Depth	(inches): NA		
Water Table Present? Yes No X_ Depth	(inches): 72.0 "		
Saturation Present? Yes X No Depth (includes capillary fringe)	(inches): 10"		sent? Yes <u>X</u> No
Describe Recorded Data (stream gauge, monitoring well, aeri	al photos, previous inspecti	ons), if available:	х Т
Remarks:			· · · · · · · · · · · · · · · · · · ·

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### VEGETATION (Four Strata) - Use scientific names of plants.

# Sampling Point: wjoo016 f-w

Tree Stratum (Plot size: 30 × 30)		Dominant		Dominance Test worksheet:
	<u>% Cover</u> Zo	<u>Species?</u>		Number of Dominant Species
1. Acer rubrum	15	<u> </u>	FAC	That Are OBL, FACW, or FAC:() (A)
2. Pinus taeda		<u> </u>	FAC	Total Number of Dominant
3. Overwsnigra	15	<u> </u>	FAC	Species Across All Strata:(B)
4. Liquidambar Styraci FWa	20	<u> </u>	FAC	Percent of Dominant Species
5		·		That Are OBL, FACW, or FAC:(OO(A/B)
6				
7				Prevalence index worksheet:
8				Total % Cover of:Multiply by:
	70	= Total Cov		OBL species x 1 =
50% of total cover: <u>35</u>		total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: $15 \times 15$ )	20/8 01	total cover	· <u> </u>	FAC species x 3 =
<u>Saping/Shrub Stratum</u> (Plot size:)	15	ы	FACW	FACU species x 4 =
1. Magnolia virginiana	$\frac{15}{10}$			UPL species x 5 =
2. Tlex Opaca	· <u> </u>	<u> </u>	FAC	Column Totals: (A) (B)
3. Acer Norrow	0	<u> </u>	FAC	
4	·	·		Prevalence Index = B/A =
5	-			Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	•			
···	35	= Total Co	vor	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: <u>17</u> ,5	~			Problematic Hydrophytic Vegetation ¹ (Explain)
	20% 0	t total cove	r:	
<u>Herb Stratum</u> (Plot size: $5 \times 5$ )		,		¹ Indicators of hydric soil and wetland hydrology must
1. Saurveus cernins	10		OBL	be present, unless disturbed or problematic.
2. Arundiherita aigenten	<u> </u>	<u></u>	<u>FACW</u>	Definitions of Four Vegetation Strata:
3				Tree Mendu plante evoluting vince 2 in (7.6 cm) or
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
	15	= Total Co	nver	
50% of total cover: 7,5		of total cove		
	<u> </u>		<u>.</u>	•
Woody Vine Stratum (Plot size:) 1. Smilax Colvidifo(Ica	<i>L</i>	v	EAI	
			$-\frac{1}{5}$	- }
2. Toxicodendron radians		7	- hac	
. 3				-
4				_ ]
5.				- Hydrophytic
		= Total C	over	Venetation
50% of total cover: <u>5</u>	20%	of total cov	-	Present? Yes <u>No</u>
			ci. <u> </u>	-
Remarks: (If observed, list morphological adaptations be	10W).			

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Sampling Point:	w100016f	w
Camping Found.		

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the indi	cator or o	onfirm	the absence of indi	cators.)
Depth	Matrix		Red	ox Features		·		
(inches)	Color (moist)	%	Color (moist)	<u>   %    1</u>	ype ¹	.0C ²	Texture	Remarks
0-8	2:54 25/1	100					10, 1	· · · · ·
8-20-	2.544/2	90	2.54 2.5/	$\frac{1}{10}$	MS /	4	10, Sa,	,
0 20					<u> </u>	· <u>(</u>	10,()	
	,	·					·	· · · · · · · · · · · · · · · · · · ·
						. <b>.</b>	<u> </u>	
	- HE B	·						
		· <u>· ·                                  </u>						
		·					<u> </u>	i
¹ Type: C=C	oncentration, D=Dep	letion, RM	=Reduced Matrix, M	IS=Masked Sa	and Grain	3	² Location: PL=Pc	ore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless othe	erwise noted.	)		Indicators for Pro	oblematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue B	elow Surface	(S8) <b>(LR</b> F	LS, T, U	) 📙 1 cm Muck (A	9) (LRR O)
🔲 Histic E	pipedon (A2)		Thin Dark S	Surface (S9) (L	.RR S, T,	U)	2 cm Muck (A	
🔲 Black H	istic (A3)			ky Mineral (F1		)	Reduced Vert	ic (F18) (outside MLRA 150A,B)
· · · ·	en Sulfide (A4)			ed Matrix (F2)	)			odplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		` Depleted M					right Loamy Soils (F20)
	Bodies (A6) (LRR P			Surface (F6)			(MLRA 153	-
	ucky Mineral (A7) (Ll			ark Surface (F	7)		Red Parent M	
	resence (A8) (LRR L	9		ressions (F8)				Dark Surface (TF12)
	uck (A9) (LRR P, T)	~ ( ^ 4 4 )	Marl (F10)	chric (F11) (M	1 DA 464		Uther (Explain	n in Remarks)
	d Below Dark Surfac ark Surface (A12)	e (ATT)		inese Masses			T) ³ Indicators of	of hydrophytic vegetation and
	Prairie Redox (A16) (			face (F13) (LF				/drology must be present,
	Mucky Mineral (S1) (		·	c (F17) (MLR/		,		turbed or problematic.
	Gleyed Matrix (S4)	Litit 0, 0,	and a second sec	ertic (F18) (MI	-	. 150B)		
	Redox (S5)			loodplain Soil				
	d Matrix (S6)			-			A 149A, 153C, 153D	)
	urface (S7) (LRR P,	S, T, U)	_		•			
Restrictive	Layer (if observed)	:						
Type:								
Depth (ir	nches):						Hydric Soil Prese	nt? Yes 🔀 No
Remarks:								······································
1								
						•		
1								
1								
								-
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Wetland data point wjoo016f_w facing southwest.

#### WETLAND DETERMINATION DATA FORM ~ Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>	City/County: Johnston Sampling Date: 7/22/14
Applicant/Owner: Dominion	State: NC Sampling Point: W100016_u
Investigator(s): ESI-JBenton	Section Township Range: N/A
andform (hillstone terrace etc.): hillstope	Local relief (concave convex none): COC(ave Sione (%): 0-2
Subragian (I BB or MI BA): LRR P	Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>0-2</u> <u>35,56832.N</u> Long: <u>78,24606.W</u> Datum: <u>W6s 198</u> 4
Subregion (LRR of MERA) Lat.	-2:1. Slope NWI classification:
	ne of year? Yes K. No
Are Vegetation, Soil, or Hydrology signi	
Are Vegetation, Soil, or Hydrology natu	rally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes X       No         Hydric Soil Present?       Yes X       No         Wetland Hydrology Present?       Yes No       No	Is the Sampled Area       within a Wetland?   Yes No
Remarks:	
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:	t apply) Secondary Indicators (minimum of two required) Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required: check all that	
	sits (B15) (LRR U)
	Sulfide Odor (C1) Moss Trim Lines (B16)
	thizospheres along Living Roots (C3) 🔲 Dry-Season Water Table (C2)
Sediment Deposits (B2)	of Reduced Iron (C4) 📃 Crayfish Burrows (C8)
Drift Deposits (B3)	n Reduction in Tilled Soils (C6)
	Surface (C7)
	blain in Remarks) Shallow Aquitard (D3)
L Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	
Surface Water Present? Yes No <u>×</u> Depth	(inches): NA
Water Table Present? Yes No X Depth	(inches): 720
Saturation Present? Yes No X Depth	(inches): 720 Wetland Hydrology Present? Yes No X
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae	
Remarks:	

### VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: Wiso Ol6_4

2 20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 × 30</u> )	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeca	15	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Queras alba	20	<u> </u>	FACU	Total Number of Deminent
3 Acer rubrum	15	Y	FAC	Total Number of Dominant I2 (B)
4. Liquidamber styraciflya	15	4	FAC	
5. Liriudandron tuliolfera	10	Ň	FACU	Percent of Dominant Species 92 (A/B)
	_ <b>·</b>			That Are OBL, FACW, or FAC: (A/B)
6				Prevalence index worksheet:
7			·	Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Cov		FACW species x 2 =
50% of total cover: <u>37.5</u>	20% of	total cover:	: 13	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 15 x 15 )			-	FACU species x 4 =
1. Liquidambar Styracifwa	0	<u> </u>	FAC	UPL species x 5 =
2. Morelly cerifera	15	<u> </u>	FAC	
3. Ilex opaca	10	<u> </u>	<u>FAC</u>	Column Totals: (A) (B)
4		•		Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
	· · · · · · · · · · · · · · · · · · ·			
8	35	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 17,5		•		Problematic Hydrophytic Vegetation' (Explain)
··· ·· ·· ··	20% 0	t total cover	: <u> </u>	
	5		5.4	Indicators of hydric soil and wetland hydrology must
1. Athyrium applenioides		<u> </u>	FAC	be present, unless disturbed or problematic.
2. Arundihária gigantea	5	. <u> </u>	FACW	Definitions of Four Vegetation Strata:
3		·	• <del>• • • • • • • • • • • • • • • • • • </del>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Literty All herteneous (new weeds) slopin regardless
9	- <u> </u>			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12	10			
	•	= Total Co	-	
50% of total cover: <u>5</u>	20%	of total cove	er: <u> </u>	
Woody Vine Stratum (Plot size: <u>30 × 30</u> )	1 5		<b>C</b>	
1. Smilax rotundifolia	10	<u> </u>	- HAC	
2. VITIS rotunditolla	5	4	FAC	- \
3. Toxicodendron radicans			FAC	
4		- <u> </u>		
5.				- Hydrophytic
	20	_ = Total C	over	Vegetation
50% of total cover: <u>1</u>	20%	of total cove	3.6	Present? Yes <u>X</u> No
			<u> </u>	- }
Remarks: (If observed, list morphological adaptations be	:iovv).			
				· · · · · · · · · · · · · · · · · · ·

### Sampling Point: Wijos 016-4

Profile Des	cription: (Describe	to the dept	h needed to docu	ment the i	ndicator	or confirm	m the absence of in	ndicators.)
Depth	Matrix		Redo	x Feature	<u>s</u>	1	Tereterer	Derest
<u>(inches)</u>	<u>Color (moist)</u> 2,54 3/1	<u>%</u>  00	Color (moist)	%	<u>Type</u>	Loc ²		Remarks
$\frac{\partial - 2}{\partial - 2}$			754050				<u>sa lo</u>	
12-18	· <u> </u>	95	7,54R 5A	5	<u> </u>	M	sa.lo.	
18-20	2,54 1/1	95	7.54R 5/8	5	<u> </u>	M	Sailo	
-	,		ł					
		·						
	•					· •		
						·		
	Concentration, D=Dep					ains.		=Pore Lining, M=Matrix.
<u> </u>	Indicators: (Applic	cable to all						Problematic Hydric Soils ³ :
Histoso	• •		Polyvalue B					< (A9) (LRR O) < (A10) (LRR S)
	Epipedon (A2) Histic (A3)		Loamy Mucl					/ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley			,		Floodplain Soils (F19) (LRR P, S, T)
1 <b>1</b>	ed Layers (A5)		👿 Depleted Ma		. ,			s Bright Loamy Soils (F20)
=	c Bodies (A6) (LRR F		Redox Dark	•	•			
	lucky Mineral (A7) (L				• •			nt Material (TF2)
	Presence (A8) (LRR I	•	Redox Depr		-8)			low Dark Surface (TF12) plain in Remarks)
	luck (A9) (LRR P, T) ed Below Dark Surfac		Marl (F10) (			(51)		Jain in Remarks)
	Dark Surface (A12)		Iron-Manga		-		P, T) ³ Indicato	rs of hydrophytic vegetation and
	Prairie Redox (A16) (	MLRA 150/						d hydrology must be present,
	Mucky Mineral (S1) (	(LRR O, S)	Delta Ochri					disturbed or problematic.
	Gleyed Matrix (S4)							
	Redox (S5) ed Matrix (S6)		Piedmont F	-	-		149A) .RA 149A, 153C, 15	(2D)
	urface (S7) (LRR P,	S. T. U)		Daight Los	any oons	(1 20) (ML	INA 143A, 1336, 13	,, ,,
	Layer (if observed						· · · · · · · · · · · · · · · · · · ·	
Type:		•						
	inches):						Hydric Soil Pre	esent? Yes <u>×</u> No
Remarks:								
1								
								•
1								
1								
1								



Upland data point wjoo016_u facing northeast.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	city/County: Johnstor	Sampling Date: 7/22/14
Applicant/Owner: Doninian		State: <u>NC</u> Sampling Point: wj00017f-W
	Section, Township, Range:	N/A
Landform (hillslope, terrace, etc.): <u>headwater</u> Subregion (LRR or MLRA): <u>LRR P</u> Lai	Local relief (concave, convex 35,56226 N Long:	<, none): <u>COACAVE</u> Slope (%): <u>O-2</u> 
Soil Map Unit Name: Kains Sandy Locu		
Are climatic / hydrologic conditions on the site typical for this	ime of year? Yes No	_ (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed? Are "Norm	
Are Vegetation, Soil, or Hydrology na	turally problematic? (If needed	, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling point locat	ions, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes X       No         Hydric Soil Present?       Yes X       No         Wetland Hydrology Present?       Yes X       No         Remarks:       Yes       X	is the sampled Area	a Yes_X No
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all th	nat apply)	Surface Soil Cracks (B6)
High Water Table (A2)       Marl Deg         Saturation (A3)       Hydroge         Water Marks (B1)       Oxidized         Sediment Deposits (B2)       Presend         Drift Deposits (B3)       Recent	Fauna (B13) posits (B15) (LRR U) n Sulfide Odor (C1) I Rhizospheres along Living Roots (C3 e of Reduced Iron (C4) ron Reduction in Tilled Soils (C6) ck Surface (C7)	<ul> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> </ul>
	ixplain in Remarks)	<ul> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Sphagnum moss (D8) (LRR T, U)</li> </ul>
Field Observations:         Surface Water Present?       Yes No De         Water Table Present?       Yes No De         Saturation Present?       Yes No De         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well,	pth (inches): <u>720</u> pth (inches): <u>720</u> Wetlau	nd Hydrology Present? Yes <u>×</u> No f available:
Remarks: Buttressed trees.		

ς.

Sampling Point: wjoo017f-w

**VEGETATION (Four Strata)** – Use scientific names of plants.

70.10	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30×30)	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species
1. Acer rubrum	30	<u> </u>	PAR.	That Are OBL, FACW, or FAC: (A)
2. Liquidambar Styracitha	30	<u> </u>	PAL	Total Number of Dominant
3. Nyssa sylvatica	15	<u> </u>	PAC	Species Across All Strata:(2(B)
4				Discussion of Discussion
5				Percent of Dominant Species 100 (A/B)
6				
			·	Prevalence Index worksheet:
7	·		·	Total % Cover of: Multiply by:
8	75	= Total Co		OBL species x1 =
2				FACW species x 2 =
50% of total cover:	<u>20% of</u>	total cove	r: <u>13</u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 15×15)	,		-	FACU species x 4 =
1. ACer Cubrum		<u> </u>	PAL	UPL species x 5 =
2. Maynolia virginiana	15	<u> </u>	PAW	Column Totals: (A) (B)
3. Liquidambar styraciflua		<u>    Y      </u>	PAL	
4. Cyrilla racenition		<u> </u>	<u>PACW</u>	Prevalence index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
7			<u> </u>	
8		= Total C		3 - Prevalence index is ≤3.0 ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $\frac{1}{2}$	20%	of total cov	er:	
nerboliatem (Fibraize:	2	ς.	<b>~ ^ .</b>	¹ Indicators of hydric soil and wetland hydrology must
1. Microstenium Vimineum	20	<u> </u>	- FAI	be present, unless disturbed or problematic.
2. Arundinaria glgantea	10	·	<u> </u>	Definitions of Four Vegetation Strata:
3. Athyrium asplenioides	10	<u>    Y     </u>	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4.				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
· · · · · · · · · · · · · · · · · · ·				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				·   ·
8				<ul> <li>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</li> </ul>
9				
10				- Woody vine - All woody vines greater than 3.28 ft in
11	<b></b> _			_ height.
12				-   -
	<u>    40  </u>	_ = Total (	Cover	
. 50% of total cover:	20 20%	of total co	ver: <u>0</u>	
Woody Vine Stratum (Plot size: 30 × 30 )				
1. Smilax cotradifolia	5	7	FAL	
2. VItis rotundifolia	<u> </u>	- <del>'</del>	Pric	
	<u> </u>			-
3				
4			·····	- [
5				- Hydrophytic
	_[0	_ = Total	Cover	Vegetation Present? Yes No
50% of total cover:	5 20%	6 of total c	over: 4	Present? Yes <u>/</u> No
Remarks: (If observed, list morphological adaptatio				
I formation in openied, for morphological adaptatio				
•				
1				

Profile Desc	ription: (Describe	to the dept	h needed to docu	ment the in	ndicator	or confirm	n the absence	of indicators.)
Depth	Matrix		Redo	x Features		<u> </u>	<b>T</b> _1-1	Remotio
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	<u>Type'</u>	Loc ²	<u>Texture</u>	Remarks
0-4	2,54 3/1	<u>    (00                               </u>					10.	
4-20.	2.516/1	95	10YR 518		<u> </u>	PL	59.10.	Oxidized Thizospheses
[ <del></del>						·		· · · · · · · · · · · · · · · · · · ·
							·	
1								
	· · · · · · · · · · · · · · · · · · ·						- <u>-</u>	
							21	: PL=Pore Lining, M=Matrix.
	oncentration, D=De Indicators: (Appli					rains.		s for Problematic Hydric Soils ³ :
1		cable to all						-
Histoso			Polyvalue B		• • •			Muck (A9) (LRR O) Muck (A10) (LRR S)
	pipedon (A2)		Thin Dark S					iced Vertic (F18) (outside MLRA 150A,B)
	listic (A3)		Loamy Muc			K UJ		nont Floodplain Soils (F19) (LRR P, S, T)
	en Sulfide (A4) ed Layers (A5)		Depleted M		([2]			nalous Bright Loamy Soils (F20)
	c Bodies (A6) (LRR	РΤШ	Redox Dark		F6)			.RA 153B)
	lucky Mineral (A7) (I							Parent Material (TF2)
	Presence (A8) (LRR		Redox Dep		• •	-		Shallow Dark Surface (TF12)
	iuck (A9) (LRR P, T	-	Mari (F10)	•	,			r (Explain in Remarks)
	ed Below Dark Surfa	•	Depleted O		(MLRA	151)		
	Dark Surface (A12)		🔲 Iron-Manga	inese Mass	ses (F12)	(LRR O, I		licators of hydrophytic vegetation and
Coast	Prairie Redox (A16)	(MLRA 150	A) 🛄 Umbric Sur	face (F13)	(LRR P,	T, U)		etland hydrology must be present,
Sandy	Mucky Mineral (S1)	(LRR 0, \$)	Delta Ochri					nless disturbed or problematic.
· · · ·	Gleyed Matrix (S4)		Reduced V					
	Redox (S5)		Piedmont F					
	ed Matrix (S6)	• <b>-</b> · · ·		s Bright Loa	amy Solis	(F20) (MI	_RA 149A, 153	SC, 153D)
	Surface (S7) (LRR P						<u> </u>	<i>.</i>
	e Layer (if observe	a):						
Type: _							1	
Depth (	inches):		<u> </u>				Hydric Se	oil Present? Yes <u>X</u> No
Remarks:								
1								
1								

,

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Wetland data point wjoo017f_w facing south.

							-11-2 hu
roject/Site: <u>ACP</u>		City/C	ounty: うっれれ	ston		Sampling Date:	422/4
pplicant/Owner: <u>Dominion</u>						Sampling Point: <u>\</u>	NJ00017_
ivestigator(s): <u>FSI-J</u>	Benton	Sectio	on, Township, Ra	nge://	'A		
andform (hillslope, terrace, etc.): _	hillslope	Local	relief (concave, c	convex, none)	: <u>COACa</u>	VC Slope	e (%): <u>0 - 2</u> _
ubregion (LRR or MLRA):	<u> Έ</u> ρ	Lat: 35,5(2	34 N	Long: 78	,25001	Dat	um: <u>WGS - 193</u>
oil Map Unit Name: _ Rain S	Sandy 100	im .			NWI classific	ation: UPland	
re climatic / hydrologic conditions	1	,	,				
re Vegetation, Soil							≦
re Vegetation, Soil						rs in Remarks.)	
				•	-		aturos oto
UMMARY OF FINDINGS	<ul> <li>Attach site ma</li> </ul>	p showing san	npling point i	locations,	transects		eatures, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes	No No	Is the Sample within a Wetla		Yes	NoX	
IYDROLOGY							
Wetland Hydrology Indicators	:			Sec	ondary Indic	ators (minimum o	f two required)
Primary Indicators (minimum of	one is required; check	all that apply)		片		l Cracks (B6)	
Surface Water (A1)		atic Fauna (B13)		片	-	egetated Concave	Surface (B8)
High Water Table (A2)		Deposits (B15) (LF		片	Moss Trim	atterns (B10)	
Saturation (A3)		rogen Sulfide Odor lized Rhizospheres		ots (C3) 🗍		Water Table (C2	3
Sediment Deposits (B2)		sence of Reduced In			Crayfish Bu		,
Drift Deposits (B3)		ent Iron Reduction i		5) 🗍	Saturation	visible on Aerial II	magery (C9)
Algal Mat or Crust (B4)	🛄 Thir	Muck Surface (C7)	)			c Position (D2)	
Iron Deposits (B5)		er (Explain in Rema	irks)		Shallow Aq	. ,	
Inundation Visible on Aeria				<u> </u>		al Test (D5)	<b>Υ</b> 11\
Water-Stained Leaves (B9)	ł			<u></u>	_ Spnagnum	moss (D8) (LRR	
Field Observations: Surface Water Present?	Yes No	Denth (inches);	NA				
Water Table Present?	Yes No _X		720				
Saturation Present?	Yes No			Wetland Hyd	rology Pres	ent? Yes	<u>No_X</u>
(includes capillary fringe) Describe Recorded Data (strea							
Remarks:						<u> </u>	

Sampling Point: Wj0007

VEGETATION	(Four Strata)	<ul> <li>Use scientific</li> </ul>	names of plants.
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22.20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 × 30</u> )		<u>Species?</u>		Number of Dominant Species $\mathcal{T}$ (A)
1. Acer rubrum	<u> </u>	<u>– <u>k</u></u>	PAC	That Are OBL, FACW, or FAC: (A)
2. Liquidmbur Styraciflua	Z5	<u> </u>	PAC	Total Number of Dominant
3. Overws alba		1	PACU-	Species Across All Strata: (B)
4				
5			1	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
6				
				Prevalence Index worksheet:
7		<u> </u>	·	Total % Cover of: Multiply by:
8		= Total Co	·	OBL species x 1 =
2				FACW species x 2 =
50% of total cover:	<u>&gt;</u> 20% o	f total cove	r: <u>17</u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 15×15)			Fred	FACU species x4 =
1. ACE EVERUM		<u> </u>	FAC	
2. Quercus albu	15	<u>у</u> ,	PACU	UPL species x 5 =
3. Ulmus alata	10	<u> </u>	PACU	Column Totals: (A) (B)
4. PLAUS' CORAllinum	5	N	UPL	Prevalence Index = B/A =
5				
				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	<u> 45</u>	_ = Total Co	over	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 27	<u>2.5</u> 20% 0	of total cove	er:	
<u>Herb Stratum</u> (Plot size: <u>$5 \times 5$</u> )				¹ Indicators of hydric soil and wetland hydrology must
1. Microstegium Vimineum	20	Y	PAC	be present, unless disturbed or problematic.
2. Arundinaria giolantea	5	Ť.	FATW	Definitions of Four Vegetation Strata:
3				
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
4				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10.				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12		_		
12	- 25	= Total (		-
- 50% of total cover:	2.5 2000	of total cov		
2	20%	OF LOLAT COV	ver	- )
viology vine onatom (i lot size:	10	-1	FAD	
1. Smilax rotunditolia	<u>10</u>		<u> </u>	-
2. Vitis rotundifolia		/_	<u>_ FRO</u>	<del>,</del> ]
3. Parthenocissus quinquetolia	5		- FRCU	
4.				_
5				- Hydrophytic
	20	= Total	Cover	Vegetation
50% of total cover:		6 of total co		Present? Yes <u>No</u>
				_
Remarks: (If observed, list morphological adaptations	below).			

SOIL								Sampling Point: WJ00017
Profile Desc	ription: (Describe t	to the de	pth needed to docur	nent the	indicator	or confirm	n the absence of in	dicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type1	Loc ²	Texture	Remarks
0-6	104R4/2	100					0.	
6-14	2,54 3/2	100					Sa. 10.	
14-20	2.54 %	95	104R318	5	C	M	Sailo.	
			, ,					•

Depth	Matrix			lox Features			,		
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹ _	_Loc ²		Remarks	
0-6	IOYR 4/2	00					10.		
6-14	2,54 3/2	100					Sa. 10.		ļ
14-20	2.54 %		104R318	5			Sailo.		
11 20	6.511	<u>95</u>	1071000		<u> </u>		<u></u>		İ
	· · · · · · · · · · · · · · · · · · ·								
	<b></b>						•		
							<u></u>		
¹ Type: C=C	oncentration, D=Dep	pletion, RM=	Reduced Matrix,	MS=Masked	Sand Gr	ains.	² Location: PL=Pore Linin	g, M=Matrix.	
	Indicators: (Applic						Indicators for Problema	tic Hydric Soils	3:
Histoso	I (A1)		Polyvalue	Below Surface	ce (S8) (I	.RR S, T, I	U) 📃 1 cm Muck (A9) (LRF	l O)	ļ
	pipedon (A2)			Surface (S9)			2 cm Muck (A10) (LR		
	istic (A3)		Loamy Mu	cky Mineral	(F1) (LRF	(O S	Reduced Vertic (F18)	(outside MLR	A 150A,B)
. =	en Sulfide (A4)		Loamy Gle	eyed Matrix (	F2)		Piedmont Floodplain	Soils (F19) (LR	R P, S, T)
Stratifie	d Layers (A5)		Depleted I	Matrix (F3)			Anomalous Bright Lo	amy Soils (F20)	
Organic	Bodies (A6) (LRR I	P, T, U)	🔲 Redox Da	rk Surface (F	6)		(MLRA 153B)		
5 cm M	ucky Mineral (A7) (L	RR P, T, U)	Depleted I	Dark Surface	(F7)		Red Parent Material		
Muck P	resence (A8) (LRR I	U)		pressions (F	8)		Uery Shallow Dark S		
	uck (A9) (LRR P, T)		Marl (F10)				Other (Explain in Re	marks)	
Deplete	ed Below Dark Surfa	ce (A11)	in the second seco	Ochric (F11)			•		
	ark Surface (A12)			anese Mass	• •	•			
	Prairie Redox (A16)			urface (F13)			wetland hydrolog		nt,
	Mucky Mineral (S1)	(LRR 0, S)		ric (F17) (MI			unless disturbed	or problematic.	
	Gleyed Matrix (S4)			Vertic (F18)					
	Redox (S5)			Floodplain S					
	d Matrix (S6)			is Bright Loa	my Solls	(F20) (ML	RA 149A, 153C, 153D)		
	urface (S7) (LRR P,						——————————————————————————————————————		
Restrictive	Layer (if observed	):							
Týpe: _									<b>%</b> /
Depth (i	nches):						Hydric Soil Present?	Yes N	10 <u>X</u>
Remarks:							· · · · · · · · · · · · · · · · · · ·		
i i									
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Upland data point wjoo017_u facing north.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

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Project/Site: ACP	City/County: Johnston Sampling Date: 7/22/14
Applicant/Owner: Dominion	
Investigator(s): <u>FSI - JBanton</u>	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): <u>headwater</u>	Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>O-2</u>
Subregion (I BB or MI BA): LRR P Lat: 35.	55870N Long: 78.25042 W Datum: WGS-1984
Soil Map Unit Name: Rains Gan dy loam	.55870N Long: 78,25042 W Datum: W65-1984 NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	
Are vegetation, Soli, or Hydrology addressed and a solid sector and the so	•
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       No	i is ule sallipleu Alea
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	
Surface Water (A1)	
High Water Table (A2)	
U Saturation (A3) Hydrogen Sulfide	Odor (C1)       Image: Moss Trim Lines (B16)         Sheres along Living Roots (C3)       Image: Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	ce (C7)
Iron Deposits (B5)	_
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No X Depth (inch	ASI NA
Water Table Present? Yes No X Depth (inch	
Saturation Present? Yes No Depth (inch (includes capillary fringe)	es): 720 Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	
· · ·	

VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: wj00018f-w

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32.20		Dominant		Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: $37 \times 30$ )		<u>Species?</u>	Status	Number of Dominant Species	8	
1. Pinus fueda	<u>40</u>	<u></u>	PAL	That Are OBL, FACW, or FAC:	0	(A)
2. Liquidambar Styraci Flua	20	<u> </u>	PAL	Total Number of Dominant	8	
3. Acer Fubrum	15	<u> </u>	PAC	Species Across All Strata:	<del></del>	(B)
4		·				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	100	(A/B)
6			ł			- (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				Prevalence index worksheet:		
7				Total % Cover of:	Multiply by:	
8	76			OBL species x	1 =	_
		= Total Cov	ver	FACW species x		
50% of total cover: 37.	<u>5</u> 20% o	f total cover	: 13	FAC species x		1
Sapling/Shrub Stratum (Plot size: 15×15)				FACU species ×		1
1. FIAVS theda	15	<u> </u>	EIK_			ł
2. Liquidanbar Styraciflua	. 10	<u> </u>	<u>nr</u>	UPL species x		
3				Column Totals: (A	۰»	^(B)
4.				Prevalence Index = B/A =		
5.						
6				Hydrophytic Vegetation Indica		
				Rapid Test for Hydrophy		
7			• ••	2 - Dominance Test is >50%		
8	21			3 - Prevalence Index is ≤3.0		
	-40	_= Total Co	over	Problematic Hydrophytic Ve	egetation1 (Exp	olain)
50% of total cover:12	<u>~`5</u> 20% (	of total cove	er: <u>&gt;</u>			1
<u>Herb Stratum</u> (Plot size: $5 \times 5$ )				¹ Indicators of hydric soil and we	etland hydrolog	y must
1. Arundinaria gigantea	0	<u> </u>	<u>Pricw</u>	be present, unless disturbed or	problematic.	
2				Definitions of Four Vegetation	n Strata:	·
3						
4				Tree – Woody plants, excluding more in diameter at breast heig		
				height.	jnt (DDN), rega	101033 01
5						_
6				Sapling/Shrub – Woody plants		
7				than 3 in. DBH and greater that	n 3.26 it (1 iii)	lall.
8				Herb - All herbaceous (non-wo		
9				of size, and woody plants less	than 3.28 ft tal	l.
10				· Woody vine - All woody vines	oreater than ?	28 ft in
11.				height.	gibato titali o	
12.						
	- 10	= Total C	over	-		
50% of total cover:		of total cov	-			
	20%	UI LULAI CUV	ei	-		
	<b>1</b> .	N	CAM			
1. Smilax rotunditolia			<u> </u>	-		
2. Vitis rotunditolia		7	- PPC	<u> </u>		
3				- ]		
4		<u> </u>		_		
5.				_ Hydrophytic		
	- 15	= Total (	Cover		/	
50% of total cover: _7	5 20%		~	Present? Yes X	No	<b></b> ,
			vei.	-1		
Remarks: (If observed, list morphological adaptations b	elow).					

.

# Sampling Point: wjoo018f_w

Profile Desc	cription: (Describe	to the depth nee				or confirm	the absence	of indicators.)
Depth	Matrix	<u></u>		x Feature		10- ²	Texture	Pomotio
(inches)	<u>Color (moist)</u> ZISY ³ /1	<u>%</u> <u>Co</u> 100	lor (moist)	%	<u>Type¹</u>	_Loc ²	Sa lo	Remarks
0-6			- IOTI			-01-		
6-14	2.54 1/2		54R5/8	. <u>.</u> 5	<u> </u>	PL	<u>SaLo</u>	Oxidized Phizospheres
14-20	2,545/1	95 7.5	SYR5B	5	c	PL	Salo	
			{					
	·				•	<u> </u>		
						. <u> </u>	<u> </u>	
1								
¹ Type: C=C	oncentration, D=Dep	pletion. RM=Redu	iced Matrix, M	S=Maske	d Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
	Indicators: (Applic							for Problematic Hydric Soils ³ :
Histoso	I (A1)	Г	Polyvalue Be	elow Surfa	ace (S8) (I	_RR S, T, I	U) 🔲 1 cm 1	Muck (A9) (LRR O)
1 22	pipedon (A2)		Thin Dark S					Muck (A10) (LRR S)
Black H	listic (A3)	_	Loamy Mucl			۲ 0)		ced Vertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gley		(F2)			iont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	X	Depleted Ma		<b>T D</b>			alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark					RA 153B) Parant Material (TE2)
	ucky Mineral (A7) (L		Depleted Da					Parent Material (TF2) Shallow Dark Surface (TF12)
	resence (A8) (LRR I iuck (A9) (LRR P, T)		Redox Depr Marl (F10) (		1.01			(Explain in Remarks)
	ed Below Dark Surfa		Depleted Or	-	) (MLRA '	151)		(Explain in Containey
	ark Surface (A12)		Iron-Manga	•		•	r, T) ³ Indi	icators of hydrophytic vegetation and
	Prairie Redox (A16) (	(MLRA 150A) 🗍	Umbric Surl					tland hydrology must be present.
Sandy	Mucky Mineral (S1)	(LRR 0, S)	Delta Ochrie	c (F17) (N	LRA 151	) - 1 - 1	ur	less disturbed or problematic.
Sandy	Gleyed Matrix (S4)	<u> </u>	Reduced Ve	, ,				
	Redox (S5)		Piedmont F	•				- /
	ed Matrix (S6)		Anomalous	Bright Lo	amy Soils	(F20) (ML	RA 149A, 153	C, 153D)
	urface (S7) (LRR P,		<u> </u>					
	E Layer (if observed	l):						
Type:							Under Co	il Present? Yes 🔀 No
	inches):		•				Hyaric So	
Remarks:								
							•	
							、	
1								
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Wetland data point wjoo018f_w facing west.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>		City/Co	ounty: Johns	ton	_ Sampling Date:	7/22/14
Applicant/Owner: Dominion	)			State: <u>NC</u>	_ Sampling Point:	wi00018-U
Investigator(s): EST - 2	Beston	Section	n. Township, Ran	_{ce:} N/A		-
Landform (hillslope, terrace, etc.):	hillstone		elief (concave, co		ave sio	ne (%): 0-2
Subregion (LRR or MLRA): <u>LR</u>	2 P		72 N	ang: 78 25033	<u>س</u> ۱	otum w (05-84
Soil Map Unit Name: Goldo		Lat. <u>201030</u>	2-7' SL		traction: (JOIn O	
	1	۰ ·		•		<u></u>
Are climatic / hydrologic condition						× 11-
Are Vegetation, Soil						
Are Vegetation, Soil	, or Hydrology	naturally problema	tic? (If ner	eded, explain any ans	wers in Remarks.)	
SUMMARY OF FINDINGS	5 – Attach site map	showing sam	pling point lo	ocations, transec	ts, important i	ieatures, etc.
Hydrophytic Vegetation Presen	t? Yes <u>×</u> I	No	Is the Sampled	Area		
Hydric Soil Present?	t? Yes <u>×</u> I Yes <u></u> I	No <u>×</u>	within a Wetlan		No <u>×</u>	-
Wetland Hydrology Present?	Yes	No <u>×</u>				
Remarks:						
Active agri	cultural field					• .
LHYDROLOGY	<u> </u>	<u></u>				
Wetland Hydrology indicator	<u> </u>			Secondary In	dicators (minimum	of two required)
Primary Indicators (minimum o		li that apply)			Soil Cracks (B6)	
Surface Water (A1)		ic Fauna (B13)			Vegetated Concav	e Surface (B8)
High Water Table (A2)	· · ·	Deposits (B15) (LR	RU)		Patterns (B10)	
Saturation (A3)		gen Sulfide Odor (		=	m Lines (B16)	
Water Marks (B1)		zed Rhizospheres a	along Living Root		son Water Table (C	;2)
Sediment Deposits (B2)		nce of Reduced Iro			Burrows (C8)	(OD)
Drift Deposits (B3)		nt Iron Reduction in		=	n Visible on Aerial	imagery (C9)
Algal Mat or Crust (B4)	i mai i a constante da constante	Muck Surface (C7) · (Explain in Remar		<b>H</b>	phic Position (D2) Aquitard (D3)	
Inundation Visible on Aeri	•	(Explain in Komai	(3)		utral Test (D5)	
Water-Stained Leaves (B				=	um moss (D8) (LRI	र T, U)
Field Observations:						
Surface Water Present?		- · · · · /				
Water Table Present?		Depth (inches):				V
Saturation Present? (includes capillary fringe)		Depth (inches):		Vetland Hydrology Pr	esent? Yes	No
Describe Recorded Data (stre	am gauge, monitoring we	ell, aerial photos, pr	revious inspectior	ns), if available:	,	
Remarks:						······································
	·					

Sampling Point: W 0004

VEGETATION (Four Strata) – Use scientific names of plants.

20.20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 × 30)	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. none				That Are OBL, FACW, or FAC: (A)
2				· · · · · ·
				Total Number of Dominant 5 (B)
3				Species Across All Strata: (B)
4		. <u> </u>		Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/B)
6				/
7				Prevalence index worksheet:
				Total % Cover of:Multiply by:
8		= Total Co		OBL species x 1 =
				FACW species x 2 =
50% of total cover:	20% o	f total cover	r:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 15)				
1. Liquidambar StyraciFlug	10	<u> </u>	FRU	FACU species x 4 =
2				UPL species x 5 =
				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8				$\square 3 - \text{Prevalence index is } \leq 3.0^{1}$
0	10	= Total Co		
		-		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20% (	of total cove	er:	
Herb Stratum (Plot size: 5)			<b>`</b> .	¹ Indicators of hydric soil and wetland hydrology must
1. Microsterium Vimineum	40	<u> </u>	PPC	be present, unless disturbed or problematic.
2. Evontorium capilifolium	10	Y	PALU	Definitions of Four Vegetation Strata:
				·) - [
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				<ul> <li>more in diameter at breast height (DBH), regardless of height.</li> </ul>
5				-
6				Sapling/Shrub - Woody plants, excluding vines, less
. 7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				<ul> <li>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</li> </ul>
9				
10				- Woody vine – All woody vines greater than 3.28 ft in
11				_ height.
12.				
	50	= Total C	Cover	······································
50% of total cover: <u>2</u>		of total cov		
	20 %	UT LULAT UUV		-
Woody Vine Stratum (Plot size: <u>30</u> )	1.	ν.		
1. <u>Smilax</u> rotundifolia	(o	<u> </u>	PAC	· _
2. Vitis rotundifolia		<u> </u>	_ PPC	]
3.				
A				— ļ
				-
5				– Hydrophytic
,		= Total (	Cover	Vegetation
~ 50% of total cover:	20%	6 of total co	ver:	_ Present? Yes <u>V</u> No
Remarks: (If observed, list morphological adaptations b	elow).			
Adam of L	1.1	1		1
Active agricultural Fie	12	W/ I	minima	Venetation along
		l.	•	
field cage.				-
inder lage.				

# Sampling Point: wi00 018-u

Profile Desc	ription: (Describe	to the depth nee	ded to docum	ent the i	indicator	or confirm	n the absence of	indicators.)	
Depth	Matrix			Feature		2	Tandara	D = == = = = =	
0 - 8	<u>Color (moist)</u> 2,54 ^{3/} 2		lor (moist)	%	<u>ĩype¹</u>	_Loc ²	<u>Texture</u>	Remarks	<u> </u>
	<u>Lisy 12</u>	100	050	<u> </u>			<u></u>		
8-18	2,54 5/6		R 518	10	<u> </u>	<u>M</u>	saichto,_		
18-20-	2,54 4/2	<u>95 7.</u>	57 <u>R 578</u>	5	<u> </u>	$\mathcal{M}$	Sa, Clilo,		
								· · · ·	
				_					
					~				
<u> </u>					-				
	oncentration, D=Dep	letion_RM=Redu	ced Matrix MS	S=Maske	d Sand Gr	ains	² Location: P	L=Pore Lining, M=Ma	
Hydric Soil	Indicators: (Applic	able to all LRRs	, unless other	wise not	ted.)			or Problematic Hydri	
Histoso		Γ	Polyvalue Be			RR S, T,	U) 🔲 1 cm Mu	ck (A9) (LRR O)	
	pipedon (A2)		Thin Dark Su	Inface (SS	) (LRR S,	T, U)	2 cm Mu	ick (A10) (LRR S)	
	listic (A3)		Loamy Muck			R O}		l Vertic (F18) (outsid	
	en Sulfide (A4)		Loamy Gleye		(F2)			nt Floodplain Soils (F	
	d Layers (A5) Bodies (A6) (LRR F		Depleted Ma Redox Dark	- •	(E6)			ous Bright Loamy Soil A 153B)	IS (F20)
	ucky Mineral (A7) (L		Depleted Da					ent Material (TF2)	
	resence (A8) (LRR I		Redox Depre					allow Dark Surface (1	(F12)
	uck (A9) (LRR P, T)		Marl (F10) (I	•			Uther (E	Explain in Remarks)	
	ed Below Dark Surface	ce (A11)	Depleted Oc	-		-			
	)ark Surface (A12)		Iron-Mangar Umbric Surfa				•	tors of hydrophytic ve and hydrology must b	
	Prairie Redox (A16) ( Mucky Mineral (S1) (		Deita Ochric					ss disturbed or proble	
	Gleyed Matrix (S4)	Link 0, 0, <u> </u>	Reduced Ve	-					
	Redox (\$5)	Ī	Piedmont Fl	oodplain	Soils (F19	) (MLRA	149A)		
	d Matrix (S6)	Ĺ	Anomalous	Bright Lo	amy Soils	(F20) <b>(M</b>	LRA 149A, 153C,	153D)	
	urface (S7) (LRR P,		<u> </u>				····		. <u></u>
	Layer (if observed	):							
Type:	nches):						Hydric Soil	Present? Yes	No_X
Remarks:									
TCHILING.					X				
4									
ł									
									-
1									
ļ									



Upland data point wjoo018_u facing east.

### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

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Project/Site:	City/County:	inston	_ Sampling Date: <u>7/23/14</u> _ Sampling Point: <u>wjpo 019 f-</u> w
Applicant/Owner: Dominion		State: NC	Sampling Point: WJDO 019 F-W
Investigator(s): ESI-JBenton	Section Township F	Range: M/A	
hivestigator(s) hradwater	Local relief (concave	convex pone): CDAC	ave Slope (%): O-Z
Landform (hillslope, terrace, etc.): <u>hcadwater</u> Subregion (LRR or MLRA): <u>LRR P</u> Lat:	ZT ST/IG NI	Lana 78 75019	W Datum W65-1984
Subregion (LRR or MLRA):	23,3367070	_ Long: (0,230()	
Soil Map Unit Name: <u>Rains Son by Joan</u>	<u>0-01.510pez</u>	NWI classifi	ication: 17-0
Are climatic / hydrologic conditions on the site typical for this ti	ne of year? Yes <u>^</u> No	) (if no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology sigr	ificantly disturbed? Ar	e "Normal Circumstances"	present? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology nate	urally problematic? (If	needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling poin	t locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes <u>Yes</u> No			
Hydric Soil Present? Yes X No	is the Sampl		
	within a Wet	land? Yes	<u> </u>
Remarks:			······································
			1
· · ·			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indi	icators (minimum of two required)
Primary Indicators (minimum of one is required; check all the	at apply)	Surface So	oil Cracks (B6)
	auna (B13)	🔲 Sparsely V	/egetated Concave Surface (B8)
	osits (B15) (LRR U)	🛄 Drainage I	Patterns (B10)
	Sulfide Odor (C1)	🛄 Moss Trim	Lines (B16)
Water Marks (B1)	Rhizospheres along Living Ro	oots (C3) 🛛 🔲 Dry-Seasc	on Water Table (C2)
Sediment Deposits (B2)	of Reduced Iron (C4)	📙 Crayfish B	Surrows (C8)
Drift Deposits (B3)	on Reduction in Tilled Soils (		Visible on Aerial Imagery (C9)
	k Surface (C7)		hic Position (D2)
	plain in Remarks)		quitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neut	
Water-Stained Leaves (B9)			n moss (D8) (LRR T, U)
Field Observations:	th (inches): NA		
Surface Water Present? Yes No Dep	h (inches):		1
Water Table Present?     Yes No Dep       Saturation Present?     Yes No Dep	(in (inches): $\frac{7 c^2}{1 b^{(\ell)}}$		sent? Yes X No
Saturation Present? Yes X No Dep (includes capillary fringe)	th (inches): 170	Wetland Hydrology Pre	sent? res <u>No</u> No
Describe Recorded Data (stream gauge, monitoring well, a	erial photos, previous inspec	tions), if available:	
Remarks:		•	
			· · · · · · · · · · · · · · · · · · ·

VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: 200019f-w

Tree Stratum (Plot size: 30x30)	Absolute Domina		Dominance Test worksheet:	
Tree Stratum (Plot size: 20×30)	<u>% Cover</u> Specie		Number of Dominant Species	
1. Acer rubrum	<u> </u>	<u>_ ppc  </u>	That Are OBL, FACW, or FAC:	(A)
2. Liquidambar styraciflua	30 /	PAC	Total Number of Dominant	
3			Species Across All Strata:	(B)
4				
5			Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
			That Ale OBE, FACW, of FAC.	(~05)
6			Prevalence Index worksheet:	
7			Total % Cover of: Multiply by:	
8			OBL species x 1 =	
	<u>70</u> = Total		· · · · · _ · _	
	<u>35</u> 20% of total co	ver: 14	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: $15 \times 15$ )	I		FAC species x 3 =	
1. Acer rubrum	12 11	MAC	FACU species x 4 =	
2. Magnolia Virginian	<u> 0 Y</u>	PAC	UPL species x 5 =	
3. Clithra alloctolia		PAUN	Column Totals: (A)	_ (B)
3. Chernic almitoria		<u>I 13000</u>		
4			Prevalence Index = B/A =	—
5			Hydrophytic Vegetation Indicators:	
6			1 - Rapid Test for Hydrophytic Vegetation	
7			2 - Dominance Test is >50%	
8			$\square$ 3 - Prevalence index is $\leq 3.0^1$	
	<u>35</u> = Total	Cover		
EQU of total opvor	22.5 20% of total c		Problematic Hydrophytic Vegetation ¹ (Expla	1111)
	20% UT IO(a) C	over		
<u>Herb Stratum</u> (Plot size: $5 \times 5$ )	<b>7.</b> N	FACW	Indicators of hydric soil and wetland hydrology	must
1. Bochmenza cylindrica 2. Dinoclea sensibilis	$\frac{20}{30}$ $\frac{1}{1}$		be present, unless disturbed or problematic.	
2 Dnoulea sensibilits	<u> </u>	<u> </u>	Definitions of Four Vegetation Strata:	
3. Athyrium applenioides	<u> </u>	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6	sem) or
4			more in diameter at breast height (DBH), regard	
5			height.	
6			Sapling/Shrub – Woody plants, excluding vine than 3 in. DBH and greater than 3.28 ft (1 m) ta	∷s, less
7				111.
8			Herb – All herbaceous (non-woody) plants, reg	jardless
9			of size, and woody plants less than 3.28 ft tall.	
10			Mender wine All woods vince greater than 2 (	29 ft in
11.			<ul> <li>Woody vine – All woody vines greater than 3.2</li> <li>height.</li> </ul>	20 11 111
12			-	
	<u>70</u> = Tota			
50% of total cover:		cover: <u>19</u>	-	
Woody Vine Stratum (Plot size: 30 × 30 )				
1. Smilax rotundifolia	10 1	PAC		
2. Vitis rotundifolia	5	1 PAC	-	
3. Toxicodendion radicans	5	1 Prov	-	
3. WARDER TO TOWN THE TEAM			- [	
4			-	
5			– Hydrophytic	
	= Tot	al Cover	Vegetation	
50% of total cover:	20% of total	cover: 4	Present? Yes X No	-
Remarks: (If observed, list morphological adaptatio				
remarks. (n observed, list morphological adaptatio	ns below).			
1				
				•

Sampling Point: W 100 019 f W

Profile Desc	ription: (Describe	to the depth a	needed to docur	nent the ir	ndicator	or confirm	n the absence o	f indicators.)	
Depth	Matrix			x Features		12	Taxd		Demodro
(inches)	$\frac{\text{Color}(\text{moist})}{2.54^{3}}$		Color (moist)	5	<u>Type</u> ¹		<u>    Texture                                    </u>	ł	Remarks
$\frac{0-8}{2}$			2.54R5B		<u> </u>	<u>M</u>	·		<u> </u>
8-20	21545/1	<u>    10                                </u>	5.1.5/	10	<u> </u>	<u>M</u>	snilo.		· · · · · · · · · · · · · · · · · · ·
	<b></b>					<u> </u>			
							·		
	·						· ·		
	oncentration, D=De	nletion RM=R	educed Matrix M	 S=Masked	Sand G	aine	² l ocation: <b>I</b>	PL=Pore Linin	a M=Matrix
	Indicators: (Appli					-			ic Hydric Soils ³ :
Histoso			Polyvalue B			RR S, T,	U) 🛄 1 cm Mi	uck (A9) (LRR	: O)
	pipedon (A2)		Thin Dark S					uck (A10) <b>(LR</b>	
	listic (A3)		Loamy Much			R O)			(outside MLRA 150A,B)
· · ·	en Sulfide (A4) d Layers (A5)		Loamy Gley		(72)				Soils (F19) (LRR P, S, T) amy Soils (F20)
	Bodies (A6) (LRR	P, T, U)	Redox Dark	• •	=6)			A 153B)	
5 cm M	ucky Mineral (A7) (L	LRR P, T, U)	Depleted Da				Red Pa	rent Material (	
	resence (A8) (LRR		Redox Depr		8)				urface (TF12)
	uck (A9) (LRR P, T) ed Below Dark Surfa		Mari (F10) (		(MIRA	(51)		Explain in Rer	narks)
	ark Surface (A12)		Iron-Manga			-	P, T) ³ Indica	ators of hydrog	phytic vegetation and
Coast F	Prairie Redox (A16)	(MLRA 150A)	—					and hydrology	must be present,
	Mucky Mineral (S1)	(LRR O, S)						ss disturbed o	or problematic.
	Gleyed Matrix (S4) Redox (S5)		Piedmont F		-		-		
	d Matrix (S6)						.RA 149A, 153C,	153D)	
	urface (S7) (LRR P	, S, T, U)		U	•	. , ,			
Restrictive	Layer (if observed	d):							
Type:									$\sim$
Depth (i	nches):						Hydric Soil	Present?	Yes <u>X</u> No
Remarks:									
	1								
1									

1



Wetland data point wjoo019f_w facing south.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County:	Johnston		Sampling Date: 7/23/14
Applicant/Owner: Dominion		Sta	ate: NC	Sampling Date: <u>7/23/14</u> Sampling Point: <u>wjoo 019_u</u>
Investigator(s): ESI - JBenton	Section Tow	nshin Range: N	/4	
Landform (hillslope, terrace, etc.): <u>h:///slope</u>	Local relief (c	concave convex no	ne) (G/cal	e. Sinne (%): 0-2
Landion (nuisiope, tenace, etc.). <u>rans ope</u>	<u></u> 20221161161 (C	N Long 74	2 75 020	Vi / Dotum: V/ (0.5 · 19.94
Subregion (LRR or MLRA): <u>LRR P</u> Lat Soil Map Unit Name: <u>RAINS, Sandy Joan</u>	<u> </u>		<u></u>	
Soil Map Unit Name: <u>Kalin, San a 10am</u>	- 0-01. Ste		NWI classific	ation:
Are climatic / hydrologic conditions on the site typical for this t				
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed?	Are "Normal C	Circumstances" p	resent? Yes X No
Are Vegetation, Soil, or Hydrology nat	urally problematic?	(if needed, ex	plain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling	point location	ns, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes 🖌 No	le the	Sampled Area		
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	withi	n a Wetland?	Voc	No
Wetland Hydrology Present? Yes No			163	
Remarks:				
HYDROLOGY				f the second second
Wetland Hydrology Indicators:			<b>—</b>	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all th				Cracks (B6)
	auna (B13)			egetated Concave Surface (B8) atterns (B10)
	osits (B15) (LRR U) n Sulfide Odor (C1)		Moss Trim	
	Rhizospheres along L	iving Roots (C3)	<b>—</b>	Water Table (C2)
	e of Reduced Iron (C4)	-	Crayfish Bu	
	ron Reduction in Tilled		<u> </u>	Visible on Aerial Imagery (C9)
	ck Surface (C7)		Geomorphi	c Position (D2)
Iron Deposits (B5)	xplain in Remarks)		Shallow Aq	uitard (D3)
Inundation Visible on Aerial Imagery (B7)			<b>F</b>	al Test (D5)
Water-Stained Leaves (B9)		<u> </u>	L Sphagnum	moss (D8) (LRR T, U)
Field Observations:	A10	-		
Surface Water Present? Yes No X Dep	th (inches): $77.0$			
Water Table Present? Yes No X Dep	oth (inches): 720			
Saturation Present? Yes No X De	oth (inches):	vvetland F	lydrology Pres	
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous	inspections), if ava	ailable:	
Remarks:				
i contanto.				
				1

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VEGETATION (Four Strata) – Use scientific names of plants.

201120	Absolute [			Dominance Test worksheet:	
Tree Stratum (Plot size: 30x 30) 1. Acer (Jbrum	<u>% Cover</u>	Species?	<u>Status</u> FAC	Number of Dominant Species	(A)
2. Liquidanbar styraciflum	25	Y	FAU	Tetal Marshare of Densite and	
3. Liriudendron tulioifera	15	¥	PAT	Total Number of Dominant Species Across All Strata:	(B)
					(-)
4			1	Percent of Dominant Species That Are OBL, FACW, or FAC: 70	(4/D)
5				That Are OBL, FACW, or FAC:	(A/B)
6			}	Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8			· Ì	OBL species X1 =	
	<u>70</u> =	Total Co	ver	•	
50% of total cover:	20% of 1 <u>کځ</u>	total cove	r: <u>\4</u>	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: $15 \times 15$ )				FAC species x 3 =	
1. Acer Fubrum	lo	Y	PAC	FACU species x 4 =	_
2. Lirisdendron tulioitera		Ň	PACU	UPL species x 5 =	_
		ſ	<u></u>	Column Totals: (A)	(B)
3					
4	····· ···· ·			Prevalence index = B/A =	_
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8					
0	- 10	= Total Co		3 - Prevalence Index is ≤3.0 ¹	
50% of total cover:				Problematic Hydrophytic Vegetation ¹ (Expla	in)
50% of total cover:	20% of	total cove	er:		
Herb Stratum (Plot size: 5 × 5 )			•	¹ Indicators of hydric soil and wetland hydrology	must
1. Phytolacca amencana	<u> </u>	<u></u>	<u>marcu</u>	be present, unless disturbed or problematic.	
2. Microsterium Vimineum	15	Y	PAC	Definitions of Four Vegetation Strata:	
3. Etrus copallina	5	Y	PACU		
ł			•	Tree – Woody plants, excluding vines, 3 in. (7.6 more in diameter at breast height (DBH), regard	
4				height.	11655 01
5		····			
6				Sapling/Shrub - Woody plants, excluding vine	s, less
7		<u>`</u>		than 3 in. DBH and greater than 3.28 ft (1 m) ta	ll.
8				   Herb – Ali herbaceous (non-woody) planis, reg	ardless
9				of size, and woody plants less than 3.28 ft tall.	
10					
				Woody vine – All woody vines greater than 3.2	28 π in
11	·····			height.	
12		.'		• ]	
		= Total C			
50% of total cover: _	12. <u>5</u> 20% c	of total cov	/er: <u>5</u>	-	
Woody Vine Stratum (Plot size: $30 \times 30$ )					
1. Smilex rotundifolia	5	Y	PAC	_ ]	
2. Vitis rotundifolia		Y	ØAC	-	
		!_		- [	
3		-		- [	
4				- \	
5				– Hydrophytic	
	0]	_ = Total	Cover	Vegetation	
50% of total cover:	5 20%	of total co	ver: 2	Present? Yes <u>V</u> No	•
				-	
Remarks: (If observed, list morphological adaptation	s Delow).				

#### SOIL

Sampling Point: WjooOl9_U

Profile Desc	ription: (Describe	to the depth r	needed to docum	nent the i	ndicator	or confirm	the absence of	Indicators.)		
Depth	Matrix_	%	Redox Color (moist)	<u>k Feature</u> %	s Type ¹	Loc ²	Texture	Ro	narks	r.
<u>(inches)</u> 0-4	<u>Color (moist)</u> 2.59 3/1	% 120		70	<u>iybe</u>		Sa, 10.		nama	
<u> </u>	2,545/2				·					
4-16		$-\frac{100}{0}$	74R 5/8	5			<u>lo, sa.</u>			
16-20	2.545/2	95 10	141 - 18	<u>``</u>	<u> </u>		<u>10.5a.</u>			
								<u> </u>		
·					_ <u></u>					
	·			·	<u>.</u>					
¹ Type: C=C	oncentration, D=De	pletion, RM=Re	educed Matrix, Ma	S=Maske	d Sand Gi	ains.	² Location: F	L=Pore Lining,	M=Matrix.	
	Indicators: (Appli							or Problematic	=	s³:
Histoso	• •		Polyvalue Be					ick (A9) (LRR O		
1 Turnel	pipedon (A2)		Thin Dark Su	-				uck (A10) <b>(LRR</b> : d Vertic (F18) <b>(o</b>		A 150A B)
	listic (A3) en Sulfide (A4)		Loamy Muck			(U)		nt Floodplain So		
	en Sunde (A4) ed Layers (A5)		Depleted Ma		(12)			ous Bright Loam		
	Bodies (A6) (LRR	P, T, U)	Redox Dark	• •	(F6)		(MLR.	A 153B)	•	
	ucky Mineral (A7) (I		Depleted Da					rent Material (TF		
	resence (A8) (LRR	-	Redox Depr		F8)			allow Dark Surf Explain in Rema		
	iuck (A9) (LRR P, T ed Below Dark Surfa		Marl (F10) (I		) (MLRA	(51)		скріанні пі кепта	(10)	
	oark Surface (A12)		Iron-Mangar				P, T) ³ Indica	ators of hydrophy	/tic vegetatio	on and
	Prairie Redox (A16)	(MLRA 150A)					wetla	and hydrology m	•	ent,
	Mucky Mineral (S1)	(LRR 0, \$)	Delta Ochric					ss disturbed or p	problematic.	
· = ·	Gleyed Matrix (S4)		Reduced Ve							
	Redox (S5) ed Matrix (S6)		Piedmont Fl				.RA 149A, 153C,	153D)		
	Surface (S7) (LRR P	, S, T, U)		2.1.9.11 20		( , (	,			
	Layer (if observe									
Type:										N/
Depth (i	inches):					_	Hydric Soil	Present? Ye	s	No <u>X</u>
Remarks:										
					•					
1										
i i										
1										



Upland data point wjoo019_u facing north.

WETLAN	D DETERMINATION DA	TA FORM – Atlantic	and Gulf Coas	stal Plain Regio	n
Project/Site: <u>ACP</u>		City/County: 5-	hnston	Sampling D	ate: 7/23/14
Applicant/Owner: Dominio	n	City/County:	State: N	C Sampling P	oint: Wi00020f-W
Investigator(s): <u>FSI - J</u>	Benton	Section, Township, F	Range: N/A		
andform (hillslope_terrace, etc.);	headwater	Local relief (concave	convex, none); C	EDINCAVE.	Slope (%): 0-2
Subregion (LRR or MLRA): Soil Map Unit Name:Ra.MS	RRP Lat:	35,55536N	Long: 78.2	5087W	_ Datum: W65-1984
Soil Man Unit Name: Rains	Sandy Jam. 0	z'l. cloped	- 0 NWI	classification: PF	-0
Are climatic / hydrologic conditions	s on the site typical for this time	of year? Yes X No	(If no, exp	lain in Remarks.)	
Are Vegetation, Soil					es _ 🗶 No
Are Vegetation, Soil				iy answers in Remar	
SUMMARY OF FINDINGS					
	- Attach site map show		t locations, tra		
Hydrophytic Vegetation Present		13 116 3410	led Area		1
Hydric Soil Present?	Yes <u>X</u> No	within a Wet		′es_ <u>×</u> No_	
Wetland Hydrology Present? Remarks:	Yes <u>X</u> No				
Remarks.					
					1
			•		
HYDROLOGY					
Wetland Hydrology Indicators			_		num of two required)
Primary Indicators (minimum of				face Soil Cracks (Be	
Surface Water (A1)	Aquatic Faur	na (B13) ts (B15) <b>(LRR U)</b>		arsely Vegetated Co ainage Pattems (B10	
Saturation (A3)	<b>—</b> ·	ulfide Odor (C1)		ss Trim Lines (B16)	<i>'</i>
Water Marks (B1)	— — · ·	izospheres along Living R	oots (C3) 🔲 Dr	-Season Water Tab	ie (C2)
Sediment Deposits (B2)		Reduced Iron (C4)		ayfish Burrows (C8)	
Drift Deposits (B3)		Reduction in Tilled Soils (		turation Visible on A	
Algal Mat or Crust (B4)	Thin Muck S	ain in Remarks)		eomorphic Position (l allow Aquitard (D3)	
Inundation Visible on Aeria		ammittemantey		C-Neutral Test (D5)	
Water-Stained Leaves (B9				hagnum moss (D8)	
Field Observations:					
Surface Water Present?	Yes No X Depth				
Water Table Present?	Yes No X Depth	<b>N P</b> -	WI 0	D	Y No
Saturation Present? (includes capillary fringe)	Yes No Depth	(inches).		gy Present? Yes	NO
Describe Recorded Data (strea	am gauge, monitoring well, aeri	al photos, previous inspec	tions), if available:		
Remarks:					
			٠,		
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**VEGETATION (Four Strata)** – Use scientific names of plants.

Sampling Point: Wi00020f.w

Tree Stratum (Plot size: 30 x 30)	+ • -	Dominant		Dominance Test worksheet:
/		<u>Species?</u>	<u>Status</u>	Number of Dominant Species
1. Acer rubrun	20	<u>- ۲</u>	PAL	That Are OBL, FACW, or FAC: (A)
2. Liquidambar styraciflua	15		PAL	Total Number of Dominant
3. Overws nigra	- 15			Species Across All Strata: <u>13</u> (B)
4. Liriodendron tulipitera	<u></u>		FALL	Percent of Dominant Species Q 2 %
5			<u> </u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>92°/</u> (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species         x1 =
2	- <u>70</u>	= Total Co	ver	FACW species x 2 =
50% of total cover: 36	20% of	f total cover	<u>. 14</u>	
<u>Sapling/Shrub Stratum</u> (Plot size: $15 \times 15$ )	_			FAC species x 3 =
1. Acer rubrum		<u> </u>	PAC	FACU species x 4 =
2. Liquidambar Styraciflun	10	<u> </u>	FAL	UPL species x 5 =
3. Ligustrum sincise		<u> </u>	PAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				$\square$ 3 - Prevalence Index is $\leq 3.0^{1}$
	30	= Total Co	- <u> </u>	
50% of total cover: 16		of total cove		Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: $5 \times 5$ )	20700		<b></b>	
	15	Y	APL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Athyrium aspleniaides	- <u>-15</u>	- <del>- \</del>	FAC	
	_	- <u>- '</u>	PACW	Definitions of Four Vegetation Strata:
3. Boehmeria cylindrica				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10		_		Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
	25	_ = Total C	over	
50% of total cover: <u>t</u>	LS 20%	_		
Woody Vine Stratum (Plot size: 30 )			·	-
1. Smilax rotunditulia	lo	Х	FAC	
2. Vittis rotundifolia	5	- <u>-</u> -	Prof.	-
3. Toxicodendron radicing		- <del>- \</del>	- 100	
			<u> </u>	-
4				-
5	- 20		<u> </u>	- Hydrophytic
1	· ·····			Vegetation Present? Yes X No
50% of total cover:	20%	of total co	ver:	-
Remarks: (If observed, list morphological adaptations t	below).			
1				

#### SOIL

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Profile Desc	cription: (Describe	to the depth nee	ded to docum	ent the i	indicator	or confirm	n the absence of in	dicators.)	
Depth	Matrix			Feature			<b>T</b>		
(inches)	<u>Color (moist)</u> 2,57 3/2		lor (moist)	%	<u>Type'</u>	_Loc ²	<u> </u>	Remarks	
$\frac{0-6}{6}$		100				. <u> </u>	·		
6-16	2.57 6/1		ζ ² /1	10	MS	M	10.59,		
16-20	2.54 1	90 104	$R^{2}/1$	.8	MS	<u></u>	10,59		
		7.5	YR 518	2	C	Μ			-
			<u></u>	. <u> </u>					
	<u></u>			<u> </u>		•••			
					•				<u> </u>
<u> </u>			<u> </u>				- <u> </u>		
	oncentration, D=Dep					ains.		Pore Lining, M=Matrix	
	Indicators: (Applic	able to all LRRs						Problematic Hydric §	Soils":
Histoso		늬	Polyvalue Bel					(A9) (LRR O)	
	pipedon (A2)		Thin Dark Su Loamy Mucky					(A10) (LRR S) 'ertic (F18) (outside M	
	listic (A3) en Sulfide (A4)	님	Loamy Gleye			(0)		Floodplain Soils (F19)	
	d Layers (A5)	, <u>-</u>	Depleted Mat		(i <del>-</del> j			Bright Loamy Soils (	
	Bodies (A6) (LRR F	э, т, ц) 🗖	Redox Dark S	• •	F6)		(MLRA 1		/
	ucky Mineral (A7) (L		Depleted Dar				Red Paren	t Material (TF2)	
	resence (A8) (LRR I		Redox Depre	ssions (f	F8)			ow Dark Surface (TF1	2)
	uck (A9) (LRR P, T)		Mari (F10) (L	-			Uther (Exp	lain in Remarks)	
	d Below Dark Surfa	ce (A11)	Depleted Ocl				<b></b> 3		
	Park Surface (A12)		Iron-Mangan					s of hydrophytic vege	
	Prairie Redox (A16) ( Mucky Mineral (S1) (	· · · ·	Umbric Surfa Delta Ochric					l hydrology must be p disturbed or problema	
	Gleyed Matrix (S4)		Reduced Ver					disturbed of problema	
	Redox (S5)	Ē	Piedmont Flo		-				
	d Matrix (S6)						LRA 149A, 153C, 15	3D)	
Dark S	urface (S7) (LRR P,	S, T, U)							
Restrictive	Layer (if observed	):							
Type:								$\sim$	
Depth (i	nches):						Hydric Soil Pre	esent? Yes $X$	No
Remarks:									
1									
1									



Wetland data point wjoo020f_w facing northwest.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

oject/Site: <u>ACP</u>	City/County: Jo!	nston	Sampling Date: 7/23/14
pplicant/Owner: Dominion		State: NC	Sampling Point: Wj00020-4
vestigator(s): <u>EST - JBenton</u>	Section Township	Range N/A	
Indform (hillslope, terrace, etc.): hillslope		$(\alpha, \alpha) = (\alpha, \alpha) = (\alpha, \alpha)$	VP Sinne (%): 0-2
ubregion (LRR or MLRA): <u>LRR P</u>	25 55572 N	1 and 78.7508	3 W/ Datum: W/65-1984
bregion (LRR or MLRA):	- Lat: 33352770	_ Long: <u>7072300</u>	
il Map Unit Name: Mar baro Sandy lo			
e climatic / hydrologic conditions on the site typical f			
e Vegetation, Soil, or Hydrology	significantly disturbed? A	vre "Normal Circumstances"	present? Yes X No
e Vegetation, Soil, or Hydrology	naturally problematic? (	lf needed, explain any answ	
UMMARY OF FINDINGS – Attach site r	nap showing sampling poir	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes 🗡	No.		
lydric Soil Present? Yes	No Is the Sam		~ ~
Vetland Hydrology Present? Yes	No K within a We	tland? Yes	No <u>X</u>
Remarks:		· · · · ·	
YDROLOGY			
Wetland Hydrology Indicators:		Secondary Indi	cators (minimum of two required)
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Sr	oil Cracks (B6)
	quatic Fauna (B13)	Sparsely V	/egetated Concave Surface (B8)
	Aarl Deposits (B15) (LRR U)	🔲 Drainage I	Patterns (B10)
Saturation (A3)	lydrogen Sulfide Odor (C1)		Lines (B16)
	Dxidized Rhizospheres along Living F	· · · · · · · · · · · · · · · · · · ·	on Water Table (C2)
	Presence of Reduced Iron (C4)		Jurrows (C8)
	Recent Iron Reduction in Tilled Soils I'hin Muck Surface (C7)		n Visible on Aerial Imagery (C9) hic Position (D2)
	Other (Explain in Remarks)	= .	quitard (D3)
Inundation Visible on Aerial Imagery (B7)			iral Test (D5)
Water-Stained Leaves (B9)		🔲 Sphagnur	m moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No 🗡	Depth (inches): NH		
	Depth (inches): 720		
	Depth (inches): 720	Wetland Hydrology Pre	sent? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitorir	ig well, aerial photos, previous inspe	ctions), if available:	
Remarks:	· · · · · · · · · · · · · · · · · · ·		
K			
			· · · · · · · · · · · · · · · · · · ·

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Sampling Point: wj00020_u

VEGETATION	(Four Strata) -	<ul> <li>Use scientific</li> </ul>	names of plants.
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Tran Okratum (Blat size: 20 )	Absolute	Dominant	Indicator	Dominance Test worksheet:
The Stratum (Flot size)		Species?	Status	Number of Dominant Species
1. Liquidanbar Styraciflya	<u> 30</u>	<u>N</u>	PAC	That Are OBL, FACW, or FAC: (A)
2 Pinus taeda	15	<u> </u>	FAC	Total Munitian of Deminant
3. Lirisdendron tulipitera	15	<u> </u>	FACU	Total Number of Dominant Species Across All Strata: 12 (B)
+ Prunus scratina	10	N	FACU	
		<u> </u>		Percent of Dominant Species That Are OBL_EACW, or EAC: 75 (A/B)
5			1	That Are OBL, FACW, or FAC: <u>75</u> (A/B)
6				Prevalence Index worksheet:
7				
8				
	70	= Total Co	ver	OBL species x 1 =
50% of total cover: 35		f total cover	r: 14	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 )				FAC species x 3 =
1. ACE (USrum	10	V	PAL	FACU species x 4 =
2. Liquidanbar Styrantlua	- 15	· <u> </u>	PAC	UPL species x 5 =
	- 10			Column Totals: (A) (B)
3. Ilex Opaca		· <u>· · · · · · · · · · · · · · · · · · </u>	FAC	
4. Queraus phellos		N	FACW	Prevalence Index = B/A =
5		·		Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				
o	- 40	= Total Co		☐ 3 - Prevalence Index is ≤3.0 ⁴
21				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>24</u>	20%	ot total cove	er:	
Herb Stratum (Plot size: 5)	_	λ.	~ ~ /	¹ Indicators of hydric soil and wetland hydrology must
1. Microstegium vimineum	10	- <u>×</u>	PAC	be present, unless disturbed or problematic.
2. Arundinaria aigantea		<u> </u>	PACW	Definitions of Four Vegetation Strata:
3. Asplenium statimeuron	5	Y	PALU	The Meeter letter eveluding vince 2 in (7.6 cm) of
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
4				height.
5				
6				<ul> <li>Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</li> </ul>
7				
8				- Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10			_	Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	- 75	= Total C		-
	$\sim \overline{\overline{}}$			
50% of total cover:	<u>~ · · ·</u> 20%	of total cov	/er:	-
Woody Vine Stratum (Plot size: 30)	_	۰.	<b></b>	
1. Viti's rotunditalia	5	<u> </u>	- THC	3
2. Parthenucissus quinquefolia	5	<u> </u>	FALL	<u>A</u>
3. Smilax rotunditolia	5	Y	PAL	
A				-
		-		-
5				- Hydrophytic
	15			Vegetation Present? Yes No No
50% of total cover:	1.5 20%	6 of total co	ver:	_
Remarks: (If observed, list morphological adaptations	below).			
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#### SOIL

# Sampling Point: Wj00020-4

Profile Description: (Describ	e to the depth nee			rm the absence of ind	licators.)
Depth <u>Matrix</u>	·	Redox Featu	ires		
(inches) Color (moist)		lor (moist) %	Type ¹ Loc ²		Remarks
0-8 2,54 4/4	_ 100	·	· · · · · · · · · · · · · · · · · · ·	<u>Sa, 10.</u>	
8-20 - 104R 5/6	100			<u> </u>	
'					
					· · · · · · · · · · · · · · · · · · ·
		<u> </u>			
		·			
¹ Type: C=Concentration, D=D					Pore Lining, M=Matrix.
Hydric Soil Indicators: (App	licable to all LRRs			<b></b>	roblematic Hydric Soils ³ :
Histosol (A1)			Inface (S8) (LRR S, T		(A9) (LRR O)
Histic Epipedon (A2) Black Histic (A3)	Le la	Thin Dark Surface Loamy Mucky Mine			(A10) (LRR S) ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)		Loamy Gleyed Mat			oodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	H	Depleted Matrix (F:			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR	ε P, T, U) 🗍	Redox Dark Surfac	,	(MLRA 15	
5 cm Mucky Mineral (A7)		Depleted Dark Sur	• •	Red Parent	Material (TF2)
Muck Presence (A8) (LRF	<u>ں</u> ۲۷)	Redox Depression			w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, 1		Mari (F10) (LRR U		📙 Other (Expl	ain in Remarks)
Depleted Below Dark Sur		Depleted Ochric (F		<b>B T</b> ) <b>3</b>	
Thick Dark Surface (A12)			asses (F12) (LRR O,		of hydrophytic vegetation and hydrology must be present,
Coast Prairie Redox (A16		Umbric Surface (F Delta Ochric (F17)	• • •		isturbed or problematic.
Sandy Mucky Milleral (31	· · ·		18) (MLRA 150A, 150		isturbed of problematic.
Sandy Redox (S5)			in Soils (F19) (MLRA	•	
Stripped Matrix (S6)				ILRA 149A, 153C, 153	5D)
Dark Surface (S7) (LRR I	P, S, T, U)				-
Restrictive Layer (if observe	ed):				
Туре:					
Depth (inches):				Hydric Soil Pres	sent? Yes No $X$
Remarks:					



Upland data point wjoo020_u facing southeast.

### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>	city/county: Johnston	Sampling Date: 7/23/14
Applicant/Owner: Dominion		Sampling Date: <u>7/23/14</u> State: <u>NC</u> Sampling Point: <u>wico 021f</u> -wl
	Section, Township, Range:	
Landform (hillslope terrace etc.): headwater	Local relief (concave, convex	none) CONCAVE Since (%): 0-2
Subregion (LRR or MLRA): <u>LRR P</u> La Soil Map Unit Name: <u>Rain S Son dy loar</u>	: 35,55302N Long:	78.25066W Datum: WG5.1984
Spil Man Linit Name: Rains Son du Loar	0-211 5602D	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this		
Are Vegetation, Soil, or Hydrology sig		,
Are Vegetation, Soli, or Hydrology na		explain any answers in Remarks.)
• •		
SUMMARY OF FINDINGS Attach site map s	howing sampling point locati	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	is the Sampled Area	
Hydric Soil Present? Yes 🔀 No	within a Wetland?	Yes_X No
Wetland Hydrology Present? Yes <u>X</u> No		
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all t	nat apply)	Surface Soil Cracks (B6)
	Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
	posits (B15) (LRR U)	Drainage Patterns (B10)
Saturation (A3)	n Sulfide Odor (C1)	Moss Trim Lines (B16)
	Rhizospheres along Living Roots (C3)	
	e of Reduced Iron (C4)	Crayfish Burrows (C8)
	ron Reduction in Tilled Soils (C6) ck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
	Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5)
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)
Field Observations:	.~	
Surface Water Present? Yes No X De	pth (inches):	
Water Table Present? Yes No X De		
Saturation Present? Yes No X De	pth (inches): <u>&gt; 2 0</u> Wetland	d Hydrology Present? Yes <u> </u>
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if a	available:
·		
Remarks:		

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**VEGETATION (Four Strata)** – Use scientific names of plants.

Sampling Point: Wj0002).f_Wl

2		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 × 30)		Species?		Number of Dominant Species
1. Liridendron tulipitera	<u> 35</u>	<u> </u>	mu	That Are OBL, FACW, or FAC:
2. Liguidanbar styraciflug	25	<u> </u>	m	Tatal Number of Deminant
3 Acer rubrum	15	Ý	ppu	Total Number of Dominant Species Across All Strata:
······································				
4				Percent of Dominant Species 731, (A/B)
5				That Are OBL, FACW, or FAC: 151, (A/B)
6	·			Prevalence Index worksheet:
7	. <u> </u>		·	
8				Total % Cover of: Multiply by:
	75	= Total Co	ver	OBL species x 1 =
50% of total cover: 37.				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 × 15 )				FAC species x 3 =
	20	Y	PAC	FACU species x 4 =
1. Ligustrum sincase	10	· <u> </u>	PHEW	UPL species x 5 =
2. Magnolia Virginiana				Column Totals: (A) (B)
3. Liridendron fulipitera	<u> </u>	<u> </u>	Ppcu	
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1-Rapid Test for Hydrophytic Vegetation
7				
				2 - Dominance Test is >50%
8	- <u>-</u> Цо			3 - Prevalence Index is ≤3.0 ¹
		_ = Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 20	<u> </u>	of total cove	er: <u>0</u>	1
<u>Herb Stratum</u> (Plot size: $5 \times 5$ )				¹ Indicators of hydric soil and wetland hydrology must
1. Microstegium Vimineum	20	<u> </u>	MAC	be present, unless disturbed or problematic.
2. Boehmeria Windrica	5	Y	FALL	Definitions of Four Vegetation Strata:
3				
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				noight.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
				<ul> <li>Woody vine – All woody vines greater than 3.28 ft in bailett</li> </ul>
				height.
12		<u> </u>		- [
	<u> </u>	_ = Total C		
50% of total cover: )	1.5 20%	of total cov	er: <u>ح</u>	-
Woody Vine Stratum (Plot size: 30 x 30 )				
1. Smilax rotundifolia	5	Y.	FAC	
2. Vitis rotundifolia	5	<u> </u>	PAL	-
3. Parthenocissus quinquefolia		<del>'</del>	PACE	$\overline{\mathbf{x}}$
3. Tal 17010235305 40114002014		/	- FACO	<u>~</u>
4				-
5				- Hydrophytic
	15	= Total (	Cover	Vegetation
50% of total cover: 7	.5 20%	6 of total co	ver: 3	Present? Yes X No
Remarks: (If observed, list morphological adaptations b				- [
	Giuwj.			
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#### SOIL

# Sampling Point: wj 021 F_WI

Profile Desc	ription: (Describe	to the depth n	eeded to docum	ent the in	ndicator	or confirm	n the absence o	of indicators.)
Depth	Matrix		Redox	Features	s			
<u>(inches)</u>	Color (moist)		Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	Remarks
0-12	2,544/2		54R416	10	<u> </u>	<u>PL</u>	<u>Cl. lo.</u>	oxidized rhizospheres
12-20	2,546/2	85 10	74R 518	15	C	M	5a. Cl. lo.	
	· · · · · · · · · · · · · · · · · · ·							
							<u></u>	
							·	
	<u></u>							
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.
I <u> </u>	Indicators: (Applic	able to all LR						for Problematic Hydric Soils ³ :
		-	Polyvalue Bel					luck (A9) (LRR O) luck (A10) (LRR S)
	pipedon (A2) istic (A3)	•	Thin Dark Su Loamy Mucky					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)	-	Loamy Gleye			,		ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		X Depleted Mat		. ,			alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F		Redox Dark	-	-			RA 153B)
	ucky Mineral (A7) (L		Depleted Dat		•••			arent Material (TF2) ihallow Dark Surface (TF12)
	resence (A8) (LRR I uck (A9) (LRR P, T)		Redox Depre		0)			(Explain in Remarks)
	d Below Dark Surfa		Depleted Oc		(MLRA	151)		(
Thick D	ark Surface (A12)		🔲 Iron-Mangan					cators of hydrophytic vegetation and
	Prairie Redox (A16)		Umbric Surfa	• •	•			tland hydrology must be present,
	Mucky Mineral (S1) Gleyed Matrix (S4)	(LRR O, S)	Delta Ochric Reduced Ve	• • •				ess disturbed or problematic.
	Redox (S5)		Piedmont Flo					
	d Matrix (S6)	,					RA 149A, 1530	, 153D)
	urface (S7) (LRR P,							
Restrictive	Layer (if observed	l}:						
Type:			_					
	nches):		<u> </u>				Hydric Soi	I Present? Yes <u>X</u> No <u>No </u>
Remarks:								



Wetland data point wjoo021f_w1 facing southwest.

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

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Project/Site: ACP		City/County: Joh	nston	Sampling Date: 7/23/14
Applicant/Owner: Dominio	n	•	State: NC	Sampling Point: Wi2021f-W2
Investigator(s): EST - JE	Lenton	Section Township Ra		
	Pine Flat		190 DD00	Slope (%): <u>0 - 2</u>
1.6	200 7	E SHEHI NI	-125010	14/ 1.1(05.1901)
Subregion (LRR or MLRA):			ong: <u>70.00011</u>	Datum: <u>WCS-118</u> 4
Soil Map Unit Name:	sindy loan, 0-	21. Slopes	NWI classifi	cation: <u>PFO-needle leaved</u> evergreen
Are climatic / hydrologic condition	s on the site typical for this time of			(emarks.)
Are Vegetation, Soil	, or Hydrology significa	ntly disturbed? Are "	'Normal Circumstances"	present? Yes 🔀 No
Are Vegetation, Soil	, or Hydrology naturally	y problematic? (If ne	eded, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS	<ul> <li>Attach site map show</li> </ul>	ing sampling point l	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present	? Yes 🔨 No _			
Hydric Soil Present?	Yes X No	is the samplet		< No
Wetland Hydrology Present?	Yes No	I within a wetla	nd? Yes	<u> </u>
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators	5:		Secondary Indi	cators (minimum of two required)
Primary Indicators (minimum of	fone is required: check all that ap	ply)	Surface Sc	il Cracks (B6)
Surface Water (A1)	📙 Aquatic Fauna	a (B13)	Sparsely V	egetated Concave Surface (B8)
High Water Table (A2)	— — ·	(B15) (LRR U)		Patterns (B10)
Saturation (A3)		fide Odor (C1)		Lines (B16)
Water Marks (B1)		ospheres along Living Root		n Water Table (C2)
Sediment Deposits (B2)		Reduced Iron (C4)	· •	urrows (C8)
Drift Deposits (B3)	i i i i i i i i i i i i i i i i i i i	teduction in Tilled Soils (C6)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Su	n in Remarks)		ic Position (D2) quitard (D3)
Iron Deposits (B5)		manitemanosy	FAC-Neut	
Water-Stained Leaves (B9				n moss (D8) (LRR T, U)
Field Observations:	<i></i>			
Surface Water Present?	Yes No 🗶 Depth (ir	nches): NR		
Water Table Present?	Yes No X Depth (ir	nches): 720		
Saturation Present?	Yes No Depth (in	nches): 720 V	Vetland Hydrology Pres	sent? Yes <u> </u>
(includes capillary fringe)	am gauge, monitoring well, aerial	nhotos, previous inspectio	ne) if available:	
Describe Recorded Data (site	an gauge, montoring weit, achai	pilotos, previous inspectio	no, il avallable.	
Remarks:			·	
i temano.				
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VEGETATION (Four Strata) - Use scientific names of plants.

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Sampling Point: Wigo 021 f W2

Tree Stratum (Plot size: $30 \times 30$ )		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: <u>20, 50</u> ) 1. Pinus tueda	<u>% Cover</u> 40	<u>Species?</u>	<u>Status</u>	Number of Dominant Species O	(A)
2. Liquidambar Styraciflug	20	4	PAC		
3. Acer rubrum	20	<u> </u>	FAC	Total Number of Dominant Species Across All Strata:	(B)
4. Nyssa sylvatica	5	N	FAC		(=/
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
6			<b> </b>	Prevalence Index worksheet:	
7				Total % Cover of:Multiply b	ov:
8			—— Ì	OBL species x1 =	
	<u>25</u>	= Total Co	ver	FACW species x 2 =	
50% of total cover:	<u>47.5</u> 20% of	f total cover	r: <u> </u>	FAC species x3 =	
Sapling/Shrub Stratum (Plot size: 15x15	)		me	FACU species x4 =	
1. Acer rubrum	_ 40	<u> </u>	MAC		
2. Liquidambar Styracitlua	- 30	<u>. Y</u>	FRU	UPL species x 5 =	
3. Mannolia virginiana	15	N	PACW	Column Totals: (A)	
4. NUSSA SYlVAFICA	10	N	PAL	Prevalence Index = B/A =	
5		·	·	Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetal	lion
7				2 - Dominance Test is >50%	
8				3 - Prevalence Index is ≤3.0 ¹	
	- 85	= Total Co	over	Problematic Hydrophytic Vegetation ¹ (	(Evolain)
50% of total cover:					CAPICING
Herb Stratum (Plot size: $5 \times 5$ )	<u></u> 2000			An end of the state of the state of the second second based on the	
1. Osmunda spectabilis	5	Y	UBL	Indicators of hydric soil and wetland hydro be present, unless disturbed or problemati	ic.
2. Arundinaria gligantea		- <u>v</u>	PATW	Definitions of Four Vegetation Strata:	
2. Al Undina ta gigantica	10		TRV	Deminitions of Four Vegetation Strata.	
3. Microstegiun vimineum		{	<u>vov</u>	Tree - Woody plants, excluding vines, 3 ir	
4				more in diameter at breast height (DBH), r height.	egardless of
6				Sapling/Shrub - Woody plants, excluding	g vines, less
7				than 3 in. DBH and greater than 3.28 ft (1	m) tall.
8 9				Herb – All herbaceous (non-woody) plant of size, and woody plants less than 3.28 f	s, regardless t tall.
10				Woody vine - All woody vines greater the	an 3.28 ft in
11				height.	
12					
	25	_ = Total C			
50% of total cover:	20%	of total cov	/er: <u>5</u>		
Woody Vine Stratum (Plot size: 33×30	)		0		
1. Smilax rotunditolia	<u> </u>	<u> </u>	m		
2. Smilax lauritolia	5_	<u> </u>	PACK	<u>[</u> ]	
3.					
4					
F					
	10	= Total (		- Hydrophytic	
FOX - field over	~		-	Present? Yes <u>No</u>	
50% of total cover	-	6 of total co	ver:	-	
Remarks: (If observed, list morphological adaptati	ons below).				

SOIL

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# Sampling Point: wjoo021f-w2

Profile Desc	ription: (Describe	to the depth ne				or confirn	n the absence of	of indicators.)
Depth	Matrix		Redox	Features	; 	<del></del>		
$\frac{(inches)}{(2 - 17)}$	Color (moist)	<u>%</u> 15 7	$\frac{1}{5} \sqrt{K} \sqrt{5}$		Type ¹		<u>Texture</u>	Remarks
0 - 12	2.5441		<u>, 3 /1( 78</u>	-5		PL	<u>Cliloi</u>	Oxidized rhizoscheres
12-20	2.54512	<u>90 7</u>	.57K3/8	5	$\mathcal{L}$	PL_	clib.	
		7	-54R518	5	<u> </u>	M	<u>cl.15,</u>	
			é					
<del></del>								
	· · · · · · · · · · · · · · · · · · ·		· · · · ·					
							·	
	· · · · · · · · · · · · · · · · · · ·			·			·	
	oncentration, D=Dep					rains.		PL=Pore Lining, M=Matrix.
l	Indicators: (Applic	able to all LRR						for Problematic Hydric Solls ³ :
Histoso		Ļ	Polyvalue Be					1uck (A9) (LRR O)
	pipedon (A2) istic (A3)	ļ	Thin Dark Su Loamy Muck					fuck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)	L L	Loamy Gleye			(C)		ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	Ì	C Depleted Mar		(· ··)			lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR F	ν, Τ, U)	Redox Dark		=6)			RA 153B)
5 cm M	ucky Mineral (A7) (L	RR P, T, U)	Depleted Da					arent Material (TF2)
	resence (A8) (LRR I	r	Redox Depre		8)			shallow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (L		/hat == -	4 F 4 1	U Other	(Explain in Remarks)
	d Below Dark Surfac	ce (A11)	Depleted Oc		-	-	<b>3</b> 1	- the of hudro chudio constation and
	ark Surface (A12) Prairie Redox (A16) (		Iron-Mangan Umbric Surfa					cators of hydrophytic vegetation and tland hydrology must be present,
	Mucky Mineral (S1) (		Delta Ochric					ess disturbed or problematic.
	Gleyed Matrix (S4)	(E((X, 0, 0)))	Reduced Ve					
	Redox (S5)	1	Piedmont Flo					
	d Matrix (S6)	-					RA 149A, 1530	, 153D)
	urface (S7) (LRR P,	s, T, U)		-	-			
Restrictive	Layer (if observed	):						
Type:			_					
Depth (i	nches):		_				Hydric Soi	I Present? Yes <u>X</u> No
Remarks:	······································							
	•							
1								
1								



Wetland data point wjoo021f_w2, facing west.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>	City/Co	unity: <u>Johnsto</u>	n	Sampling Date:	7/23/14
Applicant/Owner: Dominion	·		State: NC	Sampling Point:	Nj00 021-4
EST - JBRADO	0	Taumahin Damaa	Ar/A		
Landform (hillslone terrace etc.): hillsloge	Local r	elief (concave, convex	none): COACA	1C Slope	= (%): 0-2
Subregion (LRR or MLRA):	Lat: 35,553	03 N Long:	78,2506	6W Dat	um: WGS-1984
Soil Map Unit Name: Raihs Sun Ly lo	am, 0-2%	o slores	NWI classifi	ication: Volund	
Are climatic / hydrologic conditions on the site typical for					
Are Vegetation, Soil, or Hydrology					< No
Are Vegetation, Soil, or Hydrology			, explain any answ		
SUMMARY OF FINDINGS – Attach site m			ions, transect	s, important fe	atures, etc.
Hydrophytic Vegetation Present?       Yes         Hydric Soil Present?       Yes         Wetland Hydrology Present?       Yes         Remarks:       Yes	NO NO NO	Is the Sampled Area within a Wetland?		<u>No X</u>	-
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Ind	icators (minimum of	f two required)
Primary Indicators (minimum of one is required; check	k all that apply)			oil Cracks (B6)	
	uatic Fauna (B13)			/egetated Concave	Surface (B8)
	rl Deposits (B15) (LR			Pattems (B10)	
	drogen Sulfide Odor (			Lines (B16)	
		along Living Roots (C3		on Water Table (C2 Surrows (C8)	)
	esence of Reduced In cent Iron Reduction in	· ·		Visible on Aerial Ir	magery (C9)
	in Muck Surface (C7)		=	hic Position (D2)	
	her (Explain in Remar	ks)	=	quitard (D3)	
Inundation Visible on Aerial Imagery (B7)			FAC-Neuf	tral Test (D5)	
Water-Stained Leaves (B9)			Sphagnur	n moss (D8) (LRR	T, U)
Field Observations:					1
Surface Water Present? Yes No X	_ Depth (inches):	NK XZO			
	_ Depth (inches):		al Headacha an Dua		No X
(includes capillary fringe)			•	sent? Yes	
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, pr	revious inspections), if	available:		1
Remarks:					
			194 ¹		
					-
1					

### VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: wjoo21_u

Trac Stratum (Plataire: 30×30)		Dominant		Dominance Test worksheet:
	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species
1. Linudenaron Tripites	35	<u> </u>	PACU	That Are OBL, FACW, or FAC: (A)
2. Liquidumbar Styracitlua	25		MBC_	Total Number of Dominant
3				Species Across All Strata: <u>9</u> (B)
4				Descent of Deminent Creation
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 781( (A/B)
6				
7				Prevalence Index worksheet:
	·	·		Total % Cover of: Multiply by:
8	1.0	= Total Co		OBL species x1 =
30				FACW species x 2 =
50% of total cover: <u>30</u>	20% of	t total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 15 × 15 )	•	· · ·	520-0	FACU species x 4 =
1. Ligistron Sincase	30	<u> </u>	FAC	
2. Aller rubrum	15	,	PAL	UPL species x 5 =
3		·		Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				
				Hydrophytic Vegetation Indicators:
6				L 1- Rapid Test for Hydrophytic Vegetation
7	·	·		2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	-45	_ = Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2-7	<u>    6     20% c</u>	of total cove	er:	
Herb Stratum (Plot size: <u>5 × 5</u> )				¹ Indicators of hydric soil and wetland hydrology must
1. MICrosteain Vinincum	30	Y	PAC	be present, unless disturbed or problematic.
2. Phytolatica americana	10	- <u>- </u> Y	PArl	Definitions of Four Vegetation Strata:
	-	-		·
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8	. <u>.</u>			<ul> <li>Herb – All herbaceous (non-woody) plants, regardless</li> </ul>
9				of size, and woody plants less than 3.28 ft tall.
10				14th advision All was during grapter than 2.29 ft in
11				<ul> <li>Woody vine – All woody vines greater than 3.28 ft in</li> <li>height.</li> </ul>
12.				
12	40	= Total C		-
50% of total cover: 2	<u> </u>	of total cov	ver:	-
Woody Vine Stratum (Plot size: <u>30 × 30</u> )	~			
1. Smilax rotundikolia		<u> </u>	<u>prc</u>	_
2. vitis rotundifolia		<u>    Y    </u>	- PPC	_
3 Bignonia capreolata	5	Ϋ́	FAL	
				-
+				- ]
5				- Hydrophytic
	0			Vegetation Present? Yes No
50% of total cover:	<u>0                                    </u>	of total co	ver: <u> </u>	
Remarks: (If observed, list morphological adaptations be	elow).			
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## Sampling Point: W100 021-0

	ription: (Describe	to the de	oth needed to docu	ment the indicator	or confirm	the absence	of indicators	;.}	
Depth	Matrix			x Features					
inches)	Color (moist)	%	Color (moist)	<u>%</u> Type ¹	_Loc ²	<u>    Texture    </u>		Remarks	
2-10	2,544/3	100	· · · · · · · · · · · · · · · ·	<u> </u>		10.			
0-20	2.54 34	90	2.545/1	10 D	M	sa. (0.			
	·	_	······				• · · · ·	· · ·	
				<u> </u>		<u>.</u>	<u> </u>	-	
		_			·		·		
	<u>_</u>		· · · · · · · · · · · · · · · · · · ·		•				
1						2,			
			I=Reduced Matrix, M		rains.			ing, M≃Matrix. atic Hydric So	
<u> </u>						<b></b> 1		•	. 6115
Histoso				elow Surface (S8) ( iurface (S9) (LRR S			Muck (A9) (LF Muck (A10) (L		
	pipedon (A2) istic (A3)			ky Mineral (F1) (LR				8) (outside Mi	RA 1504
=	en Sulfide (A4)			ved Matrix (F2)	ιΟj			n Soils (F19) (	
_	d Layers (A5)		Depleted Ma	• •			•	.oamy Soils (F	
	Bodies (A6) (LRR I	P, T. U)		Surface (F6)			RA 153B)		,
-	ucky Mineral (A7) (L			ark Surface (F7)			arent Materia	II (TF2)	
	resence (A8) (LRR			ressions (F8)				Surface (TF12	)
	uck (A9) (LRR P, T)		Marl (F10) (	(LRR U)		Other	(Explain in R	emarks)	
🔲 Deplete	d Below Dark Surfa	ce (A11)	Depleted O	chric (F11) (MLRA	151)				
🔲 Thick 🗅	ark Surface (A12)			nese Masses (F12)				ophytic vegeta	
	Prairie Redox (A16)	•		face (F13) (LRR P,			•	gy must be pre	
	Mucky Mineral (S1)	(LRR O, S		c (F17) (MLRA 151			less disturbed	i or problemati	с.
	Gleyed Matrix (S4)			ertic (F18) (MLRA 1					
<b>_</b>	Redox (S5)			loodplain Soils (F19					
∐ Strippe	d Matrix (S6)			Bright Loamy Soils	(F20) (ML	RA 149A, 1530	C, 153D)		
	urface (S7) (LRR P,								
Restrictive	urface (S7) (LRR P, Layer (if observed								
Restrictive Type:	Layer (if observed								
Restrictive Type:						Hydric So	il Present?	Yes	No_X
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	No_X
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	No_X
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	<u>No X</u>
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes ,	<u>№ X</u>
Restrictive Type: Depth (i	Layer (if observed		<u> </u>			Hydric So	il Present?	Yes	<u>№ X</u>
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	No <u>×</u>
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	No <u>×</u>
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	<u>No_X</u>
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	<u>No X</u>
Restrictive Type: Depth (i	Layer (if observed		I			Hydric So	il Present?	Yes	<u>No X</u>
Restrictive Type: Depth (i	Layer (if observed		1			Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed		1			Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed		1			Hydric So	il Present?	Yes	No <u>×</u>
Restrictive Type: Depth (i	Layer (if observed		1			Hydric So	il Present?	Yes	No <u>×</u>
Restrictive Type: Depth (i	Layer (if observed		1			Hydric So	il Present?	Yes	No <u>×</u>
Restrictive Type: Depth (i	Layer (if observed		<u> </u>			Hydric So	il Present?	Yes	No X
Restrictive Type:	Layer (if observed		<u> </u>			Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed					Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed					Hydric So	il Present?	Yes	No X
Restrictive Type: Depth (i	Layer (if observed					Hydric So	il Present?	Yes	No <u>×</u>



Upland data point wjoo021_u facing northeast.

WE	TLAND DETER	MINATION DATA	FORM – At	lantic and Gu	ulf Coastal P	lain Regio	'n
Project/Site:	ACP		_ City/County: _	Johnsto	$\sim$	Sampling [	Date: 7-22-14
Applicant/Owner:	Domi	Non					oint: <u>Wjop005f</u>
nvestigator(s):		ſ				_ , •	
andform (hillslope, terrace						-	Slope (%): 0-2
Subregion (LRR or MLRA):							
Soil Map Unit Name:		Nou loam			NWI classi		
Are climatic / hydrologic co		1		/			
Are Vegetation, Soi							es No
Are Vegetation, Sol					explain any ansv		
SUMMARY OF FIND	INGS – Attach	i site map showir	ng sampling	point locatio	ons, transect	ts, importa	int features, etc.
Hydrophytic Vegetation P	resent? Ye	es No	- ls the	Sampled Area			
Hydric Soil Present?	Ye	es V No		a Wetland?	Yes	No	
Wetland Hydrology Prese	ent? Ye	es <u> </u>	-				
Remarks:		,					
IYDROLOGY							
Wetland Hydrology Ind					_		num of two required)
Primary Indicators (minin	<u>num of one is requi</u>				=	oil Cracks (B6	•
Surface Water (A1)	· · · ·	Aquatic Fauna (	•			-	ncave Surface (B8)
High Water Table (A	2)	Marl Deposits (E				Patterns (B10 h Lines (B16)	)
Saturation (A3)		Oxidized Rhizos		vina Roots (C3)		on Water Tabl	e (C2)
Sediment Deposits (	(B2)	Presence of Red				Surrows (C8)	- (- )
Drift Deposits (B3)		Recent Iron Rec		Soils (C6)			erial Imagery (C9)
Algal Mat or Crust (E	34)	Thin Muck Surfa	ace (C7)		. 🔲 Geomorpl	nic Position (E	)2)
Iron Deposits (B5)		Uther (Explain i	n Remarks)			quitard (D3)	
Inundation Visible of		7)				ral Test (D5)	
Water-Stained Leav	es (B9)			<u> </u>	Sphagnur	n moss (D8) (	
Fiel&Observations: Surface Water Present?	Yes	No Depth (inch	nes); NA				
Water Table Present?			nes):				/
Saturation Present?		No Depth (incl	~ ~ ~	Wetland	Hydrology Pre	sent? Yes	V No
(includes capillary fringe	e)						
Describe Recorded Data	a (stream gauge, m	onitoring well, aerial pl	notos, previous :	nspections), it av	allable:		
Remarks:	<u></u>						
Remarks.							

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### VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: wjop005f_w

21/224		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $30^{1} \times 30^{1}$ )	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species
1. Liriodendun tulipitera	50	<u> </u>	FAC	That Are OBL, FACW, or FAC:
2. Duncus nigra	15	<u> </u>	FAC	Total Number of Dominant
3. Iley opaca	10	<u> </u>	FAC	Total Number of Dominant Species Across All Strata:
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: $(UU)^{6}$ (A/B)
6				$\frac{1}{100}$
7				Prevalence Index worksheet:
	·	<u> </u>		Total % Cover of: Multiply by:
8	75			OBL species x 1 =
27		= Total Cov		FACW species x 2 =
50% of total cover: $37.7$	20% 0	i total cover	<u></u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30' × 30')	15	N (		FACU species x4 =
1. Liriodendrum tulipitera	<u>15</u>	<u> </u>	FAC	UPL species x 5 =
2. Liquistrum simmse	10	<u> </u>	FAC	
3. pin rubrum	<u> </u>	<u>N</u>	FAC	Column Totals: (A) (B)
4. Ilex oduca	<u> </u>	<u>N</u>	FAC	Prevalence Index = B/A =
, 5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.	<u> </u>			
0	75	= Total Co		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 17.				Problematic Hydrophytic Vegetation ¹ (Explain)
	<u> </u>	t total cove	r:	
<u>Herb Stratum</u> (Plot size: $3 \times 3 \times 1$ )	10	$\mathbf{N}$	to and	¹ Indicators of hydric soil and wetland hydrology must
1. Woodwardia a restata	<u>10</u> 5		FACW	be present, unless disturbed or problematic.
2. Arundinaria gigantea	5	. <u> </u>	FAC	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10			•	Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	10			
	~12	= Total Co	-	
50% of total cover: /.	<u>)</u> 20% (	of total cove	er: <u>&gt;</u>	
Woody Vine Stratum (Plot size: 32 X 32)	r	$\mathbf{V}$	MI	
1. Smilex bong nox	<u> </u>		-HC	
2. Lonicera japonica	<u> </u>	<u> </u>	FAC	
3J				
4				
5.				Hydrophytic
	- 10	_ = Total C	over	Vegetation
50% of total cover: 5	20%	of total cov	2	Present? Yes No
Remarks: (If observed, list morphological adaptations be				•
Remarks. (II observed, list morphological adaptations be	:IOVV).			

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Profile Des	cription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm	the absence of	indicators.)
Depth	Matrix		Redo	x Feature				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	_Type'_	Loc ²	Texture	Remarks
0-3	104R2/1	<u>   (UU                                </u>					<u> </u>	
3-10	104R3/1	95 1	04RS/2	5	_D	<u>_W</u> _		
10-20	104R3/1	80	104R6/1	20	$\overline{D}$	M	SL	
	<u>(•    1 - /</u>	· <u> </u>	· · · · · · · · · · · · · · · · · · ·					
·		·			·			
				• •		·		
·								
	oncentration, D=Dep	letion RM=R	educed Matrix M	S=Masker	d Sand Gr	ains	² l ocation: Pl	L=Pore Lining, M=Matrix.
	Indicators: (Applic							r Problematic Hydric Soils ³ :
Histoso	-		Polyvalue Be			.RR S. T. U	<b>1</b> 22	ck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)
	listic (A3)		Loamy Muck					Vertic (F18) (outside MLRA 150A,B)
=	en Sulfide (A4)		Loamy Gleye				Piedmon	t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					us Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	•	Redox Dark	•	•			153B)
	ucky Mineral (A7) (Ll	-	Depleted Da					ent Material (TF2)
	Tresence (A8) (LRR L	7)	Redox Depr	•	·8)			allow Dark Surface (TF12)
	uck (A9) (LRR P, T) ed Below Dark Surfac	a (A11)	Mari (F10) (I			51)		xplain in Remarks)
	ark Surface (A12)	e (ATT)	Iron-Mangar		-	-	T) ³ Indicat	ors of hydrophytic vegetation and
	Prairie Redox (A16) (	MLRA 150A)	= -			-	•	nd hydrology must be present,
	Mucky Mineral (S1) (		Delta Ochric					s disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve					
	Redox (S5)		Piedmont Fl					
Strippe	d Matrix (S6)		🔲 Anomalous	Bright Loa	amy Soils	(F20) (MLF	RA 149A, 153C, 1	153D)
	urface (S7) (LRR P,							
Restrictive	Layer (if observed)	):						
Type:								V
Depth (i	nches):						Hydric Soil P	resent? Yes <u>No</u>
Remarks:								
	•							
1								
1								
1								
1								



Wetland data point wjop005f_w facing southwest.

rojectistic:       ACP       ctycourty. J 4An Stevn       sampling Detr. 2/22/14         polarit/owner:       (b) Minich       Sampling Point WipP 2005         vestigato(10):       ESL - K. MAL(MV4C)       Secton, Townable Range:       NA         androm (hiloge, termes, etc):       Kinh       Local relation (concrete, convex, nore)       ALA+       Stope (N): 0.22         abregion (RR or MLRA):       CRCP       Lat 325.226.75       Long: -72.23.201.5       Datum WLSSE         oil Map Unit Name:       CRCP       Lat 325.226.75       Long: -72.23.201.5       Datum WLSSE         oil Map Unit Name:       CRCP       Lat 325.226.75       Long: -72.23.201.5       Datum WLSSE         usedion (JRR or MLRA):       CRCP       Lat 325.226.75       Long: -72.23.201.5       Datum WLSSE         usedion (JRR or MLRA):       CRCP       Lat 325.226.75       Long: -72.23.201.5       Datum WLSSE         Usediant Hydrology indicators:       Crcp latin Remarks.3       Suffice Control (Remarks)       No       No       Remarks:         Vesteriant / Vest	WETLAND DETERMINATION				
westigato(s):	roject/Site: ACP	Citv/Co ⁻	unty Jehn Ste		Sampling Date: 7/22/(
westigato(s):	pplicant/Owner: 00 Miniun			State: NC	Sampling Point: w/op005-
oil Map Unit Name:       Sold	vestigator(s): ESI-K.MUIThter	Section	, Township, Range:	NA	
oil Map Unit Name:       Sold	andform (hillslope, terrace, etc.); E(0.4	Local re	elief (concave, convex,	none): FIA+	Slope (%): ۲ -2
oil Map Unit Name:       Sold	ubregion (I BB or MI BA); LRRP	at: 35.526	76 Lona: -	-78.2501	5 Datum: W 6-58
re climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no. explain in Remarks.) re Vegetation Soil or Hydrology inaturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes	oil Man Linit Name: RAIAS Sondar LOU	3m			
re VegetationSoit, or Hydrologyasignificantly disturbed?       Are "Normal Circumstances" present? YesNo         re VegetationSoit, or Hydrologynaturally problematic?       (If needed, explain any answers in Remarks.)         UUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       YesNo         Hydrophytic Vegetation Present?       YesNo         Is the Sampled Area within a Wetland?       YesNo         Wetland Hydrology Present?       YesNo         Wetland Hydrology Indicators:			s V No		
re Vegetation	re Vegetation Soil or Hydrology S	ionificantly disturb	ed? Are "Norma	Circumstances"	present? Yes No
SutMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.         Hydrophylic Vegetation Present?       Yes       No         Hydrophylic Nogy Present?       Yes       No         Yes       No       Is the Sampled Area within a Wetland?       Yes         Wetland Hydrology Indicators:       Yes       No       No       No         Primary Indicators (minimum of one is required: check all that apply)       Surface Water (A1)       Surface Soli Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soli Cracks (B6)       Sparsely Vegetated Concove Surface (B8)         Buffate Table (A2)       Hydrogen Surface Concerve Surface (B3)       Dire Season Water Table (C2)       Dire Season Water Table (C2)         Saturation (A3)       Hydrogen Surface (C1)       Oxidized Rhizospheres along Living Roots (C3)       Dry Season Water Table (C2)         Ortic Deposits (B3)       Presence of Reduced Iron (C4)       Saturation (N3ble on Aerial Imagery (C3)       Saturation (N3ble on Aerial Imagery (C3)         Inucry and the Visible on Aerial Imagery (B7)       Water Table (Present?       Yes       No       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Yes       No       Depth (inches): $Z > Q^{-1}$ Sphagnum moss (D8) (LRR T, U)         Sutracw Nater Present?       Yes       No	re Vegetation, our Hydrology o	aturally problemat	ic? (If needed )	explain any answ	ers in Remarks )
Hydrophylic Vegetation Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Remarks:       Wetland Hydrology Indicators:       Yes       No       Surface Sol Cracks (Be)         Primary Indicators (minimum of one Is required: check all that apply)       Surface Sol Cracks (Be)       Surface Sol Cracks (Be)         Surface Water (A1)       Aquatic Fauna (B13)       Drainage Patterns (B10)       Mart Deposits (B15) (LRR U)         High Water Table (A2)       Hydrogen Sufface Odor (C1)       Most Tim Lines (S16)       Dors/Season Water Table (C2)         Ordit Deposits (B2)       Presence of Reduced Irin (C4)       Dors/Season Water Table (C2)       Craylish Burrows (C8)         Sturation Kas (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dys/Season Water Table (C2)       Craylish Burrows (C8)         In the Deposits (B3)       Recent Iron Reduction in Tilled Solis (C6)       Saturation Visible on Aerial Imagery (C9)       Sala Mat or Coposition (D2)         Weter-Stained Leaves (B9)       Thin Muck Surface (C7)       Sala Mat or Coposition (D2)       Saturation Visible on Aerial Imagery (C9)         Sutrateo Present?       Yes       No       Depth (inches): $\underline{>} \underline{>} \underline{>} \underline{>} \underline{>} \underline{>} \underline{>} \underline{>} $					
Hydric Soll Present?       Yes       No       Ves       No         Wetland Hydrology Present?       Yes       No       Ves       No         Applied Hydrology Indicators:       Secondary Indicators:       Surface Soll Cracks (B6)         Primary Indicators (minimum of one is required; check all that apply)       Surface Soll Cracks (B6)       Surface Soll Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)       Surface Soll Cracks (B6)       Drainage Patterns (B10)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Drainage Patterns (B16)       Dreinage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C2)       Crayfish Burrows (C8)       Saturation Visible on Aerial Imagery (C9)         Saturation (A3)       Hydrogen Sulface (C7)       Saturation Visible on Aerial Imagery (C9)       Saturation Visible on Aerial Imagery (C9)         Agait Mat or Crust (B4)       Thin Muck Surface (C7)       Saturation Soll (C6)       Splatow Aquitard (D2)         Inductor Visible on Aerial Imagery (B7)       Weter Stain (C6)       Splatow Aquitard (D2)       Splatow Aquitard (D2)         Field Observations:       No       Depth (inches):       DA       Splatow Aquitard (D2)       Splatow Aquitard (D2)	SUMMARY OF FINDINGS - Attach site map	snowing samp	biing point locatio	ons, transect	s, important features, etc.
Hydric Soll Present?       Yes       No       Vithin a Wetland?       Yes       No         Hydrology Present?       Yes       No       Ves       No       Ves       No         Hydrology Indicators:       Secondary Indicators:       Secondary Indicators (minimum of one is required: check all that apply)       Surface Soil Cracks (B6)         Surface Vater (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         Surface Vater (A1)       Marl Deposits (B15) (LRR U)       Dreinage Patterns (B10)         Water Table (A2)       Marl Deposits (B15) (LRR U)       Dreinage Patterns (B10)         Water Marks (B1)       Oxidized Riticospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Crayfish Burrows (B2)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Agail Mar Cruss (B4)       Thin Muck Surface (C7)       Saturation Visible on Aerial Imagery (C9)         Iron Deposits (B5)       Other (Explain in Remarks)       Spallow Aquitard (D3)         Water Table Present?       Yes       No       Depth (inches): <u>Z&amp;O''</u> Water Table Present?       Yes       No       Depth (inches): <u>Z&amp;O''</u> Sutrace Neeroride Data (stream gauge, monitoring weil, aerial photos,	Hydrophytic Vegetation Present? Yes Ves		is the Sampled Area		
Wetland Hydrology Present?       YesNo	Hydric Soil Present? Yes No			Yes	No
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)       Surface Sul Cracks (B6)         Surface Water (A1)       Aquatic Fauna (B13)         High Water Table (A2)       Mart Deposits (B15) (LRR U)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)         Drift Deposits (B2)       Presence of Reduced Iron (C4)         Drift Deposits (B3)       Recent Iron Reduction in Titled Solis (C6)         In Undation Visible on Aerial Imagery (B7)       Saturation Visible on Aerial Imagery (C9)         Inron Deposits (B3)       Other (Explain in Remarks)         Inroduction Visible on Aerial Imagery (B7)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Sphagnum moss (D8) (LRR T, U)         Surface Water Present?       Yes         No       Depth (inches):         Saturation Present?       Yes         No       Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available:         Remarks:		• <u> </u>	· · · · · · ·		
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required: check all that apply)         Primary Indicators (minimum of one is required: check all that apply)       Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)       Dorsinage Patterns (B10)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Mail and tor Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)       Shallaw Aquitard (D3)         Inon Deposits (B5)       Other (Explain in Remarks)       Sphagnum moss (D8) (LRR T, U)       Shallaw Aquitard (D3)         Water Stained Leaves (B9)       No       Depth (inches):       ZAO''       Wetland Hydrology Present? Yes       No         Surface Water Present?       Yes       No       Depth (inches):       ZAO''       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Remarks:				
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required; check all that apply)         Primary Indicators (minimum of one is required; check all that apply)       Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)       Drainage Patterns (B10)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Intin Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Inon Deposits (B5)       Other (Explain in Remarks)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Yes       No       Depth (inches): <u>720'*</u> Water Table Present?       Yes       No       Depth (inches): <u>720'*</u> Wetland Hydrology Present?       Yes       No       Depth (inches): <u>720'*</u> Remarks:       Remarks:       Remarks:       Remarks:					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required; check all that apply)         Primary Indicators (minimum of one is required; check all that apply)       Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)       Drainage Patterns (B10)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Intin Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Inon Deposits (B5)       Other (Explain in Remarks)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Yes       No       Depth (inches): <u>720'*</u> Water Table Present?       Yes       No       Depth (inches): <u>720'*</u> Wetland Hydrology Present?       Yes       No       Depth (inches): <u>720'*</u> Remarks:       Remarks:       Remarks:       Remarks:					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required: check all that apply)         Primary Indicators (minimum of one is required: check all that apply)       Surface Water (A1)       Aquatic Fauna (B13)       Surface Soil Cracks (B6)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)       Drainage Patterns (B10)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Dift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         In Inudation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)       FAC-Neutral Test (D5)         Field Observations:       No       Depth (inches):       Z20''         Sutration Present?       Yes       No       Depth (inches):       Z00''         Uncludes capillary fringe)       No       Depth (inches):       Z00''       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:					
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Water (A1)       Aquatic Fauna (B13)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Sparsely Vegetated Concave Surface (B8)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B10)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Crayfish Burrows (C8)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Innu Deposits (B5)       Other (Explain in Remarks)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Yes       No       Depth (inches): <u>220'</u> Water Table Present?       Yes       No       Depth (inches): <u>220'</u> Wetland Hydrology Present?       Yes       No       Depth (inches): <u>220'</u> Wetland Hydrology Present?       Yes       No       Depth (inches): <u>220'</u> Viculudes capillary fringe)       No       Depth (inches): <u>220'</u> Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring weil, aerial photos, previous inspections), if available:       Remarks:<					
Primary Indicators (minimum of one is required: check all that apply       Surface Vater (A1)       Aquatic Fauna (B13)       Drainage Patterns (B10)         High Water Table (A2)       Harl Deposits (B15) (LRR U)       Box Trim Lines (B16)       Drainage Patterns (B10)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Geomorphic Position (D2)         Iron Deposits (B3)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)       FAC-Neutral Test (D5)         Field Observations:       Surface Water Present?       Yes       No         Sufface Battard fringe)       Depth (inches): $\frac{NA}{220'}$ Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	YDROLOGY				
Surface Water (A1)       Aquatic Fauna (B13)       Sparsely Vegetated Concave Surface (B8)         High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Pattems (B10)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)         Drift Deposits (B3)       Recent Iron Reducion in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Inundation Visible on Aerial Imagery (B7)       Veter-Stained Leaves (B9)       FAC-Neutral Test (D5)         Surface Water Present?       Yes       No       Depth (inches): $\underline{P220^{+1}}$ Wetland Hydrology Present? Yes       No         Saturation Present?       Yes       No       Depth (inches): $\underline{P220^{+1}}$ Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available:       Remarks:	Wetland Hydrology Indicators:				
High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Pattems (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Saturation (A3)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Saturation Visible on Aerial Imagery (B7)         Water-Stained Leaves (B9)       Field Observations:       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):         Saturation Present?       Yes       No       Depth (inches):         Depth (inches):       Depth (inches):       Depth (inches):       No         Depth (inches):       Depth (inches):       Depth       No       No         Depth (inches):       Depth (inches):       Depth       No       No       No         Depth (inches):       Depth (inches):       Depth       No       No       No       No         Depth (inches):       Depth       <				<b>r</b>	
Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Inon Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Peth (inches):       NA         Water-Stained Leaves (B9)       Depth (inches):       NA         Field Observations:       Depth (inches):       Depth (inches):       NA         Saturation Present?       Yes       No       Depth (inches):       Depth '*         Water Table Present?       Yes       No       Depth (inches):       Depth '*         Saturation Present?       Yes       No       Depth (inches):       Depth '*         Bescribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:			• •		-
Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Saballow Aquitar (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)         Water Stained Leaves (B9)       Depth (inches): <u>N A</u> Field Observations:       Depth (inches): <u>Depth (inches): <u>Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): <u>Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): <u>Depth (inches): Depth (inches): Depth (inches): Depth (inches): Depth (inches): Recorded Data (stream gauge, monitoring well, aerial photos, previous Inspections), if available:         Remarks:   </u></u></u></u>					
Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Ironundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)         Water-Steined Leaves (B9)       Depth (inches):       NA         Field Observations:       Depth (inches):       NA         Saturation Present?       Yes       No       Depth (inches):         Zaturation Present?       Yes       No       Depth (inches):       No         Depth (inches):       Zau'       Wetland Hydrology Present? Yes       No         Depth (inches):       Zau'       Wetland Hydrology Present? Yes       No         Depth (inches):       Zau'       Remarks:       No       Remarks:					
Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Depth (inches):       NA         Field Observations:       Surface Water Present?       Yes       No         Sufface Water Present?       Yes       No       Depth (inches):       Z20'         Water Table Present?       Yes       No       Depth (inches):       Z20'         Wetland Hydrology Present?       Yes       No       Depth       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:         Remarks:       Saturation Present?       Yes       Saturation Present?       Yes					
Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Sballow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Depth (inches): <u>N A</u> Field Observations:       Depth (inches): <u>N A</u> Surface Water Present?       Yes         Yes       No         Depth (inches): <u>Depth</u> (inches): <u>Jacov</u> Wetland Hydrology Present? Yes         No       Depth (inches):         Saturation Present?       Yes         No       Depth (inches): <u>Jacov</u> Wetland Hydrology Present? Yes         No       Depth (inches): <u>Jacov</u> No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:         Remarks:					
Inundation Visible on Aerial Imagery (B7) ☐ Inundation Visible on Aerial Imagery (B7) ☐ Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): NA		.ck Surface (C7)		🔲 Geomorph	ic Position (D2)
Water-Stained Leaves (B9)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Yes       No       Depth (inches):       NA         Surface Water Present?       Yes       No       Depth (inches):       Z20''       Wetland Hydrology Present? Yes       No         Saturation Present?       Yes       No       Depth (inches):       Z20''       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Iron Deposits (B5)	Explain in Remark	s)		
Field Observations:       Ves       No       Depth (inches):       NA         Water Table Present?       Yes       No       Depth (inches):       Data         Saturation Present?       Yes       No       Depth (inches):       Data         Saturation Present?       Yes       No       Depth (inches):       Data         Cincludes capillary fringe)       Depth (inches):       Data       No       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:         Remarks:					• •
Surface Water Present?       YesNo       Depth (inches):NA         Water Table Present?       YesNo       Depth (inches):NA         Saturation Present?       YesNo       Depth (inches):NA         Viculades capillary fringe)       Wetland Hydrology Present?       YesNo         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	1			L Sphagnum	1 moss (D8) (LRR T, U)
Water Table Present? YesNo   Saturation Present? YesNo   Depth (inches): 720''   Wetland Hydrology Present? YesNo Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:		with (inchas); N	A		
Saturation Present?       Yes No Depth (inches): Wetland Hydrology Present? Yes No         (includes capillary fringe)       Depth (inches): Wetland Hydrology Present? Yes No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Surface water Present? Yes No De	$\frac{1}{2}$ p(n (inches): $\frac{7}{2}$	20''		/
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:				Hydrology Pres	ent? Yes No
Remarks:	(includes capillary fringe)	· · · · ·			
	Describe Recorded Data (stream gauge, monitoring well,	aerial photos, pre	vious inspections), if a	vailable:	
	Remarks:		•	•	
				•	
			÷.		

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## VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: wjop 005_4

	Absolute	Dominant	Indicator I	Dominance Test worksheet:
Tree Stratum (Plot size: 301×301)		Species?		Number of Dominant Species
1. LIQUIDONDON SKYLOCISTINO	25	$\overline{\nabla}$	FAC	That Are OBL, FACW, or FAC:
2 ALEV VUIDVUM	25	<u></u>	FAC	
	10	-7	TACK	Total Number of Dominant
3. Liviodendron thipesera		<u>_N_</u>	+14-00	Species Across All Strata: [0] (B)
4				
5				Percent of Dominant Species $40\%$ (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	·		<u> </u>	Total % Cover of: Multiply by:
8	·			
	60	= Total Cov	/er	OBL species x 1 =
50% of total cover: <u>30</u>		total cover	10	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30(X70))				FAC species x 3 =
Saplind/Shrub Stratum (Plot size: _/O _/ /O _)	40	١ř	TAC	FACU species x 4 =
1. Ligustrum Sinense	<u>40</u>	_¥	FAC	• • • • • • • • • • • • • • • • •
2. Vaccinium corymbosum	<u> </u>	<u> </u>	FACW	UPL species x 5 =
3		/		Column Totals: (A) (B)
4				Prevalence Index = B/A =
5			<del></del>	Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	45	= Total Co		3 - Prevalence Index is ≤3.0 ¹
<b>A</b>	<u></u>	= Total Co	ver 🗠	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>22</u>	<u>&gt;</u> 20% o	f total cover	r: <u> </u>	
Herb Stratum (Plot size: 30' × 30')				¹ Indicators of hydric soil and wetland hydrology must
1. Phytolacca americana	10	V	FACU	be present, unless disturbed or problematic.
2. Avundinaria gigontea	- 5	$-\frac{1}{\sqrt{1}}$	FAC	
		·	FACW	Definitions of Four Vegetation Strata:
3. Woodwardia aveolata	5	·	<u> </u>	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Impatiens, capensis	3	<u>N</u>	FACW	more in diameter at breast height (DBH), regardless of
5				height.
		·	·	
6				Sapling/Shrub – Woody plants, excluding vines, less
7			•	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
			•	Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	23_	_ = Total Co	over .	
50% of total cover:	5 20%	of total cove	r 4.6	
$30^{\circ} \times 30^{\circ}$				
Woody Vine Stratum (Plot size: 30' × 30')	10	V		
1. TOXICOARDARON radicans		- — У		
2. Smilax hona-nox	<u> </u>	<u> </u>	<u></u> <u>FAC</u>	
3. Vitis rotundifolia	5	\/	FAC	
				•
4,				·   /
5				- Hydrophytic
	20	_ = Total Co	over	Vegetation V
50% of total cover:(	0 20%	- of total cove	er: 4	Present? Yes No
				•
Remarks: (If observed, list morphological adaptations be	sow).			
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#### SOIL

# Sampling Point: WJop 005-4

Profile Desc	cription: (Describe	to the depth n	eeded to docur	nent the i	ndicator c	or confirm t	the absence of indicators.)
Depth	Matrix			x Feature	s		<b>T</b>
<u>(inches)</u> ()-H	Color (moist)		Color (moist)	%	Type	Loc ²	Texture Remarks
04	104R2/2	100			·		
4-8	104R3/2	100				<b>_</b>	<u>SL</u>
8-20	101/R3/3	100					SL
	·						
		·			·		······································
		·			· <u> </u>		
		• <u> </u>					
	oncentration, D=Dep					lins.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all LR					Indicators for Problematic Hydric Soils ³ :
Histoso	· ·	Į	Polyvalue B				
	pipedon (A2)		Thin Dark S	-	• •	•	2 cm Muck (A10) (LRR S)
	listic (A3)	ł	Loamy Mucl	-		0)	Reduced Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4) ed Layers (A5)	-	Loamy Gley Depleted Ma		(FZ)		Anomalous Bright Loamy Soils (F20)
	c Bodies (A6) <b>(LRR P</b>	. <b>τ.</b> υ)	Redox Dark		F6)		(MLRA 153B)
	ucky Mineral (A7) (Li		Depleted Da		•		Red Parent Material (TF2)
	resence (A8) (LRR L		Redox Depr				Very Shallow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Mari (F10) (	LRR U)			Other (Explain in Remarks)
	ed Below Dark Surfac	e (A11)	Depleted Or				<b>3</b>
	Dark Surface (A12)		Iron-Mangal				
	Prairie Redox (A16) (		Umbric Surf			, U)	wetland hydrology must be present, unless disturbed or problematic.
	Mucky Mineral (S1) ( Gleyed Matrix (S4)	LKK (), 5)	Delta Ochrid			0A 150B)	unless disturbed of problematic.
	Redox (S5)	•	Piedmont F				9A)
	d Matrix (S6)						A 149A, 153C, 153D)
	urface (S7) (LRR P,	S, T, U)	_	Ū			
Restrictive	Layer (if observed)	:					
Туре: _			_				
Depth (i	nches):		_				Hydric Soil Present? Yes No
Remarks:	<u> </u>					•	
							1



Upland data point wjop005_u facing northeast.

WETLAND DETERMINAT				-
Project/Site: <u>ACP</u>	City/County	, Johnston	Sa	ampling Date: 7/22/14 ampling Point: Wjop 006 f.
Applicant/Owner: DUMUNUN		Stat	le: NC Sa	mpling Point: WIOP DOG F.
EST - /15 Muller	E Section, Tr	wnship, Range: <u>N</u>	A	· · ·
andform (hillslope, terrace, etc.): Elout	/ Local relief	(concave, convex, nor	ne): <u>F(0+</u>	Slope (%): <u>0−2</u> 7Datum: <u>N (±58</u> on:P∓0 arks.)
Subregion (LRR or MLRA): L R R P	Lat: 35.52601	D Long: <u>-7</u>	8.2525	7 Datum: W658
Soil Map Unit Name: Bibb Sondy 1	UBM		NWI classification	on: <u>PFO</u>
Are climatic / hydrologic conditions on the site typical for	r this time of year? Yes	No (If r	- no, explain in Rem	arks.)
Are Vegetation, Soil, or Hydrology				sent? Yes No
Are Vegetation, Soil, or Hydrology			lain any answers i	
SUMMARY OF FINDINGS – Attach site m			s transacts i	moortant features, etc.
SUMMART OF FINDINGS - Attach site in			5, transeots, i	
Hydrophytic Vegetation Present? Yes	No Ist	he Sampied Area		
Hydric Soil Present? Yes	wit	hin a Wetland?	Yes	<u>.</u> No
Wetland Hydrology Present? Yes	_ No			
Remarks:				
1				
HYDROLOGY				
Wetland Hydrology Indicators:	<u>_</u>	<u></u>	econdary Indicato	rs (minimum of two required)
Primary Indicators (minimum of one is required: chec	k all that apply)	[	Surface Soil Ci	racks (B6)
Surface Water (A1)	uatic Fauna (B13)	Ē	Sparsely Vege	tated Concave Surface (B8)
	arl Deposits (B15) (LRR U)		Drainage Patte	
	drogen Sulfide Odor (C1)		- Moss Trim Line	
	didized Rhizospheres along esence of Reduced Iron (C		Crayfish Burro	ater Table (C2)
	ecent Iron Reduction in Till	· ·		ble on Aerial Imagery (C9)
	in Muck Surface (C7)	Ţ.	Geomorphic P	osition (D2)
	her (Explain in Remarks)	· [	Shallow Aquita	
Inundation Visible on Aerial Imagery (B7)		 	FAC-Neutral T	
Vater-Stained Leaves (B9)		<b>ـ</b> ـــــــــــــــــــــــــــــــــــ	Sphagnum mo	oss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No	_ Depth (inches): <u>NA</u>			
Water Table Present? Yes No	_ Depth (inches):	<u>)</u> (`		
Saturation Present? Yes No	_ Depth (inches):	Wetland Hy	drology Present	? Yes _ No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, previo	us inspections), it avail	able:	
Remarks:	· · · · · · · · · · · · · · · · · · ·		<u> </u>	
Neinging.				
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VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: wjop DO6 F-W

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' × 30')		Species?		Number of Dominant Species </td
1. ACET HUDRAM	30		FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidambar Styraciflua	$\zeta$	<u> </u>	FAC	, Total Number of Dominant Q
3 Magnolia Virginica		<u>N</u>	FACH	Species Across All Strata: (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
o	50	= Total Cov		OBL species x 1 =
50% of total cover: →				FACW species x 2 =
$30\%$ of total cover: $-\frac{1}{2}$	20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30'×30') 1. A Cer rubrum	15	V	FAC	FACU species x4 =
	<u></u>		FAC	UPL species x 5 =
2. Liquidambar styraciflua	5	<u>_y</u>	FACG	Column Totals: (A) (B)
3. Oxydendrum arbereum	·	<u>N</u>	· - 1	
4. Clethra alnifolia	25	<u> </u>	FACW	Prevalence Index = B/A =
5. Cyrilla Faceniflora	<u> </u>	<u>N</u>	FACW	Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				$\Box = 3 - \text{Prevalence Index is } \leq 3.0^1$
	65	= Total Co	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $32$ .	5 20% 0	f total cover	3	
Herb Stratum (Plot size: 30 ×30)			·	
1. OSMUNdastrun cinnamomeum	10	17	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundinavia gigantea		$\overline{\langle}$	FACh	
3. Mitchella repeas		- <u>-</u>	FACG	Definitions of Four vegetation Strata:
		· <del>- }</del>	<u> [- 1/ - 0</u> ]	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4		· <u> </u>		more in diameter at breast height (DBH), regardless of
5		·	·	height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7		·	·	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8	_		. <u> </u>	Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.		-	·	
	32	= Total Co	ver	
50% of total cover: 11	20%	of total cove	1. 1.	
Woody Vine Stratum (Plot size: $3^{\mathcal{O}' \times 3^{\mathcal{O}'}}$ )	2070 (		<u></u>	
1. SMILAX Drundi Fulio	<	$\mathbf{V}$	FAL.	
1. Stated (Drouter Off)		- — /	<u></u>	
2		<u> </u>		
3				
4				
5			<u> </u>	Hydrophytic
		_ = Total Co	over	Vegetation
50% of total cover: 2	<u>&gt;</u> 20% -	of total cove	er: <u> </u>	Present? Yes No No
Remarks: (If observed, list morphological adaptations be	low).	•		
	,.			

SOIL
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# Sampling Point: wjop D06 f-w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth	Matrix			Features			_		
(inches)	Color (moist)	100-	Color (moist)	%	_Type ¹ _	Loc ²	Texture	Remarks	-
03	104R3/1	<u> </u>	0			<u> </u>	<u> </u>		-
3-12	104R4/1		04R6/1	10	_ <u>D</u> _	<u></u> .	<u> </u>		_
12-20	104R4/1	50 1	04R6/1	30	<u> </u>	$-\infty$	<u> </u>		_
	1	ł	04R6/5	30	<	PL	LS		
			· · · · · · · · · · · · · · · · · · ·						-
·								· · · · · · · · · · · · · · · · · · ·	-
		<u> </u>	<u></u>				·		-
			<u></u>						_
	oncentration, D=Depl					ains.		Pore Lining, M=Matrix.	_
	Indicators: (Applica	able to all L	_					Problematic Hydric Soils ³ :	
Histoso	r (A1) pipedon (A2)		Polyvalue Be					(A9) (LRR O) (LRR S)	
	listic (A3)		Loamy Mucky			•		/ertic (F18) (outside MLRA 150A,	B)
	en Sulfide (A4)		Loamy Gleye			,		Floodplain Soils (F19) (LRR P, S,	
Stratifie	d Layers (A5)		Depleted Mat				Anomalous	s Bright Loamy Soils (F20)	
	Bodies (A6) (LRR P,		Redox Dark S						
	ucky Mineral (A7) (LR		Depleted Dar					t Material (TF2)	
=	reserice (A8) (LRR U uck (A9) (LRR P, T)	)	☐ Redox Depre	•	8)			ow Dark Surface (TF12) Ilain in Remarks)	
	ed Below Dark Surface	e (A11)	Depleted Ocl	-	(MLRA 1	51)		aan an cemencer	
	ark Surface (A12)	- ()	Iron-Mangan				F) ³ Indicator	s of hydrophytic vegetation and	
Coast I	Prairie Redox (A16) (N	/LRA 150A	) 🔲 Umbric Surfa	ice (F13) (	(LRR P, 1	, U)		I hydrology must be present,	
	Mucky Mineral (S1) (L	_RR O, S)	Delta Ochric				unless	disturbed or problematic.	
	Gleyed Matrix (S4)								
	Redox (S5) d Matrix (S6)		Piedmont Flo			•	A) A 149A, 153C, 15	30)	
	urface (S7) (LRR P, S	5. T. U)		angrit Lou		(* 20) (***2**			
	Layer (if observed):	-							
Type:								/	
Depth (i	nches):						Hydric Soil Pre	esent? Yes <u> </u>	
Remarks:							1		
	*								
1									



Wetland data point wjop006f_w facing southwest.

#### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP		city/County: JChast	ten Samp	ling Date: 7/22/14		
Annlicant/Owner DOMINION			State: NC Samp	ling Point: W 0006-		
nuestinator(s): EST - K.M.	NPHYMY	Section Townshin Ran	ne NA			
Landform (hillslope, terrace, etc.):	10+	Local relief (concave, co	nvex. none); & lat	Slope (%): 0)-2		
	EP 1at 35	,52605 1	nno-78.25241	Datum: W16584		
Soil Map Unit Name: Bibb	Serve kinn	Ľ	NWI classification:	NA		
Are climatic / hydrologic conditions on t						
Are Vegetation, Soil, or			Normal Circumstances" present			
Are Vegetation, Soil, or	Hydrology naturally p	problematic? (If nee	eded, explain any answers in R	emarks.)		
SUMMARY OF FINDINGS – A		<u> </u>	ocations, transects, imp	ortant features, etc.		
Hydrophytic Vegetation Present?	Yes No	- Is the Sampled	Aroa			
Hydric Soil Present?	Voo No	<ul> <li>within a Wetland</li> </ul>		No		
Wetland Hydrology Present?	Yes No	-	u			
Remarks:						
1						
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicators (	minimum of two required)		
Primary Indicators (minimum of one i	s required: check all that apply	v)	Surface Soil Crack	• •		
Surface Water (A1)	Aquatic Fauna (B			d Concave Surface (B8)		
High Water Table (A2)		Marl Deposits (B15) (LRR U)				
Saturation (A3)	Hydrogen Sulfide		Moss Trim Lines (I			
Water Marks (B1)		pheres along Living Roots				
Sediment Deposits (B2)	Presence of Rec	luction in Tilled Soils (C6)	Crayfish Burrows (	on Aerial Imagery (C9)		
Drift Deposits (B3)	Thin Muck Surfa		Geomorphic Posit			
Iron Deposits (B5)	Other (Explain in		Shallow Aquitard (			
Inundation Visible on Aerial Ima			FAC-Neutral Test			
Water-Stained Leaves (B9)	• • • •		🔲 Sphagnum moss (	D8) (LRR T, U)		
Field Observations:	./	o/ A				
Surface Water Present? Yes	No Depth (inch	nes): $\underline{\Lambda(A)}$				
Water Table Present? Yes	No 🗸 / Depth (inch	tes):				
Saturation Present? Yes	No Depth (inch	nes): We	etland Hydrology Present?	Yes No		
(includes capillary fringe) Describe Recorded Data (stream ga	uge, monitoring well, aerial ph	notos, previous inspections	s), if available:			
Remarks:				· · · · · · · · · · · · · · · · · · ·		
			•			
1						

#### VEGETATION (Four Strata) – Use scientific names of plants.

US Army Corps of Engineers

Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 3)×30') <u>% Cover</u> <u>Species?</u> <u>Status</u> Number of Dominant Species 1. Oxydendiam alloureum 10 FACU That Are OBL, FACW, or FAC: 2. Liquidambar Styracistua 25 FAC Total Number of Dominant 10 PIQUES Lacka FAC 3. Species Across All Strata: (B) 4. Lividdendrun tulipiseron ιS FAC Percent of Dominant Species IJ. 5._ (A/B)That Are OBL, FACW, or FAC: 6. Prevalence Index worksheet: 7. Total % Cover of: _____ Multiply by: 8. _____ x1=____ しつ_= Total Cover OBL species 50% of total cover: 30FACW species ____ _____ x 2 = ___ 20% of total cover: 12 Sapling/Shrub Stratum (Plot size: 30'×30) FAC species _____ x 3 = _____ _) FACU species ______ x 4 = _____ 1. Ligustium sinense _____ x 5 = ____ UPL species E A 2 ACEY YUDUM _____ (A) _____ (B) Column Totals: Styraci filua 3. Liquidambar 10 4. Prevalence Index = B/A = ____ 5. Hydrophytic Vegetation Indicators: 6. Ц - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 7. 8.  $\square$  3 - Prevalence Index is  $\leq 3.0^1$ 35 = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 50% of total cover:  $\underline{17.5}$  20% of total cover: 'X3JĨ 30 Herb Stratum (Plot size: ) ¹Indicators of hydric soil and wetland hydrology must 1. Arhadinatia FAC gigoten 10be present, unless disturbed or problematic. 1D FACW 2. Woodwardia areolata Definitions of Four Vegetation Strata: 3 Mitchella repeas 5 FACU Ν Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or 4. more in diameter at breast height (DBH), regardless of height. _____ 5. 6. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. 7._____ _____ 8. _____ Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 9. 10 Woody vine - All woody vines greater than 3.28 ft in 11.____ height. 12. _ = Total Cover 50% of total cover: 17.520% of total cover: 17.52%7 1. SMILOX ruthing isuria FAC 2. 3 4. 5. Hydrophytic 5 Vegetation = Total Cover No Present? Yes 50% of total cover: 2.5 20% of total cover: _ Remarks: (If observed, list morphological adaptations below).

Sampling Point: WOD006-4

## Sampling Point: wjop006-u

Profile Desc	ription: (Describe t	to the depth ne	eded to docur	ment the i	ndicator	or confirm	the absence of inc	dicators.)	-
Depth (inches)	Matrix	%		x Features %	Type ¹	Loc ²	Texture	Remarks	
<u>(inches)</u> ()ー 나	Color (moist) 104R3/2	100	olor (moist)	70	<u>ype</u>		<u>s</u>	rtemants	
		100					<u>- 5L</u> _		İ
11-11	104R5/4		0011						
4-204	10GR 4/4	90 100	1RS/6			<u> </u>	<u>5L</u>	· · · · · ·	
						<u> </u>			
				_					
		·				6			
1 Tunor C=C	oncentration, D=Dep	lotion PM-Pod	uood Matrix M	 S-Markod	Sand Gr	aine	² l ocation: Pl =l	Pore Lining, M=Matrix	
	Indicators: (Applic					an 15.		Problematic Hydric S	
Histoso	• • •	Г	Polyvalue B		-	.RR S. T. U		(A9) (LRR O)	
	pipedon (A2)		Thin Dark S				·	(A10) (LRR S)	
	istic (A3)	Ľ	Loamy Muck	-		10)		ertic (F18) <b>(outside M</b>	
	en Sulfide (A4)	Ļ	Loamy Gley		(F2)			loodplain Soils (F19) (	
	d Layers (A5)	- IN -	Depleted Ma Redox Dark		-0)			Bright Loamy Soils (F	20)
	: Bodies (A6) (LRR P ucky Mineral (A7) (LF		Depleted Dark	•	•		(MLRA 1: Red Parent	Material (TF2)	•
	resence (A8) (LRR U		Redox Depr					w Dark Surface (TF12	.)
	uck (A9) (LRR P, T)	Ī	] Marl (F10) (	LRR U)	•		Other (Expl	ain in Remarks)	-
	d Below Dark Surfac	.e (A11) 🛛 🗍	Depleted Oc						
	ark Surface (A12)	1	Iron-Mangai				•	s of hydrophytic vegeta	
	Prairie Redox (A16) (I Mucky Mineral (S1) (I	· -	Umbric Surf					hydrology must be pre listurbed or problemat	
	Gleyed Matrix (S4)	Linit 0, 0, 1	Reduced Ve						
	Redox (S5)	Ī	Piedmont F						
	d Matrix (S6)	Ĺ	Anomalous	Bright Loa	my Soils	(F20) <b>(ML</b> R	A 149A, 153C, 153	3D)	
	urface (S7) (LRR P,						1		
	Layer (if observed)	:							/
Type:	nches):		-				Hydric Soil Pre	sent? Yes	No
Remarks:	iches).						riyane son rie		
remarks.									
	•								



Upland data point wjop006_u facing northeast.

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	City/County: JOUNSTON Sampling Date: 7/22/14
Applicant/Owner: DOMINION	City/County: JOhnSton Sampling Date: 7/22/14 State: NC Sampling Point: Wjop007f-W
Investigator(s): ESI- K, MURPhrey	Section, Township, Range: NA
t and form (hillsione terrace etc.): $F(\alpha)$	Local relief (concave, convex, none): NME Slope (%): 0-2
Subracion (I BB or MI BA): LRRP Lat: 35	Local relief (concave, convex, none): <u>none</u> Slope (%): <u>0-2</u> 52559 Long: <u>-78,253,89</u> Datum <u>N6584</u>
Soil Map Unit Name: BUDD Sordy Wom	NWI classification: PF D
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significant Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	- Is the Sampled Area
Hydric Soil Present? Yes No	- within a Wetland? Yes No
Wetland Hydrology Present? Yes Ves No	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	
Surface Water (A1)	
High-Water Table (A2)	15) (LRR U) Drainage Patterns (B10)
Saturation (A3)	
	pheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)     Presence of Rec       Drift Deposits (B3)     Recent Iron Red	Juced Iron (C4) Uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Ling-Deposits (B5)	
Hundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Vater-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	NA
Surface Water Present? Yes No Depth (inch	$\frac{ e_{s} }{720''}$
Surface Water Present?       Yes No Depth (inch         Water Table Present?       Yes No Depth (inch         Saturation Present?       Yes No Depth (inch	hes): 720'' Wetland Hydrology Present? Yes V No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if available:
Remarks:	
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#### VEGETATION (Four Strata) - Use scientific names of plants.

# Sampling Point: wjop007f-w

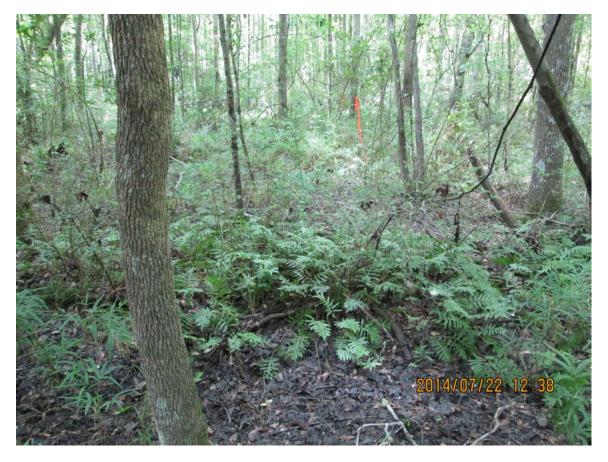
21/221		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\frac{30'\times30'}{100}$ )	<u>% Cover</u>	Species?		Number of Dominant Species
1. ACEY JUDIUM	<u> </u>	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Quercus rigra	20	<u> </u>	FAC	Total Number of Dominant
3. Liguidambor Styrocifica	10	_ý	FAC	Species Across All Strata: (B)
4				
5				Percent of Dominant Species $100^{3}$ (A/B)
6			<u> </u>	
7				Prevalence Index worksheet:
		•		Total % Cover of: Multiply by:
8	50	= Total Cov		OBL species x 1 =
25				FACW species x 2 =
50% of total cover: <u>よう</u>	20% of	total cover	. (0	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: <u>30</u> )	<i>(</i>	N		FACU species x 4 =
1. <u>MIMIUS AMERICANA</u>	5	<u></u>	TEAC	
2. ACEY VUBRIM	10	<u> </u>	FAC	UPL species x5 =
3. Liquidombor Stylacitua	10	<u> </u>	FAC	Column Totals: (A) (B)
4. Chrille Vacemizioa	5	<u>N</u>	FACW	Prevalence Index = B/A =
5. Ligustium sinerse	10	V.	FAC	Hydrophytic Vegetation Indicators:
6		$\neg$	-	
7			·	1-Rapid Test for Hydrophytic Vegetation
	·		·	2 - Dominance Test is >50%
8	40		·	3 - Prevalence Index is ≤3.0 ¹
20	-	= Total Co	<i>•</i>	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: <u>20</u>	<u> </u>	f total cove	r:	
Herb Stratum (Plot size: <u>30 × 30</u> )	20	17	-	¹ Indicators of hydric soil and wetland hydrology must
1. MOUGWAICIA AVEOLOGA	30	. <u> </u>	FACW	be present, unless disturbed or problematic.
2. America glasster	10		FAC	Definitions of Four Vegetation Strata:
3. Impatiens capensis	<u> </u>	<u>N</u>	FACW	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
				Casting/Chaste Mandu stante evaluting vince loss
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	43	= Total Co		
50% of total cover:	20% d	- of total cove	er: <u> </u>	
Woody Vine Stratum (Plot size: <u>3じょうい</u> )				
1. Smilax YULUNJ SULA	20	V V	FAC	
2		- <u>i</u>		
2				
4				
5				Hydrophytic
	<u>20</u>	_ = Total C		Vegetation
50% of total cover: <u>LC</u>	) 20%	of total cove	er: <u>Ч</u>	Present? Yes No
Remarks: (If observed, list morphological adaptations be	low).			

Sampling Point: wjop 007 f-w

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Depth	Matrix	<u> </u>		ox Feature		<u></u>	<b>—</b> .	<b>_</b> .
(inches)	Color (moist)	<u> </u>	Color_(moist)	%	Type	Loc ²	Texture	Remarks
$\overline{\Omega}$	104R2/1	100 _			·	<u> </u>	<u></u>	
<u>2-15</u>	104R3/1		14R6/1	<u> </u>	<u>   {                                 </u>	$\overline{M}$	54	·
5-20	104R2/1	i UU					<u>sl</u>	
		·						
								· · · · · · · · · · · · · · · · · · ·
								······································
						····	·	
	oncentration, D=Dep Indicators: (Applic					ains.		Pore Lining, M≖Matrix. Problematic Hydric Soils³:
• •	• • • •		Polyvalue E			ррет	_	(A9) (LRR O)
Histoso	pipedon (A2)		Thin Dark S					(A10) (LRR S)
	listic (A3)		Loamy Muc	•		•		ertic (F18) (outside MLRA 150A,E
	en Sulfide (A4)		Loamy Gley	-		•		loodplain Soils (F19) (LRR P, S, T
	d Layers (A5)		Depleted M					Bright Loamy Soils (F20)
-	Bodies (A6) (LRR P	-	Redox Dark	-				
	ucky Mineral (A7) (Ll resence (A8) (LRR U		Depleted D Redox Dep					Material (TF2) w Dark Surface (TF12)
	uck (A9) (LRR P, T)	)	Mari (F10)	•	-0)			ain in Remarks)
and the second s	d Below Dark Surfac	e (A11)	Depleted O	• •	) (MLRA 1	51)		an in contanto,
· ·	ark Surface (A12)	· /	Iron-Manga				P, T) ³ Indicators	s of hydrophytic vegetation and
	Prairie Redox (A16) (							hydrology must be present,
	Mucky Mineral (S1) (	LRR O, S)						listurbed or problematic.
=	Gleyed Matrix (S4)		Piedmont F		-			
	Redox (S5) d Matrix (S6)						RA 149A, 153C, 15:	3D)
=	urface (S7) (LRR P, 3	S. T, U)		i oligin zot		(• ===) (•••=		
	Layer (if observed)	-						
Type:								
Depth (i	nches):						Hydric Soil Pre	sent? Yes No
Remarks:							1	
			,					
					1			
					•			



Wetland data point wjop007f_w facing west.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: JOh	nston	Sampling Date: 7/22/14 Sampling Point: Wjop007_u
Applicant/Owner: DOMINION		State: NC	Sampling Point: Wjop007_u
Investigator(s): ESI- K, MURPHREY	Section, Township,	Range: AA	
and form (hillslope terrace etc.): $f(0, +)$	Local relief (concave	e. convex. none): None	Slope (%): 0-2
Landform (hillslope, terrace, etc.): <u>FIA+</u> Subregion (LRR or MLRA): <u>LRR</u> P	Lat: 35.52564	Lona: -78,253	62 Datum: WG-589
Soil Map Unit Name: Bibb SONCY 1000	<u>`</u>	NWI classifi	
Are climatic / hydrologic conditions on the site typical for thi			
Are Vegetation, Soil, or Hydrology			present? Yes No
Are Vegetation, Soil, or Hydrology		f needed, explain any answ	
SUMMARY OF FINDINGS Attach site map	showing sampling poir	t locations, transect	s, important features, etc.
Hydric Soil Present? Yes N	No Is the Samp No within a We		No
HYDROLOGY			
Wetland Hydrology Indicators:			cators (minimum of two required)
High Water Table (A2)       Marl D         Saturation (A3)       Hydrog         Water Marks (B1)       Oxidiz         Sediment Deposits (B2)       Preser         Drift Deposits (B3)       Recent         Algal Mat or Crust (B4)       Thin M         Iron Deposits (B5)       Other         Inundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)	c Fauna (B13) Deposits (B15) (LRR U) gen Sulfide Odor (C1) ed Rhizospheres along Living R nce of Reduced Iron (C4) nt Iron Reduction in Tilled Soils ( Auck Surface (C7) (Explain in Remarks)	C6) Sparsely V Drainage F Moss Trim Dry-Seaso Crayfish B Saturation Shallow Ac FAC-Neutr	il Cracks (B6) egetated Concave Surface (B8) fattems (B10) Lines (B16) in Water Table (C2) urrows (C8) Visible on Aerial Imagery (C9) ic Position (D2) guitard (D3) al Test (D5) is moss (D8) (LRR T, U)
Surface Water Present? Yes No Z	Depth (inches): $\frac{NA}{72}$		
Water Table Present? Yes NoC	Depth (inches): $22^{\vee}$	Wetland Hydrology Pres tions), if available:	ent? Yes No
Remarks:			

Ł

## VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: wjop007_u

2111201		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30' X30') 1. Acer rubyum		<u>Species?</u>		Number of Dominant Species
2 Liquidanioor styrocitina	20	$-\frac{\gamma}{1}$	FAC	That Are OBL, FACW, or FAC: (A)
3 Prunus scotina	$\frac{20}{10}$	<del>}'</del>	FAC	Total Number of Dominant
3. Francis Scioning	<u> </u>	<u> </u>	FACU	Species Across All Strata: (B)
4	······	·		Percent of Dominant Species 73%
<u> </u>			<del></del>	That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7			<u> </u>	Total % Cover of: Multiply by:
8				OBL species         x1 =
24		= Total Cov	5/	FACW species x 2 =
50% of total cover: $20$	20% of	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30' K 301)	2	1.1		FACU species x 4 =
1. Lightrum Sinerse	<u> 20</u>	<u> </u>	777	UPL species x5 =
2. Ulmus American		~~~	FAC	Column Totals: (A) (B)
3. Liquidembor styracielum	10	<u> </u>	FAC	
4			<u></u>	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Trapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8		·		3 - Prevalence Index is ≤3.0 ¹
		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $22$ .	<u>)</u> 20% o	f total cove	r: <u> </u>	
Herb Stratum (Plot size: 30 × 30)			_	¹ Indicators of hydric soil and wetland hydrology must
1. Mytolacca omericano	10	<u> </u>	FACU	be present, unless disturbed or problematic.
2. Athur um asplenioides	<u> </u>	<u> </u>	FAC	Definitions of Four Vegetation Strata:
3. Partuenocissus aninguese	<u>cia s</u>	<u> </u>	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		<i>ı</i> .		more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Menductine All wards since proster than 2.29 ft in
11.	-			Woody vine – All woody vines greater than 3.28 ft in height.
12.				
	20	_ = Total Co	over.	
50% of total cover:	20%	- of total cove	1 1	
Woody Vine Stratum (Plot size: 301/30)				
1. toxicodendrun radicans	5	Y	FAC	
2 VILIS RULANCIAUNA	- (0	- <u> </u>	FAC	
3 GALILAX RULANDISULIA	10	- <del>- Ú</del>	FAC	
		////////		•
4				·
] 0		Tetel C		- Hydrophytic Vegetation
[] [] []	<u> </u>	_ = Total C	_	Present? Yes No
50% of total cover: 12		of total cov	er:	-
Remarks: (If observed, list morphological adaptations be	10W).			

# Sampling Point: W 010 007-4

Profile Desc	cription: (Describe	to the depth	needed to docun	nent the i	ndicator	or confirm	the absence of inc	dicators.)	
Depth	Matrix			x Feature:		Loc ²	Tardera	Demerice	
(inches)	<u>Color (moist)</u> (04R 3/2	<u>    %                                </u>	Color (moist)	%	Type		<u>    Texture                                    </u>	Remarks	
				· <u> </u>		·		<b></b> .	
10-15	104R4/2	100	0 ( 1-	·	- <u>_</u>		<u>SL</u>		
15-20	104R4/2	<u> </u>	04R6/2	10	<u>D</u>	$\overline{\mathbb{N}}$	<u></u>		
	7								
				·					
···				•					
1						·	21	Dens fining Mahlaid	
	oncentration, D=Dep Indicators: (Applic					ains.		Pore Lining, M=Matri Problematic Hydric S	
Histoso	• • • •		Polyvalue Be					(A9) (LRR O)	
<u> </u>	pipedon (A2)		Thin Dark Su				·	(A10) (LRR S)	
	listic (A3)		Loamy Muck					ertic (F18) (outside M	/LRA 150A,B)
	en Sulfide (A4)		Loamy Gleye	ed Matrix	(F2)		· · · · · · · · · · · · · · · · · · ·	loodplain Soils (F19)	•
	d Layers (A5)		Depleted Ma	• •				Bright Loamy Soils (	F20)
	Bodies (A6) (LRR F	-	Redox Dark		•		(MLRA 1	53B) Material (TF2)	
	ucky Mineral (A7) (L resence (A8) (LRR L		Depleted Da					w Dark Surface (TF1	2)
	uck (A9) (LRR P, T)	-,	Marl (F10) (I		-,			ain in Remarks)	_,
	ed Below Dark Surfac	ce (A11)	Depleted Oc		(MLRA	151)	- •		
	ark Surface (A12)		Iron-Mangar		•	-		of hydrophytic vege	
	Prairie Redox (A16) (							hydrology must be p listurbed or problema	
	Mucky Mineral (S1) ( Gleyed Matrix (S4)	LKR 0, 5)	Delta Ochric					isturbed of problema	
	Redox (S5)		Piedmont FI						
1788	d Matrix (S6)			-			RA 149A, 153C, 153	SD)	
	urface (S7) (LRR P,								
_	Layer (if observed)	):							_
Type:									🗸
	nches):						Hydric Soil Pres	sent? Yes	
Remarks:									
	•								
1									
1									



Upland data point wjop007_u facing east.

Applicant/Owner:       DOMINICA       State:       NC       Sampling Point:       W100027f.w         Anyestigator(s):       EST-J. Harbour       Section, Township, Range:       NA	Applicant/Owner:       DOM:n DM       State:       NC       Sampling Point:       W]0p 027:f.         Investigator(s):       EST       J. Harkbur       Section, Township, Range:       MA         Landform (hillstope, terrace, etc.):       Flack       Local relief (concave, convex, none):       NOM       Slope (%):       G-3         Subregion (LRR or MLRA):       LRR       C       Lat:       35.53409       Long:       19.25716       Datum:       NGC       B         Soil Map Unit Name:       Granthem       Sitt Lean       No       (If no, explain in Remarks.)       Are climatic / hydrologic conditions on the site typical for this time of year? Yes       No       (If no, explain in Remarks.)       No       Are Vegetation       Soil       , or Hydrology       significantly disturbed?       Are "Normal Circumstances" present? Yes       No       Are Vegetation any answers in Remarks.)         SUMMARY OF FINDINGS Attach site map showing sampling point locations, transects, important features, etc.       Hydrophytic Vegetation Present?       Yes       No       No </th
spellcant/Owner:       Sector. Township, Range:       N/A         sudform (hildslope, lerrace, etc.):       PLA       Local relief (concave, convex, none):       NONE         sudregion (LRR or MLRA):       LRK C       Lat:       3.5.5.2.4.4.0       NWI classification:       PEO         sold megion (LRR or MLRA):       LRK C       Lat:       3.5.5.2.4.4.0       NWI classification:       PEO         sold Map Unit Name:       Gland+Hern       Silt       Lat:       3.5.5.2.4.4.0       NVI classification:       PEO         sold Map Unit Name:       Gland+Hern       Silt       Lat:       3.5.5.2.4.4.0       NVI classification:       PEO         ve vegatation       Sold       or Hydrology       istillicantly disturbed?       Are "Normal Circumstances" present? Yes       No         SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       Hydrophytic Vegetation Present?       Yes       No         Hydrophytic Vegetation Present?       Yes       No       is the Sampled Area within a Wetland?       Surface Soli Cracks (B3)         Glander (A1)       Aquelic Fauna (B13)       Surface Soli Cracks (B3)       Surface Soli Cracks (B3)         Glander (A1)       Aquelic Fauna (B13)       Sparsely Vegetated Concave Surface (B3)       Surface Soli Cracks (B3) <td< th=""><th>Applicant/Owner:       DOM:n DM       State:       NC       Sampling Point:       W]0p 027:f.         Investigator(s):       EST       J. Harkbur       Section, Township, Range:       MA         Landform (hillstope, terrace, etc.):       Flack       Local relief (concave, convex, none):       NOM       Slope (%):       G-3         Subregion (LRR or MLRA):       LRR       C       Lat:       35.53409       Long:       19.25716       Datum:       NGC       B         Soil Map Unit Name:       Granthem       Sitt Lean       No       (If no, explain in Remarks.)       Are climatic / hydrologic conditions on the site typical for this time of year? Yes       No       (If no, explain in Remarks.)       No       Are Vegetation       Soil       , or Hydrology       significantly disturbed?       Are "Normal Circumstances" present? Yes       No       Are Vegetation any answers in Remarks.)         SUMMARY OF FINDINGS Attach site map showing sampling point locations, transects, important features, etc.       Hydrophytic Vegetation Present?       Yes       No       No<!--</th--></th></td<>	Applicant/Owner:       DOM:n DM       State:       NC       Sampling Point:       W]0p 027:f.         Investigator(s):       EST       J. Harkbur       Section, Township, Range:       MA         Landform (hillstope, terrace, etc.):       Flack       Local relief (concave, convex, none):       NOM       Slope (%):       G-3         Subregion (LRR or MLRA):       LRR       C       Lat:       35.53409       Long:       19.25716       Datum:       NGC       B         Soil Map Unit Name:       Granthem       Sitt Lean       No       (If no, explain in Remarks.)       Are climatic / hydrologic conditions on the site typical for this time of year? Yes       No       (If no, explain in Remarks.)       No       Are Vegetation       Soil       , or Hydrology       significantly disturbed?       Are "Normal Circumstances" present? Yes       No       Are Vegetation any answers in Remarks.)         SUMMARY OF FINDINGS Attach site map showing sampling point locations, transects, important features, etc.       Hydrophytic Vegetation Present?       Yes       No       No </th
nvestigator(s):       EST - J. Harkbarr       Section, Township, Range:       NA         andform (hillstope, terrace, etc.):       FLA       Local relief (concave, convex, none):       NOPL       Stope (%): C-J.         Subregion (LRR of MLRA):       LRR O       Lat 35.52 HLO       Local relief (concave, convex, none):       NOPL       Stope (%): C-J.         Subregion (LRR of MLRA):       LRR O       Lat 35.52 HLO       No       If no. explain in Remarks.)         wellmatic / Hydrologic conditions on the site typical for this time of year?       Yes       No       (ff no. explain in Remarks.)         vev Vegetation       Soil       , or Hydrology       istinficantly disturbed?       Are "Normal Circumstances" present? Yes       No         SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrophylic Vegetation Present?       Yes       No       is the Sampled Area         within a Wetland?       Yes       No       Surface Soil Cracks (86)         Primary Indicators (minimum of one is required: check all that apply)       Surface Soil Cracks (86)       Surface Soil Cracks (86)         Hydrophylic Vegetation Present?       Yes       No       Surface Soil Cracks (86)       Surface Soil Cracks (86)         Surface Water (A1)	Investigator(s): EST-J. Har bdar       Section, Township, Range: NA         Landform (hillslope, terrace, etc.): Plat       Local relief (concave, convex, none): NoNe       Slope (%): 2-3         Subregion (LRR or MLRA): LRR P       Lat: 35.52469       Long: 19.2576       Datum: W65 8         Soil Map Unit Name: Grantham Silt Loam       NWI classification: PFO       Datum: W65 8         Are climatic / hydrologic conditions on the site typical for this time of year? Yes No       (If no, explain in Remarks.)         Are Vegetation
andform (hillslope, terrace, etc.):       Path       Local relief (concave, convex, none):       NoNe       Solve (%):       Detum:       MGS 54         Soli Map Unit Name:       GE(Artham       Silt       Local       NWI classification:       FTO         We climatic / hydrologic conditions on the sile typical for this time of year?       No       (If no, explain in Remarks.)       No       Yes       No         we Vegetation       Soli       or hydrology       asturally problematic?       (If needed, explain any answers in Remarks.)         we Vegetation       Soli       or hydrology       naturally problematic?       (If needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.       Hydrohytic Vegetation Present?       Yes       No         Hydrology Indicators:       Yes       No       is the Sampled Area within a Wetland?       Yes       No         Primary Indicators (minimum of one is required; check all that apply)       Surface Water (A1)       Surface Water (A1)       Surface (B16)         Sufface Water (A1)       Aquatic Found (B13)       Sparsety/Vegetated Concave Surface (B3)         High Water Table (A2)       Man Deposite (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrology Hodicatab Arit Table (C2)       Presence of Reduced	Landform (hillslope, terrace, etc.):       Flock       Local relief (concave, convex, none):       Nonc       Slope (%): 2-2         Subregion (LRR or MLRA):       LRR P       Lat: 35.53409       Long:       T9.2570       Datum: W65 \$         Soil Map Unit Name:       Granthan Silt Loam       NWI classification:       PF0         Are climatic / hydrologic conditions on the site typical for this time of year? Yes       No       (if no, explain in Remarks.)         Are Vegetation       , Soil       , or Hydrology       significantly disturbed?       Are "Normal Circumstances" present? Yes       No         Are Vegetation       , Soil       , or Hydrology       naturally problematic?       (if needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS -       Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       Yes       No       is the Sampled Area         Hydrology Present?       Yes       No       within a Wetland?       Yes       No         Hydrology Indicators:       Yes       No
Subregion (LRR or MLRA):	Subregion (LRR or MLRA):       LRR C       Lat:       35,534409       Long:       16,25740       Datum:       Web Classification:       PFO         Soil Map Unit Name:       Grantham Silt Loam       NWI classification:       PFO         Are climatic / hydrologic conditions on the site typical for this time of year?       Yes       No       (If no, explain in Remarks.)         Are Vegetation
Soli Map Unit Name:       Granthom	Soil Map Unit Name:       Granthan Silt Loam       NWI classification:       PFO         Are climatic / hydrologic conditions on the site typical for this time of year? Yes       No
ver climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)   ver Vegetation Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No   ver Vegetation Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)   SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.   Hydrophylic Vegetation Present? Yes No   Hydrology Present? Yes No   Yes No Is the Sampled Area within a Wetland?   Yes No Is the Sampled Area within a Wetland?   Yes No No   Hydrology Indicators: Secondary Indicators (minimum of two required)   Primary Indicators (minimum of one is required; check all that spph)	Are climatic / hydrologic conditions on the site typical for this time of year? Yes
we Vegetation	Are Vegetation, Soil, or Hydrology
ve Vegetation, Soll, or Hydrologynaturally problematic? (if needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrophylic Vegetation Present?       YesNo	Are Vegetation, Sol, or Hydrologynaturally problematic?       (If needed, explain any answers in Remarks.)         SUMMARY OF FINDINGS Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       YesNo         Hydrology Present?       YesNo         Wetland Hydrology Present?       YesNo         Remarks:       No         HYDROLOGY       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrophylic Vegetation Present?       Yes       No         Hydrophylic Vegetation Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Yes       No       Is the Sampled Area within a Wetland?       Yes         Wetland Hydrology Present?       Yes       No       No         HyDROLOGY       Statuation Visible on heris required: check all that apphy       Statuation Visible on herist (B8)         Surface Water (A1)       Aquetic Feuna (B13)       Sparsety Vegetated Concave Surface (B8)         High Water Table (A2)       Mat Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Coder (C1)       More Strin Lines (B16)         Saturation (A3)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Saturation Visible on Aerial Imagery (B7)       Saturation Visible on Aerial Imagery (C9)       Saturation Visible on Aerial Imagery (C9)         Hade Water Present?       Yes       No       Depth (inches):       MA         Hydrogen Mater State (Vesent?       Yes       No       Depth (inches):       Shallow Acuitard (C3)         Immodel Mater State Cases (B9)       Cher (Explain in Remarks)       Shallow	SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No       No         Hydrology Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No       No         Remarks:       Yes       No       No       Ves       No       No </td
Hydrophylic Vegetation Present?       Yes       No       is the Sampled Area within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       is the Sampled Area within a Wetland?       Yes       No         Remarks:       No       No       is the Sampled Area within a Wetland?       Yes       No         HYDROLOGY       Yes       No       No       No       No       No         HYDROLOGY       Wetland Hydrology Indicators:       Surface Xell that apply)       Surface Soil Cracks (B8)       Surface Veler (A1)       Aquatic Fauna (B13)       Surface Veler (A1)       Surface Veler (A1)       Drainage Patterns (B10)       Drainage Patterns (B10)       Drainage Patterns (B10)       Saturation (A3)       Hydrogen Surface (B8)       Sparsely Vegetated Concave Surface (B8)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)       Saturation (A3)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Presence of Reduced Iron (C4)       Crayfish Burrows (C8)       Saturation Visible on Aerial Imagery (C9)         Agai Mat or Crust (B4)       Thin Muck Surface (C7)       Saturation Visible on Aerial Imagery (C9)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Vef Ac-Neutral Test (D5)       Shallow Aquitard	Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Hydric Soil Present?       Yes       No       within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No
Hydric Soil Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Remarks:       No       Wetland Hydrology Present?       Yes       No       No         HYDROLOGY       Secondary Indicators:       Yes       No       No       No         Primary Indicators: (minimum of one is required; check all that apply)	Hydric Soil Present?       Yes       No       Is the Sampled Area within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       No       No       No         Remarks:       No       No       No       No       No       No         HYDROLOGY       Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Hydric Soil Present?       Yes       No	Hydric Soil Present?       Yes       No       within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       No       No       No         Remarks:       No       No       No       No       No       No         HYDROLOGY       Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)       No required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Present?       Yes       No         Remarks:	Wetland Hydrology Present?       Yes No         Remarks:
HYDROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)	HYDROLOGY         Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required: check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required: check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required: check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required: check all that apply)	Wetland Hydrology Indicators:       Secondary Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)
Primary Indicators (minimum of one is required; check all that apply)	Primary Indicators (minimum of one is required; check all that apply)
	High Water Table (A2)       Marl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)
✓ Saturation (A3)	Z       Saturation (A3)
Drift Deposits (B3)        Recent Iron Reduction in Tilled Soils (C6)	
Field Observations:       Yes       No       Depth (inches):       NA         Surface Water Present?       Yes       No       Depth (inches):       YA         Water Table Present?       Yes       No       Depth (inches):       YA         Saturation Present?       Yes       No       Depth (inches):       YA         Uncludes capillary fringe)       Wetland Hydrology Present?       Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       .	
Surface Water Present?       Yes       No       Depth (inches):       NA         Water Table Present?       Yes       No       Depth (inches):       Yes         Saturation Present?       Yes       No       Depth (inches):       Yes         Saturation Present?       Yes       No       Depth (inches):       Yes       Yes         Saturation Present?       Yes       No       Depth (inches):       Yes       Yes       No         Includes capillary fringe)       Depth Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       No       No	Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U)
Water Table Present?       Yes       Ves       Depth (inches):       Yes         Saturation Present?       Yes       Yes       Depth (inches):       Wetland Hydrology Present?       Yes       No         (includes capillary fringe)       Depth (inches):       U       Wetland Hydrology Present?       Yes       No	Field Observations:
Saturation Present? Yes V No Depth (inches): Wetland Hydrology Present? Yes No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	
remarks:	
	Remarks:

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## VEGETATION (Four Strata) - Use scientific names of plants.

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Sampling Point: Wjop D27f-w

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20+30)		Species?		Number of Demission (Develop
1. Quercus nigra	30	Y	FAC	Number of Dominant Species (A)
2. Acer rubrum	1D	$\frac{1}{\sqrt{2}}$	FAC	
	3	-X-		Total Number of Dominant
3. <u>Pinus taeda</u>	<u> </u>		FAC	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence index worksheet:
7			<u> </u>	Total % Cover of:Multiply by:
8	117			OBL species x 1 =
	45	= Total Cov	/er	
50% of total cover: 21.5	20% of	total cover	8.0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30×30)				FAC species x 3 =
1. Acer rubrum	15	$\mathbf{V}$	FAC	FACU species x 4 =
	$\frac{10}{10}$		FAC	UPL species x 5 =
2. Quercus nigra		Y	<u> </u>	
3. <u>Ilex OPaca</u>	<u> </u>	<u>_N</u>	FAC	Column Totals: (A) (B)
4. <u>Magnolia</u> virginiana	_5	N	FACW	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 Rapid Test for Hydrophytic Vegetation
7		<u> </u>		2 - Dominance Test is >50%
8		<u> </u>	<u> </u>	3 - Prevalence Index is ≤3.0 ¹
	<u>35</u>	= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 17.				
1 service			·	
				¹ Indicators of hydric soil and wetland hydrology must
1none				be present, unless disturbed or problematic.
2		·		Definitions of Four Vegetation Strata:
3				Tree Mineductions and discussions Oliv (7.0 and an
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				····\ <b>g</b>
6				Sapling/Shrub – Woody plants, excluding vines, less
7			<u> </u>	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – Ali herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	·		·	
	$\mathcal{O}$	= Total Co	ver	· · · · · · · · · · · · · · · · · · ·
50% of total c <u>ov</u> er:		f total cove		
Woody Vine Stratum (Plot size: [5×15])		( (0.0.)	· <u> </u>	
Trees the other office	3	<u></u>	FAC	
	· <u> </u>	- <del>J</del>	<u></u>	
2. Smilax bona-nox '		<u> </u>	FAC	
3	•	•		
4				
	• •	•		1
v			· —	Hydrophytic
<u>`</u>	<u></u>	= Total Co		Vegetation
50% of total cover:	<u> </u>	of total cove	r: <u> </u>	Present? Yes No
Remarks: (If observed, list morphological adaptations below	ow).			<u>I</u>
· · · · · · · · · · · · · · · · · · ·	,			

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Depth	Matrix	•	oth needed to docu	ox Feature		01 0011111		
(inches)	Color (moist)	%	Color (moist)		Type'	Loc ²	Texture	Remarks
0.4	10 YR 3/1	100					54	
1-20	104F5/1	<u> 90</u>	104R5/6	10	7	m	<u> </u>	
			1012010			<u> </u>		
		<u> </u>					<u> </u>	
				_			<b></b>	
	·	•••••••••••••••	•	- <u> </u>		• •		
	· · · · · · · · · · · · · · · · · · ·				·	·		·····
			<b>.</b>			·		
Type: C=C	oncentration, D=De	pletion, RM	=Reduced Matrix, M	S=Masked	d Sand G	rains.	² Location: PL=F	Pore Lining, M=Matrix.
lydric Soll	Indicators: (Applic	cable to all	LRRs, unless othe	rwise not	ed.)			roblematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue B	elow Surfa	ice (S8) (i	LRR S, T, L	J) 1 cm Muck (.	A9) (LRR O)
Histic E	pipedon (A2)		Thin Dark S	urface (S9	) (LRR S,	, T, U) ່		A10) (LRR S)
Black Hi	istic (A3)		Loamy Muci	ky Mineral	(F1) (LRI	R O)		rtic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix I	(F2)			oodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		🗹 Depleted Ma	atrix (F3)				Bright Loamy Soils (F20)
_	Bodies (A6) (LRR I		Redox Dark		•		(MLRA 15	
	ucky Mineral (A7) <b>(L</b>		· ·		• •			Material (TF2)
	esence (A8) (LRR I	•	Redox Depr	•	8)			v Dark Surface (TF12)
	JCk (A9) (LRR P, T)		Marl (F10) (i		// · · · ·		Other (Explain of the image	un in Remarks)
	d Below Dark Surface	ce (A11)	Depleted Oc			-		<b></b>
	ark Surface (A12)		Iron-Mangar					of hydrophytic vegetation and
	rairie Redox (A16) ( Auchor Mineral (S1) (			• •	• •			ydrology must be present,
	/lucky Mineral (S1) ( Sleyed Matrix (S4)	LKK 0, 3)			-			sturbed or problematic.
	Redox (S5)		Reduced Ve     Piedmont Fl	• •	•			, -
	Matrix (S6)			-	-		RA 149A, 153C, 153I	ור
	rface (S7) (LRR P,	S. T. U)				(1 20) (11) E1		5)
	Layer (if observed)							
Туре:								
Depth (in	chec):						Uudrin Call Dree	
	ciles).						Hydric Soll Pres	ent? Yes <u>No</u> No
Remarks:								

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Wetland data point wjop027f_w facing west.

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region Project/Site: ACP City/County: JOUNSHON Sampling Date: 4/13/15 Applicant/Owner: DOMINION State: NC Sampling Point: WirAug 7-4

pplicant/Owner: DOMMOION	······································	State: Samplir	ng Point: <u>ωἰνρυρ7.</u>	
nvestigator(s): ESI-J.Harbour	Section, Township, Range	: NA	J ·	
andform (hillslope, terrace, etc.): <u>flat</u>	Local relief (concave, conv	vex, none): none	Slope (%): <u>0-</u>	
ubregion (LRR or MLRA): LRRP	Lat: 35. 52463 Long		Datum: NGS	
oil Map Unit Name: Grantham Silt L	al m	NWI classification:		
e climatic / hydrologic conditions on the site typical for th	is time of year? Yes No	(If no, explain in Remarks.)		
e Vegetation, Soil, or Hydrology	significantly disturbed? Are "Nor	mal Circumstances" present?	Yes No	
e Vegetation, Soil, or Hydrology		ed, explain any answers in Rer		
UMMARY OF FINDINGS – Attach site map			•	
ChimArt of Thibings – Attach site map			rtant reatures, etc	
Hydrophytic Vegetation Present? Yes $V$	No Is the Sampled Are	ea		
-	No within a Wetland?			
Wetland Hydrology Present? Yes   Remarks:	No <u> </u>	· · · · · · · · · · · · · · · · · · ·		
YDROLOGY				
Vetland Hydrology Indicators:		Secondary Indicators (mir	imum of two required)	
rimary Indicators (minimum of one is required; check al	that apply)	Surface Soil Cracks (		
	c Fauna (813)		Concave Surface (B8)	
,	eposits (B15) (LRR U)	Drainage Patterns (B		
	gen Sulfide Odor (C1)	Moss Trim Lines (B16)		
	ed Rhizospheres along Living Roots (C	· - · · ·		
	nce of Reduced Iron (C4)	Crayfish Burrows (C8		
	t Iron Reduction in Tilled Soils (C6)	Saturation Visible on	-	
\min Algal Mat or Crust (B4) 🛛 🔄 Thin M	uck Surface (C7)	Geomorphic Position (D2)		
Iron Deposits (85) Other	Explain in Remarks)	Shallow Aquitard (D3	5)	
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D	5)	
Water-Stained Leaves (B9)	······	Sphagnum moss (D8	9) (LRR T, U)	
ield Observations:	NA			
Surface Water Present? Yes No D	epih (inches):			
	epth (inches): $\frac{720}{520}$			
Saturation Present? Yes No 🗹 D includes capillary fringe)	epth (inches): <u>~ ~ </u>   Wetla	nd Hydrology Present? Yes	s No	
Describe Recorded Data (stream gauge, monitoring well	, aerial photos, previous inspections), if	available:		
•				
Remarks:				

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## VEGETATION (Four Strata) - Use scientific names of plants.

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Sampling Point: Wjop 027_u

2) V 2 .	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30X30_)		Species?	Status	Mustan & David a 10 1
1. Quercus nígra	5	<u>N</u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Llquidambar styraciflua	10	<u> </u>	FAC	Total Number of Dominant 7
3. Acer rubrum	<u>is</u>	<u> </u>	FAC	Species Across All Strata: (B)
4. <u>Pinus</u> taeda	<u> </u>	<u>N</u>	FAC	Percent of Dominant Species $\propto (2)$
5		. <u> </u>		Percent of Dominant Species $\Im(G)_{2}$ (A/B) That Are OBL, FACW, or FAC:
6			·	
7			<u> </u>	Prevalence Index worksheet:
8			<u> </u>	Total % Cover of: Multiply by:
	33	= Total Cov	/er	OBL species x 1 =
50% of total cover: 16.	5 20% of	total cover	6.6	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30+30)				FAC species x 3 =
1. Ulmus Americana	5	V	FAC	FACU species x 4 =
2 Vaccinium Corymbosum	<u></u>	<del>V</del> .	FACW	UPL species x 5 =
3. Actr rubrum	<u> </u>	$\overline{\sqrt{i}}$	FAC	Column Totals: (A) (B)
4. Quercus higra		-21-	FAT	
	<u> </u>		<u>(///</u>	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7	•			2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	<u>'dd</u>	= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover	<u>: 47,4</u>	
Herb Stratum (Ptot size: 15×15)				¹ Indicators of hydric soil and wetland hydrology must
1. nonc				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7	•			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12	- <u>~</u>	·		
		= Total Co		
50% of total cover:	20% of	f total cover		
Woody Vine Stratum (Plot size:)		$\mathbf{x}$	FACO	
1. Lonicera Japonica	<u> </u>	<u> </u>	· <u>·                                   </u>	
2. Toxicodendron radicons	<u></u>	N	FAC	
3. Vitis rotundifolia	<u> </u>	N	FAC	
4. Smilax bone-nox	<u> </u>	<u>Ý</u>	FAC	
5				Hydrophytic
	14	= Total Co	ver	Vegetation
50% of total cover:	20% o	f total cove	r 2.8	Present? Yes Vo No
Remarks: (If observed, list morphological adaptations bel				I
L				

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Profile Description: (Describe to the depth	n needed to docur	nent the l	indicator	or confirm	n the absence of in	dicators.)
Depth <u>Matrix</u> (inches) Color (moist) %		<u>x Feature</u>			<b>T</b> /	_
	Color (moist)	%	Type	_Loc ²	Texture	Remarks
	1110 TH	·			<u>S.L</u>	
2-20 104R 5/3 95	IOYR 5/6	5	<u>_C</u>	<u></u>	S.L.	
	-					
			·	<u> </u>	<u> </u>	
		·			·····	
¹ Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix MS	S=Masker	f Sand Gr	 ains		Pore Lining, M=Matrix.
Hydric Soll Indicators: (Applicable to all L						roblematic Hydric Solls ³ :
Histosol (A1)	Polyvalue Be		•	RRSTI		-
Histic Epipedon (A2)	Thin Dark Su					A10) (LRR S)
Black Histic (A3)	Loamy Muck					ertic (F18) (outside MLRA 150A, B)
Hydrogen Sulfide (A4)	Loamy Gleye			,		odplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma					Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark 3	Surface (F	-6)		(MLRA 15	
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Date	rk Surface	e (F7)			Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depression		8)		Very Shallov	w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (L				Other (Explanation)	ain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ocl			-	9	
Thick Dark Surface (A12)	Iron-Mangan				•	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surfa Delta Ochric		• •	, uj		hydrology must be present,
Sandy Gleyed Matrix (S4)	Reduced Ver			0A 16081		sturbed or problematic.
Sandy Redox (S5)	Piedmont Flo					
Stripped Matrix (S6)					RA 149A, 153C, 153	וח
Dark Surface (S7) (LRR P, S, T, U)			,	, ,		-,
Restrictive Layer (if observed):						
Туре:						
Depth (inches):					Hydric Soil Pres	ent? Yes No
Remarks:				. <u> </u>		
1						



Upland data point wjop027_u facing east.

## WETLAND DETERMINATION DATA FORM -- Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: JOhns	100 Sampling	Date: 4/13/15
Applicant/Owner: Dominica	ony/obanty.	State: NC Sampling	Date. wich Oale
Investigator(s): ESI-J. Horbour		State: 14 Sampling	Point: Majop - Alec - W
	Section, Township, Range:		
Landform (hillslope, terrace, etc.): $\frac{F(\alpha + 1)}{2}$	Local relief (concave, convex	none): Loncaul	_ Slope (%): <u>0 - </u>
Subregion (LRR or MLRA): LRR P Lat:	35.50906 Long:	78.26231	Datum: W65_84
Soil Map Unit Name: Grantham Silt Loam		NWI classification:	EM
Are climatic / hydrologic conditions on the site typical for this tir	ne of year? Yes No	(If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology sign		al Circumstances* present?	(es No
Are Vegetation, Soil, or Hydrology natu		explain any answers in Rema	
SUMMARY OF FINDINGS – Attach site map sh			
Hydrophytic Vegetation Present? Yes No			
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No	Is the Sampled Area		
Wetland Hydrology Present? Yes No	within a Wetland?	Yes No _	
	*		
Remarks: Area recently cleanics	t, soil compo	c+c-, $10++i$	<u>^</u> 9
	,		-
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minin	num of two required)
Primary Indicators (minimum of one is required; check all that	apply)	Surface Soil Cracks (Bf	
Surface Water (A1)	una (B13)	Sparsely Vegetated Co	
High Water Table (A2) Mari Depos	its (B15) (LRR U)	Drainage Patterns (B10	
Saturation (A3) Hydrogen S	Sulfide Odor (C1)	Moss Trim Lines (B16)	
Water Marks (B1) Oxidized R	hizospheres along Living Roots (C3)	Dry-Season Water Tab	ie (C2)
	f Reduced Iron (C4)	Crayfish Burrows (C8)	
	Reduction in Tilled Soils (C6)	Saturation Visible on A	
Algal Mat or Crust (B4) Thin Muck		✓ Geomorphic Position ([	02)
Iron Deposits (B5) Other (Exp Inundation Visible on Aerial Imagery (B7)	ain in Remarks)	Shallow Aquitard (D3)	
Water-Stained Leaves (B9)		FAC-Neutral Test (D5)	
Field Observations:	<u>M.  </u>	Sphagnum moss (D8) (	(LKK 1, 0)
	(inches):		
	(inches): D		
	· · · · · · · · · · · · · · · · · · ·	Hydrology Present? Yes	V No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspections), if av	ailable:	
· · · · · · · · · · · · · · · · · · ·			
Remarks:	L.		
* Same depussions holding War	ten		
U U			
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			1

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Tree Stratum (Plot size: <u>SUFSU</u> )	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species		
1. None		<u> </u>	·	That Are OBL, FACW, or FAC:		(A)
2				Total Number of Dominant	1	
				Species Across All Strata:		(B)
4				Percent of Dominant Species	100%	
5		·		That Are OBL, FACW, or FAC:	100 10	(A/B)
67				Prevalence Index worksheet:		
7		·		Total % Cover of:	Multiply by:	
	$\mathcal{O}$	- Total Ca		OBL species x 3	1 =	_
5004 of lotal accurate				FACW species x 2		
50% of total cover:	20% 0	total cover	·	FAC species x3		
1 1				FACU species x 4	4 =	
2				UPL species x 8		
3				Column Totals: (A)	)	_ (B)
4						
5				Prevalence Index = B/A =		
6				Hydrophytic Vegetation Indicat		
7			·	2 - Dominance Test is >50%		
8			,	2 - Dominance Test is >50% $3$ - Prevalence Index is $\leq 3.0^{10}$		-
		= Total Co	ver	Problematic Hydrophytic Veg		(m)
50% of total cover:					Jetation (⊏xpia	31)
Herb Stratum (Plot size: 30×30)				¹ Indicators of hydric soil and wetl	and budralanu	muct
1. Arundinaria gigantea	<u>_</u>	<u> </u>	FACW	be present, unless disturbed or p	roblematic.	musi
2				Definitions of Four Vegetation	Strata:	
3						
4				Tree – Woody plants, excluding more in diameter at breast height		
5				height.	· ( · ), · - <b>3</b>	
6				Sapling/Shrub – Woody plants,	excluding vines	s. less
7				than 3 in. DBH and greater than	3.28 ft (1 m) tal	I.
8		·		Herb – All herbaceous (non-woo	dv) plants requ	ardless
9				of size, and woody plants less th		
10				Woody vine – All woody vines g	reater than 3.2	8 ft in
11				height.	roator artar o.L	
12		·				
,	्रेट्ये	= Total Co	ver		<u> </u>	
50% of total cover:	20% of	f total cove	n: <u>0.4</u>			
<u>Woody Vine Stratum</u> (Plot size: $30 \times 30$ )						
1. non						
2		·				
3						
4		·				
5				Hydrophytic	-	
		= Total Co	over	Vegetation	No	
50% of total cover:		f total cove	er:	Present? Yes	, NU	
Remarks: (If observed, list morphological adaptations be	elow).					
	1_					
Alea recently clearcut	Ē.					
· · ·						

#### VEGETATION (Four Strata) - Use scientific names of plants. Absolute Dominant Indicator % Cover Species? Status Tree Stratum (Plot size: 30+30

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Sampling Point: WJOP 026E-W

Dominance Test worksheet:

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inches)	Matrix			x_Features		1 2	Terretorie		D!-
	Color (moist)	$\frac{1}{100}$	Color_(moist)	%	Type'	Loc ²	<u>Texture</u>	i	Remarks
-6							<u>5L</u>	mucky	layer
<u>-10</u>	104R3/1	100					L.S.	I	
2-20	104R4/1	80	104R414	ЪD	2	M	L.S.	·	
		· — ·	10 [1. 1]		<u> </u>	<u></u>	<u> </u>		
		· ·						·	<u> </u>
		· ·						•	, ',
/pe: C=Co	ncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Linin	σ. M=Matrix.
	ndicators: (Applic						Indicators	for Problemat	ic Hydric Solls ³ :
Histosol (	(A1)		Polyvalue B	elow Surfac	e (S8) (I	RRST		luck (A9) (LRR	-
	ipedon (A2)		Thin Dark S					luck (A10) (LR	
Black His			Loamy Much						(outside MLRA 150
-	n Sulfide (A4)		Loamy Gley			,			Soils (F19) (LRR P, S
	Layers (A5)		Depleted Ma		-/				amy Soils (F20)
	Bodies (A6) (LRR P	тп	Redox Dark	• •	3)			RA 153B)	any 3015 (F20)
	cky Mineral (A7) (LF		Depleted Da					arent Material (	TEON
	sence (A8) (LRR U		Redox Depr		• •			hallow Dark Su	
	ck (A9) (LRR P, T)	''	Marl (F10) (I		0		-		
	Below Dark Surfac	a /611)			141 0 4 4	E4 1		Explain in Rem	iarks)
	rk Surface (A12)		Depleted Oc						h. m
-	• •		Iron-Mangar						hytic vegetation and
	airie Redox (A16) (N ucky Mineral (S1) (I					, Uj			must be present,
		LKK U, SJ	Delta Ochric					ess disturbed o	r problematic.
	leyed Matrix (S4)		Reduced Ve						
	edox (S5)		Piedmont FI				-		
	Matrix (S6)		Anomalous	Bright Loam	ny Solis (	F20) (ML	RA 149A, 153C,	, 153D)	
	face (S7) (LRR P, S								
	ayer (if observed):								/
Туре:			<u> </u>						
Depth (inc	hes):					•	Hydric Soli	Present? Y	es V No
marks:							<u> </u>		
									-
									-
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Wetland data point wjop026e_w facing southwest.

WETLAND DETERMINATION DAT	A FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: <u>ACP</u>	_ City/County: JOhnston Sampling Date: 4/13/15
Applicant/Owner: Dominion	Sampling Date: Sampling Date:
Investigator(s): ESI-J, HARDONY	Station Township Dances A/A
I and form (hillslope torsee ate) + ++++++++++	Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRR P Lat: 3	
Soil Map Unit Name: 600100 Silt Loam	<u>     S、52338</u> Long: <u>78、24272</u> Datum: <u>WGS</u> 84NWI classification: <u>NA</u>
Are climatic / hydrologic conditions on the site typical for this time of Are Vegetation, Soil, or Hydrology significant	ntly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally	
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No	Is the Sampled Area within a Wetland? Yes No
Remarks: Area recently cleancest; no li	ving vegetation present
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	
Surface Water (A1) Aquatic Fauna (	(B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (I	
✓ Saturation (A3) Hydrogen Sulfid	
	spheres along Living Roots (C3) Dry-Season Water Table (C2)
	_ , , ,
Algal Mat or Crust (B4) Thin Muck Surfa	
Iron Deposits (B5) Other (Explain i	· · ·
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (incl	nes): <u>NA</u>
Water Table Present? Yes 🔨 No Depth (incl	
Saturation Present? Yes No Depth (incl (includes capillary fringe)	nes): 12 Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial pl	notos, previous inspections), if available:
Remarks:	
· · · · · · · · · · · · · · · · · · ·	

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### VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: Wjop 026-4

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Tree Stratum (Plot size: 30+30)	Absolute Dominant Indicator	Dominance Test worksheet:
<u>Iree Stratum</u> (Plot size: <u>30</u> )	<u>% Cover Species? Status</u>	Number of Dominant Species
1. none		That Are OBL, FACW, or FAC: (A)
2		Tetal Number of Desile and
3		Total Number of Dominant Species Across All Strata: $\mathcal{O}$ (B)
4		
5		Percent of Dominant Species
		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species         x1 =
	D = Total Cover	
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: <u>30/30</u> )		FAC species x 3 =
1. None	- <u> </u>	FACU species x 4 =
2		UPL species x 5 =
3		Column Totals: (A) (B)
4		
		Prevalence Index = B/A =
5	· ·	Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0 ¹
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 30 × 30		¹ Indicators of hydric soil and wetland hydrology must
1. none		be present, unless disturbed or problematic.
2		Definitions of Four Vegetation Strata:
3		Dominions of Four Vegetation Grata.
		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of height.
5		neight.
6		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tail.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Meeducing Allowed a boost of a second second
11		Woody vine - All woody vines greater than 3.28 ft in height.
12	· ·	··3····
	D = Total Cover	
50% oftein enver		
<u>Woody Vine Stratum</u> (Plot size: $30 \times 30$ )	20% of total cover:	
1. none		
2	•	<u> </u>
3		
4		
5		Hydrophytic
	D = Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No V
Remarks: (If observed, list morphological adaptations bel		I
	on).	
Recently clean-cut.		

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## Sampling Point: Wjop 026 - U

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Profile Descrip	tion: (Describe)	to the depth.	meeded to docal	merit tue	Indicator	or commu	n the absence	of indicators	S.)	,
Depth	Matrix			x Feature					-	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	_Loc ²	Texture		Remarks	
0-5 1	0 1 R 2/1	100					5.2			
	0 YR 3/6	100			·	<u> </u>	5.L			
	VIN JU	100			•		<u> </u>			
					• ——		·			
		·					. <u> </u>	•		
		. <u> </u>								
1=		·					2	•	<u> </u>	
	entration, D=Dep					ains.		PL=Pore Lin		
	licators: (Applic	adle to all LR						for Problem	-	Soils":
Histosol (A	· · ·		Polyvalue Be					/luck (A9) (LF		
Histic Epipe			Thin Dark St					/luck (A10) (L		
Black Histic			Loamy Muck	ty Mineral	(F1) (LRF	: 0)	Reduc	ed Vertic (F1	8) (outside N	ALRA 150A,B)
Hydrogen 8	• •		Loamy Gley	ed Matrix (	(F2)		Piedm	ont Floodplai	n Soils (F19)	(LRR P, S, T)
Stratified La			Depleted Ma	• •				alous Bright L	oarny Soils (	F20)
	dies (A6) (LRR P		Redox Dark				(M L)	RA 153B)		
	y Mineral (A7) <mark>(</mark> LF		Depleted Da		• •		Red P	arent Materia	l (TF2)	
	ence (A8) (LRR U	)	Redox Depr		8)		Very S	hallow Dark	Surface (TF1	2)
	(A9) (LRR P, T)		Marl (F10) (I				Other	(Explain in Re	emarks)	
· · ·	elow Dark Surfac	e (A11)	Depleted Oc							
	Surface (A12)		Iron-Mangar	nese Mass	es (F12) (	LRR O, P,		ators of hydr		
Coast Prair	ie Redox (A16) (N	/LRA 150A)	Umbric Surfa	ace (F13)	(LRR P, T	; U)	we	lland hydrolog	gy must be pi	resent,
Sandy Muc	ky Mineral (S1) (L	.RR 0, S)	Delta Ochric	(F17) (MI	LRA 151)		unl	ess disturbed	or problema	tic.
Sandy Gley	yed Matrix (S4)		Reduced Ve							
Sandy Red	lox (S5)		Piedmont FI	oodplain S	Soils (F19)	(MLRA 1-	49A)		a.	
Stripped M	atrix (S6)		Anomalous I	Bright Loa	my Soils (	F20) (MLF	RA 149A, 153C	, 153D)		
Dark Surfac	ce (S7) (LRR P, S	5, T, U)								
	ce (S7) (LRR P, S yer (If observed):							······		
Restrictive Lay								······-	<u> </u>	/
Restrictive Lay Type:	yer (lf observed):						Hydric Sol	Bracont?	Vac	No
Restrictive Lay Type: Depth (inche	yer (lf observed):		_				Hydric Sol	Present?	Yes	No
Restrictive Lay	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No <u> </u>
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No <u> </u>
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No <u> </u>
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No <u> </u>
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No
Restrictive Lay Type: Depth (inche	yer (lf observed):						Hydric Sol	Present?	Yes	No



Upland data point wjop026_u facing northeast.

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site:ACP	City/County: JO	na stan	Sampling Date: 7/22/14
Applicant/Owner: DOMINION	0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	State: NC	_ Sampling Date: 7/22/14 _ Sampling Point: wjop008e_w
Investigator(s): FSI-16, MUIPG(26	Section, Township,	οιαι. Δ/Α	
Landform (hillslope, terrace, etc.):			ave Slope (%): 1-4%
Subregion (LRR or MLRA): LRR P Lat: 3		-74.31	2449 Siope (%): 1- (10
Subregion (LRR or MLRA): <u>LRK F</u> Lat: <u>7</u> .			
Soil Map Unit Name: Rains Sonly (00m		NWI classi	
Are climatic / hydrologic conditions on the site typical for this time of	-		
Are Vegetation, Soil, or Hydrology significa		re "Normal Circumstances"	" present? Yes No
Are Vegetation, Soil, or Hydrology naturally	y problematic? (l	f needed, explain any ansv	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling poin	t locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No			No
Remarks:	<u> </u>		<u> </u>
HYDROLOGY		Cocondony Ind	
Wetland Hydrology Indicators:			icators (minimum of two_required)
Primary Indicators (minimum of one is required; check all that ap			oil Cracks (B6) /egetated Concave Surface (B8)
	(B15) (LRR U)		Patterns (B10)
Saturation (A3)			n Lines (B16)
	ospheres along Living R		on Water Table (C2)
	educed Iron (C4)		Burrows (C8)
Drift Deposits (B3)	eduction in Tilled Soils (	C6) 📃 Saturation	n Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)			hic Position (D2)
L Iron Deposits (B5)	n in Remarks)		quitard (D3)
Imundation Visible on Aerial Imagery (B7)			tral.Test (D5)
Water-Stained Leaves (B9)         Field Observations:			m moss (D8) (LRR T, U)
	ches): <u>N A</u>	· ·	
	iches): <u>4</u> (		
	iches): 0"	Wetland Hydrology Pre	sent? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial		tions), if available:	
Remarks:			
	,		

-:-*

#### VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: Wjop008e_W

- 1 10	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 35 × 10)	<u>% Cover</u>			
1. SOITX NIGLO	30	V	OBL	That Are OBL, FACW, or FAC:
	10	VI.	FAC	
	<u>, o</u>	-7		Total Number of Dominant
				Species Across All Strata:  (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (JOU'K) (A/B)
6				
7				Prevalence Index worksheet:
	<u> </u>			Total % Cover of:Multiply by:
8	110		·	OBL species x1 =
		= Total Co		FACW species x 2 =
50% of total cover: <u>2</u> C	20% of	total cove	r: <u>ð</u>	
<u>Sapling/Shrub Stratum</u> (Plot size: $30^{1} \times 10^{1}$ )				FAC species x 3 =
A CEV YWAYAM	30	V	FAC	FACU species x 4 =
2. SOLIX NIGRA	20	$\overline{\mathbf{x}}$	OBL	UPL species x 5 =
		<u>-</u> Y		Column Totals: (A) (B)
3				
4		<u></u>		Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				
				- Rapid Test for Hydrophytic Vegetation
7		_		2 - Dominance Test is >50%
8		. <u>.</u>		3 - Prevalence index is ≤3.0 ¹
	<u> </u>	= Total Co	over	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 25	• > 20% o	f total cove	er: (O	
<u>Herb Stratum</u> (Plot size: $30^{1} \chi (0)$ )				
A dia line (Flot size. 00 / (0)	IO -	V	FAC	Indicators of hydric soil and wetland hydrology must
1. Arundinaria auvintea		$-\frac{1}{2}$		be present, unless disturbed or problematic.
2. Hibiscus moschentos		<u> </u>	OBL	Definitions of Four Vegetation Strata:
3. IMPARIERS CADERSI)	10	<u> </u>	FACW	Tura Mirahada antalaria (7.0 m) et
4		/	-	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
-		•		height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Line All hadronous (non-words) alapte constillant
				<ul> <li>Herb – All herbaceous (non-woody) plants, regardless</li> <li>of size, and woody plants less than 3.28 ft tali.</li> </ul>
9				
10				- Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.				
	50	_ = Total C	over	
50% of total cover: 2		of total cov		
	<u> </u>	or total cov	rei. <u>10</u>	-
Woody Vine Stratum (Plot size: 301 × 10)	<b>•</b> • •		TAC	
1. Campsis radicans	20	<u> </u>	FAC	
2.		(		
				-
3				-
4				-
5				- Hydrophytic
	20	_ = Total (	Cover .	Vegetation
50% of total cover:		of total co		Present? Yes No No
			vel. <u> </u>	<u> </u>
Remarks: (If observed, list morphological adaptations be	elow).			
Vegetation plot - limited to wetl	and w	ithin c	ditch	

# Sampling Point: 2010008 e-W

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Profile Desc	ription: (Describe t	o the depth r	eeded to document the i	ndicator or confirm t	he absence of indicators.)
Depth	Matrix		Redox Features		<b>-</b>
(inches)	Color (moist)		Color (moist)%	Type ¹ Loc ²	Texture Remarks
$\underline{0-6}$	104R2/1		<u> </u>		
6-20-	104R3/1	<u> 100 _</u>			<u> </u>
<u> </u>					
					· · · · · · · · · · · · · · · · · · ·
	<u> </u>	· ·		·	
			duced Matrix, MS=Masked		² Location: PL=Pore Lining, M=Matrix.
<u> </u>		able to all LR	Rs, unless otherwise not		Indicators for Problematic Hydric Soils ³ :
			Polyvalue Below Surfa		
	pipedon (A2)		Thin Dark Surface (S9		2 cm Muck (A10) (LRR S)
	istic (A3) en Sulfide (A4)		Loamy Mucky Mineral		Reduced Vertic (F18) (outside MLRA 150A,B) Piedmont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Matrix (F3)	(, 2)	Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	. T. U)	Redox Dark Surface (I	F6)	(MLRA 153B)
	ucky Mineral (A7) (LF		Depleted Dark Surface	•	Red Parent Material (TF2)
Muck P	resence (A8) (LRR U		Redox Depressions (F		Very Shallow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (LRR U)		Other (Explain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Ochric (F11)		
	ark Surface (A12)		Iron-Manganese Mass		
	Prairie Redox (A16) (I		Umbric Surface (F13)		wetland hydrology must be present,
	Mucky Mineral (S1) (I Gleyed Matrix (S4)	LRR 0, 5)	Delta Ochric (F17) (M Reduced Vertic (F18)		unless disturbed or problematic.
territeri i	Redox (S5)			Soils (F19) (MLRA 149	94)
	d Matrix (S6)			amy Soils (F20) (MLR/	
	urface (S7) (LRR P, \$	S, T, U)		,,,	·····
Restrictive	Layer (if observed)	:			
Type:					
Depth (i	nches):				Hydric Soil Present? Yes No
Remarks:	<u>.</u>		· · · ·		
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Wetland data point wjop008e_w facing east.

### WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

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Project/Site: ACP	City/County: JOMSTON Sampling Date: 7/22/14 State: NC Sampling Point: wjop008_u
Upplicant/Owner: DOMINIO	State: NC Sampling Point: wjop 008_u
nvestigator(s): <u>FSI = IK. Marphrey</u>	Section, Township, Range: NA
andform (billsione terrace etc.); flat	Local relief (concave, convex, none); NONE Slope (%); 2-4
Subregion (LRR or MLRA): LRR P Lat: 35.	52265 Long: -78.26350 Datum: W65 84
Soil Map Unit Name: Rains sondy loarn	NWI classification: $\nu/\Lambda_{$
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significant	
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS - Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       No	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Unundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	B13)       Sparsely Vegetated Concave Surface (B8)         B15) (LRR U)       Drainage Patterns (B10)         e Odor (C1)       Moss Trim Lines (B16)         spheres along Living Roots (C3)       Dry-Season Water Table (C2)         duced Iron (C4)       Crayfish Burrows (C8)         duction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         ace (C7)       Geomorphic Position (D2)         n Remarks)       Shallow Aquitard (D3)         FAC-Neutral Test (D5)       Sphagnum moss (D8) (LRR T, U)         hes):       720'''         Wetland Hydrology Present?       Yes No         hotos, previous inspections), if available:       No
·	

Sampling Point: wjop008_U

25 10	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30 × 10</u> ) 1. <u>NO NE</u>		Species?		Number of Dominant Species (A)
3		•		Total Number of Dominant Species Across All Strata:
4				Percent of Dominant Species 150 %
5		·		Percent of Dominant Species 100 % (A/B)
6				Prevalence Index worksheet:
7		<u> </u>		Total % Cover of: Multiply by:
8				OBL species x1 =
		= Total Co		FACW species x 2 =
50% of total cover: $\frac{3}{2}$	20% 0	t total cover	·	FAC species x 3 =
<u>Sapling/Shrub Stratum</u> (Plot size: <u>30'X 10'</u> ) 1. Quercus alba	in	$\sim$	FAC	FACU species x 4 =
		4	<u>(</u>	UPL species x 5 =
2				Column Totals: (A) (B)
3				
4 5			·	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7			·	2 - Dominance Test is >50%
8	- 70	_ = Total Co	- <u> </u>	☐ 3 - Prevalence Index is ≤3.0 ¹
50% of total cover:	> <u></u>	_ = TOTAL CO		Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: $30^{1} \times 10^{1}$ )				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	<u> </u>	FAC	be present, unless disturbed or problematic.
2		/		Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4	•			more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11	<u> </u>			height.
12				-
	10	= Total C		· · · · · · · · · · · · · · · · · · ·
50% of total cover:	20%	of total cov	er:	
Woody Vine Stratum (Plot size: 30' × 10)	5	N	TAC	
1. Smilax rotundifolia	<u>_</u>		_ THU	-
2				-
3	<u> </u>			-
4				_
5		<u> </u>		– Hydrophytic
	<u> </u>	= Total (		Vegetation Ves No
50% of total cover: _2	209	6 of total co	ver:	-
Remarks: (If observed, list morphological adaptations h	pelow).			
Active Agricultyval Fie	1d - V	egetati	on pla	of limited to ditch bank.
		-	-	

**VEGETATION (Four Strata)** – Use scientific names of plants.

## Sampling Point: Wjop008_u

Profile Desc	cription: (Describe t	o the depth ne	eded to docum	ent the in	dicator or confirm	the absence c	of indicators.)
Depth	Matrix			Features		<b>T</b> . •	<b>D</b>
(inches)	Color (moist)		olor (moist)		Type ¹ Loc ²	Texture	Remarks
<u>0-14</u>	104 R 3/2	100				<u>LS</u>	
14-20	104R 2/2	100				LS	
	· · · · · · · · · · · · · · · · · · ·						
<u></u>					<u> </u>		· · · · · · · · · · · · · · · · · · ·
					·		
		· <u></u>					· · · · · · · · · · · · · · · · · · ·
¹ Type: C=C	Concentration, D=Dep	letion RM=Red	uced Matrix, MS	S=Masked	Sand Grains.	² Location:	PL=Pore Lining, M=Matrix.
	Indicators: (Applic						for Problematic Hydric Soils ³ :
Histoso	• • • •	Г			e (S8) (LRR S, T, I	υ) 🔲 1 cm M	luck (A9) (LRR O)
	pipedon (A2)	Ī			(LRR S, T, U)		luck (A10) (LRR S)
	listic (A3)	1	Loamy Mucky			Reduce	ed Vertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)	Ţ	Loamy Gleye	ed Matrix (	F2)		ont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)	Ĺ	Depleted Ma				lous Bright Loamy Soils (F20)
	c Bodies (A6) (LRR P		Redox Dark	•	•		RA 153B)
	lucky Mineral (A7) (LI		Depleted Date Redex Dopre				arent Material (TF2) hailow Dark Surface (TF12)
	Presence (A8) (LRR L	יי <u>ו</u> ר	Redox Depre		0)		(Explain in Remarks)
	luck (A9) <b>(LRR P, T)</b> ed Below Dark Surfac	е (А11) Г	Depleted Oc		(MLRA 151)		
	Dark Surface (A12)	Ĩ		• •	es (F12) (LRR O, P	P, T) ³ India	ators of hydrophytic vegetation and
	Prairie Redox (A16) (	MLRA 150A) 👖			(LRR P, T, U)		land hydrology must be present.
	Mucky Mineral (S1) (		📘 Delta Ochric	(F17) (MI	RA 151)	uni	ess disturbed or problematic.
Sandy	Gleyed Matrix (S4)	ļ			(MLRA 150A, 150E		
	Redox (S5)	-		•	ioils (F19) (MLRA 1		
	ed Matrix (S6)	_ <del>_</del>	Anomalous	Bright Loa	my Soils (F20) (ML	.RA 149A, 153C	;, 153D)
	Surface (S7) (LRR P,					T.	
4	e Layer (if observed)	):				1	
Type: _			-				
	inches):					Hydric Soi	Present? Yes <u>No</u>
Remarks:	A		5.011				
AC	ive Agrica	utural	ALEIC				
•							
							•
1							
	•						



Upland data point wjop008_u facing west.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

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Project/Site: <u>ACP</u>	City/County: JO	nastun	Sampling Date:	7/23/14
And Isantioumin DOM INION		State: NS	Sampling Point:	W100001+_W
hypoticatorist FST - K, MUIPHrey	Section Township	Range NA		
Applicant/Owner:	Local relief (concav	e convex none): FI	N+ Sin	me (%): 0-7
	$\frac{1}{25.52}$ 139	1 ong: -78 26	717 D	www.W/c.584
Soll Man Linit Name (2007/h00) Silt (00)	<u> </u>		sification: <u>PFO</u>	
Are climatic / hydrologic conditions on the site typical for this time				
Are Vegetation, Soil, or Hydrology signifi	icantly disturbed? A	re "Normal Circumstance	es" present? Yes _	No
Are Vegetation, Soil, or Hydrology natura	ally problematic? (	f needed, explain any an	swers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map sho	wing sampling poir	nt locations, transe	cts, important i	features, etc.
Hydrophytic Vegetation Present? Yes NoN No NO NON No	—— Is the Samp		No	_
Remarks:				
HYDROLOGY		Coordony	ndicators (minimum	of two required)
Wetland Hydrology Indicators:	annhà		Soil Cracks (B6)	
Primary Indicators (minimum of one is required; check all that Surface Water (A1)			y-Vegetated Concav	e Surface (B8)
	its (B15) (LRR U)		e Patterns (B10)	e oundee (Be)
	Sulfide Odor (C1)		rim Lines (B16)	
	hizospheres along Living F		ason Water Table (C	:2)
	f Reduced Iron (C4)		h Burrows (C8)	
	n Reduction in Tilled Soils	(C6) 📃 Saturat	ion Visible on Aerial	Imagery (C9)
Algal Mat or Crust (B4)	Surface (C7)		rphic Position (D2)	
	lain in Remarks)		v Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)		=	eutral Test (D5)	5 T II)
Water-Stained Leaves (B9)			num moss (D8) (LRI	(1,0)
Field Observations:	(inches): <u>NA</u>			
Surface Water Present?     Yes No Depth       Water Table Present?     Yes No Depth				
Saturation Present? Yes No Depth	(inches): >20	Wetland Hydrology F	Present? Yes	No
(includes capillary fringe)		1		
Describe Recorded Data (stream gauge, monitoring well, aer	rial photos, previous inspe	ctions), if available:		
Remarks:			<u></u>	
				· · · · ·

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VEGETATION	(Four St	rata) – Us∈	scientific	names	of plants.
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Sampling Point: WJOP009 &-W

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20101	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30×30)		Species?	Status	Number of Dominant Species	0	
TIMUS TALES	<u>- 30</u>	<u> </u>	EAC	That Are OBL, FACW, or FAC:		(A)
Acer rubrann	$\overline{10^{-7}}$	<u> </u>	FAC	Total Number of Dominant	9	
Quercus nigra	10	<u> </u>	FAC	Species Across All Strata:		(B)
ł						
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	100%	(A/B)
						(10)
)				Prevalence Index worksheet:		
				Total % Cover of:	Multiply by:	
3				OBL species X		
, · ·	/ 30	= Total Co	over	FACW species x		
50% of total cover:	<u>&gt;</u> 20% of	f total cove	er: <u>/0</u>	FAC species X		
50% of total cover: 2 Sapling/Shrub Stratum (Plot size: 30 × 30 )			c.c			
1. Symplocos tinctoria	<u> </u>	<u> </u>	FAC	FACU species X		
Persea palustris	15	4	FALW	UPL species ×		
clethra alnifolia	<u></u> 20	4	FACW	Column Totals: (#	*)	(B)
LIEX OPACA	5	N.	FAC			
				Prevalence Index = B/A =		
5				Hydrophytic Vegetation Indica		
6				Rapid Test for Hydrophy		
7		<u> </u>		2 - Dominance Test is >50%	Ъ	
8				3 - Prevalence Index is ≤3.	01	
	<u>50</u>	= Total C	over	Problematic Hydrophytic V	egetation ¹ (Exp	ain)
50% of total cover:	25 _{20% c}	of total cov	er: (O			
Herb Stratum (Plot size: 30 X30')					Hond budralog	must
1. Arundinaria oigantea	20	V	FAC	Indicators of hydric soil and we be present, unless disturbed or		rinust
2. Osmundastrum cinnamom	auna 10	$-\dot{\tau}$	FACW	Definitions of Four Vegetatio		
		/		Deminions of Four Vegetatio	n Strata.	
3				Tree - Woody plants, excluding	g vines, 3 in. (7.	6 cm) or
4				more in diameter at breast heigh	jht (DBH), regar	dless of
5				height.		
6				Sapling/Shrub – Woody plant	s, excluding vin	es, less
7				than 3 in. DBH and greater tha	n 3.28 ft (1 m) t	all. ·
8				<ul> <li>Herb – All herbaceous (non-w of size, and woody plants less</li> </ul>	than 3 28 ft tall	garuless
9					110110.201010	•
10				<ul> <li>Woody vine – All woody vines</li> </ul>	s greater than 3	.28 ft in
11				_ height.		
12	<u> </u>			-		
	30	_ = Total	Cover			
50% of total cover:	15 20%	of total co	iver: <u>6</u>	_		
Woody Vine Stratum (Plot size: 30 X 30 )	<u> </u>			-		
1. Smilax rotundifolia	5		FAC			
		/		-		
2				-		
3						
4				_		
5.	•			- Hydrophytic	1	
	5	= Total	Cover	Vegetation	and the second s	
50% of total cover:	2.5 200	6 of total co		Present? Yes	No	
						<u> </u>
Remarks: (If observed, list morphological adaptation	ns below).					
1						

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# Sampling Point: WJ09009 f-W

Profile Desc	ription: (Describe	to the dept	h needed to docum	ent the i	ndicator	or confirm	the absence o	f indicators.)
Depth	Matrix			Feature				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>_%</u>	Type ¹	_Loc ²		Remarks
0-9	104K4/1	95	101/R4/2	3				
			104R4/6	2	$\sum_{i=1}^{n}$	PL		
9-20-	104R5/2	90	104R 5/6	10		$\overline{\mathcal{M}}$		
100	10411/2	<u> </u>	11.070		<u> </u>			
		·	. <u> </u>					
							_	
Tuno: C=C		lotion PM-	Reduced Matrix, MS		 I Sand Gr	aine	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise not	ed.)	ams		for Problematic Hydric Soils ³ :
Histoso			Polyvalue Be			RRSTI	_	uck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					uck (A10) (LRR S)
	listic (A3)		Loamy Mucky					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			,		ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mai				📙 Anoma	lous Bright Loamy Soils (F20)
🛛 🔲 Organio	Bodies (A6) (LRR F	Ρ, Τ, U)	Redox Dark S	Surface (	F6)			(A 153B)
	ucky Mineral (A7) (L							arent Material (TF2)
	resence (A8) (LRR U	(נ	Redox Depre	-	-8)			hallow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (L				U Other (	(Explain in Remarks)
	ed Below Dark Surfac	ce (A11)	Depleted Oci			-	T) ³ India	ators of hydrophylic vegetation and
	)ark Surface (A12) Prairie Redox (A16) (	MI PA 150			• •	•		land hydrology must be present,
	Mucky Mineral (S1) (							ess disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve					
	Redox (S5)		Piedmont Flo					
	d Matrix (S6)		🔲 Anomalous I	Bright Lo	amy Soils	(F20) (MLI	RA 149A, 153C	, 153D)
Dark S	urface (S7) (LRR P,	S, T, U)						
Restrictive	E Layer (if observed	):		_				
Type: _			<u> </u>					1
Depth (i	nches):						Hydric Soil	Present? Yes No
Remarks:				<b>_</b>	·			
1								
i i								
	•							



Wetland data point wjop009f_w facing west.

## WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	· · · · ·	City/County: JCh	nstan	Sampling Date: 7/23/14 Sampling Point: Wjop009-u
Applicant/Owner: DOM 1/0		only/obtainly:	State: NC	Sampling Point: W\0p009-U
$\sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{i$	MALEY MALEY CO	Contine Township F		
	×122 /	Local roliof (concerve	Connet none): K 184	Slope (%): <u>0-2</u> 553 Datum: <u>Ŵ6583</u>
Landform (nillslope, terrace, etc.):	20	$\leq \leq 2 \sqrt{4}$	-78 766	5 3 Datum With 333
Subregion (LRR or MLRA): <u> </u>				
Soil Map Unit Name: 6000+	Mar Sitt Juni		NWI classific	eation: <u>NA</u>
Are climatic / hydrologic conditions			(If no, explain in F	emarks.)
Are Vegetation, Soil			e "Normal Circumstances"	present? Yes No
Are Vegetation, Soil	, or Hydrology natura	lly problematic? (If	needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS	- Attach site map show	wing sampling poin	t locations, transects	, important features, etc.
Hydrophytic Vegetation Present		Is the Samp	led Area	
Hydric Soil Present?	Yes No	within a We	iland? Yes	No
Wetland Hydrology Present?	Yes No			
Remarks:		L Contraction of the second seco		
HYDROLOGY				
Wetland Hydrology Indicators	<u></u>		Secondary India	ators (minimum of two required)
Primary Indicators (minimum of		applv)	🔲 Surface So	il Cracks (B6)
Surface Water (A1)	🔲 Aquatic Faul	na (B13)	☐ Sparsely ∨	egetated Concave Surface (B8)
High Water Table (A2)		ts (B15) (LRR U)	<b>FT</b>	attems (B10)
Saturation (A3)	<b></b>	ulfide Odor (C1)		Lines (B16)
Water Marks (B1)		izospheres along Living R	· · · · · · · · · · · · · · · · · · ·	n Water Table (C2)
Sediment Deposits (B2)		Reduced Iron (C4)		urrows (C8) Visible on Aerial Imagery (C9)
Drift Deposits (B3)		Reduction in Tilled Soils (	· =	ic Position (D2)
Algal Mat or Crust (B4)		ain in Remarks)		uitard (D3)
Inundation Visible on Aeria	• • •		FAC-Neuti	
Water-Stained Leaves (B9				moss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes No Depth	(inches): <u>NA</u>		. 1
Water Table Present?	Yes NoDépth	(inches): 700"		
Saturation Present?	Yes No Depth	(inches):	Wetland Hydrology Pres	ent? Yes No
(includes capillary fringe) Describe Recorded Data (streat	am gauge, monitoring well, aeri	al photos, previous inspec	tions), if available:	
		• •	•	
Remarks:				
	¥ ²	- <i>11</i>		
		1		
	1	ت		

Sampling Point: wjop009-u

EGETATION (Four Strata) - Use scientific na	ames of pla	ants.		Sampling Point: W)	opee
	Absolute	Dominant		Dominance Test worksheet:	
ee Stratum (Plot size: 301×301)	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species 7	
Pinus taleda	50	<u> </u>	FAC	That Are OBL, FACW, or FAC:	_ (A)
Acer rubrum	20	<u> </u>	FAC	Total Number of Dominant	
Quercus nigra		<u>N</u>	FAC	Species Across All Strata:	_ (B)
Liquidambar styraciflua	5	N	FAC		
				Percent of Dominant Species 100%	(A/B)
					_ (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
·				Prevalence Index worksheet:	
•		·	· · · · · · · · · · · · · · · · · · ·	Total % Cover of:Multiply by:	
• · · _ · · · · · · · · · · · · ·			·	OBL species x1 =	
1	-80	= Total Co	ver	FACW species x 2 =	
50% of total cover: <u>H</u>	20% of	total cove	r: 10		
Sapling/Shrub Stratum (Plot size: 30'×30')		~1		FAC species x 3 =	
, Clethra alnifolia	10	N	FACW	FACU species x 4 =	
2 Ilex Opaca	5	N	FAC	UPL species x 5 =	
3 Persea Palustris	30		FACW	Column Totals: (A)	(B)
			FAC		
Acer rubrum	5	- <del>X</del> -		Prevalence Index = B/A =	
5. Magnolia Vivginiana	<u> </u>	<u>_</u> N	FACW	Hydrophytic Vegetation Indicators:	
6			·i	1 - Rapid Test for Hydrophytic Vegetation	ı
7				2 - Dominance Test is >50%	
8		= Total C		3 - Prevalence Index is ≤3.0 ¹	
2.	رماس ،	= Total C	over	Problematic Hydrophytic Vegetation ¹ (Ex	plain)
50% of total cover: 3	<u>く,&gt;</u> 20% o	of total cove	er: <u>15</u>		
Herb Stratum (Plot size: 30' X 30')	~			¹ Indicators of hydric soil and wetland hydrolog	gy must
1. Arhadinasia gigontea		4	FAC	be present, unless disturbed or problematic.	
				Definitions of Four Vegetation Strata:	
2				•	
3				<ul> <li>Tree – Woody plants, excluding vines, 3 in. (</li> </ul>	7.6 cm) (
4				more in diameter at breast height (DBH), reg	ardless o
5				height.	
6				- Sapling/Shrub - Woody plants, excluding vi	ines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m)	) tall.
				-	
8					regardles
9				_ of size, and woody plants less than 3.28 ft ta	<b>i</b> ii.
10				- Woody vine - All woody vines greater than	3.28 ft ir
11				height.	
				-   -	
12		= Total (		-	
· · · · · · · · · · · · · · · · · · ·					
50% of total cover:	<u> &lt;</u> 20%	of total co	ver: <u> </u>	- 1	
			-Ar		
Woody Vine Stratum (Plot size: <u>30 X 30</u> )	<u></u>		トキレ		
Woody Vine Stratum (Plot size: 30' X30')	5	y.			
1. Vitis rotundifolia	<u> </u>	⊹	FAC		
1. Vitis rotunditolia 2. smilax rotunditolia	5	- <u>¥</u>	_FAC		
1. Vitis rotundifolia	2	¥	FAC	-	
1. Vitis rotunditolia 2. smilax rotunditolia	<u>5</u> 2	¥ 			
1. <u>Vitis rotundifolia</u> 2. <u>Smilax rotundifolia</u> 3 4	<u>5</u> 2	¥			
1. Vitis rotundifolia 2. smilax rotundifolia	<u>5</u> 2  7			Hydrophytic Vegetation	
1. <u>Vitis rotundifolia</u> 2. <u>Smilax rotundifolia</u> 3 4 5	<u>5</u> 2 	 		Vegetation	
1. Vitis rotunditolia 2. Smilax rotunditolia 3 4 5 50% of total cover:				Vegetation	
1. <u>Vitis rotundifolia</u> 2. <u>Smilax rotundifolia</u> 3 4 5				Vegetation	
1. Vitis rotunditolia 2. Smilax rotunditolia 3 4 5 50% of total cover:				Vegetation	
1. Vitis rotunditolia 2. Smilax rotunditolia 3 4 5 50% of total cover:				Vegetation	
1. Vitis rotunditolia 2. Smilax rotunditolia 3 4 5 50% of total cover:				Vegetation	
1. Vitis rotundifolia 2. <u>Smilax</u> rotundifolia 3 4 5 50% of total cover:				Vegetation	
1. Vitis rotundifolia 2. <u>Smilax</u> rotundifolia 3 4 5 50% of total cover:				Vegetation	

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## Sampling Point: Wipp 009_U

SOIL								Sampling Point.	
Profile Desc	ription: (Describe t	o the dept	h needed to docum	ent the ir	dicator (	or confirm t	the absence o	f indicators.)	
Depth	Matrix		Redox	Features		<u> </u>			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Remarks	
0-8_	104R 3/3	100				<u> </u>			
8-12	104R 3/2	98	104R3/6	2	C	$\overline{\mathcal{M}}$	Ľ		
	104R4/2	98	104R4/4	2					i
12-20	WINTIL	10	10412714	<u>o</u> t	<u> </u>		<u> </u>		
						<u> </u>			
			· · · · · · · · · · · · · · · · · · ·				· ·		
		·				· ·			
								,	<u> </u>
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise note	ed.)		Indicators f	for Problematic Hydric Se	oils ³ :
Histosol	I (A1)		Polyvalue Be	low Surfa	ce (S8) <b>(l</b>	RR S, T, U)	) 🛄 1 cm M	uck (A9) <b>(LRR O)</b>	
Histic E	pipedon (A2)		🔲 Thin Dark Su	rface (S9)	(LRR S,	T, U)		uck (A10) (LRR S)	
Black H	istic (A3)		Loamy Mucky	y Mineral	(F1) <b>(LR</b> F	R O)		ed Vertic (F18) (outside M	
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)			ont Floodplain Soils (F19) (	
	d Layers (A5)		Depleted Mat					lous Bright Loamy Soils (F	20)
	Bodies (A6) (LRR P		Redox Dark					(A 153B)	
	ucky Mineral (A7) (Ll							arent Material (TF2)	
	resence (A8) (LRR L	J)	Redox Depre	•	8)			hallow Dark Surface (TF12	:)
	uck (A9) (LRR P, T)		Marl (F10) (L			(54)	Uner (	Explain in Remarks)	
	ed Below Dark Surfac	æ (A11)	Depleted Oc			-	T) ³ lodio	ators of hydrophytic vegeta	ation and
	ark Surface (A12)		Iron-Mangan				'	and hydrology must be pro	
	Prairie Redox (A16) (							ess disturbed or problemat	
	Mucky Mineral (S1) (	LKK 0, 5)	Delta Ochric					ess disturbed of problemat	io.
	Gleyed Matrix (S4) Redox (S5)		Piedmont Flo						
	d Matrix (S6)				-		A 149A, 153C	. 153D)	
	urface (S7) (LRR P,	S. T. U)		Dingin Lou		() (		,,	
	Layer (if observed)						1		
		,.							
Type:	······································							Present? Yes	No
	nches):						Hydric Son		<u> </u>
Remarks:									
		•							
		-							
1									
1									



Upland data point wjop009_u facing east.

### WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: John Ston Sampling Date: 4/13/1	<
Applicant/Owner: Dominion	State: NC Sampling Point: Wjop 028s	 SW
Investigator(s): ESI-J, Harbour	Section, Township, Range: NA	-
Landform (hillslope, terrace, etc.): <u>flat</u>		-
	Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>U-2</u>	:
	52059 Long: 78.27158 Datum: W65	_04
Soil Map Unit Name: Granthom Silt Loom	NWI classification: $_{<}$	_
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes 🔽 No	-
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       Yes       No	Is the Sampled Area within a Wetland? Yes No	
remarks:	,	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)	7
Primary Indicators (minimum of one is required; check all that apply)	) Surface Soil Cracks (B6)	
Surface Water (A1) Aquatic Fauna (B1	13) Sparsely Vegetated Concave Surface (88)	
High Water Table (A2) Mari Deposits (B1	- · · ·	
Saturation (A3) Hydrogen Sulfide		
	heres along Living Roots (C3) Dry-Season Water Table (C2)	
Sediment Deposits (B2) Presence of Redu	··· <u> </u>	
Drift Deposits (B3)     Recent Iron Reduct     Algal Mat or Crust (B4)     Thin Muck Surface	action in Tilled Soils (C6)     Saturation Visible on Aerial Imagery (C9)       action (C7)     Geomorphic Position (D2)	
Iron Deposits (B5) Other (Explain in I		
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)	1
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)	
Field Observations:		1
Surface Water Present? Yes No V Depth (inches	s): <u>NA</u>	
Water Table Present? Yes No Depth (inches		
Saturation Present? Yes Ves No Oppth (inches	es): <u> </u>	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:	-
Remarks:	······································	-
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## VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: Wjop 0285-W

20130	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30+30</u> )	% Cover	Species?	<u>Status</u>	Number of Dominant Species
				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3	·			Species Across All Strata:(B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100% (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
8	$\overline{\mathcal{O}}$			OBL species x 1 =
		= Total Cov		FACW species x 2 =
50% of total cover:	20% of	total cover	:	FAC species x 3 =
<u>Sapling/Shrub Stratum</u> (Plot size: <u>3DX3D</u> ) 1. Pinus tacda	20	$\mathbf{v}$	FAC	FACU species x 4 =
2. Symplocos, tinctoria	·	<u> </u>		UPL species x 5 =
3. Liquidambor Styraciflua	10	<u>-</u> <u>x</u>	FAC	Column Totals: (A) (B)
	<u> </u>	_N	FACCI	
4. Ulmus alatà	<u> </u>	<u>_N</u>	FACU	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1_Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
14	21	= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 18,	<b>7</b> 20% of	ftotal cover	: <u>/.4</u>	
Herb Stratum (Plot size: 15 × 15 )				¹ Indicators of hydric soil and wetland hydrology must
1. none				be present, unless disturbed or problematic.
2			. <u></u>	Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
i1				Woody vine – All woody vines greater than 3.28 ft in height.
12				
	D	= Total Co	ver	
50% of total cover:		f total cover		
Woody Vine Stratum (Plot size: 15×15)			•••••••••••••••••••••••••••••••••••••••	
1. VITIS cotundifolia	ID	$\checkmark$	FAC	
2. Lonicera Japonica	20	ý – ý –	FAC	
3. Smilax' bona - nox	<u> </u>		FAC	
		<u>_/v</u>	FAC	
4. <u>Rubus Argutus</u>			1110	
5	50		·	Hydrophytic
20		= Total Co		Vegetation Present? Yes No
50% of total cover: 25		f total cove	r: <u>10</u>	
Remarks: (If observed, list morphological adaptations bel	ow).			
No tree-sized vegetation				
J				

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Sampling Point: Wjop 0285-W

Profile Description: Descr	SOIL						<b>)</b>	~	San	npling Point:	vjop0285-
(Inches)       Color (moist)       %       Color (moist)       %       Type'       Loc'       Texture       Remarks         0-M       (I) NR 2//       IO       IO       Remarks       SL       Multy			to the dept				or confir	m the absence	of indicators	.)	
O-M       10 1R 2//       100       10 1R 5/b       10       C       M       5 L       Muckyl mixeud feytmel         1-2-D       10 1R 5/b       9D       10 1R 5/b       10       C       M       5 L							_Loc ²	Texture		Remarks	
L-2D       ID       VR 5/A       9D       IO       VR 5/A       ID       C       M       5L	0-4		100						mucky		1 Levtuso
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Histosol (A1)       Polyvalue Below Surface (S6) (LRR S, T, U)       I cm Muck (A9) (LRR O)       Histosol (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A0) (LRR S)       Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)       Loamy Gleved Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)       Stratified Layers (A5)       Corganic Bodies (A6) (LRR P, T, U)       Depleted Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)       Muck Presence (A8) (LRR P, T, U)       Depleted Dark Surface (F6)       (MLRA 153B)       Corganic Bodies (A6) (LRR P, T, U)       Depleted Dark Surface (F1)       Muck Presence (A8) (LRR P, T)       Mari (F10) (LRR U)       Depleted Below Dark Surface (A12)       Troic Manageness Masses (F12) (LRR O, P, T)       Mari (F10) (LRR U)       Depleted Below Dark Surface (A12)       Troic Manageness Masses (F12) (LRR O, P, T)       Blata (K11x, G4)       Beliat Cortic (F17) (MLRA 151)       Thick Surface (A12)       Hord-Manageness Masses (F12) (LRR O, P, T)       Blata Advirus (S4)       Beliat Cortic (F17) (MLRA 151)       Unbric Surface (F13) (LRR P, T, U)       wetland hydrotogy must be present, unless disturbed or problematic.       Sandy Mucky Mineral (S1) (LRR O, S)       Deliat Ochric (F17) (MLRA 150A, 150B)       Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Stripped Matrix (S6)       Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D)       Dark Surface (S7) (LRR P, S, T, U)       Re	4-20	10 YE 5/2	90	104R 5/6	10	2	M	<u>5L</u>			
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils ³ :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Hydrogen Sulfide (A4)       Stratified Layers (A5)       Depleted Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)       Anomalous Bright Loamy Soils (F20)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)       Indicators of hydrophytic vegetation and         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)       Depleted on thic (F17) (MLRA 151)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       No         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)			·					-			
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils ³ :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Hydrogen Sulfide (A4)       Stratified Layers (A5)       Depleted Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)       Anomalous Bright Loamy Soils (F20)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)       Indicators of hydrophytic vegetation and         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)       Depleted on thic (F17) (MLRA 151)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       No         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)											
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils ³ :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Hydrogen Sulfide (A4)       Stratified Layers (A5)       Depleted Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)       Anomalous Bright Loamy Soils (F20)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)       Indicators of hydrophytic vegetation and         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)       Depleted on thic (F17) (MLRA 151)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       No         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)			· ·					·			······
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils ³ :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Hydrogen Sulfide (A4)       Stratified Layers (A5)       Depleted Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)       Anomalous Bright Loamy Soils (F20)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)       Indicators of hydrophytic vegetation and         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)       Depleted on thic (F17) (MLRA 151)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       No         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)		+	·	· · · · · · · · · · · · · · · · · · ·							······
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils ³ :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Hydrogen Sulfide (A4)       Stratified Layers (A5)       Depleted Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)       Anomalous Bright Loamy Soils (F20)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)       Indicators of hydrophytic vegetation and         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)       Depleted on thic (F17) (MLRA 151)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       No         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)			· ·					• •			
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Soils ³ :         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       1 cm Muck (A9) (LRR O)         Histosol (A1)       Polyvalue Below Surface (S8) (LRR S, T, U)       2 cm Muck (A10) (LRR O)         Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Hydrogen Sulfide (A4)       Stratified Layers (A5)       Depleted Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)       Anomalous Bright Loamy Soils (F20)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)       Indicators of hydrophytic vegetation and         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)       Depleted on thic (F17) (MLRA 151)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       No         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)	¹ Type: C=C	oncentration, D=Depl	letion. RM=	Reduced Matrix, M	 S≃Maskeo	Sand Gr	ains.	² Location:	PL=Pore Lini	ing M=Matrix	
Histic Epipedon (A2)       Thin Dark Surface (S9) (LRR S, T, U)       2 cm Muck (A10) (LRR S)         Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Stratified Layers (A5)       X       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         Stratified Layers (A5)       X       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck (A9) (LRR P, T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)       Dark Surface (S7) (LRR P, S, T, U)         Restrictive Layer (If observed):       Type:       No       No											
Black Histic (A3)       Loamy Mucky Mineral (F1) (LRR O)       Reduced Vertic (F18) (outside MLRA 150A, B)         Hydrogen Sulfide (A4)       Loamy Gleyed Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Stratified Layers (A5)       X       Depleted Matrix (F3)       Anomalous Bright Learny Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         ✓ 5 cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)         1 cm Muck (A9) (LRR P, T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       other (Explain in Remarks)         Thick Dark Surface (A12)       tron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 150A, 150B)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F20) (MLRA 149A)       Anomalous Bright Learny Soils (F20) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D)       Derk Surface (S7) (LRR P, S, T, U)         Restrictive Layer (If observed):		• •		· ·			• •				
Hydrogen Sulfide (A4)       Loamy Gleved Matrix (F2)       Piedmont Floodplain Soils (F19) (LRR P, S, T)         Stratified Layers (A5)       Depleted Matrix (F3)       Anomalous Bright Loamy Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         ✓ 5 cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR P, T)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)         1 cm Muck (A9) (LRR P, T)       Mari (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         I coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       Pledmont Floodplain Soils (F19) (ULR 0, P, T)         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F13) (LRR P, T, U)       Pledmont Floodplain Soils (F19) (ULR 150A)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 150A, 150B)       Netland hydrology must be present, unless disturbed or problematic.         Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dert Carface (S7) (LRR P, S, T, U)       Restrictive Layer (If observed):       No       No         Type:       Depth (Inches):       No       No <td></td> <td>• • •</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		• • •									
Stratified Layers (A5)       X       Depleted Matrix (F3)       Anomalous Bright Learny Soils (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         ✓       5 cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)         1 cm Muck (A9) (LRR P, T)       Mari (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Thick Dark Surface (A12)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F20) (MLRA 149A)       Anomalous Bright Learny Soils (F20) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D)       Dark Surface (S7) (LRR P, S, T, U)         Restrictive Layer (if observed):       .       .       Yes       No         Type:					-		(0)				
Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153B)         S cm Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Parent Material (TF2)         Muck Presence (A8) (LRR U)       Redox Depressions (F8)       Very Shallow Dark Surface (TF12)         1 cm Muck (A9) (LRR P, T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Other (Explain in Remarks)         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       unless disturbed or problematic.         Stripped Matrix (S6)       Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D)       Dark Surface (S7) (LRR P, S, T, U)         Restrictive Layer (if observed):       Hydric Soil Present?       Yes       No	Stratifie	d Layers (A5)				,			•	• • •	
Muck Presence (A8) (LRR U)      Redox Depressions (F8)      Very Shallow Dark Surface (TF12)        1 cm Muck (A9) (LRR P, T)      Mari (F10) (LRR U)      Other (Explain in Remarks)        Depleted Below Dark Surface (A11)      Depleted Ochric (F11) (MLRA 151)      Other (Explain in Remarks)        Thick Dark Surface (A12)      Iron-Manganese Masses (F12) (LRR O, P, T)								(ML	RA 153B)		
1 cm Muck (A9) (LRR P, T)       Mari (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleted Ochric (F11) (MLRA 151)       Indicators of hydrophytic vegetation and         Thick Dark Surface (A12)       Iron-Manganese Masses (F12) (LRR O, P, T)       Indicators of hydrophytic vegetation and         Coast Prairie Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be present,         Sandy Mucky Mineral (S1) (LRR O, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or problematic.         Sandy Gleyed Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)       unless disturbed or problematic.         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):       Hydric Soil Present?       Yes         Type:				·						• •	
Depleted Below Dark Surface (A11)     Depleted Ochric (F11) (MLRA 151)     Thick Dark Surface (A12)     Iron-Manganese Masses (F12) (LRR O, P, T)     Sandy Mucky Mineral (S1) (LRR O, S)     Delta Ochric (F13) (LRR P, T, U)     Sandy Gleyed Matrix (S4)     Reduced Vertic (F18) (MLRA 150A, 150B)     Sandy Redox (S5)     Piedmont Floodplain Soils (F19) (MLRA 149A)     Stripped Matrix (S6)     Dark Surface (S7) (LRR P, S, T, U)     Restrictive Layer (if observed):     Type:      Depth (inches):			,	- ·	•	0)					)
Coast Prairie Redox (A16) (MLRA 150A)      Umbric Surface (F13) (LRR P, T, U)       wetland hydrology must be present, unless disturbed or problematic.        Sandy Mucky Mineral (S1) (LRR O, S)      Delta Ochric (F17) (MLRA 151)       unless disturbed or problematic.        Sandy Gleyed Matrix (S4)      Reduced Vertic (F18) (MLRA 150A, 150B)	Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)				(=	indiaco)	
							r, U)				
							60A, 150E			or probleman	ι.
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): No				Piedmont Flo	oodplain S	ioils (F19)	(MLRA 1	49A)			
Restrictive Layer (if observed):       ,         Type:				Anomalous E	Bright Loai	my Soils (	(F20) (ML	RA 149A, 153C	, 153D)		
Type:									·		
	_		· .						,		
Remarks:	Depth (in	ches):	_					Hydric Soli	Present?	Yes	No
	Remarks:	· · · •					· · · · · · · · · · · · · · · · · · ·				



Wetland data point wjop028s_w facing southwest.