WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: JOhn	ston	Sampling Data 4/13/15
Applicant/Owner: DOMINION		States ACC	Sampling Date:
Investigator(a) EST- J. HAYDOUX	Ô		Sampling Point:
	Section, Township, Range		
Landform (hillslope, terrace, etc.): <u>That</u>	Local relief (concave, con	vex, none):	Slope (%): <u>0-d</u>
Subregion (LRR or MLRA): LRN P Lat: 35.	Sauga Lor	18.2713	Datum: <u>W65</u> 84
Soil Map Unit Name: Gronthom Silt Loam		NWI classifie	cation:NH
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes <u>/</u> No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "No	ormal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If need	ed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point loc	ations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes No			
Hydric Soil Present? Yes No	Is the Sampled A	rea	
Wetland Hydrology Present? Yes No V	within a Wetland	? Yes	No
Remarks:			
eage of pasture			
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	· · · · · · · · · · · · · · · · · · ·		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary indicators (minimum of one is required; check all that apply)		Surface Soil	Cracks (B6)
Surface water (A1) Aquatic Fauna (B1	3)	Sparsely Ve	getated Concave Surface (B8)
High water Table (A2) Mari Deposits (B1) (LKK U) Ddar (C1)	Drainage Pa	atterns (B10)
Water Marks (B1) Ovidized Phizoph	Joor (CT) area along Living Paole (C	Moss Inm L	
Sediment Deposits (B2)	red iron (C4)	Crawfish Bu	
Drift Deposits (B3) Recent Iron Redu	tion in Tilled Soils (C6)	Saturation V	fisible on Aerial Imagony (CO)
Algal Mat or Crust (B4) Thin Muck Surface	(C7)	Geomorphic	Position (D2)
Iron Deposits (B5) Other (Explain in I	(emarks)	Shallow Agu	uitard (D3)
Inundation Visible on Aerial Imagery (B7)	•	FAC-Neutra	I Test (D5)
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Depth (inches): <u>NP</u>		
Water Table Present? Yes No Depth (inches): <u>>) (</u>		
Saturation Present? Yes No Depth (inches): <u>>)</u> Wetla	and Hydrology Prese	nt? Yes No
(includes capillary tringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	os, previous inspections)	f available:	
Remarks:			
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VEGETATION (Four Strata) - Use scientific names of plants.

Sampling Point: Wjop 028-U

20120	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 - 30 -)	<u>% Cover</u>	<u>Species?</u>	<u>Status</u>	Number of Dominant Species
1. Finus laeda	<u> </u>	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:
4				
5.				Percent of Dominant Species
6				That Are OBL, FACW, OF FAC: (AB)
7	·			Prevalence index worksheet:
· · · · · · · · · · · · · · · · · · ·				Total % Cover of: Multiply by:
ð	·			OBI, species x 1 =
	<u></u>	= Total Co	ver	
50% of total cover:) 20% o	f total cove	r: <u> </u>	
Sapling/Shrub Stratum (Piot size:)	~			FAC species x 3 =
1. Pinus Taeda	<u> </u>	<u> </u>	FAC	FACU species x 4 =
2. Liguidambar Styracifiva	5	_ Y	FAC	UPL species · x 5 =
3.		_		Column Totals: (A) (B)
4.	· <u> </u>			
5	·		·	Prevalence Index = B/A =
o	·	·	·	Hydrophytic Vegetation Indicators:
0	·		·	1 - Rapid Test for Hydrophytic Vegetation
/				2 - Dominance Tèst is >50%
8	. <u> </u>			3 - Prevalence Index is ≤3.0 ¹
	10	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% o	f total cove	r: <u>2</u>	
Herb Stratum (Plot size: 15×15)				
1 Andropagan Virginicus	5	У	FAC	be present, unless disturbed or problematic.
2 Salidaan altissima	<u> </u>	Ń	FACA	Definitions of Four Vegetation Strate
2. <u>DOMACON UN 1554114</u>		· · · · ·	<u>, , , , , , , , , , , , , , , , , , , </u>	Demintons of Pour Vegetation Strata:
3	1		· •	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
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				
9				of size, and woody plants less than 3.28 ft tail
10	•	·		or size, and woody plants less than 5.20 it tail.
10				Woody vine - All woody vines greater than 3.28 ft in
	•	·		height.
12				
		= Total Co	over	
50% of total_cover: 3.	<u>5</u> 20% c	of total cove	n: <u>1.4</u>	
Woody Vine Stratum (Plot size; 15×15)				
1 Smilax bong-nox	10	У	FAC	
2 L-anicera dapanica	15	· · · ·	FACU	
2. <u>Dornetra</u> Septembra		- —/—	<u></u>	
3				
4				
5				Hydrophytic
	25	_ = Total Co	over	Vegetation
50% of total cover: 12	5 20%	- of total cove	er: 5	Present? Yes No
Remarks: (If observed, list mornhological adaptations bel			· 	
	<i></i>			
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SOIL

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Sampling Point: Wjop 028.4

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Profile Description: (Describe to the dep	h needed to document the Indicator or confir	m the absence of Indicators.)
Depth <u>Matrix</u>	Redox Features	·
<u>(inches)</u> <u>Color (moist)</u> <u>%</u>	<u>Color (moist)</u> % <u>Type¹</u> Loc ²	Texture Remarks
0-0 104R3/3 (00		
8-20 104R5/3 100		<u>ل</u>
		· · · · · · · · · · · · · · · · · · ·
	······	
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Solls ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T,	U) 1 cm Muck (A9) (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)	Loamy Gleyed 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 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)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, F	P, T) °Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 1504	() Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR U, S)	Delta Ocnfic (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (54)	Reduced Venic (F18) (NLRA 150A, 150E	3) 140 A)
Stripped Matrix (S6)	Apomalous Bright Learny Soils (F19) (MLKA 1	143A) RA 140A 452C 452D)
	Anomalous angin Loamy Sons (P20) (MC	NA 149A, 100C, 100D)
I Dark Surface (S7) /I RR P S T II)		
Dark Surface (S7) (LRR P, S, T, U) Restrictive Laver (if observed):		· · · · · · · · · · · · · · · · · · ·
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):		
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:		
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): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Hydric Soil Present? Yes No

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Upland data point wjop028_u facing northeast.

WETLAND DETERMINATION DA	TA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	city/County: Johnston Sampling Date: 7/23/14
Applicant/Owner: Dominion	State: N ⊂ Sampling Point: wop 011€_1
Investigator(s): EST-K.MUIPhV29	Section, Township, Range:NA
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): <u>FlQ+</u> Slope (%): <u>O-2</u>
Subregion (LRR or MLRA): レアアク Lat: 三	35,52015 Long: -78,27444 Datum: W658
Soil Map Unit Name: <u>Gronthom Silt (UDM</u>	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes V No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signific	antly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology natural	ly problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No 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 ar	ply) L Surface Soil Cracks (B6)
High Water Table (A2)	(B15) (LRR U)
Saturation (A3)	fide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)	cospheres along Living Roots (C3)
☐ Sediment Deposits (B2) ☐ Presence of F	Leduced Iron (C4) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8)
Algal Mat or Crust (B4)	Inface (C7)
Iron Deposits (B5)	n in Remarks) 🗍 Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	년 Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (in	uches): NA
Water Table Present? Yes No Depth (in	iches): 720 '
Saturation Present? Yes No Depth (in (includes capillary fringe)	iches): 720'' Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	
This wetland	d was still forested in 10/2012.

Sampling Point: Wjop Oll F-W

/EGETATION (Four Strata) – Use scientific na	mes of pla	ants.		Sampling Point:
30×30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>1</u>	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species <u>3</u> (A)
2				Total Number of Dominant 2
3			<u>-</u>	Species Across All Strata: (B)
4				Percent of Dominant Species (κ / λ)
5				That Are OBL, FACW, or FAC: (O O (A/B)
6	<u> </u>		<u> </u>	Prevalence Index worksheet:
o				<u>Total % Cover of:</u> Multiply by:
, <u></u>	0			OBL species x 1 =
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X 30)			·	FAC species x 3 =
1. Liquidambar Styraciflux	5	<u> </u>	FAC	FACU species x 4 =
2		,		UPL species x 5 =
3				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				3 - Prevalence Index is ≤3.0 ¹
2.9	<	= Total Co	ver I	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $\cancel{3}$	<u></u> 20% of	total cover	:	
Rhevia alifanus	(c)	V	OBL	¹ Indicators of hydric soil and wetland hydrology must
2 SCIVPUS CURETINGS	10-	`	OBI	Definitions of Four Vegetation Strata:
3 12440105POVA microcarpa	<u> </u>	Ń	OBL	Seminoris of Four Vegetation official
4 CAVEX giganteo	$\overline{\zeta}$	N	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast beight (DBH), regardless of
5. POlygonum argyrololeon	- <u> </u>	3	MAL	height.
6				Sapting/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			·	
I.	<u>- 32</u>	= Total Co	ver C	· ·
	20% 01	r total cove	r: <u>@/(</u>	
Voody vine Stratum (Plot size: <u>SCK SC</u>)				·
2			·	
3			·	
۵				
5		. .	•	Under all all a
	0	= Total Co	ver	Vegetation
50% of total cover:	20% of	f total cove	r:	Present? Yes No
Remarks: (If observed, list morphological adaptations be	low).			
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SOIL

Sampling Point: wjopOll€_w

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Profile Des	cription: (Describe t	to the dept	th needed to docum	nent the i	ndicator	or confirm	the absence of in	dicators.)
Depth	Matrix		Redox	Feature	s Tural	1 + - 2	Tautura	Domorka
<u>(incnes)</u>	$\frac{Color(moist)}{(21023/1)}$	<u></u>		%	Type		<u>exture</u>	Remarks
	IN OF		10004/2					·
5-17	1000000000000000000000000000000000000	40			<u> </u>		<u> </u>	
14-20	104R4/1	<u>45</u>	10VR 5/3		Ç	\underline{N}	<u></u>	
			10YR 5/3	<u>_^</u>	<u> </u>	PL	<u>_SL</u>	
							-	
•		·		.	·	·		
17								Dens Linica, M. Matrix
Hydric Soil	oncentration, D=Dep	ietion, KM= able to all	Reduced Matrix, MS	= Masked	ad)	ains.	Location: PL=	Pore Lining, M=Matrix.
	1(A1)			iow Surfa	ca (S8) /I	PP S T II		
	bipedon (A2)		Thin Dark Su	rface (S9) (LRR S.	T. U)		(A10) (LRR S)
Black H	listic (A3)		Loamy Mucky	/ Mineral	(F1) (LRF	20)	Reduced V	ertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix ((F2)	•	Piedmont F	loodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Mat	rix (F3)			Anomalous	Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U) ייי די סיפנ	Redox Dark S	Surface (F	-6) . (E7)			53B) Matarial (TE2)
	ucky Willeral (A7) (Lh resence (A8) (LRP 11	xrx P, I, U) 1	Redox Depre	n Sullace ssione /F	ま(F7) (8)			watenar (TF2) w Dark Surface (TF12)
	uck (A9) (LRR P. T)	,	Marl (F10) (L	RRU)	-)		Other (Exol	lain in Remarks)
Deplete	ed Below Dark Surface	e (A11)	Depleted Oct	nric (F11)	(MLRA 1	51)	. <u> </u>	
Thick D	ark Surface (A12)		Iron-Mangane	ese Mass	es (F12)	(LRR 0, P,	T) ³ Indicators	s of hydrophytic vegetation and
Coast F	Prairie Redox (A16) (N	MLRA 150/	A) 🔛 Umbric Surfa	ce (F13)	(LRR P, 1	r, U)	wetland	hydrology must be present,
Sandy	Mucky Mineral (S1) (I	_RR O, S)	Delta Ochric	(F17) (Mi tio (⊑19)	LRA 151) /ML D.A. 1		unless o	disturbed or problematic.
	Gleyed Matrix (54) Redox (55)		Piedmont Flo	uc (F18) odolain S	(MILKA 1: Soils (F19)	MIRA 14	94)	
Strippe	d Matrix (S6)		Anomalous B	Bright Loa	my Soils	(F20) (MLR	A 149A, 153C, 153	3D)
Dark S	urface (S7) (LRR P, S	S, T, U)	—	Ũ				,
Restrictive	Layer (if observed):	:						
Туре:								
Depth (ii	nches):						Hydric Soil Pres	sent? Yes 🔽 No
Remarks:							<u> </u>	
1								
						,		
		,						
						•		



Wetland data point wjop011ef_w facing southwest

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	City/County: Johnston Sampling Date: 7/23/14
upplicant/Owner: Dominion	State: NC Sampling Point: Wop OILF-W
nvestigator(s): ESI - K, MUYPUYEY	Section, Township, Range: NA
andform (billslone terrace etc.): 510 H	Local relief (concave, convex, none); FIOH Slope (%): 0-2
Subragion (IRB or MIRA): LRRP Lat: 35	.51927 Long: -78,27440 Datum: N 5384
Sall Man Linit Nama: G (20tham Silt 1000)	NWA classification: PFO
No elimetia (hydrologia conditions on the site hydrol for this time of)	vear2 Ves No (If no explain in Remarks)
	the disturbed? Are "Normal Circumstances" present? Yes
Are Vegetation, Soll, of Hydrology significant	ry disturbed: Ale Normal Circumstances present: Tes (16
Are vegetation, Soli, of Hydrology flatorally p	nobernatio: (in needed, explain any answers in Kentarks.)
SUMMARY OF FINDINGS – Attach site map showir	ig 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
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	M Surface Soil Cracks (B6)
Surface Water (A1)	B13) B13) Drainage Detterme (P10)
High Water Table (A2) Mari Deposits (t	Ae Odor (C1)
Water Marks (B1)	spheres along Living Roots (C3)
Sediment Deposits (B2)	duced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	duction in Tilled Soils (C6)
Algal Mat or Crust (B4)	ace (C7) Geomorphic Position (D2)
Iron Deposits (B5)	n Remarks)
Linundation Visible on Aerial Imagery (B7)	C-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inc	hes): NA
Water Table Present? Yes No Depth (inc	hes): 720"
Saturation Present? Yes No Depth (inc	hes): 720" Wetland Hydrology Present? Yes No
(includes capillary fringe)	hotos, previous inspections), if available:
Describe recorded bata (siteam gadge, monitoring won, actual p	
Remarks:	

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Sampling Point: wjopOllf:w

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

- Juca J	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\underline{SO'XBO'}$)	<u>% Cover</u>	Species?		Number of Dominant Species
1. PINCIS FORCE		<u> </u>		That Are OBL, FACVV, of FAC: (A)
2. Liquidambar Styrocistua			++-	Total Number of Dominant
3. ACCV VUOLUM	15	<u> </u>	MAC	Species Across All Strata: 7 (B)
4.		·		Description of Description
5				That Are ORL EACIN or EAC: (UU) The (A/B)
<u>. </u>		·		
-			·	Prevalence Index worksheet:
7		·	·	Total % Cover of: Multiply by:
8	$-\frac{1}{10}$		·	OBI species x1 =
_	40	= Total Co	ver /	
50% of total cover:	<u>)</u> 20% o	f total cove	r: <u>7</u> 5	
Sapling/Shrub Stratum (Plot size: $30' \times 30'$)				FAC species X3 =
1 PERSLON Palustris	10	<u> </u>	FACW	FACU species x 4 =
2) jawidambar Skyloriz(4)a		N	FAC	UPL species x 5 =
2 Clerker Bla Filia	$-\frac{1}{10}$	$\overline{\nabla}$	TACW	Column Totals: (A) (B)
3. CIEMMA MINICIA		- <u></u>	EACW	
4. Cyrilla racemisiona	<u> </u>	- 4⁄	FUCM	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 Dominance Test is >50%
9	<u> </u>			
0	<u>- 2</u> <			3 - Prevalence index is ≤3.0
		_ = 10tal C	uver	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: 1	20% (of total cove	er:	
<u>Herb Stratum</u> (Plot size: $\frac{\mathcal{S}\mathcal{U}^{*} \times \mathcal{S}\mathcal{U}^{*}}{\mathcal{S}\mathcal{U}^{*}}$)		۰.		¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	<u> </u>	FAC	be present, unless disturbed or problematic.
> Windwardla areolata	3	- V/	FACW	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
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
·······				
0	<u> </u>			- Herb - All herbaceous (non-woody) plants, regardless
9				
10				- Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				_
	<	= Total (Cover	
EOOV of total covers	7.5 200		3	
	<u>, </u>	o or total CO	voi	-
Woody Vine Stratum (Plot size: SV A SV)	<	λ.	The	
1. Smilax Cotunditolia		7_	- Fuc	-
2.				_
3				
				-
+ ,				-
5				- Hydrophytic
	<u>, / _ ></u>	= Total	Cover	Property Van No
50% of total cover: _o	(, <u>)</u> 209	6 of total co	over:	
Remarks: (If observed, list mombological adaptations	below).			
	,			
1				

	ription: (Describe	to the dept	h needed to docu	nent the ind	icator o	r confirm t	he absence of	indicators	5.)	
pth	Matrix		Redo	x Features	Tunci	1002	Texture		Bomotio	
<u>cnes)</u>	$\frac{COIOF(MOIST)}{1/3}$			<u> </u>	түре				Remarks	
	10104/1		UNURS12		0		- <u> </u>			
$\frac{-1}{2}$	INCR I	$\frac{10}{40}$	$\frac{10}{10}$	$-\frac{0}{20}$	<u></u>	<u> </u>				
- 204	10YK > 71	<u>- 60</u>	IUYKO/		\underline{D}					
pe: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked S	and Gra	ins.	² Location: P	L=Pore Lin	ing, M=Matrix.	ile ³ .
Histosol Histosol	l (A1)		Polyvalue B	elow Surface	•/ •(S8)(L IRR S	RR S, T, U)		ick (A9) (LF	RR O)	
Black H	istic (A3)		Loamy Muc	ky Mineral (F	1) (LRR	0)	Reduced	d Vertic (F1	8) (outside ML	RA 150A,B
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (F2	2)	,		nt Floodplai	in Soils (F19) (L	RR P, S, T
Organic	a Layers (A5) Bodies (A6) (LRR F	р. т. ())	Redox Dark	Surface (F6)			A 153B)	Luarity Solis (i Z	0)
5 cm M	ucky Mineral (A7) (L	RR P, T, U	Depleted D	ark Surface (, F7)		Red Par	ent Materia	al (TF2)	
Muck P	resence (A8) (LRR l	J)	Redox Dep	ressions (F8)	ł		Very Sh	allow Dark	Surface (TF12)	
1 cm M	uck (A9) (LRR P, T)	- (044)	Marl (F10)	LRR U)		-4)	Uther (E	Explain in R	emarks)	
Thick D	ark Surface (A12)	e (ATT)	iron-Manga	nese Masses	(F12) (LRR 0. P. 1	T) ³ Indica	tors of hvd	rophytic vegetat	ion and
Coast F	Prairie Redox (A16) (MLRA 150	A) 🔲 Umbric Sur	face (F13) (L	RR P, T	, U)	wetla	and hydrolo	gy must be pres	sent,
Sandy	Mucky Mineral (S1)	LRR O, S)	🔲 Delta Ochri	c (F17) (MLF	RA 151)		unle	ss disturbe	d or problematic	
Sandy	Gleyed Matrix (S4)		Reduced V	ertic (F18) (N	ALRA 15	0A, 150B)				
Sandy	Redox (S5) d Matrix (S6)			Bright Loam	us (F19) w Soils /	(MLRA 14) E20) (MLR.	9A) A 149A 153C	1530)		
Dark S	urface (S7) (LRR P.	S, T, U)		Digit Loan	iy Colla (1 207 (MEIG		1000)		
strictive	Layer (if observed):				••				
Type:										
Depth (i	nches):						Hydric Soil	Present?	Yes	No
emarks:										
									·	



Wetland data point wjop011f_w facing southwest.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	city/County: JOhn Sta	s s	Sampling Date: 7/23/14
Applicant/Owner: DOMINION			Sampling Point: wjopOll_u
Investigator(s): ESI - KIMURPEIREG	Section, Township, Range:	NA	
Landform (billslope, terrace, etc.); FIQ+	_ Local relief (concave, conv	rex, none): FIA+	Slope (%): 2-4
Subregion (I BR or MI BA): LRR C Lat:	55,51935 Lond	-78.2744	Datum: W5584
Soil Man Unit Name: 6 Van thom Silt 100	\mathbf{N}	NWI classificat	tion: NA
Are climatic / bydrologic conditions on the site typical for this time	of year? Yes	(if no. explain in Rei	marks.)
Are Vegetation Soil or Hydrology signifi	cantly disturbed? Are "Nor	rmal Circumstances" pre	esent? Yes No
Are Vegetation Soil or Hydrology natura	Ilv problematic? (If needs	ed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point loca	ations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Ar within a Wetland?	rea Ves	No
HYDROLOGY	·		
Wetland Hydrology Indicators:	·	Secondary Indical	tors (minimum of two required)
Primary Indicators (minimum of one is required: check all that Surface Water (A1) Aquatic Fau High Water Table (A2) Marl Deposit Saturation (A3) Hydrogen S Water Marks (B1) Oxidized Rf Sediment Deposits (B2) Presence or Drift Deposits (B3) Recent Iron Algal Mat or Crust (B4) Thin Muck S Iron Deposits (B5) Other (Expl Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	apply) na (B13) ts (B15) (LRR U) ulfide Odor (C1) izospheres along Living Roots (C Reduced Iron (C4) Reduction in Tilled Soils (C6) Surface (C7) ain in Remarks)	Surface Soil (Sparsely Veg Drainage Pat Moss Trim Li C3) Dry-Season V Crayfish Burn Saturation Vi Geomorphic Shallow Aqu FAC-Neutral Sphagnum r	Cracks (B6) etated Concave Surface (B8) tems (B10) nes (B16) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) Position (D2) itard (D3) Test (D5) noss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth Water Table Present? Yes No Depth Saturation Present? Yes No Depth (includes capillary fringe) Depth Depth	(inches): NA (inches): ZO" (inches): ZO" Wet	land Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gadge, monitoring weil, der			
			· · ·

E

Sampling Point: wjop011_u

VEGETATION	(Four Strata) – Use	scientific	names	of plants.
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20(1220)	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\frac{50 \times 50}{100}$)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1. LIRX ORACO	12	\rightarrow	FAC	That Are OBL, FACW, or FAC: (A)
2. LIGUISAMBON STYLOCIEIUS	<u>~</u>	<u> </u>	EAC	Total Number of Dominant
3. BURRIAS NIGER	<u> </u>		Fuc	Species Across All Strata: (B)
4				Percept of Dominant Species
5			<u> </u>	That Are OBL, FACW, or FAC: (A/B)
6				Provolance Index workshoot
7		·		Total % Cover of: Multiply by:
8				
, 	<u>45</u>	= Total Co	ver	
50% of total cover:	<u>></u> 20% o	f total cove	r:	FAC w species x 2
Sapling/Shrub Stratum (Plot size: 30×30)	20		~~~	
1. <u>Flex</u> oraca	30	. <u> </u>	HAC	+ACU species X 4 =
2. Magnolia virginiana	10	<u> </u>	FACW	UPL species X 5 =
3. Vaccinum cotymbosum	5	N	FACW	Column Totals: (A) (B)
4. SYMPLOCUS tinctorion	5	<u>N</u>	EAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				Transpired regulation indicators
7				2 Deminando Test is >50%
0				
o	50	= Total Co		\square 3 - Prevalence index is ≤ 3.0
E0% of total appart	> 20%	_ ··· · · · · · · · · · ·	ω. (D	
30% of total cover	20700		<i></i>	
Herb Stratum (Plot size:)	5	- V	FAC	'Indicators of hydric soil and wetland hydrology must
1. A WINNING TON GIJGUTT CO				Definitions of Four Verstein Strate:
2				Demitions of Four Vegetation Strata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				beight
5				-
6				Sapling/Shrub – Woody plants, excluding vines, less
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				-
	, 5	= Total C	Cover	
50% of total cover:	<u>, </u>	of total cov	/er:	_
Woody Vine Stratum (Plot size: 30 × 30)				
1. Smilax rotundifolia	[0	<u> </u>	FAC	-
2.		/		
3				
A				-
т		_		
5		- Total		- Hydrophylic
50% of table courts	<	= Total	2	Present? Yes No
50% of total cover:	207		ver	-1
Remarks: (If observed, list morphological adaptations t	elow).			
				· · · · · · · · · · · · · · · · · · ·
1				

SOIL

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Sampling Point: wjop Oll - u

Profile Des	cription: (Describe t	o the depth nee	ded to docum	nent the i	ndicator	or confirm	the absence o	f indicators.)	
Depth	Matrix		Redo	x Features	s		Terefore	Da++	
(inches)	$\frac{\text{Color (moist)}}{(1) + O + C + C}$	$\frac{\%}{1}$	olor (moist)		1vpe'	_Loc ⁻		Kemarks	
0-8	109K.0/1	100	<u> </u>		·····	<u> </u>			
8-20	104K5/2	100							
,	· · · · · · · · · · · · · · · · · · ·	· · · ·				• ``			
	· · · · · · · · · · · · · · · · · · ·		i -						
	·				· ——				
	· · · · · · · · · · · · · · · · · · ·	·			·			·	[
·	·						· ·		
¹ Type: C=C	Concentration, D=Dep	letion, RM=Redu	ced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: 1	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to all LRRs	, unless othe	rwise not	ed.)		Indicators f	or Problematic Hydric Soils ³ :	•
Histoso	ol (A1)	Г	Polyvalue Be	elow Surfa	ice (S8) (I	_RR S, T, I	U) 🛄 1 cm M	uck (A9) (LRR O)	
Histic E	Epipedon (A2)		Thin Dark S	urface (S9) (LRR S,	T, U)	2 cm M	uck (A10) (LRR S)	
Black H	listic (A3)		Loamy Much	ky Mineral	(F1) (LR F	२ ०)	Reduce	d Vertic (F18) (outside MLRA 1	50A,B)
U Hydrog	jen Sulfide (A4)		Loamy Gley	ed Matrix	(F2)			nt Floodplain Soils (F19) (LRR F	P, S, T}
	ed Layers (A5)	 _	J Depleted Ma	atrix (F3) Surface "				ious Bright Loamy Solis (†20) A 153B)	
	c Bodies (A6) (LKR P	(,,,,,) <u> </u> зврти Г	Redox Dark	Surface (I ark Surface	FO) e(F7)			rent Material (TF2)	
	Presence (A8) (LRP 1		Redox Depr	essions (F	- (* 7) 			nallow Dark Surface (TF12)	
	luck (A9) (LRR P. T)	´´ †	Marl (F10) (LRR U)	~1		D Other (Explain in Remarks)	
Deplet	ed Below Dark Surfac	æ (A11) 🗍	Depleted O	chric (F11)) (MLRA 1	151)			
Thick I	Dark Surface (A12)	<u> </u>	Iron-Manga	nese Mas	ses (F12)	(LRR O, P	P,T) ³ Indic	ators of hydrophytic vegetation a	and
Coast	Prairie Redox (A16) (I	MLRA 150A) 📙	Umbric Sur	face (F13)	(LRR P,	T, U)	wet	and hydrology must be present,	
Sandy	Mucky Mineral (S1) (LRR O, S)	Delta Ochri	c (F17) (M	LRA 151))	unie	ess disturbed or problematic.	
	Gleyed Matrix (S4)	Ļ	Reduced Ve	ertic (F18) Joodalain J	(MLRA 1 Seile (E10	50A, 150E	5) [40.8.]		
	r Redox (55) ad Matrix (S6)	- F	Anomalous	Bright Lo:	amv Soils	(F20) (ML	RA 149A. 153C	. 153D)	
	Surface (S7) (LRR P. 3	ร. T. U) ่	Anomalous	Dingin Lot	uniy cons	(1 20) (112		,,	
Restrictiv	e Layer (if observed)):							<u> </u>
Type: _									. /
Depth ((inches):		-				Hydric Soil	Present? Yes No	<u> </u>
Remarks:									
			•						
					•				
			,						
l l									
1									



Upland data point wjop011_u facing northeast.

WETLAND DETERMINATION DA	TA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	city/County: Johnston Sampling Date: 7/23/14
Applicant/Owner: Dominion	State: N ⊂ Sampling Point: wop 011€_1
Investigator(s): EST-K. MUTPhY29	Section, Township, Range:NA
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): <u>FlQ+</u> Slope (%): <u>O-2</u>
Subregion (LRR or MLRA): レアアク Lat: 三	35,52015 Long: -78,27444 Datum: W658
Soil Map Unit Name: <u>Gronthom Silt (UDM</u>	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes V No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signific	antly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology natural	ly problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No 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 ar	ply) L Surface Soil Cracks (B6)
High Water Table (A2)	(B15) (LRR U)
Saturation (A3)	fide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)	cospheres along Living Roots (C3)
☐ Sediment Deposits (B2) ☐ Presence of F	Leduced Iron (C4) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8)
Algal Mat or Crust (B4)	Inface (C7)
Iron Deposits (B5)	n in Remarks) 🗍 Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	년 Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (in	uches): NA
Water Table Present? Yes No Depth (in	iches): 720 '
Saturation Present? Yes No Depth (in (includes capillary fringe)	iches): 720'' Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	
This wetland	d was still forested in 10/2012.

Sampling Point: Wjop Oll F-W

/EGETATION (Four Strata) – Use scientific na	mes of pla	ants.		Sampling Point:
30×30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>1</u>	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species <u>3</u> (A)
2				Total Number of Dominant 2
3			<u>-</u>	Species Across All Strata: (B)
4				Percent of Dominant Species (κ / λ)
5				That Are OBL, FACW, or FAC: (O O (A/B)
6	<u> </u>		<u> </u>	Prevalence Index worksheet:
o				<u>Total % Cover of:</u> Multiply by:
, <u></u>	0			OBL species x 1 =
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X 30)			·	FAC species x 3 =
1. Liquidambar Styraciflux	5	<u> </u>	FAC	FACU species x 4 =
2		,		UPL species x 5 =
3				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				\Box 3 - Prevalence Index is $\leq 3.0^1$
2.9	<	= Total Co	ver I	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $\cancel{3}$	<u></u> 20% of	total cover	:	
Rhevia alifanus	(c)	V	OBL	¹ Indicators of hydric soil and wetland hydrology must
2 SCIVPUS CURETINGS	10-	`	OBI	Definitions of Four Vegetation Strata:
3 12440105POVA microcarpa	<u> </u>	Ń	OBL	Seminoris of Four Vegetation official
4 CAVEX giganteo	$\overline{\zeta}$	N	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast beight (DBH), regardless of
5. POlygonum argyrololeon	- <u> </u>	3	MAL	height.
6				Sapting/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			·	
I.	<u>- 32</u>	= Total Co	ver C	· ·
	20% 01	r total cove	r: <u>@/(</u>	
Voody vine Stratum (Plot size: <u>SCK SC</u>)				·
2			·	
3			·	
۵				
5		. .	•	Under all all a
	0	= Total Co	ver	Vegetation
50% of total cover:	20% of	f total cove	r:	Present? Yes No
Remarks: (If observed, list morphological adaptations be	low).			<u> </u>
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SOIL

Sampling Point: wjopOll€_w

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Profile Des	cription: (Describe t	to the dept	th needed to docum	nent the i	ndicator	or confirm	the absence of in	dicators.)
Depth	Matrix		Redox	Feature	s Tural	1 + - 2	Tautura	Domorka
<u>(incnes)</u>	$\frac{Color(moist)}{(21023/1)}$	<u></u>		%	Type		<u>exture</u>	Remarks
	IN OF		10004/2					·
5-17	1000000000000000000000000000000000000	40			<u> </u>		<u> </u>	
14-20	104R4/1	<u>45</u>	10VR 5/3		Ç	\underline{N}	<u></u>	
			10YR 5/3	<u>_^</u>	<u> </u>	PL	<u>_SL</u>	
							-	
•		·		.	·	·		
17								Dens Linica, M. Matrix
Hydric Soil	oncentration, D=Dep	ietion, KM= able to all	Reduced Matrix, MS	= Masked	ad)	ains.	Location: PL=	Pore Lining, M=Matrix.
	1 (A1)			iow Surfa	ca (S8) /I	PP S T II		
	bipedon (A2)		Thin Dark Su	rface (S9) (LRR S.	T. U)	2 cm Muck	(A10) (LRR S)
Black H	listic (A3)		Loamy Mucky	/ Mineral	(F1) (LRF	20)	Reduced V	ertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix ((F2)	•	Piedmont F	loodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Mat	rix (F3)			Anomalous	Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U) ייי די סיפנ	Redox Dark S	Surface (F	-6) (E7)			53B) Matarial (TE2)
	ucky Milleral (A7) (Lh resence (A8) (LRP 11	xrx P, I, U) 1	Redox Depre	n Sullace ssione /F	ま(F7) (8)			watenar (TF2) w Dark Surface (TF12)
	uck (A9) (LRR P. T)	,	Marl (F10) (L	RRU)	-)		Other (Exol	lain in Remarks)
Deplete	ed Below Dark Surface	e (A11)	Depleted Oct	nric (F11)	(MLRA 1	51)	. <u> </u>	
Thick D	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12)	(LRR 0, P,	T) ³ Indicators	s of hydrophytic vegetation and
Coast F	Prairie Redox (A16) (N	MLRA 150/	A) 🔛 Umbric Surfa	ce (F13)	(LRR P, 1	r, U)	wetland	hydrology must be present,
Sandy	Mucky Mineral (S1) (I	_RR O, S)	Delta Ochric	(F17) (Mi tio (⊑19)	LRA 151) /ML D.A. 1		unless o	disturbed or problematic.
	Gleyed Matrix (54) Redox (55)		Piedmont Flo	uc (F18) odolain S	(MILKA 1: Soils (F19)	MIRA 14	941	
Strippe	d Matrix (S6)		Anomalous B	Bright Loa	my Soils	(F20) (MLR	A 149A, 153C, 153	3D)
Dark S	urface (S7) (LRR P, S	S, T, U)	—	Ũ				,
Restrictive	Layer (if observed):	:						
Туре:								
Depth (ii	nches):						Hydric Soil Pres	sent? Yes 🔽 No
Remarks:							<u> </u>	
1								
						,		
		,						
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Wetland data point wjop011ef_w facing southwest

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	City/County: Johnston Sampling Date: 7/23/14
upplicant/Owner: Dominion	State: NC Sampling Point: Wop OILF-W
nvestigator(s): ESI - K, MUYPUYEY	Section, Township, Range: NA
andform (billslone terrace etc.): 510.7	Local relief (concave, convex, none); FIOH Slope (%): 0-2
Subragion (IRB or MIRA): LRRP Lat: 35	.51927 Long: -78,27440 Datum: N 5384
Sall Man Linit Nama: G (20tham Silt Ican)	NWA classification: PFO
No elimetia (hydrologia conditions on the site hydrol for this time of)	vear2 Ves No (If no explain in Remarks)
	the disturbed? Are "Normal Circumstances" present? Yes
Are Vegetation, Soll, of Hydrology significant	ry disturbed: Ale Normal Circumstances present: Tes (16
Are vegetation, Soli, of Hydrology flatorally p	nobernatio: (in needed, explain any answers in Kentarks.)
SUMMARY OF FINDINGS – Attach site map showir	ig 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? YesNo
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	M Surface Soil Cracks (B6)
Surface Water (A1)	B13) B13) Drainage Detterme (P10)
High Water Table (A2) Mari Deposits (t	Ae Odor (C1)
Water Marks (B1)	spheres along Living Roots (C3)
Sediment Deposits (B2)	duced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	duction in Tilled Soils (C6)
Algal Mat or Crust (B4)	ace (C7) Geomorphic Position (D2)
Iron Deposits (B5)	n Remarks)
Linundation Visible on Aerial Imagery (B7)	C-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inc	hes): NA
Water Table Present? Yes No Depth (inc	hes): 720"
Saturation Present? Yes No Depth (inc	hes): 720" Wetland Hydrology Present? Yes No
(includes capillary fringe)	hotos, previous inspections), if available:
Describe recorded bata (sitean gadge, monitoring won, actual p	
Remarks:	

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Sampling Point: wjopOllf:w

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

- Juca J	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\underline{SO'XBO'}$)	<u>% Cover</u>	Species?		Number of Dominant Species
1. PINCIS FORCE		<u> </u>		That Are OBL, FACVV, of FAC: (A)
2. Liquidambar Styrocistua			++-	Total Number of Dominant
3. ACEV VUOLUM	15	<u> </u>	MAC	Species Across All Strata: 7 (B)
4.		·		Description of Description
5				That Are ORL EACIN or EAC: (UU) The (A/B)
o.		·		
-			·	Prevalence Index worksheet:
7		·	·	Total % Cover of: Multiply by:
8	$-\frac{1}{10}$		·	OBI species x1 =
_	40	= Total Co	ver /	
50% of total cover:	<u>)</u> 20% o	f total cove	r: <u>7</u> 5	
Sapling/Shrub Stratum (Plot size: $30^{\circ} \times 30^{\circ}$)				FAC species X3 =
1 PERSLON Palustris	10	<u> </u>	FACW	FACU species x 4 =
2) jawidambar Skyloriz(4)a		N	FAC	UPL species x 5 =
2 Clerker Bla Filia	$-\frac{1}{10}$	$\overline{\nabla}$	TACW	Column Totals: (A) (B)
3. CIEMMA MINICIA		- <u></u>	EACW	
4. Cyrilla racemisiona	<u> </u>	- 4⁄	FUCM	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 Dominance Test is >50%
9	<u> </u>			
0	<u>- 2</u> <			3 - Prevalence index is ≤3.0
		_ = Total C	uver	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: 1	20% (of total cove	er:	
<u>Herb Stratum</u> (Plot size: $\frac{\mathcal{S}\mathcal{O}^{*} \times \mathcal{S}\mathcal{O}^{*}}{\mathcal{S}\mathcal{O}^{*}}$)		۰.		¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	<u> </u>	FAC	be present, unless disturbed or problematic.
> Windwardla areolata	3	- V/	FACW	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
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
·······				
0	<u> </u>			- Herb - All herbaceous (non-woody) plants, regardless
9				
10				- Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				_
	<	= Total (Cover	
EOOV of total covers	7.5 200		3	
	<u>, </u>	o or total CO	voi	-
Woody Vine Stratum (Plot size: SV A SV)	<	λ.	The	
1. Smilax Cotunditolia		7_	- Fuc	-
2.				_
3				
				-
+ ,				-
5				- Hydrophytic
	<u>, / _ ></u>	= Total	Cover	Property Van No
50% of total cover: _o	(, <u>)</u> 209	6 of total co	over:	
Remarks: (If observed, list mombological adaptations	below).			
	,			
1				

	ription: (Describe	to the dept	h needed to docu	nent the ind	icator o	r confirm t	he absence of	indicators	5.)	
pth	Matrix		Redo	x Features	Tunci	1002	Texture		Bomotio	
<u>cnes)</u>	$\frac{COIOF(MOIST)}{1/3}$			<u> </u>	түре				Remarks	
	10104/1		UNURS12		0		- <u> </u>			
$\frac{-1}{2}$	INCR I	$\frac{10}{40}$	$\frac{10}{10}$	$-\frac{0}{20}$	<u></u>	<u> </u>				
- 204	10YK > 71	<u>- 60</u>	IUYKO/		\underline{D}					
pe: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked S	and Gra	ins.	² Location: P	L=Pore Lin	ning, M=Matrix.	ile ³ .
Histosol Histosol	l (A1)		Polyvalue B	elow Surface	•/ •(S8)(L IRR S	RR S, T, U)		ick (A9) (LF	RR O)	
Black H	istic (A3)		Loamy Muc	ky Mineral (F	1) (LRR	0)	Reduced	d Vertic (F1	8) (outside ML	RA 150A,B
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (F2	2)	,		nt Floodplai	in Soils (F19) (L	RR P, S, T
Organic	a Layers (A5) Bodies (A6) (LRR F	р. т. ())	Redox Dark	Surface (F6)			A 153B)	Luarity Solis (i Z	0)
5 cm M	ucky Mineral (A7) (L	RR P, T, U	Depleted D	ark Surface (, F7)		Red Par	ent Materia	al (TF2)	
Muck P	resence (A8) (LRR l	J)	Redox Dep	ressions (F8)	ł		Very Sh	allow Dark	Surface (TF12)	
1 cm M	uck (A9) (LRR P, T)	- (044)	Marl (F10)	LRR U)		-4)	Uther (E	Explain in R	emarks)	
Thick D	ark Surface (A12)	e (ATT)	iron-Manga	nese Masses	(F12) (LRR 0. P. 1	T) ³ Indica	tors of hvd	rophytic vegetat	ion and
Coast F	Prairie Redox (A16) (MLRA 150	A) 🔲 Umbric Sur	face (F13) (L	RR P, T	, U)	wetla	and hydrolo	gy must be pres	sent,
Sandy	Mucky Mineral (S1)	LRR O, S)	🔲 Delta Ochri	c (F17) (MLF	RA 151)		unle	ss disturbe	d or problematic	
Sandy	Gleyed Matrix (S4)		Reduced V	ertic (F18) (N	ALRA 15	0A, 150B)				
Sandy	Redox (S5) d Matrix (S6)			Bright Loam	us (F19) w Soils /	(MLRA 14) E20) (MLR.	9A) A 149A 153C	1530)		
Dark S	urface (S7) (LRR P.	S, T, U)		Digit Loan	iy Colla (1 207 (MEIG		1000)		
strictive	Layer (if observed):				••				
Type:										
Depth (i	nches):						Hydric Soil	Present?	Yes	No
emarks:										
									·	



Wetland data point wjop011f_w facing southwest.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	city/County: JOhn Sta	s s	Sampling Date: 7/23/14
Applicant/Owner: DOMINION			Sampling Point: wjopOll_u
Investigator(s): ESI - KIMURPEIREG	Section, Township, Range:	NA	
Landform (billslope, terrace, etc.); FIQ+	_ Local relief (concave, conv	rex, none): FIA+	Slope (%): 2-4
Subregion (I BR or MI BA): LRR C Lat:	55,51935 Lond	-78.2744	Datum: W6584
Soil Man Unit Name: 6 Van thom Silt 100	\mathbf{N}	NWI classificat	tion: NA
Are climatic / bydrologic conditions on the site typical for this time	of year? Yes	(if no. explain in Rei	marks.)
Are Vegetation Soil or Hydrology signifi	cantly disturbed? Are "Nor	rmal Circumstances" pre	esent? Yes No
Are Vegetation Soil or Hydrology natura	Ilv problematic? (If needs	ed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point loca	ations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Ar within a Wetland?	rea Ves	No
HYDROLOGY	·		
Wetland Hydrology Indicators:	·	Secondary Indical	tors (minimum of two required)
Primary Indicators (minimum of one is required: check all that Surface Water (A1) Aquatic Fau High Water Table (A2) Marl Deposit Saturation (A3) Hydrogen S Water Marks (B1) Oxidized Rf Sediment Deposits (B2) Presence or Drift Deposits (B3) Recent Iron Algal Mat or Crust (B4) Thin Muck S Iron Deposits (B5) Other (Expl Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	apply) na (B13) ts (B15) (LRR U) ulfide Odor (C1) izospheres along Living Roots (C Reduced Iron (C4) Reduction in Tilled Soils (C6) Surface (C7) ain in Remarks)	Surface Soil (Sparsely Veg Drainage Pat Moss Trim Li C3) Dry-Season V Crayfish Burn Saturation Vi Geomorphic Shallow Aqu FAC-Neutral Sphagnum r	Cracks (B6) etated Concave Surface (B8) tems (B10) nes (B16) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) Position (D2) itard (D3) Test (D5) noss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth Water Table Present? Yes No Depth Saturation Present? Yes No Depth (includes capillary fringe) Depth Depth	(inches): NA (inches): ZO" (inches): ZO" Wet	land Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gadge, monitoring weil, der			
			· · ·

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Sampling Point: wjop011_u

VEGETATION	(Four Strata) – Use	scientific	names	of plants.
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20(1220)	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\frac{50 \times 50}{100}$)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1. LIRX ORACO	12	\rightarrow	FAC	That Are OBL, FACW, or FAC: (A)
2. LIGUISAMBON STYLOCIEIUS	<u>~</u>	<u> </u>	EAC	Total Number of Dominant
3. BURRIAS NIGER	<u> </u>		Fuc	Species Across All Strata: (B)
4				Percept of Dominant Species
5			<u> </u>	That Are OBL, FACW, or FAC: (A/B)
6				Browstones Index workshoot
7		·		Total % Cover of: Multiply by:
8				
, 	<u>45</u>	= Total Co	ver	
50% of total cover:	<u>></u> 20% o	f total cove	r:	FAC w species x 2
Sapling/Shrub Stratum (Plot size: 30×30)	20		~~~	
1. <u>Flex</u> oraca	30	. <u> </u>	HAC	+ACU species X 4 =
2. Magnolia virginiana	10	<u> </u>	FACW	UPL species X 5 =
3. Vaccinum cotymbosum	5	N	FACW	Column Totals: (A) (B)
4. SYMPLOCUS tinctorion	5	<u>N</u>	EAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				Transpired regulation indicators
7				2 Deminando Test is >50%
0				
o	50	= Total Co		\square 3 - Prevalence index is ≤ 3.0
E0% of total appart	> 20%	_ ··· · · · · · · · · · ·	ω. (D	
30% of total cover	20700		<i></i>	
Herb Stratum (Plot size:)	5	- V	FAC	'Indicators of hydric soil and wetland hydrology must
1. A (UNDIVIDITION G/1941-160				Definitions of Four Verstein Strate:
2				Demitions of Four Vegetation Strata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				beight
5				-
6				Sapling/Shrub – Woody plants, excluding vines, less
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				-
	, 5	= Total C	Cover	
50% of total cover:	<u>, </u>	of total cov	/er:	_
Woody Vine Stratum (Plot size: 30 × 30)				
1. Smilax rotundifolia	[0	<u> </u>	FAC	-
2.		/		
3				
A				-
т		_		
5		- Total		- Hydrophylic
50% of table courts	<	= Total	2	Present? Yes No
50% of total cover:	207		ver	-1
Remarks: (If observed, list morphological adaptations t	elow).			
				· · · · · · · · · · · · · · · · · · ·
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SOIL

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Sampling Point: wjop Oll - u

Profile Des	cription: (Describe t	o the depth ne	eded to docum	nent the i	ndicator	or confirm	the absence o	of indicators.)
Depth	Matrix		Redo	x Features	<u>s</u>	1 2	Tautor	Domoti-
	$\frac{\text{Color (moist)}}{(1) + O 5 1}$	$\frac{\%}{100}$ $\frac{C}{100}$	<u>pior (moist)</u>	<u> %</u>	<u>ıvpe</u>	LOC	$\leq 1_{-}$	<u>Remarks</u>
$\frac{0}{2}$	109R-0/1	. 100	<u> </u>			<u> </u>	<u> </u>	
<u>8-20</u>	104K5/2	100						
,						· `		
								· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·							
<u></u>	·				·		·	,
		·		<u> </u>				
¹ Type: C=C	Concentration, D=Dep	letion, RM=Red	uced Matrix, M	S=Masked	d Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all LRR	s, unless othe	rwise not	ed.)		Indicators	for Problematic Hydric Soils ³ :
Histoso	ol (A1)	Ľ	Polyvalue B	elow Surfa	ice (S8) (l	.RR S, T, I	U) 📙 1 cm M	luck (A9) (LRR O)
Histic E	Epipedon (A2)		Thin Dark S	urface (S9) (LRR S,	T, U)	2 cm M	luck (A10) (LRR S)
Black H	listic (A3)		Loamy Muck	ky Mineral	(F1) (LRF	2 0)		ed Vertic (F18) (outside MLRA 150A,B
	jen Sulfide (A4)	Ļ	Loamy Gley	ed Matrix	(⊢2)			ont Floodplain Soils (F19) (LRK P, S, 1)
	ea Layers (A5) a Radias (A6) (LPP B	- TIN -	Beday Dark	auix (⊏3) Surface /I	E6)		Anoma /Mi s	
	lucky Mineral (A7) /	,,,,, <u> </u>	Depleted Da	ark Surface	e (F7)			arent Material (TF2)
	Presence (A8) (LRR U	n)	Redox Depr	essions (F	-8)		U Very S	hallow Dark Surface (TF12)
1 cm N	luck (A9) (LRR P, T)	Ī	Marl (F10) (LRR U)			Other ((Explain in Remarks)
Deplet	ed Below Dark Surfac	æ (A11)	Depleted O	chric (F11)) (MLRA 1	151)		
Thick I	Dark Surface (A12)	ļ	Iron-Manga	nese Mas	ses (F12)	(LRR O, P	r, T) ³ Indic	ators of hydrophytic vegetation and
Coast	Prairie Redox (A16) (I	MLRA 150A)	Umbric Surl	face (F13)	(LRR P,	T, U)	wet	tland hydrology must be present,
Sandy	Mucky Mineral (S1) (LRR 0, S) <u> </u> Г	Deita Ochrie	C (F17) (M ortio /E19)	(ML DA 1		uni N	ess disturbed or problematic.
	Gleyed Matrix (54)	<u>+</u>	Piedmont F	loodolain :	Soils (F10) /MIRA 1	2) 149A)	
	ed Matrix (S6)	1	Anomalous	Bright Loa	amy Soils	(F20) (ML	.RA 149A, 153C	, 153D)
Dark S	Surface (S7) (LRR P,	S, T, U) -		U U		. ,.	·	
Restrictiv	e Layer (if observed)):						
Type: _			-					
Depth ((inches):		-				Hydric Soi	Present? Yes No Yes
Remarks:								
4			•					
	•							
1								



Upland data point wjop011_u facing northeast.

WETLAND DETERMINATION DAT	TA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	city/county; Johnston Sampling Date: 7/23/14
Applicant/Owner: DOm In Tor	State: N ⊂ Sampling Point: wipp 011€-u
Investigator(s): EST - K. MULPhY29	Section, Township, Range:NA
Landform (hillslope, terrace, etc.): Flot	Local relief (concave, convex, none): $\underline{F(Q+)}$ Slope (%): $\underline{O-2}$
Subregion (LRR or MLRA): レアアク	5.52015 Long: -78.27444 Datum: W6584
Soil Map Unit Name: <u>Gronthom Silt (UDM</u>	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of	of year? Yes V No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signification	antly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology natural	ly problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No 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 ap	ply) Surface Soil Cracks (B6)
High Water Table (A2)	(B15) (LRR U) Drainage Patterns (B10)
Saturation (A3)	fide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)	ospheres along Living Roots (C3) Dry-Season Water Table (C2)
Drift Deposits (B2)	Leduced Iron (C4) reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	rface (C7)
Iron Deposits (B5)	n in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Field Observations:	E Sphagnum moss (D8) (LRR 1, 0)
Surface Water Present? Yes No / Depth (in	
Water Table Present? Yes No Depth (in	iches): 720 '
Saturation Present? Yes No Depth (in (includes capillary fringe)	iches): <u>720''</u> Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	
This wetland	d was still forested in 10/2012.

Sampling Point: Wjop Oll F-W

VEGETATION (Four Strata) – Use scientific na	mes of pl	ants.		Sampling Point:
30×30	Absolute-	Dominant	Indicator	Dominance Test worksheet:
<u>1</u>	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species <u>3</u> (A)
2				Total Number of Dominant
3			<u>-</u>	Species Across All Strata: (B)
4				Percent of Dominant Species $(\kappa /)$
5				That Are OBL, FACW, or FAC: (O O (A/B)
6	<u> </u>		<u> </u>	Prevalence Index worksheet:
o				Total % Cover of:Multiply by:
, <u></u>	0			OBL species x 1 =
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X 30)			·	FAC species x 3 =
1. Liquidambar Styraciflux	5	<u> </u>	FAC	FACU species x 4 =
2		,		UPL species x 5 =
3				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				3 - Prevalence Index is ≤3.0 ¹
2.9	<u> </u>	= Total Co	ver I	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $\cancel{3}$	<u></u> 20% of	total cover	:	
Rhevia alifanus	(c)	V	OBL	¹ Indicators of hydric soil and wetland hydrology must
2 SCIVPUS CURETINGS	10-	`	OBI	Definitions of Four Vegetation Strata:
3 12440105POVA microcarpa	<u> </u>	Ń	OBL	bennitons of Four Vegetation offata.
4 CAVEX giganteo	<	N	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast beight (DBH), regardless of
5. POlygonum argyrololeon		3	MAL	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				· ·
I/	<u>-32</u>	= Total Co	ver L+	· ·
50% of total cover: $\frac{10}{20}$	20% of	f total cove	r: <u>0/ (</u>	
Woody Vine Stratum (Plot size: <u>30 × 30</u>)				
			·	
2		-		
۶ ۸				
5			•	
	0	= Total Co		Vegetation
50% of total cover:	20% 0	f total cove	r:	Present? Yes No
Remarks: (If observed list morphological adaptations be				
recitation (a observed, list morphological adaptations be				

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SOIL

Sampling Point: wjopOll€_w

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Profile Des	cription: (Describe f	to the dep	th needed to docum	nent the i	ndicator	or confirm	the absence of in	ndicators.)
Depth	Matrix		Redox	Feature	s Turnal	1 + - 2	Testere	Demode
(incnes)	$\frac{Color(moist)}{(21)^2 3 / 1}$	<u></u>		%	Type		<u>exture</u>	Remarks
	104 OF		10004/2					
<u>5-17</u>	-1000000000000000000000000000000000000	40			<u> </u>	<u>/v</u>	<u> </u>	
<u>14 - 20</u>	104R4/1	<u>45</u>	10VR 5/3		<u> </u>	\underline{N}	<u> </u>	
			10YR 5/3	<u>_^</u>	<u> </u>	_PL	<u>_SL</u>	
		·						
•				.	· ·····	<u> </u>		
17	- <u> </u>							Dese Lision M. Matrix
Hydric Soi	Concentration, D=Dep	ietion, KM= able to all	Reduced Matrix, MS	= Masked	ad)	ains.	Location: PL=	Problematic Hydric Soils ³
		able to all		Mae not	eu.) 	DDCTI		
	Enipedon (A2)		Thin Dark Su	rface (S9) (LRR S.	T. U)	$\square 2 \text{ cm Muck}$	(A10) (LRR S)
Black I	Histic (A3)		Loamy Mucky	/ Mineral	(F1) (LRF	., c, ₹O)	Reduced V	/ertic (F18) (outside MLRA 150A,B)
Hydrog	jen Sulfide (A4)		Loamy Gleye	d Matrix ((F2)	•	Piedmont I	Floodplain Soils (F19) (LRR P, S, T)
📘 🛄 Stratifie	ed Layers (A5)		Depleted Mat	rix (F3)			Anomalous	s Bright Loamy Soils (F20)
📙 Organi	c Bodies (A6) (LRR P	, T, U)	Redox Dark S	Surface (F	-6) . (5-7)			53B)
	iucky Mineral (A7) (LF	κκ Ρ, Τ, U) Ν	Depleted Dar Redox Depre	K SU∏ace ssione /⊏	e (⊢7) '8)			n Malefial (112) ow Dark Surface (TE12)
	100 (LRR P. T)	7	Mart (F10) (L	RRU)	.,			blain in Remarks)
Deplet	ed Below Dark Surface	e (A11)	Depleted Oct	nric (F11)	(MLRA 1	51)		,
Thick [Dark Surface (A12)		Iron-Mangan	ese Mass	es (F12)	(LRR O, P,	T) ³ Indicator	s of hydrophytic vegetation and
Coast	Prairie Redox (A16) (N	MLRA 150	A) 🔲 Umbric Surfa	ce (F13)	(LRR P, 1	r, U)	wetland	I hydrology must be present,
	Mucky Mineral (S1) (I	LRR O, S)	Delta Ochric	(F17) (M I tia (E10)	LRA 151)		unless	disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver	UC (F18) Indolain S	(MLKA 1: Soile (E19)	MI PA 14	941	
Strippe	d Matrix (S6)		Anomalous B	Bright Loa	mv Soils ((F20) (MLR	A 149A, 153C, 15	3D)
Dark S	Surface (S7) (LRR P, S	6, T, U)				(·	·····, ····, ···	,
Restrictive	E Layer (if observed):	:						
Type:								
Depth (i	inches):						Hydric Soil Pre	esent? Yes <u> </u>
Remarks:								
1								
						•		
						•		
						÷ .		



Wetland data point wjop011ef_w facing southwest

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	city/County: Johnston Sampling Date: 7/23/14
poplicant/Owner: Dominion	State: NC Sampling Point: Wop OILF-W
nvestigator(s): ESS - K, MUYPUNEY	Section, Township, Range: NA
andform (billslone terrace etc.): 510.1-	Local relief (concave, convex, none); FIOH Slope (%): 0-2
Subragion (IRB or MIRA): LRCP Lat: 35	.51927 Long: -78,27440 Datum: N 5384
Sall Man Linit Name: G (20tham Silt (200	NWI classification: PFO
the elimetic (bud relegie conditions on the site build for this time of)	vear2 Ves No (If no explain in Remarks)
	the disturbed 2 Are "Normal Circumstances" present? Yes No
Are Vegetation, Soll, of Hydrology significant	y distuibed: Ale Normal Circuitistances present: Tes (16
tre vegetation, Soli, or Hydrology haterally p	in the event, explain any answers in Kentarks.)
SUMMARY OF FINDINGS – Attach site map showin	ig 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
l	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	(y) Surface Soil Cracks (B6)
Surface Water (A1)	B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Mari Deposits (E	An Odor (C1)
Water Marks (B1)	spheres along Living Roots (C3)
Sediment Deposits (B2)	duced Iron (C4)
Drift Deposits (B3)	duction in Tilled Soils (C6)
Algal Mat or Crust (B4)	ace (C7) Geomorphic Position (D2)
Iron Deposits (B5)	in Remarks)
Linundation Visible on Aerial Imagery (B7)	C-Neutral test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (incl	hes): NA
Water Table Present? Yes No Depth (inc	hes): 720"
Saturation Present? Yes No Depth (inc	hes): 720" Wetland Hydrology Present? Yes No
(includes capillary fringe)	hotos, previous inspections), if available:
Describe recorded bata (stream gauge, monitoring won, donar p	
Remarks:	

8

...

Sampling Point: wjopOllf:w

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\underline{SO}(\underline{X},\underline{SO})$)	<u>% Cover</u>	Species?		Number of Dominant Species
1. PINCIS FORCE		<u> </u>	$\frac{1}{1}$	That Are OBL, FACVV, or FAC: (A)
2. Li qui Lambar Styrocistua		\	+H-C	Total Number of Dominant
3. ACCV VUOLUM	15	¥	MC	Species Across All Strata: 7 (B)
4.			·	Description of Description
5				That Are OBL EACIN or EAC: (UU) 1. (A/B)
<u>. </u>		··	·	
-			·	Prevalence Index worksheet:
7			·	Total % Cover of: Multiply by:
8	$-\frac{1}{10}$		·	OBI species x 1 =
_	40	= Total Co	ver /	
50% of total cover: 20	<u>)</u> 20% o	f total cove	r: <u>7</u> 5	
Sapling/Shrub Stratum (Plot size: $30^{\circ} \times 30^{\circ}$)				+AC species x 3 =
1 PERSLON Palustris	10	<u> </u>	FACW	FACU species x 4 =
2) jawidambar Skyloriz(4.2		N	FAC	UPL species x 5 =
2 Clerker Bla Stilling	$-\frac{1}{10}$	$\overline{\nabla}$	TACW	Column Totals: (A) (B)
3. CIEGNICA PAINICICA		· <u> </u>	EACW	
4. Lyrilla racemisiona	<u> </u>	. <u> </u>	FUCM	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 - Dominance Test is >50%
9	<u> </u>			
0	<u>- 27</u>			3 - Prevalence index is ≤3.0
	55	= 101a1Ci	over	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: <u>1</u>	<u>/ ></u> 20% (of total cove	er:	
<u>Herb Stratum</u> (Plot size: $\frac{30^{\circ} \times 30^{\circ}}{100}$)		ι.		¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	<u> </u>	FAC	be present, unless disturbed or problematic.
> Windwardla areplata	3	- V/	FACW	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
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
·······				
o				- Herb - All herbaceous (non-woody) plants, regardless
[⁹				
10				- Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				_
	<	= Total (Cover	
EON of total answer	7 5 200		3	
	<u>, a</u> 20%	opitotal co	voi	-
Woody Vine Stratum (Plot size: DV A DV)	<	١.	- N/	
1. Smilax Cotunditolia		7_	- Fuc	-
2.				_
3				
				-
+ ,				-
5				- Hydrophytic
	<u>, _ ></u>	= Total	Cover	Vegetation
50% of total cover:	(, <u>)</u> 209	6 of total co	over:	
Remarks: (If observed, list mombological adaptations	helow).			l
Transma, in observed, nat morphological adaptations	,			

	ription: (Describe	to the dept	h needed to docu	nent the indi	ator or conf	irm the absence	of indicators.)
pth	Matrix		Redo	x Features	ma ¹ 1+-2		Pomotio
cnes)	$\frac{COIOF(MOIST)}{1/3}$	$\frac{1}{100}$		<u> </u>	<u>/peL0C_</u>		remanks
	10104/1		INURS12	1/ 7	$\overline{\Omega}$ $\overline{\Lambda}$		· · · · · · · · · · · · · · · · · · ·
$\frac{-1}{2}$	INCR I	$-\frac{-10}{400}$	$\frac{10}{10}$	$-\frac{0}{2}$			
- 204	10YK > 71	60	IUYKO/	20) (//		
pe: C=C	oncentration, D=Dep	pletion, RM=	Reduced Matrix, M	S=Masked Sa	nd Grains.	² Location:	PL=Pore Lining, M=Matrix.
Histosol	l (A1)		Polyvalue B	elow Surface (S8) (LRR S,	T, U)	Muck (A9) (LRR O) Muck (A10) (LRR S)
Black H	istic (A3)		Loamy Muc	ky Mineral (F1) (LRR O)	Reduc	ced Vertic (F18) (outside MLRA 150A,B
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix (F2)			nont Floodplain Soils (F19) (LRR P, S, T
Organic	d Layers (A5) Bodies (A6) (I RR F	P. T. (J)	Redox Dark	Surface (F6)			RA 153B)
5 cm M	ucky Mineral (A7) (L	, ., ., RR P, T, U)	Depleted Da	ark Surface (F	7)		Parent Material (TF2)
Muck P	resence (A8) (LRR I	J)	Redox Dep	essions (F8)		Very :	Shallow Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, T)	(044)	Marl (F10) (LRR U) obria (E11) (M	DA 454)	L Other	· (Explain in Remarks)
Deplete	ed Below Dark Surface (A12)	ce (ATT)		chiic (Ei F) (M nese Masses	LKA 151) (F12) (LRR C), P. T) ³ Ind	icators of hydrophytic vegetation and
Coast F	Prairie Redox (A16) (MLRA 150	A) 🔲 Umbric Sur	face (F13) (LF	R P, T, U)	We	etland hydrology must be present,
Sandy I	Mucky Mineral (S1)	(LRR O, S)	Deita Ochri	c (F17) (MLR/	A 151)	ur	nless disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced V	ertic (F18) (Mi	RA 150A, 15	50B)	
Sandy Stringer	Redox (S5)		Piedmont F	Religion Soll	Soile (F19) (MLR	A 149A) MI DA 140A 152	C 153D)
Dark Si	u Mainx (56) urface (S7) (LRR P.	S. T. U)		Digit Loaniy	Solis (i 20) (MEINE 1498, 103	6, 1350)
strictive	Layer (if observed):					
Type:							
Depth (ii	nches):					Hydric Sc	oil Present? Yes No
emarks:				······································			



Wetland data point wjop011f_w facing southwest.
WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	city/County: JOhn Sta	s s	Sampling Date: 7/23/14
Applicant/Owner: DOMINION			Sampling Point: wjopOll_u
Investigator(s): ESI - KIMURPEIREG	Section, Township, Range:	NA	
Landform (billslope, terrace, etc.); FIQ+	_ Local relief (concave, conv	rex, none): FIA+	Slope (%): 2-4
Subregion (I BR or MI BA): LRR C Lat:	55,51935 Lond	-78.2744	Datum: W6584
Soil Man Unit Name: 6 Van thom Silt 100	\mathbf{N}	NWI classificat	tion: NA
Are climatic / bydrologic conditions on the site typical for this time	of year? Yes	(if no. explain in Rei	marks.)
Are Vegetation Soil or Hydrology signifi	cantly disturbed? Are "Nor	rmal Circumstances" pre	esent? Yes No
Are Vegetation Soil or Hydrology natura	Ilv problematic? (If needs	ed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point loca	ations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No	Is the Sampled Ar within a Wetland?	rea Ves	No
HYDROLOGY	·		
Wetland Hydrology Indicators:	·	Secondary Indical	tors (minimum of two required)
Primary Indicators (minimum of one is required: check all that Surface Water (A1) Aquatic Fau High Water Table (A2) Marl Deposit Saturation (A3) Hydrogen S Water Marks (B1) Oxidized Rf Sediment Deposits (B2) Presence or Drift Deposits (B3) Recent Iron Algal Mat or Crust (B4) Thin Muck S Iron Deposits (B5) Other (Expl Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	apply) na (B13) ts (B15) (LRR U) ulfide Odor (C1) izospheres along Living Roots (C Reduced Iron (C4) Reduction in Tilled Soils (C6) Surface (C7) ain in Remarks)	Surface Soil (Sparsely Veg Drainage Pat Moss Trim Li C3) Dry-Season V Crayfish Burn Saturation Vi Geomorphic Shallow Aqu FAC-Neutral Sphagnum r	Cracks (B6) etated Concave Surface (B8) tems (B10) nes (B16) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) Position (D2) itard (D3) Test (D5) noss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth Water Table Present? Yes No Depth Saturation Present? Yes No Depth (includes capillary fringe) Depth Depth	(inches): NA (inches): ZO" (inches): ZO" Wet	land Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gadge, monitoring weil, der			
			· · ·

E

Sampling Point: wjop011_u

VEGETATION	(Four Strata) – Use	scientific	names	of plants.
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20(1220)	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\frac{50 \times 50}{100}$)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1. LIRX ORACO	12	\rightarrow	FAC	That Are OBL, FACW, or FAC: (A)
2. LIGUISAMBON STYLOCIEIUS	<u>~</u>	<u> </u>	EAC	Total Number of Dominant
3. BURRIAS NIGER	<u> </u>		Fuc	Species Across All Strata: (B)
4				Percept of Dominant Species
5			<u> </u>	That Are OBL, FACW, or FAC: (A/B)
6				Browstones Index workshoot
7		·		Total % Cover of: Multiply by:
8				
, 	<u>45</u>	= Total Co	ver	
50% of total cover:	<u>></u> 20% o	f total cove	r:	FAC w species x 2
Sapling/Shrub Stratum (Plot size: 30×30)	20		~~~	
1. <u>Flex</u> oraca	30	. <u> </u>	HAC	+ACU species X 4 =
2. Magnolia virginiana	10	<u> </u>	FACW	UPL species X 5 =
3. Vaccinum cotymbosum	5	N	FACW	Column Totals: (A) (B)
4. SYMPLOCUS tinctorion	5	<u>N</u>	EAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				Transpired regulation indicators
7				2 Deminando Test is >50%
0				
o	50	= Total Co		\square 3 - Prevalence index is ≤ 3.0
E0% of total appart	> 20%	_ ··· · · · · · · · · · ·	ω. (D	
30% of total cover	20700		<i></i>	
Herb Stratum (Plot size:)	5	- V	FAC	'Indicators of hydric soil and wetland hydrology must
1. A (UNDIVIDITION G/194111 CO				Definitions of Four Verstein Strate:
2				Demitions of Four Vegetation Strata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				beight
5				-
6				Sapling/Shrub – Woody plants, excluding vines, less
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				-
	, 5	= Total C	Cover	
50% of total cover:	<u>, </u>	of total cov	/er:	_
Woody Vine Stratum (Plot size: 30 × 30)				
1. Smilax rotundifolia	[0	<u> </u>	FAC	-
2.		/		
3				
A				-
т		_		
5		- Total		- Hydrophylic
50% of table courts	<	= Total	2	Present? Yes No
50% of total cover:	207		ver	-1
Remarks: (If observed, list morphological adaptations t	elow).			
				· · · · · · · · · · · · · · · · · · ·
1				

SOIL

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Sampling Point: wjop Oll - u

Profile Des	cription: (Describe t	o the depth nee	ded to docum	nent the i	ndicator	or confirm	the absence o	f indicators.)	
Depth	Matrix		Redo	x Features	s		Terefore	Da++	
(inches)	$\frac{\text{Color (moist)}}{(1) + O + C + C}$	$\frac{\%}{1}$	olor (moist)		1vpe'	_Loc ⁻		Kemarks	
0-8	109K.0/1	100	<u> </u>		·····	<u> </u>			
8-20	104K5/2	100							
,	· · · · · · · · · · · · · · · · · · ·					• ``			
	· · · · · · · · · · · · · · · · · · ·		i -						
	·				· ——				
	· · · · · · · · · · · · · · · · · · ·	·			·			·	[
·	·						· ·		
¹ Type: C=C	Concentration, D=Dep	letion, RM=Redu	ced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: 1	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to all LRRs	, unless othe	rwise not	ed.)		Indicators f	or Problematic Hydric Soils ³ :	•
Histoso	ol (A1)	Г	Polyvalue Be	elow Surfa	ice (S8) (I	_RR S, T, I	U) 🛄 1 cm M	uck (A9) (LRR O)	
Histic E	Epipedon (A2)		Thin Dark S	urface (S9) (LRR S,	T, U)	2 cm M	uck (A10) (LRR S)	
Black H	listic (A3)		Loamy Much	ky Mineral	(F1) (LR F	२ ०)	Reduce	d Vertic (F18) (outside MLRA 1	50A,B)
U Hydrog	jen Sulfide (A4)		Loamy Gley	ed Matrix	(F2)			nt Floodplain Soils (F19) (LRR F	P, S, T}
	ed Layers (A5)	 _	J Depleted Ma	atrix (F3) Surface "				ious Bright Loamy Solis (†20) A 153B)	
	c Bodies (A6) (LKR P	(,,,,,) <u> </u> зврти Г	Redox Dark	Surface (I ark Surface	FO) e(F7)			rent Material (TF2)	
	Presence (A8) (LRP 1		Redox Depr	essions (F	- (* 7) 			nallow Dark Surface (TF12)	
	luck (A9) (LRR P. T)	´´ †	Marl (F10) (LRR U)	~1		D Other (Explain in Remarks)	
Deplet	ed Below Dark Surfac	æ (A11) 🗍	Depleted O	chric (F11)) (MLRA 1	151)			
Thick I	Dark Surface (A12)	<u> </u>	Iron-Manga	nese Mas	ses (F12)	(LRR O, P	P,T) ³ Indic	ators of hydrophytic vegetation a	and
Coast	Prairie Redox (A16) (I	MLRA 150A) 📙	Umbric Sur	face (F13)	(LRR P,	T, U)	wet	and hydrology must be present,	
Sandy	Mucky Mineral (S1) (LRR O, S)	Delta Ochri	c (F17) (M	LRA 151))	unie	ess disturbed or problematic.	
	Gleyed Matrix (S4)	Ļ	Reduced Ve	ertic (F18) Joodalain J	(MLRA 1 Seile (E10	50A, 150E	5) 140 A \		
	r Redox (55) ad Matrix (S6)	- F	Anomalous	Bright Lo:	amv Soils	(F20) (ML	RA 149A. 153C	. 153D)	
	Surface (S7) (LRR P. 3	ร. T. U) ่	Anomalous	Dingin Lot	uniy cons	(1 20) (112		,,	
Restrictiv	e Layer (if observed)):							<u> </u>
Type: _									. /
Depth ((inches):		-				Hydric Soil	Present? Yes No	<u> </u>
Remarks:									
			•						
					•				
			,						
l l									
1									



Upland data point wjop011_u facing northeast.

WETLAND DETERMINATION DA	TA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	city/County: Johnston Sampling Date: 7/23/14
Applicant/Owner: Dominion	State: N ⊂ Sampling Point: wop 011€_1
Investigator(s): EST-K. MUTPhY29	Section, Township, Range:NA
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): <u>FlQ+</u> Slope (%): <u>O-2</u>
Subregion (LRR or MLRA): レアアク Lat: 三	35,52015 Long: -78,27444 Datum: W658
Soil Map Unit Name: <u>Gronthom Silt (UDM</u>	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes V No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signific	antly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology natural	ly problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No 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 ar	ply) L Surface Soil Cracks (B6)
High Water Table (A2)	(B15) (LRR U)
Saturation (A3)	fide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)	cospheres along Living Roots (C3)
☐ Sediment Deposits (B2) ☐ Presence of F	Leduced Iron (C4) Crayfish Burrows (C8) Crayfish Burrows (C8) Crayfish Burrows (C8)
Algal Mat or Crust (B4)	Inface (C7)
Iron Deposits (B5)	n in Remarks) 🗍 Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	년 Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (in	uches): NA
Water Table Present? Yes No Depth (in	iches): 720 '
Saturation Present? Yes No Depth (in (includes capillary fringe)	iches): 720'' Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	
This wetland	d was still forested in 10/2012.

Sampling Point: Wjop Oll F-W

/EGETATION (Four Strata) – Use scientific na	mes of pla	ants.		Sampling Point:
30×30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>1</u>	<u>% Cover</u>	<u>Species?</u>		Number of Dominant Species <u>3</u> (A)
2				Total Number of Dominant 2
3			<u>-</u>	Species Across All Strata: (B)
4				Percent of Dominant Species (κ / λ)
5				That Are OBL, FACW, or FAC: (O O (A/B)
6	<u> </u>		<u> </u>	Prevalence Index worksheet:
o				<u>Total % Cover of:</u> Multiply by:
, <u></u>	0			OBL species x 1 =
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X 30)			·	FAC species x 3 =
1. Liquidambar Styraciflux	5	<u> </u>	FAC	FACU species x 4 =
2		,		UPL species x 5 =
3				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				3 - Prevalence Index is ≤3.0 ¹
2.9	<	= Total Co	ver I	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $\cancel{3}$	<u></u> 20% of	total cover	:	
Rhevia alifanus	(c)	V	OBL	¹ Indicators of hydric soil and wetland hydrology must
2 SCIVPUS CURETINGS	10-	`	OBI	Definitions of Four Vegetation Strata:
3 12440105POVA microcarpa	<u> </u>	Ń	OBL	Seminoris of Four Vegetation official
4 CAVEX giganteo	$\overline{\zeta}$	N	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast beight (DBH), regardless of
5. POlygonum argyrololeon	- <u> </u>	3	MAL	height.
6				Sapting/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			·	
I.	<u>- 32</u>	= Total Co	ver C	· ·
	20% 01	r total cove	r: <u>@/(</u>	
Voody vine Stratum (Plot size: <u>SCK SC</u>)				·
2			·	
3			·	
۵				
5		. .	•	Under all all a
	0	= Total Co	ver	Vegetation
50% of total cover:	20% of	f total cove	r:	Present? Yes No
Remarks: (If observed, list morphological adaptations be	low).			<u> </u>
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SOIL

Sampling Point: wjopOll€_w

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Profile Des	cription: (Describe t	to the dept	th needed to docum	nent the i	ndicator	or confirm	the absence of in	dicators.)
Depth	Matrix		Redox	Feature	s Turnal	1 + - 2	Tautura	Domorka
<u>(incnes)</u>	$\frac{Color(moist)}{(21023/1)}$	<u></u>		%	Type		<u>exture</u>	Remarks
	IN OF		10004/2					·
5-17	1000000000000000000000000000000000000	40			<u> </u>		<u> </u>	
14-20	104R4/1	<u>45</u>	10VR 5/3		<u> </u>	\underline{N}	<u></u>	
			10YR 5/3	<u>_^</u>	<u> </u>	PL	<u>_SL</u>	
							-	
•		·		.	·	·		
17								Dens Linica, M. Matrix
Hydric Soil	oncentration, D=Dep	ietion, KM= able to all	Reduced Matrix, MS	= Masked	ad)	ains.	Location: PL=	Pore Lining, M=Matrix.
	1(A1)			iow Surfa	ca (S8) /I	PP S T II		
	bipedon (A2)		Thin Dark Su	rface (S9) (LRR S.	T. U)		(A10) (LRR S)
Black H	listic (A3)		Loamy Mucky	/ Mineral	(F1) (LRF	20)	Reduced V	ertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix ((F2)	•	Piedmont F	loodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Mat	rix (F3)			Anomalous	Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U) ייי די סיפנ	Redox Dark S	Surface (F	-6) (E7)			53B) Matarial (TE2)
	ucky Milleral (A7) (Lh resence (A8) (LRP 11	xrx P, I, U) 1	Redox Depre	n Sullace ssione /F	ま(「!) 「名)			watenar (TF2) w Dark Surface (TF12)
	uck (A9) (LRR P. T)	,	Marl (F10) (L	RRU)	-)		Other (Exol	lain in Remarks)
Deplete	ed Below Dark Surface	e (A11)	Depleted Oct	nric (F11)	(MLRA 1	51)	. <u> </u>	
Thick D	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12)	(LRR 0, P,	T) ³ Indicators	s of hydrophytic vegetation and
Coast F	Prairie Redox (A16) (N	MLRA 150/	A) 🔛 Umbric Surfa	ce (F13)	(LRR P, 1	r, U)	wetland	hydrology must be present,
Sandy	Mucky Mineral (S1) (I	_RR O, S)	Delta Ochric	(F17) (Mi tio (E19)	LRA 151) /ML D.A. 1		unless o	disturbed or problematic.
	Gleyed Matrix (54) Redox (55)		Piedmont Flo	uc (F18) odolain S	(MILKA 1: Soils (F19)	MIRA 14	941	
Strippe	d Matrix (S6)		Anomalous B	Bright Loa	my Soils	(F20) (MLR	A 149A, 153C, 153	3D)
Dark S	urface (S7) (LRR P, S	S, T, U)	_	Ũ				,
Restrictive	Layer (if observed):	:						
Туре:								
Depth (ii	nches):						Hydric Soil Pres	sent? Yes 🔽 No
Remarks:							<u> </u>	
1								
						,		
		,						
						•		



Wetland data point wjop011ef_w facing southwest

WETLAND DETERMINATION DATA	FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP	City/County: Johnston Sampling Date: 7/23/14
upplicant/Owner: Dominion	State: NC Sampling Point: Wop OILF-W
nvestigator(s): ESI - K, MUYPUYEY	Section, Township, Range: NA
andform (billslone terrace etc.): 510.7	Local relief (concave, convex, none); FIOH Slope (%): 0-2
Subragion (IRB or MIRA): LRRP Lat: 35	.51927 Long: -78,27440 Datum: N 5384
Sall Man Linit Nama: G (20tham Silt Ican)	NWA classification: PFO
No elimetia (hydrologia conditions on the site hydrol for this time of)	vear2 Ves No (If no explain in Remarks)
	the disturbed? Are "Normal Circumstances" present? Yes
Are Vegetation, Soll, of Hydrology significant	ry disturbed: Ale Normal Circumstances present: Tes (16
Are vegetation, Soli, of Hydrology flatorally p	nobernatio: (in needed, explain any answers in Kentarks.)
SUMMARY OF FINDINGS – Attach site map showir	ig 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
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	M Surface Soil Cracks (B6)
Surface Water (A1)	B13) B13) Drainage Detterme (P10)
High Water Table (A2) Mari Deposits (t	Ae Odor (C1)
Water Marks (B1)	spheres along Living Roots (C3)
Sediment Deposits (B2)	duced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	duction in Tilled Soils (C6)
Algal Mat or Crust (B4)	ace (C7) Geomorphic Position (D2)
Iron Deposits (B5)	n Remarks)
Linundation Visible on Aerial Imagery (B7)	C-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inc	hes): NA
Water Table Present? Yes No Depth (inc	hes): 720"
Saturation Present? Yes No Depth (inc	hes): 720" Wetland Hydrology Present? Yes No
(includes capillary fringe)	hotos, previous inspections), if available:
Describe recorded bata (siteam gadge, monitoring won, actual p	
Remarks:	

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Sampling Point: wjopOllf:w

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

- Juca J	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\underline{SO'XBO'}$)	<u>% Cover</u>	Species?		Number of Dominant Species
1. PINCIS FORCE		<u> </u>		That Are OBL, FACVV, of FAC: (A)
2. Liquidambar Styrocistua			++-	Total Number of Dominant
3. ACCV VUOLUM	15	<u> </u>	MAC	Species Across All Strata: 7 (B)
4.		·		Description of Description
5				That Are ORL EACIN or EAC: (UU) The (A/B)
<u>. </u>		·		
-			·	Prevalence Index worksheet:
7		·	·	Total % Cover of: Multiply by:
8	$-\frac{1}{10}$		·	OBI species x1 =
_	40	= Total Co	ver /	
50% of total cover:	<u>)</u> 20% o	f total cove	r: <u>7</u> 5	
Sapling/Shrub Stratum (Plot size: $30^{\circ} \times 30^{\circ}$)				FAC species X3 =
1 PERSLON Palustris	10	<u> </u>	FACW	FACU species x 4 =
2) jawidambar Skyloriz(4)a		N	FAC	UPL species x 5 =
2 Clerker Bla Filia	$-\frac{1}{10}$	$\overline{\nabla}$	TACW	Column Totals: (A) (B)
3. CIEMMA MINICIA		- <u></u>	EACW	
4. Cyrilla racemisiona	<u> </u>	- 4⁄	FICM	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				X 2 Dominance Test is >50%
9	<u> </u>			
0	<u>- 2</u> <			3 - Prevalence index is ≤3.0
		_ = Total C	uver	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: 1	20% (of total cove	er:	
<u>Herb Stratum</u> (Plot size: $\frac{30^{\circ} \times 30^{\circ}}{100}$)		۰.		¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	<u> </u>	FAC	be present, unless disturbed or problematic.
> Windwardla areolata	3	- V/	FACW	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
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
·······				
0	<u> </u>			- Herb - All herbaceous (non-woody) plants, regardless
9				
10				- Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				_
	<	= Total (Cover	
EOOV of total covers	7.5 200		3	
	<u>, </u>	o or total CO	voi	-
Woody Vine Stratum (Plot size: SV A SV)	<	λ.	The	
1. Smilax Cotunditolia		7_	- Fuc	-
2.				_
3				
				-
+ ,				-
5				- Hydrophytic
	<u>, / _ ></u>	= Total	Cover	Property Van No
50% of total cover: _o	(, <u>)</u> 209	6 of total co	over:	
Remarks: (If observed, list mombological adaptations	below).			
	,			
1				

	ription: (Describe	to the dept	h needed to docu	nent the ind	icator o	r confirm t	he absence of	indicators	5.)	
pth	Matrix		Redo	x Features	Tunci	1002	Texture		Bomotio	
<u>cnes)</u>	$\frac{COIOF(MOIST)}{1/3}$			<u> </u>	түре				Remarks	
	10104/1		UNURS12		0		- <u> </u>			
$\frac{-1}{2}$	INCR I	$\frac{10}{40}$	$\frac{10}{10}$	$-\frac{0}{20}$	<u></u>	<u> </u>				
- 204	10YK > 71	<u>- 60</u>	IUYKO/		$\underline{\mathcal{D}}$					
pe: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked S	and Gra	ins.	² Location: P	L=Pore Lin	ning, M=Matrix.	ile ³ .
Histosol Histosol	l (A1)		Polyvalue B	elow Surface	•/ •(S8)(L IRR S	RR S, T, U)		ick (A9) (LF	RR O)	
Black H	istic (A3)		Loamy Muc	ky Mineral (F	1) (LRR	0)	Reduced	d Vertic (F1	8) (outside ML	RA 150A,B
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (F2	2)	,		nt Floodplai	in Soils (F19) (L	RR P, S, T
Organic	a Layers (A5) Bodies (A6) (LRR F	р. т. ())	Redox Dark	Surface (F6)			A 153B)	Luarity Solis (i Z	0)
5 cm M	ucky Mineral (A7) (L	RR P, T, U	Depleted D	ark Surface (, F7)		Red Par	ent Materia	al (TF2)	
Muck P	resence (A8) (LRR l	J)	Redox Dep	ressions (F8)	ł		Very Sh	allow Dark	Surface (TF12)	
1 cm M	uck (A9) (LRR P, T)	- (044)	Marl (F10)	LRR U)		-4)	Uther (E	Explain in R	emarks)	
Thick D	ark Surface (A12)	e (ATT)	iron-Manga	nese Masses	(F12) (LRR 0. P. 1	T) ³ Indica	tors of hvd	rophytic vegetat	ion and
Coast F	Prairie Redox (A16) (MLRA 150	A) 🔲 Umbric Sur	face (F13) (L	RR P, T	, U)	wetla	and hydrolo	gy must be pres	sent,
Sandy	Mucky Mineral (S1)	LRR O, S)	🔲 Delta Ochri	c (F17) (MLF	RA 151)		unle	ss disturbe	d or problematic	
Sandy	Gleyed Matrix (S4)		Reduced V	ertic (F18) (N	ALRA 15	0A, 150B)				
Sandy	Redox (S5) d Matrix (S6)			Bright Loam	us (F19) w Soils /	(MLRA 14) E20) (MLR.	9A) A 149A 153C	1530)		
Dark S	urface (S7) (LRR P.	S, T, U)		Digit Loan	iy Colla (1 207 (MEIG		1000)		
strictive	Layer (if observed):				••				
Type:										
Depth (i	nches):						Hydric Soil	Present?	Yes	No
emarks:										
									·	



Wetland data point wjop011f_w facing southwest.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	city/County: JOhn Sta	s s	Sampling Date: 7/23/14
Applicant/Owner: DOMINION			Sampling Point: wjopOll_u
Investigator(s): ESI - KIMURPEIREG	Section, Township, Range:	NA	
Landform (billslope, terrace, etc.); FIQ+	_ Local relief (concave, conv	rex, none): FIA+	Slope (%): 2-4
Subregion (I BR or MI BA): LRR C Lat:	55,51935 Lond	-78.2744	Datum: W5584
Soil Man Unit Name: 6 Van thom Silt 100	\mathbf{N}	NWI classificat	tion: NA
Are climatic / bydrologic conditions on the site typical for this time	of year? Yes	(if no. explain in Rei	marks.)
Are Vegetation Soil or Hydrology signifi	cantly disturbed? Are "Nor	rmal Circumstances" pre	esent? Yes No
Are Vegetation Soil or Hydrology natura	Ilv problematic? (If needs	ed, explain any answers	in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point loca	ations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Vo Wetland Hydrology Present? Yes No Vo Remarks: No Vo Vo Vo	Is the Sampled Ar within a Wetland?	rea Ves	No
HYDROLOGY	·		
Wetland Hydrology Indicators:	·	Secondary Indical	tors (minimum of two required)
Primary Indicators (minimum of one is required: check all that Surface Water (A1) Aquatic Fau High Water Table (A2) Marl Deposit Saturation (A3) Hydrogen S Water Marks (B1) Oxidized Rf Sediment Deposits (B2) Presence or Drift Deposits (B3) Recent Iron Algal Mat or Crust (B4) Thin Muck S Iron Deposits (B5) Other (Expl Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	apply) na (B13) ts (B15) (LRR U) ulfide Odor (C1) izospheres along Living Roots (C Reduced Iron (C4) Reduction in Tilled Soils (C6) Surface (C7) ain in Remarks)	Surface Soil (Sparsely Veg Drainage Pat Moss Trim Li C3) Dry-Season V Crayfish Burn Saturation Vi Geomorphic Shallow Aqu FAC-Neutral Sphagnum r	Cracks (B6) etated Concave Surface (B8) tems (B10) nes (B16) Water Table (C2) rows (C8) isible on Aerial Imagery (C9) Position (D2) itard (D3) Test (D5) noss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No Depth Water Table Present? Yes No Depth Saturation Present? Yes No Depth (includes capillary fringe) Depth Depth	(inches): NA (inches): ZO" (inches): ZO" Wet	land Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gadge, monitoring weil, der			
			· · ·

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Sampling Point: wjop011_u

VEGETATION	(Four Strata) – Use	scientific	names	of plants.
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20(1220)	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: $\frac{50 \times 50}{100}$)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
1. LIRX ORACO	12	\rightarrow	FAC	That Are OBL, FACW, or FAC: (A)
2. LIGUISAMBON STYLOCIEIUS	<u>~</u>	<u> </u>	EAC	Total Number of Dominant
3. BURRIAS NIGER	<u> </u>		Fuc	Species Across All Strata: (B)
4				Percept of Dominant Species
5			<u> </u>	That Are OBL, FACW, or FAC: (A/B)
6				Provolance Index workshoot
7		·		Total % Cover of: Multiply by:
8				
, 	<u>45</u>	= Total Co	ver	
50% of total cover:	<u>></u> 20% o	f total cove	r:	FAC w species x 2
Sapling/Shrub Stratum (Plot size: 30×30)	20		~~~	
1. <u>Flex</u> oraca	30	. <u> </u>	HAC	+ACU species X 4 =
2. Magnolia virginiana	10	<u> </u>	FACW	UPL species X 5 =
3. Vaccinum cotymbosum	5	N	FACW	Column Totals: (A) (B)
4. SYMPLOCUS tinctorion	5	<u>N</u>	EAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				Transpired regulation indicators
7				2 Deminando Test is >50%
0				
o	50	= Total Co		\square 3 - Prevalence index is ≤ 3.0
E0% of total appart	> 20%	_ ··· · · · · · · · · · ·	ω. (D	
30% of total cover	20700		<i></i>	
Herb Stratum (Plot size:)	5	- V	FAC	'Indicators of hydric soil and wetland hydrology must
1. A WINNING TON GIJGUTT CO				Definitions of Four Verstein Strate:
2				Demitions of Four Vegetation Strata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				beight
5				-
6				Sapling/Shrub – Woody plants, excluding vines, less
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				-
	, 5	= Total C	Cover	
50% of total cover:	<u>, </u>	of total cov	/er:	_
Woody Vine Stratum (Plot size: 30 × 30)				
1. Smilax rotundifolia	[0	<u> </u>	FAC	-
2.		/		
3				
A				-
т		_		
5		- Total		- Hydrophylic
50% of table courts	<	= Total	2	Present? Yes No
50% of total cover:	207		ver	-1
Remarks: (If observed, list morphological adaptations t	elow).			
				· · · · · · · · · · · · · · · · · · ·
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SOIL

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Sampling Point: wjop Oll - u

Profile Des	cription: (Describe t	o the depth nee	ded to docum	nent the i	ndicator	or confirm	the absence o	f indicators.)	
Depth	Matrix		Redo	x Features	s		Terefore	Da++	
(inches)	$\frac{\text{Color (moist)}}{(1) + O + C + C}$	$\frac{\%}{1}$	olor (moist)		1vpe'	_Loc ⁻		Kemarks	
0-8	109K.0/1	100	<u> </u>		·····	<u> </u>			
8-20	104K5/2	100							
,	· · · · · · · · · · · · · · · · · · ·					• ``			
			i -						
	·				· ——				
	· · · · · · · · · · · · · · · · · · ·	·			·			·	[
·	·						· ·		
¹ Type: C=C	Concentration, D=Dep	letion, RM=Redu	ced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: 1	PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to all LRRs	, unless othe	rwise not	ed.)		Indicators f	or Problematic Hydric Soils ³ :	•
Histoso	ol (A1)	Г	Polyvalue Be	elow Surfa	ice (S8) (I	_RR S, T, I	U) 🛄 1 cm M	uck (A9) (LRR O)	
Histic E	Epipedon (A2)		Thin Dark S	urface (S9) (LRR S,	T, U)	2 cm M	uck (A10) (LRR S)	
Black H	listic (A3)		Loamy Much	ky Mineral	(F1) (LR F	२ ०)	Reduce	d Vertic (F18) (outside MLRA 1	50A,B)
U Hydrog	jen Sulfide (A4)		Loamy Gley	ed Matrix	(F2)			nt Floodplain Soils (F19) (LRR F	P, S, T}
	ed Layers (A5)	 _	J Depleted Ma	atrix (F3) Surface "				ious Bright Loamy Solis (†20) A 153B)	
	c Bodies (A6) (LKR P	(,,,,,) <u> </u> зврти Г	Redox Dark	Surface (I ark Surface	FO) e(F7)			rent Material (TF2)	
	Presence (A8) (LRP 1		Redox Depr	essions (F	- (* 7) 			nallow Dark Surface (TF12)	
	luck (A9) (LRR P. T)	´´ †	Marl (F10) (LRR U)	~1		D Other (Explain in Remarks)	
Deplet	ed Below Dark Surfac	æ (A11) 🗍	Depleted O	chric (F11)) (MLRA 1	151)			
Thick I	Dark Surface (A12)	<u> </u>	Iron-Manga	nese Mas	ses (F12)	(LRR O, P	P,T) ³ Indic	ators of hydrophytic vegetation a	and
Coast	Prairie Redox (A16) (I	MLRA 150A) 📙	Umbric Sur	face (F13)	(LRR P,	T, U)	wet	and hydrology must be present,	
Sandy	Mucky Mineral (S1) (LRR O, S)	Delta Ochri	c (F17) (M	LRA 151))	unie	ess disturbed or problematic.	
	Gleyed Matrix (S4)	Ļ	Reduced Ve	ertic (F18) Joodalain J	(MLRA 1 Seile (E10	50A, 150E	5) 140 A \		
	r Redox (55) ad Matrix (S6)	- F	Anomalous	Bright Lo:	amv Soils	(F20) (ML	RA 149A. 153C	. 153D)	
	Surface (S7) (LRR P. 3	ร. T. U) ่	Anomalous	Dingin Lot	uniy cons	(1 20) (112		,,	
Restrictiv	e Layer (if observed)):							<u> </u>
Type: _									. /
Depth ((inches):		-				Hydric Soil	Present? Yes No	<u> </u>
Remarks:									
			•						
					•				
			,						
l l									
1									



Upland data point wjop011_u facing northeast.

Project/Site:	1.1.0012
Applicant/Owner: 100/N(1101 State: NA Investigator(s):	
Investigator(s):	
Landform (hillslope, terrace, etc.): Y CAY Local relief (concave, convex, none): Y CAY Si Subregion (LRR or MLRA): L R R P Lat: 35. 50 9 8 8 Long: 78. 2780 9 tr Soil Map Unit Name: Y CAY Soil Algo No Out classification: PCC 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 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 Hydrology Present? Yes No uithin a Wetland? Yes No Hydrology Indicators: Yes No Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Conca Drainage Patterns (B10) Drainage Patterns (B10) High Water Table (A2) Mat Deposits (B15) (LRR U) Drainage Patterns (B10) Drainage Patterns (B10) Drai	
Subtregion (LRR or MLRA): LKK Y Lat: 25.501000 Long: 10.70.41001 T Soil Map Unit Name: Un (Kulkay) Sondy, 1000 NWI classification: PEC 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 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 Hydrology Present? Yes No uithin a Wetland? Yes No Hydrology Indicators: Yes No Surface Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Sparsely Vegetated Conca High Water Table (A2) Mart Deposits (B15) (LRR U) Drainage Patterns (B10) Drainage Patterns (B10) Drainage Patterns (B10) Dry Season Water Table (C) Staturation (A3) Undergon Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C) <t< td=""><td>ope (%): <u>C </u></td></t<>	ope (%): <u>C </u>
Soil Map Unit Name: Un C (U) (U) (U) (U) (D) (D) (D) (D) (D) (D) (D) (D) (D) (D	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	J
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 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 Hydrophytic Vegetation Present? Yes No Hydrology Present? Yes No Wetland Hydrology Present? Yes No Remarks: No Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required: check all that apply)	
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 Hydrophytic Vegetation Present? YesNo Hydric Soil Present? YesNo Wetland Hydrology Present? YesNo Remarks: No Wetland Hydrology Indicators: Secondary Indicators (minimum fone is required: check all that apply) Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Mart Deposits (B10) Uydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (Cravifish Burrows (C8)	No
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Hydric Soil Present? Yes No Is the Sampled Area within a Wetland? Yes No Remarks: Yes No Is the Sampled Area within a Wetland? Yes No HYDROLOGY Yes No Is the Sampled Area within a Wetland? Yes No HyDROLOGY Yes No Is the Sampled Area within a Wetland? Yes No Brimary Indicators (minimum of one is required: check all that apply) Is the Sampled Area Soil Cracks (B6) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Conca High Water Table (A2) Mart Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Doxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (0 Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (0 Crayfish Burrows (C8)	ł
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: Yes No within a Wetland? Yes No HYDROLOGY Ketland Hydrology Indicators: Secondary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Conca High Water Table (A2) Mart 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 (Ca) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)	features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	
Wetland Hydrology Fresent: Festion: Remarks: HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum 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) Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B2) Presence of Reduced Iron (C4)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Vater (A1) High Water Table (A2) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Vater Marks (B1) Sediment Deposits (B2)	
HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of one is required; check all that apply) Surface Vater (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRR U) Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Sediment Deposits (B2) Presence of Reduced Iron (C4)	
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that apply) Surface Vater (A1) High Water Table (A2) High Water Table (A2) Saturation (A3) Vater Marks (B1) Sediment Deposits (B2)	
HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Conca High Water Table (A2) Mart Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Vater Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (Carayfish Burrows (C8)	
HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Conca High Water Table (A2) Mart Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Vater Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (Carayfish Burrows (C8)	
Wetland Hydrology Indicators: Secondary Indicators (minimum Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Conca High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Vater Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (Carafish Burrows (C8)	
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Conca High Water Table (A2) Mart 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 (C4) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)	of two required)
Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Conca High Water Table (A2) Mart 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 (Calification (C4))	
High Water Table (A2) Mart 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 (C4) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)	ve Surface (B8)
Saturation (A3) Saturation (A3) Image: Add of the second sec	
Sediment Deposits (B2)	C2)
	,
Drift Deposits (B3)	l Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
☐ Inundation Visible on Aerial Imagery (B7)	
L. Water-Stained Leaves (B9)	<u></u>
Surface Water Present? Yes No Denth (inches): NA	
Water Table Present? Yes No Depth (inches): 72011	
Saturation Present? Yes No V Depth (inches): 72011 Wetland Hydrology Present? Yes L	No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring weil, aenai photos, previous inspections), il avaliable.	
Remarks:	

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Sampling Point: wjop012f-w

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

anivant	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>50 × 50</u>)	<u>% Cover</u>	Species'		Number of Dominant Species
1. PINUS FARDA	<u> </u>	<u>X</u>	上方	That Are OBL, FACW, or FAC: (A)
2 Liquidambar styraciflua	<u> 10 </u>	<u>_N</u>	-FU	Total Number of Dominant
3. Acer rubrum	10	N	EAC	Species Across All Strata:(B)
4. Quereus nigra	5	N	FAC	
5 Ruercus falcata	2	N	FAC	That Are OBL EACW or EAC: (OC/() (A/B)
6				
7			·	Prevalence Index worksheet:
· · · · · · · · · · · · · · · · · · ·				Total % Cover of: Multiply by:
8,	57		·	OBL species x 1 =
)a			ver 니니	FACW species x 2 =
50% of total cover: $\angle O$.	<u> </u>	total cove	er: <u>[[]</u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30 × 50)	E	\mathbf{x}	- Nov /	
1. Cyrilla racemiflora	<u> </u>	<u> </u>	I-ACW	
2. Vaccinium conymbosum	<u>15</u>	<u> </u>	FACW	OPL species x 5
3. Lyonia lucida	5	<u> </u>	FACW	Column otals: (A) (B)
4.				Brevelence index = B/A =
5				Understatio Venetation Indicatora
6		<u></u>		
0				1 ARapid Test for Hydrophytic Vegetation
[,				2 - Dominance Test is >50%
8	25			3 - Prevalence Index is ≤3.0 ¹
1	<u> </u>	= Total C	over 🗲	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	<u>··</u> 2 20% o	f total cov	er:	
<u>Herb Stratum</u> (Plot size: $30^{5} \times 30^{5}$)			- . .	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	\underline{V}	<u>FAC</u>	be present, unless disturbed or problematic.
2		1		Definitions of Four Vegetation Strata:
3				
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
		· .		height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
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				
12.	10		Covor	
	5			
50% of total cover:	20%	of total co	ver:	•
Woody Vine Stratum (Plot size: 30 x 50)		·	EAC	
1. Smilax votandifolia		<u> </u>	<u> AC</u>	=
2				_
3.				_
A				-
· · · · · · · · · · · · · · · · · · ·				
				-
5				- Hydrophytic
5	5	= Total	Cover	- Hydrophytic Vegetation Present? Yes No
5	5 20%	_ = Total of total co	Cover	- Hydrophytic Vegetation Present? Yes No
5	5 20%	_ = Total of total co	Cover	- Hydrophytic Vegetation Present? Yes No
5	5 20% 20%	= Total of total co	Cover	- Hydrophytic Vegetation Present? Yes No
5	5 20% 20%	_ = Total of total co	Cover over:	- Hydrophytic Vegetation Present? Yes No
5	<u>5</u> 20% pelow).	= Total of total co	Cover over:	- Hydrophytic Vegetation Present? Yes No
5	<u>5</u> 20% pelow).	_ = Total of total co	Cover over:	- Hydrophytic Vegetation Present? Yes No

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Sampling Point: wjop012f_w

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Profile Desc	ription: (Describe t	o the depth n	eeded to docum	ent the ir	ndicator	or confirm	the absence of indi	cators.)
Depth	Matrix	·····	Redox	Features	i	. 3	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc		Remarks
	10412 2/1	100		<u> </u>			<u> </u>	
2-10	104R 5/2	<u>95 10</u>	UR 5/6	_5	<u> </u>	PL.	<u>_CL</u>	
10-20	104R 5/1	95 10	4R516	5	C	PL	SL	
			····-			·····		
<u> </u>			·····		·		<u> </u>	
		<u> </u>						
¹ Type: C≖C	oncentration, D=Depl	etion, RM=Re	duced Matrix, MS	=Masked	Sand Gr	ains.	² Location: PL=Pe	pre Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all LR	Rs, unless other	wise not	ed.)		Indicators for Pr	oblematic Hydric Soils ³ :
📙 Histoso	I (A1)		Polyvalue Be	low Surfa	ce (S8) (I	.RR S, T, L)) 📙 1 cm Muck (A	(LRR O)
Histic E	pipedon (A2)		Thin Dark Su	rface (S9)) (LRR S,	T, U)	2 cm Muck (A	(LRR S)
📔 🔲 Black H	listic (A3)		Loamy Muck	y Mineral	(F1) (LR	R O)	Reduced Ver	tic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gleye	d Matrix ((F2)		Piedmont Flo	odplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mar	trix (⊦3) Surfeee //	-0			sright Loamy Solis (F20)
	: Bodies (A6) (LKR P, usky Mineral (A7) (LE	, i, U) . 20 0 T III		Sunace (F rk Surface	-0) (E7)		(MLKA 15)	Aaterial (TE2)
	tesence (A8) (LP	ων ε, ι, Ψ) _ }	Redox Depre	essions (F	(1)			/ Dark Surface (TF12)
	uck (A9) (LRR P. T)	/	Mari (F10) (L	.RR U)	~/		Other (Expla	in in Remarks)
	ed Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA	151)		,
Thick E	ark Surface (A12)	. ,	🔲 Iron-Mangan	ese Mass	es (F12)	(LRR O, P,	, T) ³ Indicators	of hydrophytic vegetation and
Coast I	Prairie Redox (A16) (N	MLRA 150A)	Umbric Surfa	ace (F13)	(LRR P,	T, U)	wetland h	ydrology must be present,
Sandy	Mucky Mineral (S1) (I	LRR O, S)	📙 Delta Ochric	(F17) (M	LRA 151)	unless di	sturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced Ve	rtic (F18)	(MLRA 1	50A, 150B)	
Sandy	Redox (S5)		Piedmont Fl	oodplain S	Soils (F19) (MLRA 1	49A)	
	ed Matrix (S6)	> T 11)	Anomalous I	Bright Loa	imy Solls	(F20) (MLF	RA 149A, 153C, 153L	((
L Dark S	unace (S/) (LRR P, 3	s, 1, 0)						· ·
Tune:	Eayer (il observed)	•						1
Dopth (i	nebos);		_				Hydric Soil Pres	entz Yes No
Depting	nones).						Tiyane commes	
rtemarks.								
					•			
1								
1								
						•		



Wetland data point wjop012f_w facing north.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/Co	ounty: JUhasta	5	Sampling Date: 7	1/24/14
Applicant/Owner: DOMINION			State: NC	Sampling Point:	Jop012-4
Investigator(s): EST- K. MULPHIEL) Sectio	n, Township, Range	NA		· · · · · · · · · · · · · · · · · · ·
Landform (hillslope terrace etc.): $Flort$	Local	relief (concave, conv	ex. none):	+ Slope	(%):2-4
Subregion (I BR or MI BA): LRR P	Lat: 35. 509	(2 Long	1-78,278	TS Datu	m:W6584
Soil Man Linit Name: LYACU build Soc	NG LUDM		NWI classifi	cation: N/A	
Are elimetic / hydrologic conditions on the site typical for t	his time of year? Y		(if no explain in l	Remarks)	<u> </u>
Are Verstetien Seil or Werelegy	significantly distur	bed? Are "No	mal Circumstances"		No
Are Vegetation, Soil, or Hydrology	_ significantly distur	tic? (If needs	d evoluin any answ	are in Romarke)	
SUMMARY OF EINDINGS Attach site ma	_ naturally problems	nling point loc:	ations transact	s important fea	tures etc.
	p showing suit				
Hydrophytic Vegetation Present? Yes	No	is the Sampled Ar	ea		
Hydro Soll Present? Tes V		within a Wetland?	Yes	No	
Remarks:	<u> </u>	l		<u> </u>	
	•				
	•				
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indi	cators (minimum of t	wo required)
Primary Indicators (minimum of one is required: check	all that apply)		Surface So	oil Cracks (B6)	
Surface Water (A1)	atic Fauna (B13)			egetated Concave S	Surface (B8)
High Water Table (A2)	Deposits (B15) (LR	(R U)		Patterns (B10)	
Saturation (A3)	ized Rhizosnheres	along Living Roots ((C3) Dry-Seaso	n Water Table (C2)	
Sediment Deposits (B2)	ence of Reduced In	on (C4)	Crayfish B	urrows (C8)	
Drift Deposits (B3)	ent Iron Reduction i	n Tilled Soils (C6)	Saturation	Visible on Aerial Ima	agery (C9)
Algal Mat or Crust (B4)	Muck Surface (C7)	I	🔲 Geomorpi	nic Position (D2)	
Iron Deposits (B5)	er (Explain in Rema	rks)	Shallow A	quitard (D3)	
Inundation Visible on Aerial Imagery (B7)				ral lest (D5)	10
Water-Stained Leaves (B9)			Spriaghur		, 0)
Surface Water Present? Yes No	Depth (inches): N	'A			
Water Table Present? Yes No	Depth (inches):	20"		,	
Saturation Present? Yes No	Depth (inches):	> 20 Wet	land Hydrology Pre	sent? Yes	No
(includes capillary fringe)	uell aerial nhotos n	revious inspections)	if available:	<u> </u>	
Describe Recorded Data (stream gauge, monitoring w	ren, aenai priotos, p	темоца парескопа),	, n avanabie.		
Remarks:	······································				

(EGETATION (Four Strata) - Use scientific ha	arries of pa	ants.		Sampling Folin. V
2014201	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 X 30</u>)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1 Dinus tarda	30	- V	FAC	That Are OBL_EACW, or EAC; (A)
GALPS CUS D'OLO	10	N	FAC	
2. Other that the first of Plan		- 57		Total Number of Dominant
3. Liquidambar styraciflua	12	<u> </u>	THC	Species Across All Strata: (B)
I TLEX placa	5	\sim	FAC	
				Percent of Dominant Species 100
5		·····		That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8				OPI species $x = 1$
	60	= Total Co	ver	
50% of total cover: X) 20% o	f total cover	: 12	FACW species x 2 =
30 8 201				FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	5	\sim	TAC	FACU species x 4 =
1. NUSSA DYIVATICA			FUC	
2 ALEV VUbrum	15	9	FAC	UPL species X 5 =
· Maccin in corumbosuk	$\frac{10}{10}$		EACHI	Column Totals: (A) (B)
3. Vaccinium confino 6000		·	- new	
4		·	· ·	Prevalence Index = B/A =
5				
v			·	nyurophytic vegetation indicators:
6				Bapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				
Q,	- 21)		• • • • • • • • • • • • • • • • • • •	
1	<u>c</u>	$_{=}$ 1 otal Co	over /	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover:	<u>)</u> 20% a	of total cove	er: 🖸	
Herh Stratum (Plot size: 30' × 30')				In the steps of building of land until and building building with
A 10: A A BANG A CODE PA	5	\sim	EAC	he present unless disturbed of problematic
1. Avanamana gigamica	<u> </u>	{		be present, unless disturbed of problematic.
2 Clethra alhifolia	<u> 15 </u>	_ <u> </u>	- FACW	Definitions of Four Vegetation Strata:
2		,		
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5.				height.
0		-		Sapling/Snrub – woody plants, excluding vines, less
7				\cdot that s in. DBH and greater than 5.26 it (1 m) tail.
8				Harb All borbassaria (pap 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>			- \
	20	_ = Total C	over	
50% of total cover	() 20%	of total cov	rer: ト	
30. 230	20%	01 10121 001		-
Woody Vine Stratum (Plot size:)	,	4 1/		
1. Smilax rotundifolia	5	Y.	-AC	
				-
2				-
3				-
4				
				~
5	<u> </u>			– Hydrophytic
	<u> </u>	= Total (Cover	Vegetation
50% of total course	2. 5 2001	6 of total co		Present? Yes No
	207		vei	<u> </u>
Remarks: (If observed, list morphological adaptations	below).			

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SOIL

Profile Desc	ription: (Describe t	to the depth ne	eeded to docun	nent the in	dicator	or confirm t	he absence o	f indicators	.)	
Depth	Matrix		Redox	x Features	Ture -1	L = -2	Tanducia			
		$\frac{-\frac{1}{2}}{9}$	$\frac{1001(moist)}{10}$	- <u>%</u>	<u>rype</u>			•	Remarks	
$\left \frac{O^{-1} \mathcal{L}}{O^{-1} \mathcal{L}} \right $	1041 5/2	$\frac{75}{00}$	<u>4K 74</u>	<u> </u>	$\frac{}{}$					
<u> 12-20_</u>	104K5/3	40 10	<u>4R3/6</u>	10	<u> </u>	<u> </u>	SL.			
							,			
		· ·								
		· • • • • • • • • • • • • • • • • • • •			·····					
	·			·		· ` _				
							·		· -	
¹ Type: C=C	oncentration, D=Dep	letion, RM=Rec	duced Matrix, M	S=Masked	Sand Gr	ains.	² Location: I	PL=Pore Lini	ng, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to all LRF	Rs, unless other	rwise note	ed.)		Indicators f	or Problem	atic Hydric S	oils":
	(A1)	4	Polyvalue Be	elow Surfac	ce (S8) (I	LRR S, T, U)		uck (A9) (LR	RO)	
	pipedon (A2)	4	I nin Dark St	Jnace (59) w Mineral /	(LKK 5, (E1) (1 BI	, I, U) 2 ()		uck (A10) (L d Vertic (E1)	KR 5) 8) (outside M	RA 150A B)
	en Sulfide (A4)	4	Loamy Glevé	ed Matrix (I	F2)	(0)		nt Floodplair	n Soils (F19) (LRR P. S. T)
Stratifie	d Layers (A5)	1	Depleted Ma	trix (F3)	-,		Anomal	ious Bright L	oamy Soils (F	20)
Organic	Bodies (A6) (LRR P	ν, Τ, U)	Redox Dark	Surface (F	6)			A 153B)		
5 cm M	ucky Mineral (A7) (Ll	RR P, T, U)	Depleted Da	rk Surface	(F7)			rent Materia	l (TF2)	
	resence (A8) (LRR L	ן (ר ז	Redox Depr	essions (Fi	6)			hallow Dark (Evolution in D	Surface (TF12	:)
	UCK (A9) (LRK P, T) d Bolow Dark Surfac	ο (Δ11)	Depleted Or	hric (F11)		(51)		Explain in Re	emarks)	
	ark Surface (A12)		Iron-Mangar	nese Mass	es (F12)	(LRR O. P.	T) ³ Indic	ators of hydr	ophytic vegeta	ation and
Coast F	Prairie Redox (A16) (MLRA 150A)	Umbric Surf	ace (F13) (LRR P,	Τ, U)	, wetl	and hydrolog	y must be pre	esent,
🛛 🔲 Sandy I	Mucky Mineral (S1) (LRR O, S)	Delta Ochric	: (F17) (ML	RA 151)	unie	ess disturbed	or problemat	ic.
Sandy	Gleyed Matrix (S4)	-	Reduced Ve	ertic (F18) ((MLRA 1	50A, 150B)				
Sandy	Redox (S5)	-	Piedmont Fl	loodplain S	ioils (F19) (MLRA 14:	9A) A 140A - 1520	4520)		
	d Matrix (S6) urface (S7) /I BB P -	9 T IN		Bright Loa	my Solis	(F20) (MLRA	A 149A, 153C,	, 1930)		
Restrictive	Laver (if observed)	3, 1, 0)):								
Type:		,-								
Denth (i	nches):		_				Hydric Soil	Present?	Yes	No
Remarks:										
i remano.										
			-							
l										



Upland data point wjop012_u facing south.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Joh	inston	Sampling Da	ate: <u>7/2</u>
Applicant/Owner: DOMINION	·····	State: <u>N</u>	Sampling Po	pint: <u>Wjop</u>
Investigator(s): <u>EST - K.MU(FGreg</u>	Section, Township, F	Range: <u>NA</u>		
Landform (hillslope, terrace, etc.): Flat	Local relief (concave	convex, none): <u>Co</u>	oncave	Slope (%): <u>C</u>
Subregion (LRR or MLRA): <u>LRK</u>	Lat: 35.5056	_ Long: <u>- 7名 , う</u>	15065	Datum: 📐
Soil Map Unit Name: Bibb Sondy 100	\underline{m}	NWI	classification: <u>P1</u>	-0
Are climatic / hydrologic conditions on the site typical for t	his time of year? Yes 🔽 No	(If no, expl	ain in Remarks.)	
Are Vegetation, Soil, or Hydrology	_ significantly disturbed? Ar	e "Normal Circumsta	ances" present? Ye	s No
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If	needed, explain any	answers in Remark	s.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point	t locations, trar	nsects, importa	nt feature:
Hydrophytic Vegetation Present? Yes	No Is the Sampl	led Area		
Wetland Hydrology Present?	No within a Wet	land? Yo	es No	
Remarks:				
	<u></u>			
		Seconda	n Indicators (minim	im of two red
Primary Indicators (minimum of and is required; shock	all that apply		are Soil Cracks (B6)	
Primary indicators (minimum or one is required, check			ace 3011 Clacks (D0)	cave Surface
High Motor Table (A2)	Deposite (B15) /I BB U)		nana Patterns (B10)	
	rogen Sulfide Odor (C1)		s Trim Lines (B16)	
Mater Marke (P1)	ized Rhizospheres along Living R	$oots (C3) \square Dry$	Season Water Table	(C2)
Sodiment Deposite (P2)	ence of Reduced Iron (C4)		vfish Burrows (C8)	(02)
Drift Deposits (B3)	ent Iron Reduction in Tilled Soils (C6) 🗖 Sati	uration Visible on Ae	rial Imagery
Algal Mat or Crust (B4)	Muck Surface (C7)		morphic Position (D	2)
Iron Deposits (B5)	er (Explain in Remarks)		llow Aquitard (D3)	,
undation Visible on Aerial Imagery (B7)		FAC	C-Neutral Test (D5)	
Water-Stained Leaves (B9)	_	🔲 Spł	nagnum moss (D8) (l	LRR T, U)
Field Observations:	~			
Surface Water Present? Yes No	Depth (inches):			
Water Table Present? YesNo	Depth (inches): > 20"			\checkmark
Saturation Present? Yes <u>Ves</u> No	Depth (inches):	Wetland Hydrolog	y Present? Yes	No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous inspect	tions), if available:		
Remarks:				
•				

Sampling Point: wjop013f-w

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VEGETATION (Four Strata) - Use scientific names of plants.	
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						_
30'230'	Absolute	Dominant	Indicator	Dominance Test worksheet:	~	
Tree Stratum (Plot size:)		<u>Species</u>		Number of Dominant Species	Q	
1. Liguidambiar Styracitua	<u></u>	<u> </u>	TAC	That Are OBL, FACW, or FAC:		. (A)
2 Pinus taeda	20	_V	FAC		~	
Arof Reham	16	$\overline{\mathbf{v}}$	FAC	I otal Number of Dominant	Y	(Ð)
3. Acer Indian		<u> </u>	· <u>- · · · · </u>	Species Across All Strata:	·	(5)
4			· }	Percent of Dominant Species	151	
5				That Are OBI FACW or FAC:	00	(A/B)
6						
0,			·	Prevalence Index worksheet:		
7			·	Total 9/ Course fr	Multiply by	
8.				lotal % Cover or:	wontiply by:	<u> </u>
	50	- Total Co	Wor	OBL species :	x1=	
14		- 101a100		FACW species	x 2 =	
50% of total cover:	<u> </u>	f total cove	r: <u>(O</u>			
Sapling/Shrub Stratum (Plot size: $30^{\circ} \times 30^{\circ}$)					x3=	
Vaccinium corumbosum	15	V	FACW	FACU species	x 4 =	
1. Succertain Congression		· _ , //		UPI species	x 5 =	
2. Lyonia lucida		. <u> </u>	FUC		····	/D\
3 Ilex opaca	5	V.	FAC	Column Lotals:	(A)	(B)
4 · ·				Prevalence Index = B/A	₩	
5				Hydrophytic Vegetation India	cators:	
e		•			u din Manadadian	
					iylic vegetation	
7				2 - Dominance Test is >50)%	
8.				\square 3 - Prevalence Index is ≤ 3	1.0 ¹	
	25	= Total C	over			I=:=>
l)	<		5		vegetation (Exp	nain)
50% of total cover: 10.	<u> </u>	of total cove	er:			
Herb Stratum (Plot size: $30' \times 30'$)				¹ Indicators of hydric soil and w	etland hydrolog	v must
A Quadinovina Quantera	5		FAC	be present unless disturbed of	r nrohlematic	,
T. ATUMANIA J. J. Jan Con		7		be preacht, unless disturbed e		
2				Definitions of Four Vegetation	on Strata:	
3.				Tura 161- de alemán avalual	anuinen 2 in (7	6 cm) or
4				Tree – vvoody plants, excludi	ig vines, 3 m. (7	rdloes of
4				hore in diameter at breast ne	igni (Don), iega	101692-01
5				lieigta.		
6				Sapling/Shrub - Woody plan	is excluding vir	ies less
				than 3 in DBH and greater th	an 3.28 ft (1 m)	tall.
/		_				
8				Herb - All herbaceous (non-v	voody) plants, re	gardless
9				of size, and woody plants less	s than 3.28 ft tal	
		_				
10				 Woody vine – All woody vine 	es greater than 3	.28 ft in
11				height.		
12						
12.				-		
2	~ <u>~</u> ~		Jover			
50% of total cover:	$.>_{20\%}$	of total co	ver: <u> </u>			
Weady Vine Stratum (Blat size: 30 X30)						
South A V Softer 10 12-	5	17	FAC	ļ		
1. Smilax rotunditolia			<u> </u>	-		
2 Vitis rotundifolia	5	V/	FAC	- 1		
				-		
-3				- 1		
4				_ \		
5				(hodes also the		
				- Hydrophytic		
	<u>~ _10</u>	= Total	Cover	Procent?	No	
50% of total cover:	5 20%	6 of total co	over: X	Present? Tes	NO	_
Demokra (Boleney & Bellerenek 1, et al. And P	holow					
Remarks: (if observed, list morphological adaptations i	Delow).					
1						

Sampling Point: Wjop 013f-W

Profile Desc	ription: (Describe	to the depth	needed to document	the indicator or confirm t	the absence of inc	dicators.)
Depth	Matrix		Redox Fe	atures	-	
(inches)	Color (moist)	<u> </u>	Color (moist)	<u>% Type' Loc'</u>	Texture	Remarks
0-14	IOYR A/I	160				
14-20	104R3/2	100				
	·····		···_			
			• • •			
i			· · · · · · · · · · · · · · · · ·			
Type: C=C	oncentration D=Der	letion RM=R	educed Matrix, MS=M	lasked Sand Grains.	²Location: PL≓	Pore Lining, M=Matrix,
Hydric Soil	Indicators: (Applic	able to all LF	RRs, unless otherwis	e noted.)	Indicators for F	Problematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Below	Surface (S8) (LRR S, T, U)) 🛄 1 cm Muck	(A9) (LRR O)
Histic E	pipedon (A2)		Thin Dark Surfac	e (S9) (LRR S, T, U)	2 cm Muck	(A10) (LRR S)
Black H	istic (A3)		Loamy Mucky M	ineral (F1) (LRR O)	Reduced V	ertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gleyed N	1atrix (F2)	Piedmont F	loodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Matrix	(F3)	Anomalous	Bright Loamy Soils (F20)
	Bodies (A6) (LRR F	ν, Τ, U)	Redox Dark Sur	tace (F6)		53B) Matarial (TEC)
	ucky Mineral (A7) (L	кк P, I, U) N	Depleted Dark S	ounace (F7)		waterial (TF2)
)	Mari /F10) /I PD	una (Fo) 111)	Other (Evo	lain in Remarks)
	dok (A9) (CKK F, T) A Below Dark Surfa	ce (A11)	Depleted Ochric	(E11) (MLRA 151)		ian in contanto,
Thick D	ark Surface (A12)		Iron-Manganese	Masses (F12) (LRR O, P,	T) ³ Indicator	s of hydrophytic vegetation and
Coast F	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 (F1	7) (MLRA 151)	unless (disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced Vertic	(F18) (MLRA 150A, 150B)		
Sandy	Redox (S5)		Piedmont Flood	plain Soils (F19) (MLRA 14	9A)	
	d Matnx (S6)	ет II)	Anomalous Brig	INT LOAMY SOIIS (F20) (MER	A 149A, 153C, 15	3D}
Poctrictive	unace (S7) (LRR P,	3, 1, 0))-				·····
Tupo:	Eayer (il observed) .				
Depth (i					Hydric Soil Pre	No No
Deptir (i	nones)				riyane son rie	
Remarks:						
				1		
						3
1						



Wetland data point wjop013f_w facing west.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

i.

Project/Site: ACP	City/Cou	nty: Johnston	s	ampling Date: 7/24/(4
Applicant/Owner: DOMINION	· · · · · · · · · · · · · · · · · · ·	Sta	ate: <u>N</u>	ampling Point: Wiop 013-1
Investigator(s): EST K, MUNPGYCC	/ Section,	Township, Range:	(A	
Landform (billsione terrace etc.): $\mathcal{F}(\mathcal{D})$	Local rel	ief (concave, convex, no	ne): flat	Slope (%): 0-2-
Subrecion // RR or MIRA); LRR P	1at:35,5057	778 Long: -7	8-28601	+ Datum: WGSE
Soil Man Unit Name: Bibb Sondy (U)	ê.~		N\/I classificat	ion: N/A
Are elimetic / hydrologic conditions on the site typical fr	as this time of year? Yes	I No (if	no evolain in Per	parke)
Are climatic / hydrologic conditions on the site typical it	significantly disturbed	(ii	iroumatonoon" nro	No. No.
Are Vegetation, Soil, of Hydrology	significantly disturbed		aloin any priswore	in Romarke)
Are vegetation, Soli, or Hydrology	naturally problematic	in needed, exp	plain any answers	
SUMMARY OF FINDINGS – Attach site n	ap showing samp	ling point location	s, transects,	mportant features, etc.
Hydrophytic Vegetation Present? Yes	_ No is	s the Samplèd Area		
Hydric Soil Present? Yes	No No	vithin a Wetland?	Yes	_ No
Wetland Hydrology Present? Yes	No			
Remarks:				
				x.
HYDROLOGY				. b
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is required: cher	ck all that apply)		Surface Soil C	cracks (B6)
Surface Water (A1)	quatic Fauna (B13)		Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2)	arl Deposits (B15) (LRR	U)	Drainage Patt	ems (B10)
Saturation (A3)	ydrogen Sulfide Odor (C1	1)	Moss Trim Lir	ies (B16) Veter Teble (C2)
Vater Marks (B1)	xidized Knizospheres ald		Cravfish Burn	valer rable (C2)
\square Drift Deposits (B3)	ecent Iron Reduction in T	Filled Soils (C6)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	hin Muck Surface (C7)		🔲 Geomorphic I	Position (D2)
Iron Deposits (B5)	ther (Explain in Remarks	\$)	🔲 Shallow Aqui	ard (D3)
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)		······	L_ Sphagnum m	oss (D8) (LRR 1, U)
Field Observations:	(Donth (inches): N	A		
Water Table Present? Yes No	Depth (inches): 7	2011		
Saturation Present? Yes No	Depth (inches):	スンパー Wetland H	lvdroloav Preser	t? Yes No
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, prev	vious inspections), it ava	llable:	
Remarks:				
	•••			
		la su en		
		•		
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Sampling Point: Wjop013-4

VEGETATION	(Four Strata) -	Use scientific names of	plants.
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3114201	Absolute	Dominant 1	ndicator	Dominance Test worksheet:
$\frac{\text{Tree Stratum}}{100000000000000000000000000000000000$	<u>30</u>			Number of Dominant Species
1. Plings tocco	-16		-AC	That Are OBL, FACW, or FAC: (A)
2. RCEV INOUNT		<u> </u>	$\frac{-\pi}{-\pi}$	Total Number of Dominant
3. Light dambur signaciona	<u> </u>			Species Across Ali Strata: (B)
5.				Percent of Dominant Species
6				
7		·		Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
· · · · · · · · · · · · · · · · · · ·	45	= Total Cove	er _	OBL species x 1 =
50% of total cover: 22.	5_ 20% of	total cover:	9	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X 30)				FAC species x 3 =
1. Vaccinium Corymbosum	10_	<u> </u>	<u>=Acw</u>	FACU species x 4 =
2. Acer (ubrunn	5	<u> </u>	FAC	UPL species x 5 =
3. 41mus americana	5	1	FAC	Column Totals: (A) (B)
4.		/		Prevalence index = B/A =
5.				Hydrophytic Vegetation Indicators:
6.				12 Ranid Test for Hydrophytic Vegetation
7.				2 Deminance Test is >50%
8				\square 2 - Dominiance rest is 200 %
	$\frac{1}{20}$	= Total Cov	er,	Drahlamatia Hudranhutia Vagatatian ¹ (Evalain)
50% of total cover: (\mathcal{O})	20% 0	f total cover	4	L Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30' X30')			· <u> </u>	
1 Arundinaria gigantea	5	V	FAC	be present, unless disturbed or problematic.
			<u> </u>	Definitions of Four Vegetation Strata:
2				Seminorio or rour regulation of our
		• ••••		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				height.
6		•		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 tall
9		_		bi size, and woody plants less than 5.20 it tall.
10			·	Woody vine – All woody vines greater than 3.28 ft in
11			·	
12			·	-
1	<u> </u>		ver i	
50% of total cover: $\underline{\chi}_{1}$	20%	of total cove	r: <u> </u>	-
Woody Vine Stratum (Plot size: <u>SVX SU</u>)	30	\mathbf{X}	FAC	
1. SMITTAX TOFUNATIONA			14-	-
2	<u>-</u> .			-
3				-
4				- [
5				- Hydrophytic
	,	_ = Total Co	over	Vegetation
50% of total cover:	<u>り</u> 20%	of total cove	er: 🧕	_ Present?
Remarks: (If observed, list morphological adaptations b	elow).			
1				

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Profile Desc	ription: (Describe t	to the dept	h needed to docu	iment the	indicator	or confirm t	he absence of i	ndicators.)	
Depth	Matrix		Red	lox Feature	S Turaal	1 2	Taudur-	D	
	$\frac{\text{Color (moist)}}{(n) \cdot p \cdot 2/1}$	100	Color (moist)	%	ype'	<u>LOC</u>		Kemarks	
	10 yr 5/1	100			•				
5-10	104R4/3	100	<u> </u>				<u> </u>		
10-20	104R4/6	95	104R4/1	5		<u></u>			
	1								
	····								
·					÷,				
		· ·							
1						· ·	21		——
Hydric Soil	oncentration, D=Dep	able to all I	Reduced Matrix, I	erwise no	a Sana Gr ted)	ains.	Indicators for	.=Pore Lining, M≕Matrix, Problematic Hydric Soil	ls ³ :
		able to all i		Relow Surf	ace (S8) (I	RRSTIN		k (A9) (I RR ())	
Histic E	pipedon (A2)		Thin Dark	Surface (SS) (LRR S.	T, U)	2 cm Muc	k (A10) (LRR S)	
Black H	istic (A3)		Loamy Mu	cky Mineral	(F1) (LRI	ξ Ο)	Reduced	Vertic (F18) (outside MLF	RA 150A,B)
🗍 Hydrog	en Sulfide (A4)		🔲 Loamy Gle	yed Matrix	(F2)		Piedmont	Floodplain Soils (F19) (LI	RR P, S, T)
Stratifie	d Layers (A5)		Depleted N	Aatrix (F3)	IT = 1			us Bright Loamy Soils (F20))
	Bodies (A6) (LRR P	', 「, U) סססד ויי	Redox Dar	K Surface (F6) e (F7)			353B) Int Material (TE2)	
	resence (A8) (LRR I	NIXE, 1, UJ }}	Redox Der	pressions (- () /) 		Verv Sha	llow Dark Surface (TF12)	
1 cm M	uck (A9) (LRR P, T)	*	Marl (F10)	(LRR U)	-,		Other (E>	plain in Remarks)	
Deplete	ed Below Dark Surfac	e (A11)	Depleted C	Ochric (F11) (MLRA 1	151)			
Thick D	ark Surface (A12)		Iron-Mang	anese Mas	ses (F12)	(LRR O, P,	T) ³ Indicate	ors of hydrophytic vegetati	on and
	Prairie Redox (A16) (I Musicu Minoral (S1) (MLRA 1507	A) 📋 Umbric Su	rface (F13) ric (F17) (N	(LRR P, 1 PA 151)	1,0}	wetlar	id hydrology must be pres disturbed or problematic	ent,
	Gleved Matrix (S4)	LKK 0, 3)		Vertic (F18)	(MLRA 1	50A, 150B)	unes	s distanced of problematic.	· ,
Sandy	Redox (S5)		Piedmont	Floodplain	Soils (F19) (MLRA 14	9A)		
Strippe	d Matrix (S6)		🔲 Anomalou	s Bright Lo	amy Soils	(F20) (MLR	A 149A, 153C, 1	53D)	
Dark S	urface (S7) (LRR P,	S, T, U)					1		
Restrictive	Layer (if observed)	}:							
Type:	• •							· · · · · · · · · · · · · · · · · · ·	
Depth (i	nches):						Hydric Soil P	resent? Yes	NO
Remarks:									
1									
1									



Upland data point wjop013_u facing east.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: AC (? City/County: JOhnston Sampling Date: 6/ Applicant/Owner: Dominion State: NC Investigator(s): ESJ-J. Harbour, K. Murphrell Section, Township, Range: NA Landform (hillslope, terrace, etc.): + Lat Local relief (concave, convex, none): <u>+ 10+</u> Lat: 35.50617 Long: 78.29060 Subregion (LRR or MLRA): LRR Datum: VV Soil Map Unit Name: Grantham silt loom NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes V No _____ (If no, explain in Remarks.) Are Vegetation _____, Soil ____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _ 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? Yes No Yes 🖌 No _____ within a Wetland? Wetland Hydrology Present? 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) ___ 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) ____ Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (85) Other (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? No Depth (inches): Yes _____ No ____ Water Table Present? Depth (inches): 10 Saturation Present? Depth (inches): Yes No Wetland Hydrology Present? Yes No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

A

Sampling Point: wjop 031Ew

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 3077 X 3077	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. VINUS toeda	<u></u>	<u> </u>	FAC	That Are OBL, FACW, or FAC:
2.		_,		
3				Total Number of Dominant
				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC; 100 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of:Multiply by:
·····	50			OBL species x 1 =
<u>って</u>	<u> </u>	= Total Cov	er ا	
50% of total cover: <u>45</u>	20% of	total cover	: <u> (</u>	
Sapling/Shrub Stratum (Plot size: SUALX SOP)	~	. }		FAC species X 3 =
1. Liquidambar Schlaciflua		<u>_N</u>	FAC	FACU species x 4 =
2. QUEVICUS NIGVON	5	$\overline{\mathbf{y}}$	TAC	UPL species x 5 =
· Moanolia vivaininna	2	Δ <u>Λ</u>	FARW	Column Totais: (A) (B)
DIALLS LAPLA	-2	~		
4. Elistra rocar		IN	+MC	Prevalence Index = B/A =
5. <u>Elvin Jaceminiora</u>	<u></u>		FACW	Hydrophytic Vegetation Indicators:
6. TIEX OPACO	2	N	<u>FAC</u>	1 - Rapid Test for Hydrophylic Vegetation
7				2 Daminagan Testing 50%
8				
····	177			3 - Prevalence Index is ≤3.0'
	<u> </u>	= 10(a) CO	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>7). 3</u>	<u>></u> 20% of	f total cover	: <u>>, ~</u>	
<u>Herb Stratum</u> (Plot size: <u>ろのそそ X ろの</u> かそ				¹ Indicators of hydric soil and wetland hydrology must
1. MORE PRESENT				be present, unless disturbed or problematic,
2.				Definitions of Four Vegetation Strata
3		•••••••	<u> </u>	sommende off our vegetation offata.
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sanling/Shrub - Moody 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	••••		·	or 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				
	$\overline{0}$	= Total Co	ver	
500% oftatal access	2006 -	f total acura		
	20 % C	n totat cove	··	
woody Vine Stratum (Plot size: <u>DUFT X DU</u>) t	2	λz	TA /	
1. LOXICODPACION CORECONS		<u> </u>	<u>++C</u>	
2. Smilak rotundispolion	2	<u> </u>	FAC	
3.		1		
Δ		-		
) D	ź.			Hydrophytic
-		= Total Co	wer	Vegetation
50% of total cover:	20% <	of total cove	r: <u>0, 8</u>	Present? Yes No
Remarks: (If observed, list morphological adaptations bel				
	ow)			
1	ow).			
	ow).			

SOIL

Sampling Point: Wjep031F.w

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix Redox Features							
(inches)	Color (moist)	%	Color (moist)	%	Type	_Loc ²	Texture	Remarks
0-5	10463/1	100				<u></u>	<u> </u>	
3-20	NURS/1	90	104R 5/6	2	C	PL	L	
			INUR SILO	3		ΛΛ.		
		- <u> </u>	100110/0	<u>v</u>			<u> </u>	
	· · ·····							
	•				<u></u>		·····	
'Type: C=C	oncentration, D=Dep	oletion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soll	Indicators: (Applic	able to all	LRRs, unless other	wise note	ed.)		Indicators for F	Problematic Hydric Soils ³ :
Histoso	(A1)		Polyvalue Bei	low Surfa	ce (S8) (I	.RR S, T, U) 1 cm Muck	(A9) (LRR O)
Histic E	pipedon (A2)		Thin Dark Su	rface (S9)) (LRR S,	T, U)	2 cm Muck	(A10) (LRR S)
Black H	istic (A3)		Loamy Mucky	y Mineral I	(F1) (LRI	R O)	Reduced V	ertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F2)		Piedmont F	loodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Mat	rix (F3)			Anomalous	Bright Loamy Soils (F20)
Organic	Bodies (AG) (LRR F	', T, U)	Redox Dark 8	Surface (F	-6)		(MLRA 1	53B)
cm Mi	ucky Mineral (A/) (L	кк Р, Т, U) N	Depleted Dar	K Surface	:(F7) □\		Red Parent	Material (TF2)
	resence (A8) (LKR U	1)	Redox Depre	ssions (F	೮)		Very Shallo	W Dark Surface (TF12)
Deplete	d Relow Dark Surfa		Depleted Och	KKU) via (Ed.1)	/M1 15 A 4	543	Other (Expl	ain in Remarks)
Thick D	a Delow Dark Ourface	29 (MTT)	Depieted Ocr	ию (F33) есе Маса	ุเพ⊾เสล 1 คร (⊏⊀ว)	(IRPO P. JI)		
Coast F	rairie Redox (A1A)	MLRA 1504	(A) Umbric Surfe	ce (F13)	(1 RR P "		indicators	by drology must be present
Sandy	Mucky Mineral (S1) ((LRR O. S)	Delta Ochrin	(F17) (MI	RA 151)	· • • • •	wouditu unless s	isturbed or problematic
Sandy	Gleved Matrix (S4)		Reduced Ver	tic (F18) ((MLRA 1	50A. 150B)	011655.0	isturbed of problematic.
Sandy I	Redox (S5)		Piedmont Flo	odplain S	oils (F19) (MLRA 14	9A)	
Strippe	d Matrix (S6)		Anomalous E	Bright Loai	my Soils	(F20) (MLR.	A 149A, 153C, 153	3D)
Dark Su	urface (S7) (LRR P,	S, T, U)		÷			,	;
Restrictive	Layer (If observed)):					1	
Type:								1
Depth (ir	iches):						Hydric Soil Pre-	sent2 Yes No
Pemarke:			·····				Invalie Coll Pre	
Nethalas.								
1								
1								



Wetland data point wjop031f_w facing west.



Wetland data point wjop031f_w facing north.

Photo Sheet 1 of 2
WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: $A \subseteq P$	City/County: JOhns	いろう	Sampling Date: 6/8/15
Applicant/Owner: Dominion		State: NC	Sampling Point: W100031_4
Investigator(s): ESI-J, Harbour, K. Marphr	ey Section Townshin Ran	ne NA	
Landform (hillslope terrace etc.): FIQ+	Locat ratiof (concerve or	90. <u>79</u>	Store (91): 2-3
Subracion (I BB or NI BA), L RR P 1-125	$\leq 0.60^{\circ}$	-78 2905	6 300 (70). <u>20</u>
Sublegion (LRR of MERA):	<u> </u>	ong:	Datum: <u>VVØ 2</u>
Soil Map Unit Name: Orony Man Still COOR	, 	NWI classifie	cation:
Are climatic / hydrologic conditions on the site typical for this time c	of year? Yes <u></u> No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significa	ntly disturbed? Are "N	Vormal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology naturally	y problematic? (If nee	eded, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ing sampling point lo	ocations, transects	s, important features, etc.
Hydric Soil Present? Yes No	Is the Sampled	Area	and the second second
Wetland Hydrology Present? Yes No	within a Wetlan/	d? Yes	No
Remarke:			
		·····	
Wetland Hydrology Indicators:		Secondary India	store (minimum of two required)
Primary Indicators (minimum of one is required; check all that an	nlu)	Surface Soi	L Cracks (R6)
Surface Water (A1)	/B13)	Sonace Son	related Concours Surface (PR)
High Water Table (A2) Mart Deposits	(B15) (LRR II)	Drainage P	atterns (B10)
Saturation (A3) Hvdrogen Sulfi	ide Odor (C1)	Moss Trim I	ines (B16)
Water Marks (B1) Oxidized Rhizo	spheres along Living Roots	(C3) Dry-Season	Water Table (C2)
Sediment Deposits (B2) Presence of Re	educed Iron (C4)	Crayfish Bu	rrows (C8)
Drift Deposits (B3) Recent Iron Re	eduction in Tilled Soils (C6)	Saturation \	/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Sur	face (C7)	Geomorphic	c Position (D2)
Iron Deposits (B5) Other (Explain	in Remarks)	Shallow Aqu	uitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutra	
Eield Observations:	<u> </u>	Sphaghum	moss (D8) (LRR 1, 0)
Surface Water Present? Yes No Depth (inc	ches): NA		
Water Table Present? Yes No Depth (inc	ches): 720		
Saturation Present? Yes No Depth (inc	ches): 720 We	tland Hydrology Prese	ent? Yes No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial p	photos, previous inspections)), if available:	
Population		·····	
Remarks,			

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

Sampling Point: wjop031_u

2.5. 10.161	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 5054 X 205-5	<u>% Cover</u>	Species?	Status	Number of Dominant Species
1. <u>PINUS toeda</u>	<u> </u>	$\underline{\nabla}$	FAC	That Are OBL, FACW, or FAC: (A)
2		1		
3.				Total Number of Dominant
Λ				Species Across Air Strata; (B)
*				Percent of Dominant Species
5			<u></u>	That Are OBL, FACW, or FAC: (A/B)
6		·		
7		<u></u>		Prevalence Index worksheet:
8.				Total % Cover of:Multiply by:
	50	- Total Ca		OBL species x 1 =
				FACW species x 2 =
	20% 0	total cover		FAC species x 3 -
Sapling/Shrub Stratum (Plot size: SUT + X SOT +		. /		
1. TIEX OPACES	10		FAC	FACU species X 4 =
2. QUEVEUS NIGVA	2	Ń.	FAC	UPL species x 5 =
3 Prunus servina	2	$\overline{\nabla}$	FAC	Column Totals: (A) (B)
A		/		
T		. <u>.</u>	<u> </u>	Prevalence Index = B/A =
٥			·	Hydrophytic Vegetation Indicators:
6			<u></u>	1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				
	14			3 - Prevalence Index is ≤3.0°
7			1.4	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>/</u>	20% of	f total cover	<u>~~~</u>	
Herb Stratum (Plot size: SOR4 KBOPA				¹ Indicators of hydric soil and wetland hydrology must
1. NONE Present				be present, unless disturbed or problematic.
2.				Definitions of Four Vegetation Strata
3				soundere en regeration er atal
J	·			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 - Moody plante, evoluting vines, less
7.			,	than 3 in, DBH and greater than 3.28 ft (1 m) tall.
g				
<i>с.</i>		· · · · · · · · · · · · · · · · · · ·		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.				
		- Takal Oa		
			ver	
50% of total cover:	20% o	f total cover	r:	
Woody Vine Stratum (Plot size: 30 F+ X 30 F+				
1. Smilax whyndia	2	Y	FAC	
2 VITIS ONGORISONIA	5	$\overline{\nabla}$	FAC	
3		/	<u>, , , , , , , , , , , , , , , , , , , </u>	
· · · · · · · · · · · · · · · · · · ·				
4	· · · · · · · · · · · · · · · · · · ·			
5				Hydrophytic
	7	= Total Co	ver	Vegetation
50% of total cover: 3, 5	> 20%	f total nove	-1.4	Present? Yes No
Demortes (Kabaaa sed list as a fast in the	<u> </u>			
Remarks: (If observed, list morphological adaptations below	5W).			

SOIL

Sampling Point: wjop031_u

Depth	Matrix		Redox Features	
$\frac{(\text{incnes})}{(\lambda - 2)}$	10/2000 (moist)	$\frac{\%}{100}$ –	Color (moist) % Type'Coc ²	Texture Remarks
	IVMN AV &			
3-6	1048412	<u> </u>		
<u>6-20</u>	104R 5/4	100		
	,			
	· · · · · · · · · · · · · · · · · · ·			<u></u>
¹ Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soll I	ndicators: (Applic	able to all LF	≀Rs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Below Surface (S8) (LRR S, T, I	U) 1 cm Muck (A9) (LRR O)
Histic Ep	pipedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black His	SIIC (A3) B Sulfide (A4)		Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hyuroge Stratified	H Sunde (A4)		Loamy Gleyed Matrix (F2)	Pledmont Floodplain Soils (F19) (LRR P, S, T)
Organic	Bodies (A6) (LRR P	. T. U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mu	cky Mineral (A7) (LF	R P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Pr	esence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Mu	ck (A9) (LRR P, T)		Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted	i Below Dark Surfac	e (A11)	Depleted Ochric (F11) (MLRA 151)	
Thick Da	rk Surface (A12)		Iron-Manganese Masses (F12) (LRR O, P	7, T) ³ Indicators of hydrophytic vegetation and
Coast Pr	airie Redox (A16) (M	MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy G	locky Mineral (S1) (1 leved Matrix (S4)	.KK 0, 5)	Delta Ocnric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 460B,	unless disturbed or problematic.
Sandy R	edox (S5)		Piedmont Floodplain Soils (F19) (MLRA 1.	/) / () () () () () () () () () () () () ()
Stripped	Matrix (S6)		Anomalous Bright Loamy Soils (F20) (MLF	H3A) RA 149A, 153C, 153D)
Dark Sur	face (S7) (LRR P, S	S, T, U)		
Restrictive I	ayer (if observed):			
Туре:				
Depth (inc	ches):			Hydric Soll Present? Yes No
Remarks:				
•				



Upland data point wjop031_u facing southwest.



Upland data point wjop031_u facing south.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/	County: Johnston	Sampling Date: 10/12	2/2015
Applicant/Owner: Dominico			State: NC Sampling Point: Will	039F.0
Investigator(a): EST (R. Theophiell)	L. Roper) South	ion Township Pango:	N/A	
Londform (billelong temper ato)	Jak Jack	lon, Township, Range		1-7%
Landform (nillslope, terrace, etc.):		이 relief (concave, convex. 1년	70 04 11/ Sibpe (%):	10-01
Subregion (LRR or MLRA):	Lat: 33.503	Long:	-10. CIII6 Datum: 1	NG58.
Soil Map Unit Name: Lynchlourg St	andy learn, 0-27. slope	5	NWI classification:	
Are climatic / hydrologic conditions on th	e site typical for this time of year?	Yes No	(If no, explain in Remarks.)	
Are Vegetation, Soil, or H	-lydrology significantly distu	rbed? Are "Norma	I Circumstances" present? Yes N	No
Are Vegetation, Soil, or H	Hydrology naturally problem	natic? (If needed,	explain any answers in Remarks.)	
SUMMARY OF FINDINGS - At	tach site map showing sar	mpling point locati	ons, transects, important feature	es, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes <u> </u>	
Hardwood Flat				
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two re	quired)
Primary Indicators (minimum of one is	required check all that apply)		Surface Soil Cracks (B6)	quireu
Surface Water (A1)	Aquatic Fauna (B13)	Approximation of the second	Sparsely Vegetated Concave Surface	e (88)
High Water Table (A2)	Marl Deposits (B15) (LR	R U)	Drainage Patterns (B10)	0 (00)
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 In	on (C4)	Crayfish Burrows (C8)	
Drift Deposits (B3)	Recent Iron Reduction in	n 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 Remar	rks)	Shallow Aquitard (D3)	
Inundation Visible on Aerial Image	ry (B7)		FAC-Neutral Test (D5)	
Water-Stained Leaves (B9)			Sphagnum moss (D8) (LRR T, U)	
Field Observations:		NA		
Surface Water Present? Yes	No Depth (Inches):	20		
Saturation Present? Yes (includes capillary fringe)	No Depth (inches): 2	20 Wetland	Hydrology Present? Yes <u>/</u> No	
Describe Recorded Data (stream gaug	e, monitoring well, aerial photos, pro	evious inspections), if av	ailable:	
Remarks:				
A. S. S. M. S. S. P. S. S.				

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

Sampling Point: wjop 039 Ew

		-		
The Shating (Blating 31FL + 3AFL)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Iree Stratum (Plot size: 3014. 4 3014.)	% Cover	Species?	Status	Number of Dominant Species /
1. Quereus mare	20	N	FAC	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	20	N	FAC	
3 Liquidamber studie: Elua	Lto	V	FAC	Total Number of Dominant
D' tol	24	V	FAC	Species Across All Strata: (B)
4. FINUS TARDA	20	-	MIC	Percent of Dominant Species
5. Querens phellos	10	N	MACH	That Are OBL, FACW, or FAC: 00 (A/B)
6				
7	-			Prevalence Index worksheet:
T				Total % Cover of: Multiply by:
8				
	120	= Total Cov	ver	OBL species x 1 =
50% of total cover: 60	20% of	total cover	. 24	FACW species x 2 =
Son or total and son of the sol	_ 20 70 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 3014, K 3014,)	~	V	-10	
1. Liquidambar styraciflua	.20	T	FAC	FACO species x 4 =
2. Magnolia Virginiana	10	Y	FACW	UPL species x 5 =
				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hudrophytic Vegetation Indicators:
6	0.000	New West		Hydrophytic vegetation indicators;
	The second second			1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is <3.01
	30	= Total Co	er	
FOR ALLEL IE		- 10001000	1	Problematic Hydrophytic Vegetation (Explain)
	20% of	total cover	0	
Herb Stratum (Plot size: 30+1. x 50+1-)				¹ Indicators of hydric soil and wetland hydrology must
1. none				be present, unless disturbed or problematic.
2	10000	11.11.17		Definitions of Four Vegetation Strata:
2				Demnitions 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	1.			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				
0		1000	2	ef cize, and weady plants loss than 2.29 & toll
9				or size, and woody plants less than 5.26 it tail.
10	A State			Woody vine - All woody vines greater than 3 28 ft in
11.				height.
12	1.14.17.11.17			
12.	-			
	0:	= Total Cov	er	
50% of total cover:	_ 20% of	total cover		
Woody Vine Stratum (Plot size: 30Ft. x 30Ft.)				
+ Vite aturdifie	10	V	FAC	
I. VIIIS TOTALATIONA	10	-	THE	
2. Smilar rotunditolia	10	_T	FAC	
3	3.0.3.5.5			
4			10,000	
	Dimetric Contra			
5				Hydrophytic
	20 :	= Total Cov	er	Vegetation
50% of total cover: 10	20% of	total cover	4	Present? Yes No No
Permetke: (If observed list merch standard data for a balance				
remarks: (if observed, list morphological adaptations below				
	W).			

SOIL

Sampling Point: wjop039F.w

Profile Des	cription: (Describe	to the dept	h needed to docu	ment the l	ndicator	or confirm	the absence of l	Indicators.)	
Depth (inches)	Matrix Color (moist)	0/	Redo	x Features	S Turnel	1.002	Texture	Per	marke
0-C	104R 3/2	140				LOC		Rei	marks
5-12	10404/2	G .	ILURELI	10	-	M			
12 20	10/12 1/2	90	1040011	10	-	M			
16-00	10-112 016	10	10 425/6	0	<u> </u>	_/\			
-	-	· ·							
							<u></u>	2010	
						-			
	A MORE AND A			<u></u>				Carles Alars	
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL	=Pore Lining, M	M=Matrix.
Hydric Soll	Indicators: (Application	able to all I	.RRs, unless othe	rwise note	ed.)		Indicators for	Problematic I	Hydric Solls":
- Histoso	(A1)		Polyvalue Be	ow Surface	ce (S8) (L	RRS, T, U) 1 cm Mucl	(A9) (LRR O)	
Black H	istic (A3)		Loamy Muck	y Mineral ((F1) (LRR	0)	Reduced	Vertic (F18) (ou	utside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (F2)		Piedmont	Floodplain Soil	Is (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			Anomalou	s Bright Loamy	/ Soils (F20)
Organic	Bodies (Ab) (LRR P,	, I, U) 28 8 7 11	Redox Dark	Surface (F	(E7)		(MLRA '	153B) ht Material (TE:	2)
Muck Pr	resence (A8) (LRR U)	Redox Depre	essions (F	B)		Very Shall	ow Dark Surfa	ce (TF12)
1 cm Mi	uck (A9) (LRR P, T)		Marl (F10) (L	RR U)			Other (Exp	blain in Remark	(5)
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA 15	1)			
Thick D	ark Surface (A12) Prairie Redox (A16) (N	AL RA 150A	Iron-Mangan	ese Masse	es (F12) (I	-RR O, P,	T) "Indicator	t hydrology mu	ic vegetation and
Sandy M	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (ML	RA 151)	0,	unless	disturbed or pr	oblematic.
Sandy C	Gleyed Matrix (S4)		Reduced Ver	tic (F18) (MLRA 15	DA, 150B)			
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	9A)		
Stripped	I Matrix (S6)	TIN	Anomalous E	sright Loan	ny Solis (F	·20) (MLRA	A 149A, 153C, 15	30)	
Restrictive	Layer (if observed):	, , , , ,							
Туре:		121	Mar Marin						/
Depth (in	ches):		<u></u>				Hydric Soil Pre	sent? Yes	No
Remarks:	alay a kasaraa			11-116-11	and the factor		in particular y		



Wetland data point wjop039f_w facing south.



Wetland data point wjop039f_w facing west.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Johnston	Sampling Date: 15/12/15
Applicant/Owner: Deminian	State	NC Sampling Point: WYP039-4
Investigatorial ESE/R Twinkhill L. Roger)	Section Township Denses	A Camping Fold
Hivestigator(s)	Section, Township, Range:	
Landform (hillslope, terrace, etc.):(a1	_ Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRK [Lat: _>>	. >0313 Long: - 18	.67113 Datum: WG584
Soil Map Unit Name: Lynchburg sandy loam, O-	2º la slopes	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time o	year? Yes No (If no.	explain in Remarks.)
Are Vegetation, Soil, or Hydrology significant	tly disturbed? Are "Normal Circi	umstances" present? Yes V No
Are Vegetation Soil or Hydrology naturally	problematic? (If needed, explai	n any answers in Remarks)
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations,	transects, important features, etc.
Hydrophytic Vegetation Present? Yes Veg No	 Is the Sampled Area 	
Wetland Hydrology Present? Yes No	- within a Wetland?	Yes No
Pemarke:		
HYDROLOGY		
Wetland Hydrology Indicators:	Seco	andary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	(v)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (E	(LRR U)	Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfid	e Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizos	pheres along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Ref	luced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Rec	uction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfa	ce (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in	I Remarks)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)		Sphagnum moss (DS) (I BBT II)
Field Observations:	<u> </u>	Sphaghan moss (Do) (ERR 1, D)
Surface Water Present? Yes No X Depth (inch	es): N/A	
Water Table Present? Yes No 20 Depth (inch	es); >20	
Saturation Present? Yes No Depth (inch (includes capillary fringe)	es): >20 Wetland Hydro	logy Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available	
Remarks		
Nonaika.		

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

Sampling Point: wiep 039_u

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 Fl. + 20 Ft.)	% Cover	Species?	Status	Dominance rest worksheet.
1 Liquidanhar strandillus	En	Y	TAC	Number of Dominant Species 7
A Digmodamour Styraciflue	-20		FAC	Inat Are OBL, FACVV, or FAC: (A)
2. Querens nigra	20	-	HAC	Total Number of Dominant
3				Species Across All Strata: (B)
4		Cold States		
1				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7	1.165.00	1000		Prevalence Index worksheet:
1				Total % Cover of: Multiply by:
8				
	70	= Total Cov	er	OBL species x 1 =
FOR official amore 35	200/ -6	total anum	14	FACW species x 2 =
	20% 01	total cover		FAC species v 3 -
Sapling/Shrub Stratum (Plot size: 50th X 2014.)				
1. Liquidambar sturaciflua	20	Y	FAC	FACU species x 4 =
2 Maralla carifaca	10	V	CAC	UPL species x 5 =
2. Instelling certifiera	10		PAC	Column Totals: (A) (D)
3		141.31		Column Totals: (A) (B)
4				
		Terrer and the		Prevalence Index = B/A =
D				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				
				2 - Dominance Test is >50%
8	1.10.0			3 - Prevalence Index is ≤3.0 ¹
	30	= Total Cov	er	
EON attatal array 15	200/ -6	total annual	6	Problematic Hydrophytic Vegetation (Explain)
Su% of total cover: 13	_ 20% of	total cover		
Herb Stratum (Plot size: 30+1.x Co++.)				¹ Indicators of hydric soil and wetland hydrology must
1. Marella cerifera	5	Y	FAC	be present, unless disturbed or problematic.
		1941		
2				Definitions of Four Vegetation Strata:
3		11-20-21-20-20-20-20-20-20-20-20-20-20-20-20-20-		Tree Minedu plante evoluting vises 2 in (7.6 ers) er
4	Che Harden		TO CARDON	Tree - woody plants, excluding vines, 3 in. (7.6 cm) or
1				hore in diameter at breast neight (DBH), regardless of
5				neight.
6				Sanling/Shrub - Woody plants, excluding vines, less
7	1003518	a second and the second se	A PARTY OF A	than 3 in DBH and greater than 3 28 ft (1 m) tall
8		1.		Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10		Selection and the second	Second Second	
10:				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.				승규가에 물건하는 것 것을 하는 것이 같은 것이 없었는 것이 없다.
	5	Tatal Ca		when the rest of the second
		- I dai Cov	er	
50% of total cover: 2.5	_ 20% of	total cover:		
Woody Vine Stratum (Plot size: 30ft + 20ft.)				The second s
1 Sailan = t 1:51:	24	V	TAC	
1. JMITAE FOLUNAITOLIA	30		PAL	state of the second
2. Vitis rotunditolia	20	7	FAC	
3	Same Sa	S-346453	A STATISTICS	
·				
4				
5				Hydrophytic
	50	- Total Cou		Vegetation
25		- 10(a) 000	10	Present? Yes No
50% of total cover:	_ 20% of	total cover:	10	
Remarks: (If observed, list morphological adaptations below	w).	CAL VIELON	No. State	
				병에서는 물건물에 있는 것이 물건을 다 들어졌다. 것
				양한 그 것에 그 것 않는 것 같아. 김 선물은 것은 것이 가지 않는 것이 같아. 이 것이 가지 않는 것이 같아.
				방법 집에 집에 들었다. 것은 것은 것은 것은 것을 위해 가지 않는 것이 것을 수 없다. 것이 것 것을 많은 것이 것을 것이 같이 했다.

SOIL

Sampling Point: wigp 039 - w

epth	Matrix		Red	ox Feature	es			
iches)	Color (moist)	%	Color (moist)	%	Type1	Loc ²	Texture	Remarks
)-12	104R312	160			_		CL	
2-20	104R 5/2	90	104R5/6	10	C	M	CL	
pe: C=C	oncentration, D=De	pletion, RN	I=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL=	Pore Lining, M=Matrix.
dric Soil	Indicators: (Appli	cable to al	I LRRs, unless othe	rwise not	ted.)		Indicators for	Problematic Hydric Soils ³ :
Histoso Histic E Black H Hydrog Stratifie Organic 5 cm Mi Muck P 1 cm Mi Deplete Thick D Coast P Sandy M Sandy C Sandy F Strippec Dark Su	((A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A5) (LRR ucky Mineral (A7) (I resence (A8) (LRR P, T) d Below Dark Surfa ark Surface (A12) rairie Redox (A16) Mucky Mineral (S1) Sleyed Matrix (S4) Redox (S5) d Matrix (S6) rface (S7) (LRR P,	P, T, U) .RR P, T, U U) ce (A11) (MLRA 150 (LRR O, S) S, T, U)	 Polyvalue B Thin Dark S Loamy Much Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (I Depleted Oc Iron-Mangar Umbric Surfi Delta Ochric Reduced Ve Piedmont FI Anomalous I 	elow Surfa urface (S9 ky Mineral ed Matrix atrix (F3) Surface (I ink Surface essions (F LRR U) chric (F11) hese Mass ace (F13) i (F17) (MI rtic (F18) oodplain S Bright Loa	ace (S8) (L ace (S8) (L (F1) (LRR (F2) F6) e (F7) F8) (MLRA 15 Ses (F12) (I (LRR P, T, LRA 151) (MLRA 15 Soils (F19) my Soils (F	RR S, T, U T, U) O) LRR O, P, , U) 0A, 150B) (MLRA 14 -20) (MLR	J) 1 cm Muck 2 cm Muck Reduced V Piedmont I Anomalous (MLRA 1 Red Paren Very Shalk Other (Exp T) ³ Indicator wetland unless of (9A) A 149A, 153C, 153	(A9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A Floodplain Soils (F19) (LRR P, S s Bright Loamy Soils (F20) 53B) t Material (TF2) bw Dark Surface (TF12) lain in Remarks) s of hydrophytic vegetation and hydrology must be present, disturbed or problematic. 3D)
trictive	Layer (If observed):				Care and		
Туре:								/
Depth (in	ches):						Hydric Soll Pre	sent? Yes <u>V</u> No



Upland data point wjop039_u facing north.



Upland data point wjop039_u facing east.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Johnston Sampling Date: 10/12/2015
Applicant/Owner: Dominion	State: NC Sampling Point: w10038F-w
Investigator(s): ESI (R. Turnbull, L. Roper)	Section, Township, Range: N/A
Landform (hillslope, terrace, etc.): Flat	I ocal relief (concave convex none): None Slone (%): 0-2.7/2
Subregion (IBB or MIRA): I.R.P. Lat: 355	0099 1000 - 78,79714 Datum 10/6584
Soil Map Unit Name: Lynchburg sandy losm, O-2	% slopes NWI classification: PFO
Are climatic / bydrologic conditions on the site typical for this time of ye	ager? Yes I No (If no explain in Remarks)
Are Vegetation IC Soil or Hydrolegy significantly	
Are Vegetation, Soli, or Hydrology significantly	disturbed? Are Normal Circumstances present? res
SUMMARY OF FINDINGS – Attach site map showing	a sampling point locations, transects, important features, etc.
	,
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No No	within a Wetland? Yes No No
Wetland Hydrology Present? Yes No	
Remarks:	
Understory recently cleared	
Hardwood Flat	
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 (B1	3) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15	5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide C	Ddor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosph	eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduc	ced Iron (C4) Cravfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduc	tion 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 R	(emarks) Shallow Aguitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	1.
Surface Water Present? Yes No Depth (inches): <u>N/A</u>
Water Table Present? Yes <u>Ves</u> No Depth (inches): 18
Saturation Present? Yes Vo Depth (inches): 10 Wetland Hydrology Present? Yes V No No
(includes capillary fringe) Describe Recorded Data (stream dauge, monitoring well, aerial photo	ne previous inspections) if available:
beschoe recorded bata (shearn gauge, monitoring weir, aenar prote	
Remarks:	

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

Sampling Point: Wjap 038F_W

3051 +3461	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species	? Status	Number of Dominant Species
1. <u>Acer Fubrum</u>	70		FAC	That Are OBL, FACW, or FAC: (A)
2. Quercus mara	_ 60	F	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		1.00		
7		1 - 200		Prevalence Index worksheet:
8	1236178			Total % Cover of:Multiply by:
	60	= Total Co	ver	OBL species x 1 =
50% of total cover: 36	20% of	total cove	- 12	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30-9. x 30-94.)		total obro	-	FAC species x 3 =
1 Liquidanabar starres Flue	10	Y	FAC	FACU species x 4 =
1. Digninger Statecitiene	-10			UPL species x 5 =
2			·	Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7		Ash 2 mal	1	2 - Dominance Test is >50%
8			ALC: N	$3 - \text{Prevalence Index is } \leq 30^{1}$
	10 :	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20% of	total cover	: 2	
Herb Stratum (Plot size: 30Pt. x 36 Pt.)				
1 Magazia Vicciniana	20	Y	FACW	be present unless disturbed or problematic
2 Aces subsum	10	Y	FAC	Definitions of Four Vagatation Strata:
2. Medicatio accolete	10	V	ARI	Demittoris of Four Vegetation Strata.
J. MOODWARAIA ALEOIATA			OBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4			·	more in diameter at breast height (DBH), regardless of
5				neight.
6		1000		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	12.2.28			of size, and woody plants less than 3.28 ft tall.
10				Woody ying All weathy incegrates then 2.29 ft in
11				height.
12.		1445		
	40	= Total Co	ver	and the second findered and the second
50% of total cover: 7.0	20% of	total cover	- 8	
Woody Vine Stratum (Plot size 30 FL x 30 FL	0			
1 Vibis saturdifilia	10	Y	EAC	
1. VIIIS I Bland I follo			TAL	see and to have a set of the set of
2				
3				
4				
5				Hydrophytic
	10 :	= Total Co	ver	Vegetation
50% of total cover: 5	20% of	total cover	. 2	Present? Yes No
Remarks: (If observed, list morphological adaptations below	w).		The second	1

SOIL

Sampling Point: wjop038F-w

Profile Des	cription: (Describe to	the depth needs	ed to document	the Indicator	or confirm	the absence o	f Indicators.)	
Depth	Matrix		Redox Fe	atures				
(inches)	Color (moist)	<u>%</u> Color	(moist)	% Type'	Loc	Texture	Remarks	-
0-5	104R 311					CL		
3-20	104R6/2	85 104 R	5/6 1!	s c	M	CL		
			1000	1000				-
					•			-
								_
		San San		10.20				
		Section Strates						
¹ Type: C=C	concentration, D=Deple	tion, RM=Reduce	d Matrix, MS=Ma	asked Sand G	ains.	² Location: P	L=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applical	ble to all LRRs, u	nless otherwise	e noted.)		Indicators fo	or Problematic Hydric Solis ³ :	
Histoso	I (A1)	P	olyvalue Below	Surface (S8) (.RR S, T, U)	1 cm Mu	ck (A9) (LRR O)	
Histic E	pipedon (A2)	T	hin Dark Surface	(S9) (LRR S,	T, U)	2 cm Mu	ck (A10) (LRR S)	
Black H	listic (A3)	L	camy Mucky Mir	neral (F1) (LRI	R O)	Reduced	Vertic (F18) (outside MLRA 150A,	,B)
Hydrog	en Sulfide (A4)	<u> </u>	bamy Gleyed Ma	atrix (F2)		Piedmon	t Floodplain Soils (F19) (LRR P, S,	T)
Stratifie	d Layers (A5)		epleted Matrix (I	F3)		Anomalo	bus Bright Loamy Soils (F20)	
5 cm M	ucky Mineral (A7) (LRR P,		edox Dark Suna	rface (FD)		(MLRA Red Date	ant Material (TE2)	
Muck P	resence (A8) (LRR U)	R R	edox Depression	ns (F8)		Very Sha	allow Dark Surface (TE12)	
1 cm M	uck (A9) (LRR P, T)	N	arl (F10) (LRR I	J)		Other (E	xplain in Remarks)	
Deplete	d Below Dark Surface	(A11) D	epleted Ochric (F11) (MLRA 1	51)	_		830
Thick D	ark Surface (A12)	Ir	on-Manganese I	Masses (F12)	LRR O, P, T	7) ³ Indicat	ors of hydrophytic vegetation and	
Coast P	Prairie Redox (A16) (MI	LRA 150A) U	mbric Surface (F	-13) (LRR P, 1	r, u)	wetla	nd hydrology must be present,	
Sandy M	Mucky Mineral (S1) (LF	(RO, S) D	elta Ochric (F17) (MLRA 151)		unles	s disturbed or problematic.	
Sandy E	Sedox (S5)	— ^к	educed vertic (F	in Soile (E10)	MI PA 140	(A)		
Stripped	Matrix (S6)	— F	nomalous Bright	Loamy Soils	E20) (MI RA	149A 153C 1	53D)	
Dark Su	Inface (S7) (LRR P. S.	T, U)	inernaleus Bright	Louiny Cons (1 20) (112111)	1401, 1000, 1	552,	
Restrictive	Layer (If observed):						Strategies was a subject of	-
Type:		River Green at a						
Depth (in	ches):					Hydric Soll P	resent? Yes VNo	
Remarks:							And the second sec	-
The second								130
								1.5
Cold and the								
1.000								312
								165
1000								
12.13 (L. 1913								S



Wetland data point wjop038f_w facing south.



Wetland data point wjop038f_w facing north.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County:	Johnston		Sampling Date: 10/12/201
Applicant/Owner: Deminion	only ocumy:	Stat	. NC	Sampling Point: huno/135
Investigatorial EST (R Turcialial Paras)	Contine Towns	Jan Danna Al	/4	Sampling Form. Meposis
investigator(s)(, in north,oper)	Section, Townsi	nip, Range: <u>P</u>	yr.	6.70
Landform (hillslope, terrace, etc.): + 1 a c	Local relief (con	cave, convex, non	e): none	Slope (%): 0-27
Subregion (LRR or MLRA): LAR P Lat:	35.50111	Long:/8	5.29215	Datum: WG 58
Soil Map Unit Name: Lynchburg Sandy learn,	0.2% slopes	5	NWI classifica	ation: NA
Are climatic / hydrologic conditions on the site typical for this ti	ne of year? Yes	No (If no	o, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed?	Are "Normal Circ	cumstances" p	resent? Yes V No
Are Vegetation Soil or Hydrology nate	rally problematic?	(If needed expla	ain any answer	s in Remarks)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling p	oint locations.	transects.	important features, etc.
			,,	
Hydrophytic Vegetation Present? Yes No_	Is the Sa	impled Area		
Wetland Hydrology Present? Yes No	within a	Wetland?	Yes	No_
Remarks:				
Understory recently clearant				
HYDROLOGY				
Wetland Hydrology Indicators:		Sec	condary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that	apply)		Surface Soil C	Cracks (B6)
Surface Water (A1) Aquatic Fa	una (B13)		Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2) Marl Depos	its (B15) (LRR U)		Drainage Patt	terns (B10)
Saturation (A3)Hydrogen S	Sulfide Odor (C1)	-	Moss Trim Lir	nes (B16)
Water Marks (B1) Oxidized R	hizospheres along Living	Roots (C3)	Dry-Season V	Vater Table (C2)
Drift Deposits (B3)	Reduced Iron (C4)		Crayfish Burro	ows (C8)
Algal Mat or Crust (B4) Thin Muck	Surface (C7)	s (CO)	Geomorphic F	Position (D2)
Iron Deposits (B5) Other (Exp	ain in Remarks)	1	Shallow Aquit	ard (D3)
Inundation Visible on Aerial Imagery (B7)	,		FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)			Sphagnum m	oss (D8) (LRR T, U)
Field Observations:	100 A		-	
Surface Water Present? Yes No X Depth	(inches): <u>N/A</u>			
Water Table Present? Yes No X Depth	(inches): >15			
Saturation Present? Yes No Depth (includes capillary fringe)	(inches): > 15	Wetland Hydro	ology Present	? Yes No <u>+</u>
Describe Recorded Data (stream gauge, monitoring well, aer	al photos, previous inspe	ections), if available	e:	
Remarks:			Here and the second	

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

Sampling Point: Wien 038- u

2151 2151	Absolute	Dominan	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50Ht. & 50Ht.)	% Cover	Species	Status	Number of Dominant Species
1. Quercus nigra	20	4	FAC	That Are OBL, FACW, or FAC: (A)
2. Quereus laevis	30	Y	LIPL	
3 Arec abrian	2.0	Y	FAC	Total Number of Dominant
A.				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6		12.12		Beerland Indexed by A
7		1		Prevalence Index worksheet:
8		Man Internet		Total % Cover of: Multiply by:
	70	= Total Co	ver	OBL species O x 1 = O
50% oftatal acuse: 35	200/ 05	total agus	. 14	FACW species 10 x 2 = 20
Sold of Charles Charles 249 530CH	_ 20% 0	total cove		FAC species $76 \times 3 = 210$
Sapling/Shrub Stratum (Plot size: JOIT-X JOTT-)			-10	FACIL Species 20 x4= 80
1. Acer lubrum	10	F	FAC	HDI appeires TO NET 350
2				$\frac{170}{170} \times 5 = \frac{330}{170}$
3		122314.0129		Column Totals: $(\tau 0)$ (A) <u>6.60</u> (B)
4.	25-22/10	CALLS IN		288
5	1100,000			Prevalence index = B/A =
e				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
ſ		CO 12 110		2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	10 :	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20% of	total cover	: 2	
Herb Stratum (Plot size: 30ft, x30ft,)				1
1 Liquidan has sty saciflys	10	N	EA1	Indicators of hydric soil and wetland hydrology must
1. Liquidamber STURELITIDA	10	01	FAC	be present, unless disturbed or problematic.
2. Acer ruorum	10	10	FAC	Definitions of Four Vegetation Strata:
3. Khus copallinum	40	Y	apt	Tree - Woody plants, excluding vines, 3 in (7.6 cm) or
4. <u>Clethra alnifolia</u>	10	N	FACW	more in diameter at breast height (DBH), regardless of
5. Phytolacca americana	20	Y	FACU	height.
6				Continer(Charte)Mondu plants qualitation in an loss
7		N. C. S. MORT		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.	The second second	200314		
	90 -	- Total Co		
FOR attack and 45	200/ -4		18	
	20% of	total cover	: 10	
Woody Vine Stratum (Plot size:)				
1. none				
2				
3				
4.	STATISTICS.	1000		
5			Contraction of the	
5	~		COLONIC MAL	Hydrophytic
	:	= lotal Co	ver	Present? Yes No
50% of total cover:	20% of	total cover		
Remarks: (If observed, list morphological adaptations below	∧).	17 - 16 1		
				아이님은 것은 것은 것이 아이들을 가운 것이 것이다.

SOIL

Sampling Point: Wigo 038. u

Profile Des	cription: (Describe	to the depth	needed to doc	ument the l	ndicator	or confirm	the absence of	of Indicators.)		
(inches)	Color (moist)	%	Color (moist)	dox Feature %	s Type'	Loc ²	Texture	Re	marks	
0-4	104R4/1	100		13 12	1252S		CL		122	
4-15	10484/2	70 1	INYR S/8	30	C	M	C			
			io ne era					1.7.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1		
11.1997										
	-	·								
								and the second second		
17.000										
Hydric Soll	Indicators: (Applic	able to all LF	Rs. unless off	MS=Masked	ed.)	ains.	Location:	or Problematic	M=Matrix. Hydric Soils ³	
Histoso	(A1)		Polyvalue	Below Surfa	ce (S8) (L	RR S. T. U	I) 1 cm M	uck (A9) (LRR O)	
Histic E	pipedon (A2)		Thin Dark	Surface (S9)	(LRR S,	T, U)	2 cm M	uck (A10) (LRR	, 5)	
Black H	istic (A3)		Loamy Mu	cky Mineral	(F1) (LRR	0)	Reduce	d Vertic (F18) (o	utside MLRA 1	50A,B)
Hydroge Stratifie	d Lavers (A5)		Loamy Gle	eyed Matrix (Matrix (E3)	F2)		Piedmo	nt Floodplain So	ils (F19) (LRR P	, s, t)
Organic	Bodies (A6) (LRR P	, T, U)	Redox Dar	k Surface (F	6)		(MLR	A 153B)	y cons (1 20)	
5 cm Mi	ucky Mineral (A7) (LF	RR P, T, U)	Depleted D	Dark Surface	(F7)		Red Pa	rent Material (TF	2)	
Muck Pi	resence (A8) (LRR U)	Redox Dep	pressions (Fi	8)		Very Sh	allow Dark Surfa	ice (TF12)	
1 cm Mi	JCK (A9) (LRR P, T)	e (A11)	Marl (F10)	(LRR U)	MIRA 1	1	Other (E	Explain in Remar	ks)	
Thick D	ark Surface (A12)	C (ATT)	Iron-Manga	anese Masse	es (F12) (I	LRR O, P,	T) ³ Indica	tors of hydrophy	tic vegetation an	nd
Coast P	rairie Redox (A16) (N	ALRA 150A)	Umbric Su	rface (F13) (LRR P, T,	U)	wetla	and hydrology m	ust be present,	
Sandy M	Aucky Mineral (S1) (L	.RR O, S)	Delta Ochr	ic (F17) (ML	RA 151)		unle	ss disturbed or p	roblematic.	
Sandy C	Redox (S5)		Reduced V	Floodplain S	MLKA 15	UA, 150B) (MI RA 14	94)			
Stripped	Matrix (S6)		Anomalous	s Bright Loar	ny Soils (F	20) (MLR	A 149A, 153C,	153D)		
Dark Su	rface (S7) (LRR P, S	5, T, U)								1.4.2
Restrictive	Layer (if observed):									
Type:	ab a a b		-				Iludela Call		/	
Bemarks:	ciles).		-	18.0	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		Hydric Soll F	resent? res	NO	
A A										
Could	not auger 1	past 1	5 inches.							
	5 (



Upland data point wjop038_u facing north.



Upland data point wjop038_u facing east.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP		City/County: 50h n.	ston Sam	pling Date: <u>8/57/4</u>
Applicant/Owner: Domini	ω <u>.</u>	-	State: Sam	pling Point: WIOP019 f-W
Investigator(s) EST 1L	Rober	Section, Township, Rang	e: NA	
Landform (hillslope, terrace, etc.): Subregion (LRR or MLRA): Soil Map Unit Name:	- Flait - P P Lat: 35 5 Sondy loam, 6	Local relief (concave. cor 49317 Lo 2-211 Screen	NWi classification	Slope (%): <u>0-4</u> /, Datum: <u>NGS81</u> :PPD
Are climatic / hydrologic conditions	s on the site typical for this time of	year? Yes 🗹 No	(If no, explain in Remar	ks.)
Are Vegetation, Soil	_, or Hydrology significan'	ily disturbed? Are "N	lormal Circumstances" prese	nt? Yes 🔽 No
Are Vegetation, Soil	_, or Hydrology naturally	problematic? (If nee	ded, explain any answers in	Remarks.)
SUMMARY OF FINDINGS	- Attach site map showin	ng sampling point lo	cations, transects, im	portant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	? Yes No Yes No Yes No	 Is the Sampled A within a Wetland 	Area d? Yes	No
HYDROLOGY	······································			•
Wetland Hydrology Indicators			Secondary Indicators	s (minimum of two required)
Primary Indicators (minimum of 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 (B5)	al Imagery (B7)	(B13) (B13) (B15) (LRR U) de Odor (C1) spheres along Living Roots educed Iron (C4) eduction in Tilled Solls (C6) face (C7) in Remarks)	Surface Soil Cra Sparsely Vegeta Drainage Patter Moss Trim Line s (C3) Dry-Season Wa Crayfish Burrov Saturation Visit Geomorphic Po Shallow Aquita FAC-Neutral To Sphagnum mo	icks (B6) ated Concave Surface (B8) ns (B10) s (B16) ater Table (C2) vs (C8) ble on Aerial Imagery (C9) osition (D2) rd (D3) est (D5) ss (D8) (LRR T, U)
Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes No Depth (in Yes No Depth (in Yes No Depth (ir eam gauge, monitoring well, aerial	ches): NA ches): 200 iches): 720 w photos. previous inspection	Vetland Hydrology Present ns), if available:	? Yes No
Remarks:		······································		

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	ines or pre	arno.		Sampling Comm
	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>ee Stratum</u> (Plot size: <u>30×30</u>) Pinus tapag	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species Q (A)
Light dambour church flug	15	- v	PM	
Acer rubrum	15	<u>,</u>	PAC	Total Number of Dominant Species Across All Strata:(B)
			·	Percent of Dominant Species
			·	That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	40	= Total Co	over	OBL species x 1 =
50% of total cover: 24) 20% of	f total cove	er: <u>8</u>	FACW species x 2 =
apling/Shrub Stratum (Plot size: 30×30)				FAC species x 3 =
Vaccinium corymbosum	5	Y	PACW	FACU species ×4 =
Liquidambar styraciflug .	15	<u> </u>	FAC	UPL species x 5 =
Quercus nigra	5	Y	PAC	Column Totals: (A) (B)
·				Prevalence Index = B/A =
·• · · · · · · · · ·				- Hydrophytic Vegetation Indicators:
•		·		- Rapid Test for Hydrophytic Vegetation
•				- 🗹 2 - Dominance Test is >50%
·				- I 🛄 3 - Prevalence Index is ≤3.0 ¹
	25	_= Total C	Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 🚺	15 20%	of total cov	/er: <u>5</u>	-
Herb Stratum (Piot size: <u>30x30</u>)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	<u> </u>	<u> </u>	_ PACV	be present, unless disturbed or problematic.
2. Clethra alnifolia	25		<u>PACU</u>	Definitions of Four Vegetation Strata:
3				-1 Trop – Woody plants, excluding vines 3 in (7.6 cm) 0
4				 more in diameter at breast height (DBH), regardless of height.
5			·	
6 7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardles of size and woody plants less than 3.28 ft tall.
9				Woody vine – All woody vines greater than 3.28 ft in
11	<u> </u>			height.
12		- Tata		
	17.5			
50% of total cover:	<u>1 // 3</u> 20%	% OF IOIAL C	over:	— [·
Woody Vine Stratum (Piot size:)	١٨	V	opi	•
1. SmillAX rotunditolize		<u> </u>	<u> </u>	
				[
2				
23			·	<u> </u>
2 3 4				
2 3 4 5			·	Hydrophytic
2.			al Cover	Hydrophytic Vegetation
2 3 4 5 50% of total cover:	 	 = Tot 9% of total	al Cover cover:	Hydrophytic Vegetation Present? Yes <u>No</u>

Sampling Point: WJOP 019 F.W

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SOIL

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Profile Desc	ription: (Describe	to the dep	oth needed to door	ument the in	ndicator	or confirm	the absence of	findicators.)
Depth	Matrix		Rec	dox Features		1008	Texture	Remarke
(incnes)		<u>%</u>		70			<u> </u>	
0-6	25/12	100						······································
6-20	2.545/	70	2.57 1	<u> </u>	Þ	<u>M</u>		
	<u>, , , , , , , , , , , , , , , , , </u>	- ,	10Y251	. 10	ŕ	M	5	
					- Alar	·		
	·				<u></u>		<u> </u>	
•			. <u> </u>					
e								
		<u> </u>			·			
'Type: C=C	oncentration, D=De	pletion, RM	M=Reduced Matrix.	MS=Masker	d Sand G	rains.	Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Appli	cable to a	II LRRs, unless of	herwise not	ed.)		Indicators t	or Problematic Hydric Sons :
Histoso	d (A1)		Polyvalue	Below Surfa	ice (S8) (LRR S, T,	U) 1 cm M	uck (A9) (LRR O)
Histic E	pipedon (A2)		Thin Dark	Surface (S9) (LRR S	i, T, U)		uck (A10) (LRR S)
🔲 Black H	fistic (A3)		Loamy Mu	ucky Mineral	(F1) (LR	(R O)		ed Vertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy GI	eyed Matrix	(F2)			ont Floodplain Soils (F19) (LRR P, S, 1)
Stratific	ed Layers (A5)		· Depleted	Matrix (F3)			🛄 Anoma	lous Bright Loamy Soils (F20)
🔲 Organi	c Bodies (A6) (LRR	P, T, U)	📙 Redox Da	ark Surface (F6)			(A 153B)
5 cm N	lucky Mineral (A7) (I	LRR P, T,	U) Depleted	Dark Surfac	e (F7)			arent Material (TF2)
Muck F	Presence (A8) (LRR	U)	Redox De	epressions (l	F8)			hallow Dark Surface (TF12)
∐ 1 cm №	iuck (A9) (LRR P, T)	Marl (F10)) (LRR U)			L Other	(Explain in Remarks)
Deplet	ed Below Dark Surfa	ace (A11)		Ochric (F11) (MLRA	151)		a the heat second from and
Thick I	Dark Surface (A12)		iron-Man	ganese Mas	ses (F12) (LRR O, I	P, T) "India	ators of hydrophytic vegetation and
Coast	Prairie Redox (A16)	(MLRA 1	50A) 📙 Umbric S	Surface (F13)) (LRR P	, T, U)	wei	land hydrology must be present,
Sandy	Mucky Mineral (S1)	(LRR 0, 1	S) 📙 Delta Oc	hric (F17) (N	ILRA 15	1)	uni	ess disturbed or problematic.
Sandy	Gleyed Matrix (S4)			Vertic (F18) (MLRA	150A, 150	B)	
Sandy	/ Redox (S5)		Piedmon	it Floodplain	Soils (F1	9) (MLRA	149A)	
🖌 🗹 Stripp	ed Matrix (S6)			ius Bright Lo	amy Soil	s (F20) (M	LRA 149A, 1530	, 1530)
Dark :	Surface (S7) (LRR F	P, S, T, U)						
Restrictiv	e Layer (if observe	d):						
Type:	·							
Depth	(inches):	F					Hydric Soi	il Present? Yes <u>V</u> No No
Remarks:	••••••••••••••••••••				-			-
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Wetland data point wjop019f_w facing south.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/Co	ounty: Johnston	Sampling D	ate: 8/5/14
Applicant/Owner: Daninia		State:	NL Sampling P	oint: <u>Wjop019-</u> 9
investigator(s); ESI LLPD	200 Sectio	n. Township, Range: NA		<u> </u>
Landform (hillsione terrace etc.): Hu	Local	relief (concave, convex, none);	non	Slope (%): 0-4%
Cutaccian (LDD or MLDA): 1 22	> 1at 35. 491	1.8 LODE -79.	29258	Datum: N6584
	adular in Dr2	L SLOPP N	NA/L classification:	NA
Soil Map Unit Name: 2017 5 30	Nou wango o		witclassification:	
Are climatic / hydrologic conditions on the si	te typical for this time of year? Y	es No (It no, (explain in Remarks.)	
Are Vegetation, Soil, or Hyd	rology significantly distur	bed? Are "Normal Circui	mstances" present? Yo any answers in Remai	es <u>V</u> No
SUMMARY OF FINDINGS - Atta	ch site map showing san	npling point locations, t	transects, importa	ant features, etc.
· · · · · ·				
Hydrophytic Vegetation Present?	Yes No	is the Sampled Area		
Hydric Soil Present?		within a Wetland?	Yes No `\	<u> </u>
Remarks:	103 110]		
0	hre			
Kain within 20	,			
HYDROLOGY	, ,,			
Wetland Hydrology Indicators:	······································	Sec	ondary Indicators (mini	mum of two required)
Primary Indicators (minimum of one is re	quired: check all that apply)	<u> </u>	Surface Soil Cracks (B	6)
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Co	oncave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LI	RR U)	Drainage Patterns (B1	0)
Saturation (A3)	Hydrogen Sulfide Odor	· (C1)	Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizospheres	along Living Roots (C3)	Dry-Season Water Ta	ble (C2)
Sediment Deposits (B2)	Presence of Reduced I	lron (C4)	Crayfish Burrows (C8)) • · · · · · · · · · · · · · · · · · · ·
Drift Deposits (B3)		in Tilled Soils (C6)	Saturation Visible on	Aerial Imagely (C9)
Algal Mat or Crust (B4)			Shollow Aquitard (D3)	(DZ)
Iron Deposits (B5)			FAC-Neutral Test (D	, 5)
Water-Stained Leaves (B9)	y (B7)		Sphagnum moss (D8	-,) (LRR T, U)
Field Observations:	· · · · · · · · · · · · · · · · · · ·			,
Surface Water Present? Yes	No Depth (inches): _	NA		
Water Table Present? Yes	No Depth (inches):	>20		
Saturation Present? Yes	No Depth (inches): _	Wetland Hyd	Irology Present? Ye	sNo
(includes capillary fringe)	- manifering well optial photos	previous inspections) if sysils	hle:	
Describe Recorded Data (stream gaug	e. monitoring weit, aerial photos,	previous inspections), il avalla	DIC.	
Demovies				
Remarks.				
l				
{				
1				

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

US Army Corps of Engineers

	Absolute	Dominant	Indicator	Dominance Test worksheet:
e Stratum (Plot size: <u>39(3)</u>)	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species
Pinus: tueder	25	``.	rnu	That Are OBL, FACW. or FAC: (A)
		,		Total Number of Dominant
				Species Across All Strata:(B)
			1	
				Percent of Dominant Species $(7^{-3})_{6}$ (A/B)
				Inat Are OBL, FACVV, or FAC: (AUB)
				Prevalence Index worksheet:
		· <u> </u>		Total % Cover of: Multiply by:
	25	= Total Cov	/er	
50% of total cover: 12	-15 20% 0	of total cover	:_5	FACW species x 2 =
pling/Shrub Stratum /Plot size: 30×30				FAC species x 3 =
Dura avit (not size: <u>30 koo</u>)	10	N.	PARU	FACU species x 4 =
	_ <u></u> _		CA/	UPL species x 5 =
QUENTUS MAN			<u>r nc</u>	Column Totals: (A) (B)
U			·	
			. <u> </u>	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
•••••				1 Donid Tost for Hydronhytic Vegetation
· · · · · · · · · · · · · · · · · · ·				2 - Dominance Test is >50%
·] 🛄 3 - Prevalence Index is ≤3.0'
-	<u></u>	_ = Total Co	over	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	<u>20% _2، 20</u>	of total cove	er: <u> </u>	.)
Herb Stratum (Plot size: 30,30)	~			¹ Indicators of hydric soil and wetland hydrology must
Minim allo	12	Y	PACK	be present unless disturbed or problematic.
CIRPHIN CAUSERSIE				Definitions of Four Vegetation Strater
· · · · · · · · · · · · · · · · · · ·				- Deminions of Four vegetation Strata.
)			- ,	- Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
ŧ				_ more in diameter at breast height (DBH), regardless of
j.				height.
2				Sapling/Shrub - Woody plants, excluding vines, less
·			- <u> </u>	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				- Woody vine - All woody vines greater than 3.28 ft in
11.				_ height.
10				
14		- Tatalu		
	$1 \xrightarrow{13}$	= 10(an)		
50% of total cover:	20	% of total co	ver: 🥥	
Woody Vine Stratum (Plot size: 30 14)				
1. Smilax rotundifolia	<u>)</u> 6	<u> </u>	_ FAC	
2 Galiansilus sempervirens.	5	Y	PA	4
a u alternium the providence				—
3				— [
4		<u> </u>		\
				Hydrophytic
5	19	⊃ = Toia	Cover	Vegetation
5				Present? Yes V No
5	7. C	no/ of total a	over 🍡 🥆	
5 50% of total cover:	<u>7,5</u> 21	0% of total c	over:	
5	7:5 21 s below).	0% of total c	over:	
5	7,5 21 s below).	0% of total c	over: <u> </u>	
5	<u>7,5</u> 21 s below).	0% of total c	over: <u> </u>	

Sampling Point: Wjop019_u

SOIL

Sampling Point: Wjop019_4

Profile Desc	ription: (Describe t	to the depth r	needed to document the indicator or conf	irm the absence of ir	idicators.)
Depth	Matrix		Redox Features	-	Demotio
(inches)	Color (moist)	<u>_%</u>		<u></u>	Cuto1/2
<u>122</u>	2-1-16	<u> </u>			······
5-8	6.5 7 13	100			
8-20	2.5744	100			
·					
	· · · · · · · · · · · · · · · · · · ·				
	·				
				2)	-Dere Lining M-Motrix
Type: C=C	Concentration, D=Dep	vetion, RM=Re	educed Manx, MS=Masked Sand Grans.	Indicators for	Problematic Hydric Soils ³ :
			Polyvalue Below Surface (S8) (LRR S		k (A9) (LRR O)
	ninedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muc	k (A10) (LRR S)
Black	listic (A3)		Loamy Mucky Mineral (F1) (LRR O)	Reduced	Vertic (F18) (outside MLRA 150A,B)
Hydrog	jen Sulfide (A4)		Loamy Gleyed Matrix (F2)	Piedmont	Floodplain Soils (F19) (LRR P, S, T)
Stratifi	ed Layers (A5)		Depleted Matrix (F3)		us Bright Loamy Soils (F20)
	c Bodies (A6) (LRR I	P, T, U)	Redox Dark Surface (F6) Depleted Dark Surface (F7)		1536) nt Material (TE2)
	NUCKY MINERAL (A7) (L Presence (A8) /I PP I	.KK P, I, U) 13)	Redox Depressions (F8)		llow Dark Surface (TF12)
	luck (A9) (LRR P. T)		Mari (F10) (LRR U)	D Other (E)	(plain in Remarks)
Depiet	ed Below Dark Surfa	.ce (A11)	Depleted Ochric (F11) (MLRA 151)		
Thick	Dark Surface (A12)		Iron-Manganese Masses (F12) (LRR)	D, P, T) ³ Indicate	ors of hydrophytic vegetation and
Coast	Prairie Redox (A16)	(MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	wetlar	nd hydrology must be present,
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochic (F17) (MLRA 151)	50B)	s disturbed of problematic.
Sandy Sandy	/ Gleyed Matrix (S4)		Piedmont Floodplain Solis (F19) (ML	30D) RA 149A)	
	ed Matrix (S6)		Anomalous Bright Loamy Soils (F20)	(MLRA 149A, 153C,	(53D)
Dark	Surface (S7) (LRR P	, S, T, U)			
Restrictiv	ve Layer (if observed	d):			
Type:					/
Depth	(inches):		<u>.</u>	Hydric Soil F	Present? Yes No
Remarks:					
					•
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Upland data point wjop019_u facing north.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: SERP	City/County: _	lohnston	_ Sampling Date: 8/1/2014
Applicant/Owner: DOMINION		State: NC	Sampling Point: WJOA020f_W
Investigator(s): GB, TP, LE	Section, Town	ship, Range: <u>No PLSS in this are</u>	ea
Landform (hillslope, terrace, etc.): FLAT	Local relief (conc	ave, convex, none): <u>concave</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): P	Lat: <u>35.48708686</u>	Long: <u>-78.30017761</u>	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam, 0 to	2 percent slopes	NWI classif	ication: PFO1A
Are climatic / hydrologic conditions on the sit	e typical for this time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydro	blogy significantly disturbed?	Are "Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydro	blogy naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attac	h site map showing sampling	point locations, transect	s, 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:						
Wetland data point taken in a very shallow depression on a flat for a saturated to seasonally flooded PFO wetland; area is shown as a NWI polygon on aeriel map.						

HYDROLOGY

	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)			
 True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living I Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Sc Thin Muck Surface (C7) Other (Explain in Remarks) 			
Depth (inches):			
Depth (inches):			
Depth (inches):	Wetland Hydrology Present? Yes <u>V</u> No		
oring well, aerial photos, previous inspect	ions), if available:		
	 <u>check all that apply</u> True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living F Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled So Thin Muck Surface (C7) Other (Explain in Remarks) 		

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

Sampling Point: WJOA020f_W

		-				
20	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species		
1. Nyssa biflora	30	Yes	FACW	That Are OBL, FACW, or FAC	; 9	(A)
2. Quercus laurifolia	15	Yes	FACW			
3 Liquidambar styraciflua	10	No	FAC	Total Number of Dominant	10	(P)
A Acer rubrum	10	No	FAC	Species Across All Strata.		(B)
- Magnalia virginiana	5	No	FACW	Percent of Dominant Species		
5. Magnolia Virginiana		No	FACU	That Are OBL, FACW, or FAC	;: 90	(A/B)
6. <u>liex opaca</u>	4		1 700	Drevelance Index workshoe		
7				Prevalence Index worksnee		
	74	= Total Cove	er	Total % Cover of:	Multiply by:	
50% of total cover: 37	20% of	f total cover:	14.8	OBL species 0	x 1 =	
Sapling/Shrub Stratum (Plot size: 15		-		FACW species64	x 2 =128	
<u>Clethra alnifolia</u>	10	Yes	FAC	FAC species 60	x 3 = 180	
	10		EAC		× 4 – 56	
2. Liquidambar siyracında			FAC		x 4 =	
3. <u>Acer rubrum</u>	8	Yes	FAC	UPL species	$x 5 = \frac{364}{364}$	
4. Ilex opaca	7	No	FACU	Column Totals:	(A) <u> </u>	(B)
5 Cyrilla racemiflora	2	No	FACW		0.00	
<u> </u>		·		Prevalence Index = B/A	= 2.03	
б		· <u> </u>	·	Hydrophytic Vegetation Indi	cators:	
7				1 - Rapid Test for Hydrop	hytic Vegetatior	1
8				✓ 2 - Dominance Test is >5	0%	
9					570 2 0 ¹	
	37	= Total Cove	er	<u> </u>	3.0	
50% of total cover: 18.5	20% of	f total cover:	7.4	4 - Morphological Adapta	tions' (Provide s	supporting
Horb Stratum (Plot size: 5)				data in Remarks or on	a separate she	et)
Woodwardia areolata	5	Voc		Problematic Hydrophytic	Vegetation ¹ (Ex	olain)
2. Arundinaria gigantea	5	Yes	FACW	¹ Indicators of hydric soil and w	vetland bydroloc	w must
3. Microstegium vimineum	4	Yes	FAC	be present, unless disturbed of	or problematic.	ly must
_{4.} Boehmeria cylindrica	2	No	FACW	Definitions of Four Vegetati	on Stroto	
5				Demittions of Four vegetation	Jii Sirala.	
<u>.</u>		·		Tree - Woody plants, excludir	ng vines, 3 in. (7	.6 cm) or
б		· <u> </u>	·	more in diameter at breast he	ght (DBH), rega	rdless of
7				height.		
8				Sanling/Shrub - Woody plan	ts excluding vir	عما عم
9				than 3 in. DBH and greater that	an or equal to 3	.28 ft (1
10.				m) tall.	·	,
11						
	16	Total Cour		Herb – All herbaceous (non-w	'oody) plants, re	gardless
E0% of total appear	200/ 01	= Total Cove	32	or size, and woody plants less	11111 3.20 11 1411	•
	20 /6 01	iolai cover.		Woody vine - All woody vine	s greater than 3	.28 ft in
Woody Vine Stratum (Plot size:)	•	Mar	540	height.		
1. Smilax rotundifolia	8	res	FAC			
2. Toxicodendron pubescens	3	Yes	FACU			
3.						
4						
т. <u></u>		·		Hydrophytic		
D		·		Vegetation Present?	No	
	11	= Total Cove	er	Fresent? Tes		_
50% of total cover: <u>5.5</u>	20% of	f total cover:	2.2			
Remarks: (Include photo numbers here or on a separate s	heet.)			•		

Profile Des	cription: (Describe t	o the dept	h needed to docur	nent the ir	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Features	<u> </u>	. 2	_	
(inches)	Color (moist)		Color (moist)	%	l ype	Loc	<u>l exture</u>	Remarks
0-15	101R 2/1	100					L	
15-20	10YR 3/1	100					SCL	
								<u> </u>
1 .							2	
Type: C=C	oncentration, D=Depi	etion, RM=	Reduced Matrix, Ma	5=IVIasked	Sand Gra	ains.	Location: I	PL=Pore Lining, M=Matrix.
				(07)			maid	
HIStOSO	I (A1)		Dark Surface	e (57) Janua Cumfa a	··· (CO) (N			2 cm Muck (A10) (MLRA 147)
HISTIC E	pipedon (AZ)		Polyvalue Be	vrface (SO)	20 (58) (IV	ILRA 147, 47 440)	148)	
	en Sulfide (A4)			Matrix (47, 140)		(MERA 147, 140) Diedmont Floodplain Soils (F19)
Stratifie	d Lavers (A5)		Depleted Ma	trix (F3)	2)			(MI RA 136 147)
2 cm M	uck (A10) (LRR N)		Redox Dark	Surface (F	6)		,	Very Shallow Dark Surface (TF12)
Deplete	d Below Dark Surface	e (A11)	Depleted Da	rk Surface	(F7)		_	Other (Explain in Remarks)
Thick D	ark Surface (A12)	、 ,	Redox Depre	essions (F8	3)			
Sandy I	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	es (F12) (I	LRR N,		
MLR	A 147, 148)		MLRA 13	6)				
Sandy	Gleyed Matrix (S4)		Umbric Surfa	ice (F13) (I	MLRA 13	6, 122)	³ In	dicators of hydrophytic vegetation and
Sandy I	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	• 8) w	vetland hydrology must be present,
Strippe	d Matrix (S6)		Red Parent M	Aaterial (F2	21) (MLR	A 127, 147	') u	nless disturbed or problematic.
Restrictive	Layer (if observed):							
Type: N	ONE							
Depth (ir	nches):						Hydric So	il Present? Yes 🖌 No
Remarks:							1	



Photo 1 Wetland data point WJOA020f_w facing west



Photo 2 Wetland data point WJOA020f_w facing east

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: SERP	City/County: Johnston		Sampling Date: 8/1/2014		
Applicant/Owner: DOMINION		State: NC	Sampling Point: WJOA020_U		
Investigator(s): GB, TP, LE	Section, Township, Rang	e: No PLSS in this are	а		
Landform (hillslope, terrace, etc.): SLIGHT SLOPE	Local relief (concave, conve	x, none): <u>none</u>	Slope (%): <u>3</u>		
Subregion (LRR or MLRA): P Lat: 35.48	869336 Long:	-78.30039154	Datum: WGS 1984		
Soil Map Unit Name: Rains sandy loam, 0 to 2 percent slope	es	NWI classifi	cation: None		
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrology sig	gnificantly disturbed? Are "No	ormal Circumstances"	present? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology na	aturally problematic? (If need	ded, explain any answe	ers in Remarks.)		
			• • • • • •		

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: Upland data point taken just above the	Remarks: Upland data point taken just above the toe of a very gradual slope for a PFO wetland								

HYDROLOGY

Wetland Hydrology Indicators:	Se	condary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all th	nat apply)	Surface Soil Cracks (B6)				
Surface Water (A1) True	Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2) Hydro	ogen Sulfide Odor (C1)	Drainage Patterns (B10)				
Saturation (A3) Oxidia	zed Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16)				
Water Marks (B1) Prese	ence of Reduced Iron (C4)	Dry-Season Water Table (C2)				
Sediment Deposits (B2) Recei	ent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)				
Drift Deposits (B3) Thin I	Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)				
Algal Mat or Crust (B4) Other	r (Explain in Remarks)	Stunted or Stressed Plants (D1)				
Iron Deposits (B5)		Geomorphic Position (D2)				
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)				
Water-Stained Leaves (B9)		Microtopographic Relief (D4)				
Aquatic Fauna (B13)		FAC-Neutral Test (D5)				
Field Observations:						
Surface Water Present? Yes No 🗹 Dept	th (inches):					
Water Table Present? Yes No 🛩 Dept	th (inches):					
Water Table Present? Yes No _ Dept Saturation Present? Yes No _ Dept (includes capillary fringe) Ves No _ Ves No _	th (inches): th (inches): Wetland Hyd	rology Present? Yes No				
Water Table Present? Yes No _ Dept Saturation Present? Yes No _ Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, action of the stream gauge)	th (inches): th (inches): Wetland Hyd erial photos, previous inspections), if availab	rology Present? Yes No				
Water Table Present? Yes No _ Dept Saturation Present? Yes No _ Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, additional contents)	th (inches): Wetland Hyd erial photos, previous inspections), if availab	rology Present? Yes No				
Water Table Present? Yes No V Dept Saturation Present? Yes No V Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac Remarks:	th (inches): Wetland Hyd erial photos, previous inspections), if availab	rology Present? Yes No				
Water Table Present? Yes No _ Dept Saturation Present? Yes No _ Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac Describe Recorded Data (stream gauge, monitoring well, ac Remarks: no hydrology indicators	th (inches): th (inches): Wetland Hyd erial photos, previous inspections), if availab	rology Present? Yes No				
Water Table Present? Yes No _ Dept Saturation Present? Yes No _ Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ad Describe Recorded Data (stream gauge, monitoring well, ad Remarks: no hydrology indicators	th (inches): th (inches): Wetland Hyd erial photos, previous inspections), if availab	rology Present? Yes No le:				
Water Table Present? Yes No _ Dept Saturation Present? Yes No _ Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ad Describe Recorded Data (stream gauge, monitoring well, ad Remarks: no hydrology indicators	th (inches): Wetland Hyd erial photos, previous inspections), if availab	rology Present? Yes No le:				
Water Table Present? Yes No _ Dept Saturation Present? Yes No _ Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ad Describe Recorded Data (stream gauge, monitoring well, ad Remarks: no hydrology indicators	th (inches): Wetland Hyd erial photos, previous inspections), if availab	rology Present? Yes No le:				
Water Table Present? Yes No <u>v</u> Dept Saturation Present? Yes No <u>v</u> Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac Remarks: no hydrology indicators	th (inches): th (inches): erial photos, previous inspections), if availab	rology Present? Yes No le:				
Water Table Present? Yes No <u>v</u> Dept Saturation Present? Yes No <u>v</u> Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac Remarks: no hydrology indicators	th (inches): th (inches): erial photos, previous inspections), if availab	rology Present? Yes No				
Water Table Present? Yes No <u>v</u> Dept Saturation Present? Yes No <u>v</u> Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac Remarks: no hydrology indicators	th (inches): th (inches): erial photos, previous inspections), if availab	rology Present? Yes No le:				
Water Table Present? Yes No V Dept Saturation Present? Yes No V Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac Remarks: no hydrology indicators	th (inches): Wetland Hyd erial photos, previous inspections), if availab	rology Present? Yes No le:				
Water Table Present? Yes No <u>v</u> Dept Saturation Present? Yes No <u>v</u> Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac Remarks: no hydrology indicators	th (inches): th (inches): erial photos, previous inspections), if availab	rology Present? Yes No le:				
Water Table Present? Yes No <u>v</u> Dept Saturation Present? Yes No <u>v</u> Dept (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ac Remarks: no hydrology indicators	th (inches): th (inches): erial photos, previous inspections), if availab	rology Present? Yes No le:				

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

Sampling Point: WJOA020_U

	Abaaluta	- Deminent I		Deminence Test worksheet
Tree Stratum (Plot size: 30)	Absolute % Cover	Species?	Status	Dominance Test worksneet:
Liquidambar styraciflua	30	Yes	FAC	Number of Dominant Species
1. <u>Elquidambal styracilida</u>		<u> </u>		That Are OBL, FACW, or FAC: (A)
2. Pinus taeda		res	FAC	Total Number of Dominant
_{3.} Acer rubrum	8	No	FAC	Species Across All Strata: 8 (B)
⊿ llex opaca	7	No	FACU	(=)
Liriodendron tulipifera	3	No	FACU	Percent of Dominant Species
5. <u>Emodonaton tampilota</u>		·		That Are OBL, FACW, or FAC: 75 (A/B)
6		·		Brevalence Index worksheet:
7				
	78	= Total Cove	r	I otal % Cover of: Multiply by:
50% of total cover: ³	9 20% of	total cover:	15.6	OBL species x 1 =
Sapling/Shrub Stratum (Plot size: 15				FACW species $2 \times 2 = 4$
<u>Japing/Sinds Stratum</u> (110t size)	12	Ves	FACU	EAC species $108 \times 3 = 324$
			- 1 400	$\frac{37}{148}$
2. Symplocos tinctoria	10	Yes	FAC	FACU species $x 4 = 0$
_{З.} Ilex ораса	10	Yes	FACU	UPL species $0 \times 5 = 0$
A Liriodendron tulipifera	5	No	FACU	Column Totals:147 (A)476 (B)
		· · · · · · · · · · · · · · · · · · ·		
5		·		Prevalence Index = $B/A = 3.23$
6		·		Hydrophytic Vegetation Indicators:
7				1. Daniel Test for Livelandu tie Venetation
8				1 - Rapid Test for Hydrophytic Vegetation
0		·		2 - Dominance Test is >50%
9	37	·		3 - Prevalence Index is ≤3.0 ¹
10		= Total Cove	r 74	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:18	.5 20% of	total cover:	7.4	data in Romarks or on a soparate sheet)
Herb Stratum (Plot size: 5)				
1. Microstegium vimineum	20	Yes	FAC	Problematic Hydrophytic Vegetation' (Explain)
o Woodwardia areolata	2	No	FACW	
2				¹ Indicators of hydric soil and wetland hydrology must
3		·		be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5.				
6		· · ·		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
-		·		more in diameter at breast height (DBH), regardless of
7		·		height.
8				Sanling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
44		· · · · · · · · · · · · · · · · · · ·		
· · ·		· · · · · · · · · · · · · · · · · · ·		Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove	er A A	of size, and woody plants less than 3.28 ft tall.
50% of total cover:	<u> </u>	total cover:	4.4	Woody vine – All woody vines greater than 3 28 ft in
Woody Vine Stratum (Plot size: 30)				height.
1. Smilax rotundifolia	5	Yes	FAC	
2 Toxicodendron radicans	5	Yes	FAC	
2		·		
3		·		
4				Hydrophytic
5.				Vegetation
	10	- Total Cove	r	Present? Yes <u>No</u>
50% of total cover: 5	20% of		2	
	20 % 01	total cover.		
Remarks: (Include photo numbers here or on a separate	sheet.)			

Profile Desc	cription: (Describe t	o the depth	needed to docun	nent the ir	ndicator	or confirm	the absence of	indicato	rs.)	
Depth	Matrix		Redo	x Features	<u>.</u>					
(inches)	Color (moist)		Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-17	10YR 2/2	100					L			
17-24	10YR 4/2	100					SCL			
						·······				
1							2			
'Type: C=C	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	Location: PL=P	Pore Linir	ng, M=Matrix.	drie Ceile ³ .
Hydric Soli	indicators:			(07)			Indicator			
Histosol	(A1)		Dark Surface	(\$7)	(00) (1)		2 cm	Muck (A	(10) (MLRA 1	47)
	pipedon (AZ)		Polyvalue Be	IOW SUITAC	(58) (IV) /MIDA 1	ILRA 147,	148) <u> </u>		Redox (A16)	
Black II	suc (AS) $Sulfide (\Delta A)$			nace (39) d Matrix (F		47, 140)	Piedr	mont Flo	odolain Soils ((F19)
Stratifie	d Lavers (A5)		Depleted Mat	trix (F3)	2)		(M	II RA 136	6, 147)	(110)
2 cm Mi	uck (A10) (LRR N)		Redox Dark S	Surface (F	6)		Verv	Shallow	Dark Surface	(TF12)
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		Othe	r (Explain	n in Remarks)	()
Thick Da	ark Surface (A12)	· · ·	Redox Depre	ssions (F8	3)			· ·	,	
Sandy M	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	es (F12) (I	LRR N,				
MLR	A 147, 148)		MLRA 13	6)						
Sandy C	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (I	MLRA 13	6, 122)	³ Indicat	tors of hy	drophytic veg	etation and
Sandy F	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	8) wetlar	nd hydrol	ogy must be p	vresent,
Stripped	d Matrix (S6)		Red Parent N	Aaterial (F2	21) (MLR	A 127, 147) unless	s disturbe	ed or problema	atic.
Restrictive	Layer (if observed):									
Type: no	one		_							
Depth (in	ches):		_				Hydric Soil Pre	esent?	Yes	No 🔽
Remarks:							1			



Photo 1 Upland data point WJOA020_u facing west



Photo 2 Upland data point WJOA020_u facing east
WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: John Ston Sampling Date 7/20/15
Applicant/Owner: Dominion	State: NC Sampling Point: 141) AA 029F L
Investigator(s): ESI-J, Harbour, K. Murphrey	Section Townshin Range: A/A
andform (hillslope terrace etc.): depression	Local ratio (concerned approximation approxi
Subragian (I DD as MI DA), L B B P	± 7996 ± 16591
Sublegion (LRR of MLRA): $L_2 + 5 + 7$ Lat: 23	$\frac{17110}{2000} Long: \frac{70130317}{2000} Datum: \frac{10000}{2000} +$
Soil Map Unit Name: North Sold Ob / , O A	NWI classification: TFO
Are climatic / hydrologic conditions on the site typical for this time of year	ar? 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 pro	blematic? (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	
Hydric Soil Present? YesNo	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a wetland? Yes No
Remarks:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary indicators (minimum of two required)
Surface Water (A1)	
High Water Table (A2)	5) (LRR U) Drainage Patterns (B10)
Saturation (A3)	Ddor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosph	ieres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	ced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	tion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	e (C7) Geomorphic Position (D2)
I Iron Deposits (85) U Other (Explain in F	Remarks) . L Shallow Aquitard (D3)
Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches	si: NA
Water Table Present? Yes No Depth (inches	st: 720
Saturation Present? Yes No Depth (inches	s): 720 Wetland Hydrology Present? Yes No
(includes capillary fringe)	
beschoe Recorded Data (stream gauge, monitoring weil, aenal phot	tos, previous inspections), if available:
Remarke	

Sampling Point: wjoo029 F.w

TOGI YZOEL	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 2081 \ 2081)	<u>% Cover</u>	<u>Species</u> ?	<u>Status</u>	Number of Dominant Species
1. ALEN VUDIUM	20	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidambar Styracisture	<u> </u>	N	FAC	Total Number of Dominant
3 NUSSO Sylvatica	2	N	FAC	Species Across All Strata: (B)
4				
5				That Are OBL EACING on FAC: 100% (MP)
6.				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		- Total Ca		OBL species x 1 =
12 4		= Total Co	< 4	FACW species x 2 =
50% of total cover; $\sum_{i=1}^{3}$	<u>></u> 20% of	i total cove	r: <u>_+</u> ≠ (FAC species x3=
Sapling/Shrub Stratum (Plot size: 504+1, 306+)	10	\checkmark	-	
1. Liquidambor Sturgeisting		\leftarrow	- FRC	
2. ALER MOBILIA	<u></u>	<u> </u>	FAC	OPL species X 5 =
3. Magnolla Virginiana	<u></u>	<u>_N</u>	FACW	(B)
4. Ilex oraca	5	N	FAC	Prevalence Index = B/A =
5. Linustrum sinense	5	_ <u>N</u>	FAC	Hydronbytic Vegetation Indicatore:
6				The second Test for Lindra the Martin Martin
7.				
8		<u></u>		
····	40			3 - Prevalence Index is ≤3.0
50% of total assume 20			S	Problematic Hydrophytic Vegetation' (Explain)
	20% 0	total cove		
Herb Stratum (Plot size: 20047(2002))	$\sim \sim$	\mathbf{V}	TACK)	Indicators of hydric soil and wetland hydrology must
1. Alundinavia Aigontea	- 20		FACT	be present, unless disturbed or problematic.
2. Nucewardia arculata		- <u>N</u>	<u>_061_</u>	Definitions of Four Vegetation Strata:
3. Boehmeria cylindica	<u> </u>	<u> N </u>	M JAP 1	Tree – Moody plants, excluding vines 3 in (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sanling/Shrub - Woody plants excluding vines less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tail.
8.				
9.				d size, and woody nights less than 3.28 ft tall
10				
11	<u> </u>	· · · · · · · · · · · · · · · · · · ·		Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	7 1			
1	<u>ر کر</u>	_ = Total C	over	
50% of total cover:	> 20%	of total cov	rer: <u>6</u>	· .
Woody Vine Stratum (Plot size: 308+X 308-1)	~	\sim		
1. Daiceria Japonica			- FAL	_
2. Vitis rotunditolia	5	<u> </u>	FAC	
3. TOXICODENTION VORICOOS	2	\sim	FAC	
4.				-
5				
	12	— — Totol (- Hydrophytic Vegetation
		= 10(a) (Present? Yes No
	20%	of total co	ver: <u>« · ·</u>	- <u></u>
Remarks: (It observed, list morphological adaptations b	elow).			

SOIL

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Sampling Point: 200029 -

Profile Des	cription: (Describe	to the depth	needed to docum	nent the i	ndicator	or confirm f	he absence of indic	ators.)
Depth	Matrix		Redox	Features	<u> </u>			
	$\frac{Color (moist)}{COP}$	$-\frac{\%}{1/1}$	<u>Color (moist)</u>	_%	Type'	Loc ²	Texture	Remarks
2-3	<u>107K371</u>	<u> 40 1</u>	0011316	2	$\underline{\ }$	<u></u>	<u> </u>	
5-7	104K4/2	100					<u>_SL</u>	
8-20	104R4/1	94 10	04R6/2	2	$\boldsymbol{\mathcal{D}}$	\sim	51	
	<i>ν</i>		£					
			·· ···································				· ·	
		•		<u> </u>		·		
			· · · · _					
<u> </u>				·	······			
¹ Type: C=C	Concentration, D=Dep	pletion, RM=F	Reduced Matrix, MS	S≕Masked	Sand Gr	ains.	² Location: PL=Po	re Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless other	wise note	ed.)		Indicators for Pro	blematic Hydric Soils ³ :
Histoso	ol (A1)		Polyvalue Bel	low Surfac	ce (S8) (L	.RR S, T, U)	L 1 cm Muck (A	9) (LRR O)
	Epipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm Muck (A	10) (LRR S)
	HISTIC (A3)		Loamy Mucky	y Mineral ((F1) (LRF	R O)	Reduced Verti	c (F18) (outside MLRA 150A,B)
Stratific	en Sunue (A4)		Depleted Med	o Matrix (F2)		Predmont Floc	odplain Soils (F19) (LRR P, S, T)
	c Bodies (A6) (I BR F	тты	Bedoy Dark	llix (Fo) Surface (F	6)			ight Loamy Soils (F20)
	lucky Mineral (A7) (L	RR P. T. U)		k Surface	(F7)			Dj storial (TE2)
Muck F	Presence (A8) (LRR 1	J)	Redox Depre	ssions (Fi	8)		Very Shallow	Dark Surface (TF12)
1 cm N	luck (A9) (LRR P, T)	•	🗍 Marl (F10) (L	RR U)	-,		Other (Explain	n in Remarks)
Deplete	ed Below Dark Surfac	ce (A11)	Depleted Oct	hric (F11)	(MLRA 1	51)		· · · · · · · · · · · · · · · · · · ·
Thick [Dark Surface (A12)		Iron-Mangan	ese Mass	es (F12)	(LRR 0, P, ⁻	F) ³ Indicators of	f hydrophytic vegetation and
Coast I	Prairie Redox (A16) (MLRA 150A)) 📙 Umbric Surfa	ice (F13)	(LRR P, T	r, U)	wetland hy	drology must be present,
Sandy	Mucky Mineral (S1) (LRR 0, S)		(F17) (ML	_RA 151)		unless dist	urbed or problematic.
	Gieyed Matrix (S4)		Diadmant Eld	(110 (F18) ((MLRA 1) 2010 (E40)	50A, 150B)		
	nedox (35) ad Matrix (S6)			Bright Los	my Soile	(E20) (MI D)	9A) N 140A (1520 (1530)	
Dark S	Surface (S7) (LRR P.	S. T. U)		ngin Loa	119 0015	(i 20) (mERA	4 143A, 153C, 153D)	,
Restrictive	Layer (if observed):					· · · · · · · · · · · · · · · · · · ·	······
Type: _			_					
Depth (i	inches):						 Hydric Soil Prese	nt? Yes No
Remarks:								
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Environmental Field Surveys Wetland Photo Page



Wetland data point wjoo029f_w facing south.



Wetland data point wjoo029f_w facing northwest.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: <u>A C P</u>	City/County: John Stan Sampling Date: 7/20/15
Applicant/Owner: Dominion	State: NC Sampling Point: 100 029_4
Investigator(s): ESI-J. Harbur, K. Murphrey	Section, Township, Range: NA
Landform (hillslope, terrace, etc.): hillslope	_ocal relief (concave, convex, none); COAVEX Slope (%): 2-4
Subregion (LRR or MLRA): LRRP Lat: 35.4	7999 Long: -78, 30391 Datum: WGS 84
Soil Map Unit Name: ROINS SONAG (DOM)	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year	ar? Yes No (If no explain in Romarks)
Are Vegetation Soil or Hydrology significantly (
Are Vegetation Soil or Hydrology naturally or	blematic? (If pooled, ovalein and approaching Demotion)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
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 apply)	Surface Soil Cracks (B6)
Aquatic Fauna (B1:	3) 📃 Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U) <u>L</u> Drainage Patterns (B10)
Water Marks (B1)	aor (C1) <u>L</u> Moss Trim Lines (B16)
Sediment Deposits (B2)	red from (C4)
Drift Deposits (B3)	tion in Tilled Soils (C6)
Algal Mat or Crust (B4)	(C7) Geomorphic Position (D2)
I Iron Deposits (B5)	emarks) Shallow Aquitard (D3)
Water Stained Leaves (R0)	
Field Observations:	
Surface Water Present? Yes No Depth (inches	n NA
Water Table Present? Yes No Depth (inches): 720
Saturation Present? Yes No Depth (inches): 720 Wetland Hydrology Present? Yes No
(includes capillary fringe)	or province inspections) if ovoilable:
Poolino recorded Bata (orean gadge, montoning weil, aenar prot	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
Remarks:	
	•

VEGETATION	(Four Strata)	- Use scientific names of plants.	
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Sampling Point: W 00029_4 Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 308+X308+) % Cover Species? Status Number of Dominant Species 1. Liviodendaux tunpiseron 40 Frich That Are OBL, FACW, or FAC: (A) 2. Liquidombor Sturacistua 20 FAC Total Number of Dominant 3. Prunas sproting FACC Species Across All Strata: (B) 4. Percent of Dominant Species 10 5. That Are OBL, FACW, or FAC: (A/B)6. _____ Prevalence Index worksheet: 7._____ Total % Cover of: Multiply by: 8. OBL species _____ x 1 = _____ 65. = Total Cover FACW species _____ x 2 = _____ 50% of total cover: 32.5 20% of total cover: Sapling/Shrub Stratum (Plot size: 308+X 3084) FAC species _____ x 3 = ____ FACU species _____ x 4 = _____ 1. Liridendrun tulipitera UPL species _____ x 5 = _____ 2 SUMPLOCOS FINCTORIA FAC Column Totals: _____ (A) _____ (B) 3. Ligustrum sinense Ν FAC N 4. ACEV VUbrum FAC Prevalence Index = B/A = N 5 Clethra aloceolia FACW Hydrophytic Vegetation Indicators: 6. Arrapid Test for Hydrophytic Vegetation 7._____ 2 - Dominance Test is >50% 8. 3 - Prevalence Index is ≤3.0¹ 42 _= Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 50% of total cover: _ 2 \ 20% of total cover: <u>84</u> Herb Stratum (Plot size: 3084X 3084 ¹Indicators of hydric soil and wetland hydrology must 1 Arundinaria FACh 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. 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. 5 _= Total Cover 50% of total cover: 2.5 20% of total cover: Woody Vine Stratum (Plot size: 308+X308+ 1 Par-menucissus aunquetolia 2.Vitis (orundifoi) de 10 3. TOXICO denaria radican 2 N 4. Lonicera Japonica 5. Hydrophytic 6 = Total Cover Vegetation No Present? Ч 20% of total cover: 3, 2 Yes 50% of total cover: Remarks: (If observed, list morphological adaptations below).

Profile Description: (Describe to the depth ne	eded to document the indicator or confirm th	ne absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) % C	color (moist) % Type1 Loc2	Texture Remarks
0-9 104R3/3 100		LS
9-20 104R6/3 101)		LS
·		
	•	
······································		
¹ Type: C=Concentration, D=Depletion, RM=Red	luced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRR	s, 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)
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)	Depleted Matrix (F3)	L 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)	Harrian (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Ury Shallow Dark Surface (TF12)
□ 1 Cm Muck (A9) (LRR P, T)		ليل Other (Explain in Remarks)
Thield Derk Surface (A11)	Depleted Ochric (F11) (MLRA 151)	
Coast Brairio Rodov (A16) (MI RA 150A)	I Iron-Manganese Masses (F12) (LRR O, P, 1) Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) (I RR O S)	Delta Ochric (E17) (MI BA 151)	weiland hydrology must be present,
Sandy Mucky Mineral (S1) (ERR 0, S)	Beduced Vertic (F18) (MLRA 151)	uniess disturbed of problematic.
Sandy Bedox (S5)	Piedmont Elondolain Soils (E19) (MLRA 149	201
Stripped Matrix (S6)	Anomaious Bright Loamy Soils (F20) (MLRA	(C) 149A, 153C, 153D)
Dark Surface (S7) (LRR P. S. T. U)		
Restrictive Layer (if observed):		
Type:		
Depth (inches):	-	Hudrin Soil Brogont2 Yon No
Departici		Nulle Son Plesentry res No
Remarks:		
ļ		

Environmental Field Surveys Wetland Photo Page



Upland data point wjoo029_u facing north.



Upland data point wjoo029_u facing east.

Project/Site: SERP	City/County:	Johnston	_ Sampling Date: 7/31/2014
Applicant/Owner: DOMINION		State: NC	Sampling Point: WJOA019f_W
Investigator(s): GB, TP, LE	Section, Tow	nship, Range: <u>No PLSS in this are</u>	a
Landform (hillslope, terrace, etc.): FLAT	Local relief (cond	cave, convex, none): <u>concave</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P Lat: 3	5.47479361	Long: <u>-78.30601649</u>	Datum: WGS 1984
Soil Map Unit Name: Cowarts loamy sand, 2 to 6 percent	slopes	NWI classifi	ication: None
Are climatic / hydrologic conditions on the site typical for t	his time of year? Yes	No (If no, explain in I	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	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site ma	o showing sampling	point locations, transect	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes 🖌	No No No	Is the Sampled Area within a Wetland?	Yes 🖌	_ No
Remarks:					
Wetland data point taken at the edge of stream SJOB011.	an agricultural f	ield for a saturated I	PFO wetland located in a col	ncave area of a	flat through which intermittent

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) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) 	
Water-Stained Leaves (B9) Aquatic Fauna (B13)	Microtopographic Relief (D4) ✓ EAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (include a considered on the constraints) 14	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available:

Sampling Point: WJOA019f_W

, <i>,</i>				
30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
_{1.} Quercus laurifolia	20	Yes	FACW	That Are OBL, FACW, or FAC; 8 (A)
 Liriodendron tulipifera 	20	Yes	FACU	
Z. Liquidambar aturaciflua	15	Ves	FAC	Total Number of Dominant
3	15	163		Species Across All Strata: 9 (B)
_{4.} Quercus nigra	10	No	FAC	
Acer rubrum	10	No	FAC	Percent of Dominant Species
<u> </u>				That Are OBL, FACW, or FAC: (A/B)
6				Decoder as indecomplete at
7.				Prevalence Index worksheet:
	75	Total Car		Total % Cover of: Multiply by:
27.1		= Total Cove	er 15	$\frac{1}{1}$ OBL species 5 $x_1 - 5$
50% of total cover: 37.	20% of	f total cover:	15	ODL species X I = 83 166
Sapling/Shrub Stratum (Plot size: 15)				FACW species $x 2 = 100$
Magnolia virginiana	10	Yes	FACW	FAC species $83 \times 3 = 249$
<u>Ormational inginiana</u>				$\frac{25}{100}$
2. Sambucus nigra	8	Yes	FAC	FACU species $x 4 = 0$
₃ Ligustrum sinense	3	No	FACU	UPL species 0 x 5 = 0
· llev onaca	2	No	FACU	Column Totals: 196 (A) 520 (B)
4. <i>nex opaca</i>			17100	
5				Dravalance Index D/A 2.65
6				Prevalence index = $B/A = 2.00$
0		·		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
		- <u> </u>		2 - Dominance Test is >50%
9		·		✓ 3 - Prevalence Index is $\leq 3.0^1$
	23	= Total Cove	er	
50% of total cover: 11.5	5 20% of	f total cover:	4.6	4 - Morphological Adaptations (Provide supporting
				data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	<u> </u>			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Woodwardia areolata	35	Yes	FACW	
2 Arundinaria gigantea	15	Yes	FACW	
- Microstegium vimineum	6	No	EAC	¹ Indicators of hydric soil and wetland hydrology must
3. Microstegium virnineum	0		FAC	be present, unless disturbed or problematic.
_{4.} Osmunda spectabilis	5	No	OBL	Definitions of Four Vegetation Strata
Boehmeria cylindrica	3	No	FACW	Deminions of Four vegetation Strata.
- S				Tree – Woody plants excluding vines 3 in (7.6 cm) or
6				more in diameter at breast height (DBH) regardless of
7.				height
		·	·	
8			. <u> </u>	Sapling/Shrub – Woody plants, excluding vines, less
9		<u></u>		than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
		·	·	, ,
11		·	<u> </u>	Herb – All herbaceous (non-woody) plants, regardless
	64	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32	20% of	f total cover:	12.8	
				Woody vine – All woody vines greater than 3.28 ft in
<u>vvoody vine Stratum</u> (Plot size:)		.,		height.
1. Toxicodendron radicans	15	Yes	FAC	
2 Smilax rotundifolia	10	Yes	FAC	
Z	5	No	FAC	
	5		170	
_{4.} Campsis radicans	4	No	FAC	
				Hydrophytic
ð				Vegetation
	34	= Total Cove	ər	Present? Yes <u>NO</u>
50% of total cover: ¹⁷	20% of	f total cover:	6.8	
	h = = t)			
Remarks: (include photo numbers here of on a separate s	neet.)			

Profile Des	cription: (Describe t	o the de	pth needed to docur	nent the	indicator of	or confirm	the absence o	of indicators.)	
Depth	Matrix		Redo	x Feature	S				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-7	10YR 2/2	100					SCL		
7-18	10YR 4/1	97	10YR 4/6	3	С	PL	SCL		
			· · · · · · · · · · · · · · · · · · ·		·		· ·		<u> </u>
					·		·		
							·		
							·		
					·		·		
							·		
¹ Type: C=C	oncentration, D=Deple	etion, RM	I=Reduced Matrix, MS	S=Masked	d Sand Gra	ains.	² Location: PL:	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicat	ors for Problematic Hydr	ic Soils ³ :
<u> </u>	l (A1)		Dark Surface	(S7)			2 c	m Muck (A10) (MLRA 147)
Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ice (S8) (N	ILRA 147,	148) <u>Co</u>	ast Prairie Redox (A16)	
Black H	istic (A3)		Thin Dark Su	rface (S9) (MLRA 1	47, 148)	((MLRA 147, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix	(F2)		Pie	edmont Floodplain Soils (F1	19)
Stratifie	d Layers (A5)		Depleted Mat	trix (F3)				(MLRA 136, 147)	
2 cm M	uck (A10) (LRR N)		Redox Dark	Surface (F	=6)		Ve	ry Shallow Dark Surface (T	F12)
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	e (F7)		Oth	her (Explain in Remarks)	
Thick D	ark Surface (A12)		Redox Depre	ssions (F	8)				
Sandy M	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Mass	es (F12) (I	LRR N,			
MLR	A 147, 148)		MLRA 13	6)		a 400)	31	a ta ma set la sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-	de la cal
Sandy C	Sleyed Matrix (S4)		Umbric Surfa	ce (F13)		6, 122)		cators of hydrophytic vegeta	ation and
Sandy F	Kedox (SS)		Pleamont Fic	Actorial (5011S (F19)	(INLRA 14	18) weti 7) weti	and nydrology must be pre	sent,
Surpped				laterial (r		A 127, 147) unie	ess disturbed of problematic	<i>.</i>
	ONE								
Type:									
Depth (in	ches):						Hydric Soil F	Present? Yes	No
Remarks:									



Photo 1 Wetland data point WJOA019f_w facing west



Photo 2 Wetland data point WJOA019f_w facing east

Project/Site: SERP	City/County: Joh	nston	Sampling Date: 7/31/2014
Applicant/Owner: DOMINION		State: NC	Sampling Point: WJOA019_U
Investigator(s): GB, TP, LE	Section, Townsh	ip, Range: <u>No PLSS in this are</u>	a
Landform (hillslope, terrace, etc.): FLAT	Local relief (concave	e, convex, none): <u>none</u>	Slope (%): <u>3</u>
Subregion (LRR or MLRA): P Lat: 3	5.47465399	_ Long: <u>-78.30579003</u>	Datum: WGS 1984
Soil Map Unit Name: Cowarts loamy sand, 2 to 6 percent	t slopes	NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes	No (If no, explain in F	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 answe	ers in Remarks.)
		• • • • • •	• • • • • •

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: Upland data point taken at the edge of an agricultural field for a PFO wetland.					

HYDF	ROL	OGY
------	-----	-----

	ors:	Secondary Indicators (minimum of two required)	
Primary Indicators (minimum	of one is required; chec	Surface Soil Cracks (B6)	
Primary Indicators (minimum of one is required; check all that apply)			 Surface Soli Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3)
Water-Stained Leaves (E	39)		Microtopographic Relief (D4)
Aquatic Fauna (B13)			FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present?	Yes No _	Depth (inches):	
Water Table Present?	Yes No 🖌	Depth (inches):	
Saturation Present?	Yes No 🔽	_ Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)			
(includes capillary fringe) Describe Recorded Data (stre	eam gauge, monitoring	well, aerial photos, previous inspec	tions), if available:

Sampling Point: WJOA019_U

, , ,		• •	P 4	
Tree Stratum (Plataine) 30	Absolute	Dominant Ir	dicator	Dominance Test worksheet:
<u>livis de rederent tulinifere</u>	<u>% Cover</u> 30	<u>Species</u>	FACI	Number of Dominant Species
1. Linodendron tulipitera	45	fes		That Are OBL, FACW, or FAC:5 (A)
2. Acer rubrum	15	Yes	FAC	Total Number of Deminent
3 Quercus phellos	8	No	FAC	Species Across All Strata: 7 (B)
A Juglans nigra	8	No	FACU	
	6	No	FAC	Percent of Dominant Species
5. Quercus nigra	0	110		That Are OBL, FACW, or FAC: 71.42857142 (A/B)
6. Quercus laurifolia	5	No	FACW	
7				Prevalence Index worksheet:
/. <u></u>	72			Total % Cover of: Multiply by:
20		= Total Cover	111	OBL spacing = 0 $x = 0$
50% of total cover: 30	20% of	total cover:	14.4	$\frac{20}{20}$ $x = \frac{10}{40}$
Sapling/Shrub Stratum (Plot size: 15)				FACW species 20 $x 2 = 40$
1 Ligustrum sinense	45	Yes	FACU	FAC species $x_3 =2 297$
				FACIL species $83 \times 4 = 332$
2		·		
3				UPL species $x = -60$
4				Column Totals: (A) (B)
··	-			
5				Prevalence Index = $B/A = 3.31$
6				Hydrophytic Vegetation Indicators:
7.				
0				1 - Rapid Test for Hydrophytic Vegetation
o		·		2 - Dominance Test is >50%
9		·		3 - Prevalence Index is $\leq 3.0^{1}$
	45	= Total Cover		A March alagical Adaptations ¹ (Dravida averageting
50% of total cover: 22.5	20% of	total cover:	9	4 - Morphological Adaptations (Provide supporting
Harb Stratum (Blat aiza: 5)				data in Remarks or on a separate sheet)
Arundinaria gigantea	15	Vee		Problematic Hydrophytic Vegetation ¹ (Explain)
1. Alunumana gigamea	10	res	FACW	
2. Microstegium vimineum	10	Yes	FAC	1
3				Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
4		·		Definitions of Four Vegetation Strata:
5				
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7				more in diameter at breast height (DBH), regardless of
/		·		neight.
8		·		Sanling/Shrub - Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
10				,
11		·		Herb – All herbaceous (non-woody) plants, regardless
	25	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 12.5	20% of	total cover:	5	
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in
Toxicodendron radicans	25	Ves	FAC	neight.
	20		140	
2. Smilax rotundifolia	15	Yes	FAC	
3. Vitis rotundifolia	10	No	FAC	
A Campsis radicans	10	No	FAC	
4	10			Hydrophytic
5		·		Vegetation
	60	= Total Cover		Present? Yes No No
50% of total cover: 30	20% of	total cover:	12	
	2070 01			
Remarks: (Include photo numbers here or on a separate s	neet.)			

Profile Des	scription: (Describe	to the dep			or confirm	the absence of Indic	ators.)
Depth	Matrix Color (moint)	0/	Color (moiot)	<u>Features</u>	1.0.02	Taxtura	Demerke
		100		<u> </u>	LUC		Remarks
0-0		100					
8-20	10YR 3/1	100				SCL	
		·					
		·					
		·					
		·					
		·					
		·					
		·			<u> </u>		
¹ Type: C=(Concentration, D=Dep	letion. RM=	Reduced Matrix, MS	=Masked Sand Gr	ains	² l ocation: PI =Pore I	ining, M=Matrix,
Hydric Soi	I Indicators:	iouon, run				Indicators for	Problematic Hydric Soils ³ :
Histosc	ol (A1)		Dark Surface	(\$7)		2 cm Muc	k (A10) (MI RA 147)
Histic F	=ninedon (A2)		Polyvalue Bel	ow Surface (S8) (N	II RA 147.	148) Coast Pra	irie Redox (A16)
Black F	Histic (A3)		Thin Dark Sur	face (S9) (MI RA 1	47, 148)	(MI RA	147, 148)
Hvdroc	ien Sulfide (A4)		Loamy Glever	Matrix (F2)	,,	Piedmont	Floodplain Soils (F19)
Stratifie	ed Lavers (A5)		Depleted Matr	ix (F3)		(MLRA	136, 147)
2 cm V	luck (A10) (LRR N)		Redox Dark S	urface (F6)		Verv Shal	low Dark Surface (TF12)
Deplete	ed Below Dark Surface	e (A11)	Depleted Dark	Surface (F7)		Other (Ex	plain in Remarks)
Thick E	Dark Surface (A12)	- ()	Redox Depres	sions (F8)			· · · · · · · · · · · · · · · · · · ·
Sandv	Mucky Mineral (S1) (L	.RR N.	Iron-Mangane	se Masses (F12) (LRR N.		
MLR	RA 147. 148)	,)	,		
Sandy	Gleved Matrix (S4)		Umbric Surfac	, e (F13) (MLRA 13	6, 122)	³ Indicators o	f hydrophytic vegetation and
Sandy	Redox (S5)		Piedmont Floo	odplain Soils (F19)	(MLRA 14	8) wetland hy	drology must be present.
Strippe	d Matrix (S6)		Red Parent M	aterial (F21) (MLR	A 127, 147) unless dist	urbed or problematic.
Restrictive	Laver (if observed):			. , ,		, 	•
Type: N	IONE						
Depth (ii	nches):					Hydric Soil Present	? Yes No
Remarks:						1	



Photo 1 Upland data point WJOA019_u facing east



Photo 2 Upland data point WJOA019_u facing west

Project/Site: Atlantic Coast Pipeline	_ City/County: Johnston	Sa	mpling Date: 2/9/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: <u>wjob108f_w</u>
Investigator(s): TP, RH	Section, Township, Range:	No PLSS in this area	
Landform (hillslope, terrace, etc.): depression	.ocal relief (concave, convex, r	ione): <u>concave</u>	Slope (%): <u>0</u>
Subregion (LRR or MLRA): P Lat: <u>35.46270816</u>	Long: <u>-7</u>	8.31196579	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam, 0 to 2 percent slopes		NWI classificatic	n: None
Are climatic / hydrologic conditions on the site typical for this time of	year?Yes 🖌 No	_ (If no, explain in Rem	arks.)
Are Vegetation, Soil, or Hydrology _ 🖌 significant	ly disturbed? Are "Norn	al Circumstances" pres	ent? Yes No 🖌
Are Vegetation, Soil, or Hydrology naturally p	oroblematic? (If needed	, explain any answers ir	n Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locat	ions, transects, ir	nportant features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes 🖌	No No No	Is the Sampled Area within a Wetland?	Yes 🖌	_ No
Remarks:					
clay and soil compaction.				tanding water. W	

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) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
✓ High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
✓ Saturation (A3) Oxidized Rhizospheres on Living Roots (C3	3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	 Microtopographic Relief (D4)
Aquatic Fauna (B13)	 FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes 🖌 No Depth (inches):0	
Saturation Present? Yes <u>V</u> No Depth (inches): 0 Wetland (includes capillary fringe)	d Hydrology Present? Yes 🖌 No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	available:
Remarks:	
Microtopographic relief is due to skidder ruts.	

Sampling Point: wjob108f_w

	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	60	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2				
		·		Total Number of Dominant
3		·	·	Species Across All Strata: (B)
4		·		Percent of Dominant Species
5			. <u> </u>	That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
· ·	60	Tatal Cause		Total % Cover of: Multiply by:
50% of total assess 30	000/ -/	= Total Cove	r 12	OBL species $0 \times 1 = 0$
50% of total cover:	20% of	total cover:		$\frac{25}{25} \times 2 = \frac{50}{50}$
Sapling/Shrub Stratum (Plot size:)				FACW species $x = 240$
1. Liquidambar styraciflua	10	Yes	FAC	FAC species $3 = 240$
2. Acer rubrum	10	Yes	FAC	FACU species x 4 =
2				UPL species $0 \times 5 = 0$
		·		Column Totals: 105 (A) 290 (B)
4		·		
5		·		Prevalence Index = $B/A = 2.76$
6			<u> </u>	Hydrophytic Vegetation Indicators:
7				1 - Ranid Test for Hydrophytic Vegetation
8.				
9				2 - Dominance Test is >50%
	20			\checkmark 3 - Prevalence Index is ≤3.0 ¹
500(() () 10		= I otal Cove	r 4	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:	•	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				
1. Arundinaria gigantea	25	Yes	FACW	
2				
2		· · · · · · · · · · · · · · · · · · ·		¹ Indicators of hydric soil and wetland hydrology must
3		·		be present, unless disturbed or problematic.
4		·		Definitions of Four Vegetation Strata:
5				
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7		·		more in diameter at breast height (DBH), regardless of
7		·		neight.
8		. <u> </u>		Sanling/Shrub - Woody plants, excluding vines, less
9		· ·		than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11			·	
11	25		·	Herb – All herbaceous (non-woody) plants, regardless
40.0		= Total Cove	r _	of size, and woody plants less than 3.28 ft fall.
50% of total cover: 12.	20% of	total cover:	5	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30)				height.
1				- Holghi
··		·		
۲ <u>.</u>				
3				
4				Hydrophytic
5.				Vegetation
	0	Total Cava		Present? Yes V No
50% - (1-1-1			1	
	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Profile Desc	cription: (Describe t	o the de	oth needed to docum	nent the	indicator of	or confirm	the absence of in	dicators.)	
Depth	Matrix		Redo	x Feature	S				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-3	10YR 4/1	100					SL		
3-12	10YR 4/1	95	10YR 4/6	5	С	М	SCL		
					·		<u> </u>		
							·		
							. <u> </u>		
					·		· ·		
							·		
							. <u> </u>		
¹ Type: C=C	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gra	ins.	² Location: PL=Po	re Lining, M=Matrix	
Hydric Soil	Indicators:						Indicators	for Problematic Hydric Soils ³	·:
Histosol	l (A1)		Dark Surface	(S7)			2 cm N	/uck (A10) (MLRA 147)	
Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ice (S8) (M	LRA 147,	148) Coast	Prairie Redox (A16)	
Black H	istic (A3)		Thin Dark Su	rface (S9) (MLRA 1	47, 148)	(ML	RA 147, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix	(F2)		Piedm	ont Floodplain Soils (F19)	
Stratifie	d Layers (A5)		 Depleted Mat 	trix (F3)			(ML	RA 136, 147)	
2 cm Mu	uck (A10) (LRR N)		Redox Dark S	Surface (I	=6)		Very S	hallow Dark Surface (TF12)	
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	e (F7)		Other	(Explain in Remarks)	
I NICK Da	ark Surface (A12)		Redox Depre	SSIONS (F	8) 				
Sanuy MIR	Δ 147 148)	KK N,	MIRA 13	ese mass 6)	es (F12) (1	-KK N,			
Sandy (Gleved Matrix (S4)		Umbric Surfa	ce (F13)	(MLRA 13	6, 122)	³ Indicator	rs of hydrophytic vegetation and	ł
Sandy F	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	 wetland 	hydrology must be present.	-
Stripped	d Matrix (S6)		Red Parent M	Aaterial (F	21) (MLR	A 127, 147) unless o	disturbed or problematic.	
Restrictive	Layer (if observed):								
Type:									
Depth (in	ches):						Hydric Soil Pres	ent? Yes 🖌 No	
Remarks:							-		



Photo 1 Wetland data point wjob108f_w facing north



Photo 2 Wetland data point wjob108f_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: <u>Atlantic Coast Pipeline</u>	City/County: Johnston		_ Sampling Date: <u>4/9/2015</u>	
Applicant/Owner:			State: NC	_ Sampling Point: wjob108_u
Investigator(s):		Section, Township, Rar	nge: <u>No PLSS in this ar</u>	ea
Landform (hillslope, terrace, etc.): gentle slo	_ocal relief (concave, c	onvex, none): <u>none</u>	Slope (%): 2	
Subregion (LRR or MLRA): P Lat: 35.4633		7269 L	269 Long: -78.31127172 Da	
Soil Map Unit Name: Rains sandy loam, 0 t	o 2 percent slopes		NWI classif	ication: None
Are climatic / hydrologic conditions on the si	ite typical for this time of yea	ar? Yes 🖌 No 🔄	(If no, explain in	Remarks.)
Are Vegetation, Soil, or Hyd	rology significantly of	disturbed? Are "l	Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally pr		blematic? (If ne	eded, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attac	ch site map showing	sampling point lo	ocations, transect	s, important features, etc.
Hydrophytic Vegetation Present?	Yes 🖌 No	Is the Sampled	Area	
Hydric Soil Present?	Yes No _	within a Wetlan	d? Yes	No 🖌
Wetland Hydrology Present?	Yes No 🖌			
Remarks:				
Upland data point taken on a gentle slope f	for a seasonally saturated to	temporarily flooded PF	O wetland located on a	a disturbed flat in a pine plantation

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)		
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)		
Water Marks (B1) Oxidized Rhizospheres along Living R	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)		
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 (inches):			
Water Table Present? Yes No 🖌 Depth (inches): 17			
Saturation Present? Yes No 🗸 Depth (inches): 14	Netland Hydrology Present? Yes No 🗸		
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:		
Remarks:			
insufficient hydrology indicators present			

Sampling Point: <u>wjob108_u</u>

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
		res	FAC	That Are OBL, FACW, or FAC: <u>8</u> (A)
2. Liquidambar styraciflua	10	No	FAC	Total Number of Dominant
3				Species Across All Strata: <u>9</u> (B)
4				Demonstrat Deminant Creation
5				That Are OBL FACW or FAC: 88.888888888 (A/B)
6.				
7	_			Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
0	75	- Total Ca		OBL species $0 x 1 = 0$
37	7.5		15	FACW species 13 x 2 = 26
50% of total cover:	20% of	total cover	•	FAC species $\frac{117}{x 3} = \frac{351}{x 3}$
Sapling/Shrub Stratum (Plot size: 15)	45	Vee	FAC	FACIL species 11 x 4 = 44
1. Liquidambar styracifiua	15	Yes	FAC	$\frac{1}{100} \frac{1}{100} \frac{1}$
2. Pinus taeda	5	Yes	FAC	$\begin{array}{c} \text{OPL species} \\ \text{OPL species} \\ 141 \\ \text{(a)} \\ 421 \\ \text{(b)} \end{array}$
3. Acer rubrum	5	Yes	FAC	Column lotals: (A) (B)
4. Vaccinium corymbosum	3	No	FACW	Prevalence Index = B/A = 2.98
5. Liriodendron tulipifera	3	No	FACU	
6.			·	Denid Test for Undershulis Manufation
7				1 - Rapid Test for Hydrophytic Vegetation
0				2 - Dominance Test is >50%
o	31			3 - Prevalence Index is ≤3.0 ¹
1F	55		/er 62	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	<u>20% of</u> 20% of	total cover	:	
Herb Stratum (Plot size:5)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	6	Yes	FACW	be present, unless disturbed or problematic.
2. Chasmanthium laxum	4	Yes	FACW	Definitions of Four Vegetation Strata:
3				Tree Mondy plants evaluating vince 2 in (7.6 cm) or
4.				more in diameter at breast height (DBH) regardless of
5				height.
6				Conting (Chryde - Weedy plants, systeming vines, loss
7				than 3 in DBH and greater than 3 28 ft (1 m) tall
0				
0				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				
	10	= Total Cov	/er	
50% of total cover:	⁵ 20% of	total cover	2	
Woody Vine Stratum (Plot size: 30)				
1 Smilax rotundifolia	10	Yes	FAC	
 Vitis aestivalis 	8	Yes	FACU	
2. Gelsemium sempenvirens		Yes	FAC	
		100	1710	
4				
5				Hydrophytic
	25	= Total Cov	/er	Vegetation
50% of total cover:12	2.5 20% of	total cover	: 5	Present? resNo
Remarks: (If observed, list morphological adaptations be	elow).			1
	,			

SOIL

Profile Desc	ription: (Describe	to the dep	th needed to docun	nent the i	indicator	or confirm	n the absence of indicators.)	
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-3	10YR 2/2	100					SL	
3-12	10YR 5/3	60	10YR 5/8	40	С	М	SCL	
12-25	10YR 5/2	50	10YR 4/6	50	С	М	SCL	
·		·			·		· ·	—
		. <u> </u>						
		·						—
		·					· ·	
¹ Type: C=Ce	oncentration, D=Dep	letion, RM:	Reduced Matrix, MS	S=Masked	d Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to all	LRRs, unless other	wise not	ed.)		Indicators for Problematic Hydric Soils ³ :	
Histosol	(A1)		Polyvalue Be	low Surfa	ice (S8) (L	RR S, T, L	J) 1 cm Muck (A9) (LRR O)	
Histic Ep	pipedon (A2)		Thin Dark Su	rface (S9) (LRR S,	T, U)	2 cm Muck (A10) (LRR S)	
Black Hi	stic (A3)		Loamy Muck	/ Mineral	(F1) (LRR	0)	Reduced Vertic (F18) (outside MLRA 150A	В)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix ((F2)		Piedmont Floodplain Soils (F19) (LRR P, S,	(T)
Stratified	Layers (A5)		Depleted Mat	rix (F3)	`		Anomalous Bright Loamy Soils (F20)	
Organic	Bodies (A6) (LRR P	, T, U)	Redox Dark S	Surface (F	-6)		(MLRA 153B)	
5 cm Mu	icky Mineral (A7) (LF	R P, T, U)	Depleted Dar	k Surface	, (F7)		Red Parent Material (TF2)	
Muck Pr	esence (A8) (LRR U)	Redox Depre	ssions (F	8)		Very Shallow Dark Surface (TF12)	
1 cm Mu	ick (A9) (LRR P, T)		 Marl (F10) (L	RR U)	,		Other (Explain in Remarks)	
Depleted	d Below Dark Surfac	e (A11)	Depleted Och	nric (F11)	(MLRA 1	51)	<u> </u>	
Thick Da	ark Surface (A12)	, ,	Iron-Mangan	ese Mass	es (F12) (l	LRR O, P,	T) ³ Indicators of hydrophytic vegetation and	
Coast P	rairie Redox (A16) (N	/LRA 150/	A) Umbric Surfa	ce (F13) ((LRR P, T	. U)	wetland hydrology must be present.	
Sandy M	lucky Mineral (S1) (I	.RR O, S)	Delta Ochric	(F17) (ML	RA 151)	, ,	unless disturbed or problematic.	
Sandy G	Bleved Matrix (S4)		Reduced Ver	tic (F18) (, (MLRA 15	0A, 150B)		
Sandy R	Redox (S5)		Piedmont Flo	odplain S	, Soils (F19)	(MLRA 14	49A)	
Stripped	Matrix (S6)		Anomalous B	right Loai	my Soils (I	, F20) (MLR	A 149A, 153C, 153D)	
Dark Su	rface (S7) (LRR P, S	5, T, U)		0	, (<i>,</i> , ,	· · ·	
Restrictive	Laver (if observed):							
Type. noi	ne							
Type								
Depth (Inc	cnes):						Hydric Soll Present? Yes No	_
Remarks:								



Photo 1 Upland data point WJOB108_u facing south



Photo 2 Upland data point WJOB108_u facing north

Project/Site: Atlantic Coast Pipeline	City/County: Johnst	ton	Sampling Date: 2/9/2015		
Applicant/Owner: Dominion		State: NC	Sampling Point: wjob107f_w		
Investigator(s): TP, RH	Section, Township,	Range: No PLSS in this area	l		
Landform (hillslope, terrace, etc.): drainage way	Local relief (concave, c	convex, none): <u>none</u>	Slope (%): <u>2</u>		
Subregion (LRR or MLRA): P Lat: 2	35.46182084	_ong: <u>-78.31363068</u>	Datum: WGS 1984		
Soil Map Unit Name: Rains sandy loam, 0 to 2 percent s	lopes	NWI classific	ation: None		
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes N	o (If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydrology	_ significantly disturbed? A	re "Normal Circumstances" p	oresent? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology	naturally problematic? (I	f needed, explain any answe	rs in Remarks.)		
SUMMARY OF EINDINGS Attach site me	n showing sampling poir	t locations transacts	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 _	ン ン ン	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:						
Forested wetland in drainage way. Conn	ects to	OJOA0	07 and SJOB008.			

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 Soft Clacks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Eicld Observations:	
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches):	tland Hydrology Present? Yes 🖌 No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)	ı, if available:

Sampling Point: wjob107f_w

30	Absolute	Dominant	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u> 10	<u>Species?</u> Yes	Status FAC	Number of Dominant Species
Quercus niara	10	Yes	FAC	That Are OBL, FACW, of FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
4		·		Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
6		·		Prevalence Index worksheet:
/	20			Total % Cover of: Multiply by:
50% of total cover: 10	20% of	= 10tal Cover	er 4	OBL species 0 $x = 0$
Sapling/Shrub Stratum (Plot size: 15)	20 /0 01			FACW species 10 x 2 = 20
A Acer rubrum	10	Yes	FAC	FAC species 45 x 3 = 135
2 Quercus nigra	10	Yes	FAC	FACU species 0 $x 4 = 0$
2				UPL species 0 x 5 = 0
3		·		Column Totals: 55 (A) 155 (B)
4				
5				Prevalence Index = B/A =2.81
6		·		Hydrophytic Vegetation Indicators:
/		·		1 - Rapid Test for Hydrophytic Vegetation
8		·		✓ 2 - Dominance Test is >50%
9	20			\checkmark 3 - Prevalence Index is ≤3.0 ¹
FOOL of total accurry 10	20	= Total Cove	er 4	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:		data in Remarks or on a separate sheet)
Arundinaria gigantea	10	Vec	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
	10	165	TACW	
2		·		¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4		·		Definitions of Four Vegetation Strata:
5		·		Tree – Woody plants, excluding vines 3 in (7.6 cm) or
6		·		more in diameter at breast height (DBH), regardless of
7				height.
8		. <u> </u>		Sapling/Shrub – Woody plants, excluding vines, less
9		·		than 3 in. DBH and greater than or equal to 3.28 ft (1
10		·		m) tall.
11		. <u> </u>		Herb – All herbaceous (non-woody) plants, regardless
_	10	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 5	20% of	total cover:	2	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30)	_			height.
1. Smilax rotundifolia	5	Yes	FAC	
2		. <u> </u>		
3		. <u> </u>		
4				Hydrophytic
5				Vegetation
	5	= Total Cove	er	Present? Yes Vo No
50% of total cover: 2.5	20% of	total cover:	1	
Remarks: (Include photo numbers here or on a separate s	heet.)			1

Profile Des	cription: (Describe t	o the dep	th needed to docur	nent the ir	ndicator o	or confirm	the absence o	f indicators.)			
Depth	Matrix		Redo	x Features							
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type'	Loc ²	Texture	Remarks			
0-12	10YR 3/1	95	10YR 4/6	5	С	PL	SCL				
							·				
			,								
							21 / 1				
	oncentration, D=Deple	etion, Rivi-	Reduced Matrix, Ma	s=IVIasked	Sand Gra	ains.	Location: PL=	Pore Lining, M=Matrix.			
			Darly Curfere	(07)							
Histosol	rinadan (A2)		Dark Surrace	(S7) Iow Surfor			149) <u> </u>	m Muck (A10) (MLRA 147)			
HISUC E	pipedon (AZ)		Thin Dark Su	rface (SQ)	/MI PA 1	12 TA 147,	(140)	MI PA 147 148)			
<u> </u>	en Sulfide (A4)		Loamy Gleve	d Matrix (F	(WEIXA 1 2)	47, 140)	(Pie	dmont Floodplain Soils (F19)			
Stratifie	d Lavers (A5)		Depleted Ma	trix (F3)	2)		(MLRA 136. 147)			
2 cm Mr	uck (A10) (LRR N)		✓ Redox Dark S	Surface (F	6)		Ver	v Shallow Dark Surface (TF12)			
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		Oth	ner (Explain in Remarks)			
Thick D	ark Surface (A12)	· · ·	Redox Depre	ssions (F8	3)						
Sandy M	Mucky Mineral (S1) (L	RR N,	Iron-Mangan	ese Masse	s (F12) (l	_RR N,					
MLR	A 147, 148)		MLRA 13	6)							
Sandy (Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (I	MLRA 13	6, 122)	³ Indic	ators of hydrophytic vegetation and			
Sandy F	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	8) wetla	and hydrology must be present,			
Stripped	d Matrix (S6)		Red Parent M	Aaterial (F2	21) (MLR	A 127, 147	') unle	ss disturbed or problematic.			
Restrictive	Layer (if observed):										
Туре:											
Depth (in	ches):						Hydric Soil P	resent? Yes 🥓 No			
Remarks:							1				



Photo 1 Wetland data point wjob107f_w facing north



Photo 2 Wetland data point wjob107f_w facing south

Project/Site: Atlantic Coast Pipeline	City/County: Johr	nston	Sampling Date: 2/9/2015		
Applicant/Owner: Dominion		State: NC	Sampling Point: wjob107_u		
Investigator(s): TP, RH	Section, Townshi	p, Range: <u>No</u> PLSS in this area	a		
Landform (hillslope, terrace, etc.): hill slope	Local relief (concave	, convex, none): <u>none</u>	Slope (%): <u>2</u>		
Subregion (LRR or MLRA): P L	at: <u>35.46173036</u>	Long: <u>-78.31371621</u>	Datum: WGS 1984		
Soil Map Unit Name: Rains sandy loam, 0 to 2 perce	ent slopes	NWI classific	cation: None		
Are climatic / hydrologic conditions on the site typica	I for this time of year? Yes	No (If no, explain in F	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 answe	ers in Remarks.)		

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:					

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) High Water Table (A2) Hydrogen Sulfide Odor (C1) Saturation (A3) Oxidized Rhizospheres on Living F Water Marks (B1) Presence of Reduced Iron (C4) Sediment Deposits (B2) Recent Iron Reduction in Tilled So Drift Deposits (B3) Thin Muck Surface (C7) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) 	 Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) Shallow Aquitard (D3) Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Yes Depth (inches):	
Water Table Present? Yes No _ Depth (inches): Saturation Present? Yes No _ Depth (inches): (includes capillary fringe) Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes No

Sampling Point: wjob107_u

	Absoluto	- Dominant In	dicator	Dominance Test worksheet
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance Test worksheet.
Liquidambar styraciflua	20	Yes	FAC	Number of Dominant Species
	10	Voc	EACU	That Are OBL, FACW, or FAC: (A)
2. Quercus rubra		165	TACO	Total Number of Dominant
_{3.} Pinus taeda	5	No	FAC	Species Across All Strata: 6 (B)
4				()
			<u> </u>	Percent of Dominant Species
5			<u> </u>	That Are OBL, FACW, or FAC: 00.00000000 (A/B)
6				
7.				Prevalence Index worksheet:
	35	- Total Cover		Total % Cover of: Multiply by:
50% of total power: 17.5			7	OBL species $0 x 1 = 0$
50% of total cover	20% 01			E_{ACW} species 0 x 2 $ 0$
Sapling/Shrub Stratum (Plot size:)				$x_2 =$
1. Quercus nigra	10	Yes	FAC	FAC species $x^3 = \frac{100}{20}$
₂ Liquidambar styraciflua	10	Yes	FAC	FACU species 15 x 4 = 60
Prunus serotina	5	Yes	FACU	UPL species $0 \times 5 = 0$
3				$\frac{65}{65}$
4				Column Totals: (A) (B)
5				Dravalance Index D/A 3.23
6				Prevalence index = $B/A = \frac{3.23}{2}$
~				Hydrophytic Vegetation Indicators:
/		<u> </u>		1 - Rapid Test for Hydrophytic Vegetation
8				\checkmark 2 Dominance Test is > 50%
9.				
	25	Total Cover		3 - Prevalence Index is ≤3.0'
50% - (1-1-1	000/		5	4 - Morphological Adaptations ¹ (Provide supporting
	<u>20% of</u>	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				
1.				Problematic Hydrophytic vegetation (Explain)
2				
				¹ Indicators of hydric soil and wetland hydrology must
3			<u> </u>	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata
5.				Sommone of Four Vogetation et alar
6		· ·		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
0		<u> </u>		more in diameter at breast height (DBH), regardless of
7				height.
8				
9				then 2 in DBH and greater than or equal to 2.28 ft (1
		<u> </u>		m) tall
10			<u> </u>	
11				Herb – All herbaceous (non-woody) plants, regardless
	0	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 0	20% of	total cover:	0	
Weady Vine Stratum (Plot size) 30				Woody vine – All woody vines greater than 3.28 ft in
woody vine Stratum (Flot Size)	-	Vaa		height.
1		Tes	FAC	
2				
3				
			<u> </u>	
4				Hydrophytic
5				Vegetation
	5	= Total Cover		Present? Yes Ves No
50% of total cover: 2.5	20% of	total cover.	1	
	20 % 01			
Remarks: (Include photo numbers here or on a separate s	neet.)			

Profile Desc	cription: (Describe to	the dep	th needed to docur	nent the i	ndicator	or confirm	the absence of ir	idicato	ors.)	
Depth	Matrix		Redo	x Features	3					
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-12	10YR 3/2	98	10YR 4/6	2	С	М	SCL			
1										
				. <u> </u>		<u> </u>				
¹ Type: C=C	oncentration, D=Deple	etion, RM=	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=Pc	re Lini	ng, M=Matrix	
Hydric Soil	Indicators:						Indicators	for Pr	oblematic H	ydric Soils [°] :
Histosol	(A1)		Dark Surface	e (S7)			2 cm I	√luck (A	A10) (MLRA [•]	147)
Histic E	pipedon (A2)		Polyvalue Be	low Surfac	ce (S8) (N	ILRA 147,	148) Coast	Prairie	Redox (A16)
Black H	istic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	(ML	.RA 14	7, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (I	F2)		Piedm	ont Flo	odplain Soils	s (F19)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			(ML	RA 13	6, 147)	
2 cm Mi	uck (A10) (LRR N)		Redox Dark	Surface (F	6)		Very S	Shallow	Dark Surfac	e (TF12)
Deplete	d Below Dark Surface	(A11)	Depleted Dat	rk Surface	(F7)		Other	(Explai	in in Remarks	5)
	ark Surface (A12)		Redox Depre	essions (Fo	3) >> (F12) (
Sandy N	/IUCKY IVIINEI (31) (Lr	KK N,	Iron-Mangan		es (F12) (1	LKK N,				
Sandy	A 147, 140) Sloved Matrix (S4)		WILKA 13	0)	MI DA 12	6 122)	³ Indicato	re of h	udrophytic vo	actation and
Sandy E	Pedax (S5)		Onblic Suna Piedmont Flo	odolain S		0, 122) /MI DA 1/	Inuicato	15 ULII) I bydro'	logy must be	present
Stripper	Matrix (S6)		Red Parent M	Jatorial (F	21) (MI R	Δ 127 147		disturb	ed or problem	present, natic
Restrictive	l aver (if observed):					~ 121, 141				latic.
Type:										
Type										
Depth (in	cnes):						Hydric Soil Pres	sent?	res	NO
Remarks:										



Photo 1 Upland data point wjob107_u facing north



Photo 2 Upland data point wjob107_u facing south

Project/Site: Atlantic Coast Pipeline	City/County:	ohnston County	_ Sampling Date: 8/7/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: WJOB115f_w
Investigator(s): TP, SA	Section, Towns	ship, Range: <u>No PLSS in this are</u>	a
Landform (hillslope, terrace, etc.): drainage way	Local relief (conca	ave, convex, none): <u>concave</u>	Slope (%): <u>10</u>
Subregion (LRR or MLRA): P Lat	35.47558116	Long: <u>-78.33477758</u>	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam, 0 to 2 percent	t slopes	NWI classifi	cation: PEM1Ch
Are climatic / hydrologic conditions on the site typical for	or this time of year? Yes	No (If no, explain in I	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	ers in Remarks.)

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:						
PFO in drainage way adjacent to agricultural fields. Abutting SJOB109.						

wetiand 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) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
✓ High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
✓ Saturation (A3) Oxidized Rhizospheres on Living	Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled So	oils (C6) 🛛 💆 Crayfish Burrows (C8)
✓ Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
✓ Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u>/</u> No Depth (inches): <u>10</u>	
Saturation Present? Yes V No Depth (inches)	Wetland Hydrology Present? Yes 🖌 No
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	tions), if available:

Sampling Point: WJOB115f_w

,	Abaaluta	Dominant Ir	diaatar	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance rest worksneet.
A Acer rubrum	30	Yes	FAC	Number of Dominant Species
Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Elquidambar styracinda	15	<u> </u>		Total Number of Dominant
3. Salix nigra	15	fes	UBL	Species Across All Strata: 9 (B)
4				
5.				Percent of Dominant Species
· · · · · · · · · · · · · · · · · · ·				That Are OBL, FACVV, of FAC:(A/B)
0				Prevalence Index worksheet:
7		·		Total % Cover of: Multiply by:
	65	= Total Cover		
50% of total cover: <u>32.5</u>	20% of	f total cover:	13	OBL species 23 $x = 23$
Sapling/Shrub Stratum (Plot size: 15)				FACW species 10 x 2 = 20
1 Morella cerifera	15	Yes	FAC	FAC species 110 x 3 = 330
Liquidambar styraciflua	10	Ves	FAC	$\begin{bmatrix} 0 \\ x \\ 4 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \end{bmatrix}$
2. Elquidambal styracinda	10	<u> </u>		
3. Acer rubrum	10	Yes	FAC	UPL species $x 5 = \frac{375}{145}$
4.				Column Totals: (A) (B)
5				
0		·		Prevalence Index = $B/A = 2.58$
6		·		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8.				
0				2 - Dominance Test is >50%
ð	35			\checkmark 3 - Prevalence Index is ≤3.0 ¹
17 5		= Total Cover	. 7	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	f total cover:	'	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				
_{1.} Microstegium vimineum	25	Yes	FAC	Problematic Hydrophytic Vegetation' (Explain)
 Murdannia keisak 	10	Yes	OBI	
	10	 	EACW/	¹ Indicators of hydric soil and wetland hydrology must
3. Woodwardia areolata	10	165	FACW	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata
5.				Deminions of Four Vegetation of ata.
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
0		·		more in diameter at breast height (DBH), regardless of
7		·	<u> </u>	height.
8		. <u> </u>		Conting/Chruch Magdy planta avaluding vines lass
9.				than 3 in DBH and greater than or equal to 3.28 ft (1
10				m) tall.
10		·		
11	45	·		Herb – All herbaceous (non-woody) plants, regardless
	45	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 22.5	20% of	f total cover:	9	Weedy vine All weedy vince greater than 2.29 ft in
Woody Vine Stratum (Plot size: 30)				height
1				
·		·		
۷		·		
3		·		
4.				Hadaa ahada
5				Hydrophytic
0				Present? Yes V No
		= Total Cover	0	
50% of total cover:	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	ription: (Describe to	o the dept	th needed to docume	nt the indicator	or confirm	the absence of indicators.)	
Depth	Matrix		Redox F	eatures			
(inches)	Color (moist)	%	Color (moist)	<u>% Type¹</u>	Loc ²	Texture Remarks	
0-12	10YR 5/1	100				SCL	
l							
¹ Type: C=Co	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS=	Masked Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	ndicators:					Indicators for Problematic Hydric So	ls³:
Histosol	(A1)		Dark Surface (S	57)		2 cm Muck (A10) (MLRA 147)	
Histic Fr	pipedon (A2)		Polyvalue Belov	w Surface (S8) (N	ILRA 147.	148) Coast Prairie Redox (A16)	
Black Hi	stic (A3)		Thin Dark Surfa	ace (S9) (MI RA 1	47. 148)	(MI RA 147, 148)	
Hydroge	n Sulfide (A4)		Loamy Gleved	Matrix (F2)	,,	Piedmont Floodplain Soils (F19)	
<u>Stratifier</u>			Depleted Matrix	(F3)		(MI RA 136 147)	
2 cm Mu	ick (A10) (I BB N)		Redox Dark Su	rface (E6)		Very Shallow Dark Surface (TE12)	
2 cm wa	Below Dark Surface	(Δ11)	Depleted Dark	Surface (F7)		Other (Explain in Remarks)	
Depicted	ark Surface (A12)	(411)	Depicted Darks	vione (E8)			
Thick De	lucky Mineral (S1) (L		Iron-Manganes	e Masses (E12) (
	147 148)	··· ••,	MI PA 136)		,		
Sandy G	(147, 140)		Limbric Surface	(E12) (MI DA 12	6 122)	³ Indicators of hydrophytic vogotation a	nd
Sandy C			Onblic Surface	halain Soile (E10)	0, 122) /MI DA 149	9) wetland bydrology must be present	inu
Sandy N	Motrix (S6)		Pod Paront Mai	torial (E21) (MI P	(INILINA 140 A 107 147	() wetland hydrology must be present,	
Suipped					A 127, 147		
	ayer (il observeu).						
Туре:							
Depth (ind	ches):					Hydric Soil Present? Yes No	
Remarks:						1	



Photo 1 Wetland data point WJOB115f_w facing northwest



Photo 2 Wetland data point WJOB115f_w facing southeast
WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Johnston Co	unty	Sampling Date: 8/7/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: WJOB115_u
Investigator(s): TP, SA	Section, Township, Range	e: No PLSS in this area	l
Landform (hillslope, terrace, etc.): hill slope	Local relief (concave, convex	(, none): <u>none</u>	Slope (%): <u>20</u>
Subregion (LRR or MLRA): P Lat: 35.4	7574628 Long:	-78.33483198	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam, 0 to 2 percent slope	98	NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes 🖌 No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrologysi	gnificantly disturbed? Are "No	ormal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology na	aturally problematic? (If need	ed, explain any answe	rs in Remarks.)

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:					
Upland point taken adjacent to agricultura	al fields.				

HYDROLOGY

Drimony Indiantors (minimum of one is required, sheet, all that apply)	Secondary indicators (minimum of two required)
Phinary indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3) Oxidized Rhizospheres on Living	Roots (C3) Moss Trim Lines (B16)
Water Marks (B1) Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2) Recent Iron Reduction in Tilled Sc	ils (C6) Crayfish Burrows (C8)
Drift Deposits (B3) Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Microtopographic Relief (D4)
Aquatic Fauna (B13)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No Yes Depth (inches):	
Saturation Present? Yes <u>No</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
	tiona) if available:
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	liuis), il avallable.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	

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

Sampling Point: WJOB115_u

	Absolute	- Dominant Ir	dicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance rest worksneet.
Prunus serotina	15	Yes	FACU	Number of Dominant Species
	10	Voc	EAC	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	10	res	FAC	Total Number of Dominant
_{3.} Quercus phellos	10	Yes	FAC	Species Across All Strata: 9 (B)
1				
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 55.55555555 (A/B)
6.				、 /
7				Prevalence Index worksheet:
/	35			Total % Cover of: Multiply by:
		= Total Cover	_	
50% of total cover: 17.5	20% of	total cover:	1	OBL species $x_1 = 0$
Sapling/Shrub Stratum (Plot size: 15)				FACW species x 2 =0
Ligustrum sinense	10	Yes	FACU	FAC species $40 \times 3 = 120$
	10		17100	$\frac{30}{120}$
2. Quercus velutina	10	Yes		FACU species $x 4 = 0$
3. Morella cerifera	10	Yes	FAC	UPL species x 5 =
· ·				Column Totals: 70 (A) 240 (B)
4		<u> </u>		
5				Prevalence Index - B/A = 3.42
6.				
7				Hydrophytic Vegetation Indicators:
1		·		1 - Rapid Test for Hydrophytic Vegetation
8				\checkmark 2 Dominance Test is >50%
9				
	30	Tatal Original		3 - Prevalence Index is ≤3.0'
15		= Total Cover	6	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:	20% of	total cover:	0	data in Romarks or on a congrate shoot)
Herb Stratum (Plot size: 5)				
1 Campsis radicans	5	Yes	FAC	Problematic Hydrophytic Vegetation' (Explain)
1. <u></u>				
2				¹ Indicators of hydric soil and wetland hydrology must
3				be present unless disturbed or problematic
4				
-				Definitions of Four Vegetation Strata:
5				Tree March rights quality in a 2 in (7.0 cm) or
6				Tree – woody plants, excluding vines, 3 in. (7.6 cm) of
7				height
· · · · · · · · · · · · · · · · · · ·				neight.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
10				,
11		·		Herb – All herbaceous (non-woody) plants, regardless
	5	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 2.5	20% of	total cover:	1	
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in
Vitis retundifolia	5	Voc	EAC	neight.
1. Vitis rotuntinona		165	TAC	
2. Smilax glauca	5	Yes	FACU	
3				
		·		
4				Hydrophytic
5				Vegetation
	10	- Total Cover		Present? Yes Vo No
E0% of total assign 5			2	
	20% 01	total cover.		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Des	cription: (Describe t	o the dept	h needed to docur	nent the ir	ndicator o	or confirm	the absence of	indicators.)		
Depth	Matrix		Redo	x Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	R	emarks	
0-12	10YR 4/4	100					SL			
					·					
. <u> </u>										
. <u> </u>										
	anoantration D-Donk	ation DM	Boducod Matrix M	-Mookod	Sand Cr	ino	² Location: DL	Doro Lining M	Motrix	
	Indicators:			J=IVIASKEU	Sanu Gra	aii 15.		rs for Proble	matic Hydric S	oils ³ .
History	(A 1)		Dark Surfage	(87)			2 on			0110
	rinadan (A2)			(S7) Jour Surfac			2 Cm	at Drairia Dad	(VILKA 147)	
	pipedon (AZ)		Folyvalue Be	rfooo (SO)	/MIDA 1	12KA 147, 47 440)	140) <u> </u>		0X (ATO)	
	Suc(A3)			Motrix (E		47, 140)	(I Dioc	mont Floodal	oj Sin Soilo (E10)	
Hyuruye	d Lovoro (AE)			triv (E2)	-2)					
	u Layers (A3)		Podox Dark	uix (F3) Surfaco (E(S)		(i) Von	A Shallow Dark	() Surface (TE12	1
	d Below Dark Surface	(Δ11)		sunace (Fo	0) (E7)		Very	r (Evolain in F	Comarke)	.)
Depiete	ark Surface (A12)	(,,,,)	Depleted Dal	secione (E8	(17)				(emarks)	
Thick D	Aucky Mineral (S1) (I		Itedox Depie		") \c (F12) /I					
	Mucky Milleral (31) (∟ ∧ 1/7 1/8)	NN 1 ,	MI PA 13	630 Masse	5 (1 12) (1	LININ IN,				
Sandy (Cleved Matrix (S4)		Limbric Surfa	•) (F13) (I		6 122)	³ Indica	tors of hydron	hytic vegetation	and
Sandy F	Redox (S5)		Piedmont Flo	odolain Sc	nils (F19)	0, 122) (ΜΙ RΔ 14	(8) wetla	nd hydrology r	must be present	h and
Stripper	Matrix (S6)		Red Parent M	Anterial (F2	21) (MI R	Δ 127 147	() unles	s disturbed or	nrohlematic	•,
Restrictive	l aver (if observed):					A 127, 147			problemato.	
Turnor	Luyer (il observeu).									
Type:									v	
Depth (in	ches):						Hydric Soil Pr	resent? Yes	s <u>*</u> No_	
Remarks:										



Photo 1 Upland data point WJOB115_u facing southeast



Photo 2 Upland data point WJOB115_u facing northwest

Project/Site: ACP City/C	County: Johnston Sampling Date: 4120116
Applicant/Owner: Dominion	حمـ State: <u>NC</u> Sampling Point: <u>wjooD 33</u>
Investigator(s): L. Roper, S. Bryan Section	on, Township, Range: <u>none</u>
Landform (hillslope, terrace, etc.): drainage Local	relief (concave, convex, none): <u>CON CAVE</u> Slope (%): <u>2-5</u>
Subregion (LRR or MLRA): LRRP Lat: 35.45	339 Long: -78, 32251 Datum: W6584
Soil Map Unit Name: Dorian fine Sandy loam	NWI classification: P FO
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling 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
NCWAM: Headwater Forest	
HYDROLOGŸ	
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)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Mari Deposits (B15) (LR	(U) Drainage Patterns (B10)
Water Marks (B1)	long Living Roots (C3)
Sediment Deposits (B2)	n (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5)	(s) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	
Field Observations:	
Surface Water Present? Yes No Depth (inches):	NA
Water Table Present? Yes No 🔽 Depth (inches):	>20
Saturation Present? Yes Ves No Depth (inches):	2 Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	
Nemana.	
it is a second se	

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

ree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	11	
Aler rubrum	25	Y	FAL	That Are OBL FACW or FAC:	4	(A)
Liquidombar styraciflua	ID	- <u>y</u>	FAC			
				Total Number of Dominant	5	
	-		-	Species Across All Strata.		- (D)
	-	TRACTOR		Percent of Dominant Species	80	
		CONTRACTOR		That Are OBL, FACW, or FAC:		- (A/B
	100000 ARM		Transfer de la comp	Prevalence Index worksheet:	S and the second second	
	-	Tesperence a		Total % Cover of:	Multiply by:	11
	25			OBL species x	1 =	11/5
		= Total Cov	/er	FACW species x2	2 =	
50% of total cover: 1/1	⊇ 20% of	total cover	:	FAC species x	3 =	120
apling/Shrub Stratum (Plot size: <u>30++ X00++</u>)				FACIL species	4 =	
none					5 =	
		des alles i des		Column Totals:		(B)
		A Shink				_ (D)
		All states		Prevalence Index = B/A =	Section 2	
			1000 C	Hydrophytic Vegetation Indicat	tors:	1
				1 - Rapid Test for Hydrophyt	ic Vegetation	
				2 - Dominance Test is >50%		
	A SALETY	61625217		\square 3 - Prevalence Index is $\leq 3.0^{1}$	in an	
	0	= Total Cov	/er		retation ¹ (Expl	ain)
50% of total cover:	20% of	total cover			Jetation (Expi	
erh Stratum (Plot size: 30ft x 30ft)				1 - distance of building of land work	and budralage	-
Osmundastrum Cinnamamen	01 n	Y	FACW	be present, unless disturbed or p	roblematic.	must
Arundinaria gigantea	25	Ý	FACW	Definitions of Four Vegetation	Strata:	
monance gigenies			FIICH	Demitions of Four Vegetation	Strata.	
	A CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE OWNER OWNE OWNER OW			Tree - Woody plants, excluding	vines, 3 in. (7.6	6 cm) o
		AN TO CAUSE		more in diameter at breast height	t (DBH), regard	liess o
				The grad		
·	-			Sapling/Shrub - Woody plants,	excluding vine	s, less
	-			than 3 in. DBH and greater than 1	3.20 it (1 iii) ta	n.
	-	Carlos and		Herb - All herbaceous (non-woo	dy) plants, reg	ardles
	-			of size, and woody plants less th	an 3.28 ft tall.	
D			- Carlos and -	Woody vine - All woody vines g	reater than 3.2	8 ft in
1				height.		
2			1. (al., 1)			
	35	= Total Cov	ver			10000 300 2000 101 101
50% of total cover: 17	.5 20% of	total cover	: 7			
Voody Vine Stratum (Plot size: 30F+ x 30F+)						
Lonicera japonica	20	Y	FACU			
		NEWS				
		THE PROPERTY.	STATUS (**)			
	2.0	- Total Cau		Hydrophytic Vegetation	•	
			ver Ц	Present? Yes	No	
50% of total cover:	20% of	total cover			MALENTINE.	63.C.S.S
lemarks: (If observed, list morphological adaptations below	ow).			LAND AND A CARD AND AND A	CVC TVC III	

دىن Sampling Point:

Thesi Color (moist) % Type! Loc' Texture Remarks -20 10 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
a: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Indicators for Problematic Hydric Soils ³ : Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) I cm Muck (A9) (LRR O) Statified Layers (A5) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) Matric (F10) (LRR P, Stratified Layers (A5) Mark (F10) (LRR U) Redox Dark Surface (F7) Muck Presence (A8) (LRR U) Depleted Dark Surface (F1) Matric (F10) (LRR O, P, T) Depleted Below Dark Surface (A11) Inon-Manganese Masses (F12) (LRR O, P, T) Other (Explain in Remarks) Depleted Below Carlie (S1) (LRR O, S) Dela Ochric (F17) (MLRA 151) ³ Indicators of hydrophytic vegetation an wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) DeletarontE Incordinalin Soilis (F10) (MI RA 149A) Sandy Polymeria (S1)
Stripped Matrix (S6) Image: Construction of the formation of t



Wetland data point wjoo033f_w facing north.



Wetland data point wjoo033f_w facing west.

Photo Sheet 1 of 2

Project/Site: ACP City	County: Johnston Sampling Date: 4/20/16
Applicant/Owner: Dominion	State: NC Sampling Point: wioo 033 - 4
Investigator(s): L. FODER, S. Bryan Sec	tion, Township, Range: NONE
Landform (hillslope terrace etc.): drainage Loc	al relief (concave, convex, none): concave Slope (%): 2-5
Subracian (I BB or MI BA): LRR P Lat: 35, 49	5334 Long: -78,32238 Datum: W6584
Sublegion (cirk of micka):	NWA classification: NA
Soli Map Unit Name: <u>portant threads the site to satisfy to satisfy</u>	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distu	Irbed? Are Normal Circumstances present? Tes No
Are Vegetation, Soil, or Hydrology naturally probler	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling 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 No Ves	
Abarmally dry conditions	
Hunamoerig - J	
HYDROLOGŸ	
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)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	RU) Drainage Patterns (B10)
Saturation (A3)	(C1) Moss Trim Lines (B16)
U Water Marks (B1)	along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	in Tilled Soils (C6)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5)	rks) 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:	AA
Surface Water Present? Yes No Depth (inches):	NI
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes Ves Depth (inches):	Wetland Hydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Demarke	
Remarks.	이 같은 것이 같은 것 같은 것이 않는 것이 같은 것이 못했다.
	Are see the second s
	1. 이번 2011년 1월 21일 - 11일 1월 21일

VEGETATION (Four Strata) – Use scientific nan	nes of pl	ants.		Sampling Point:	Provid Parks
Tree Stratum (Plot size: <u>30ft x 30ft</u>) 1. Aur rubrum	Absolute % Cover 25	Dominant Species?	FAL	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
2				Total Number of Dominant Species Across All Strata:	(B)
4 5				Percent of Dominant Species 100	(A/B)
6 7				Prevalence Index worksheet: Total % Cover of: Multiply by:	
B	75	To Average Substance		OBL species x1=	
12 4	00	= Total Co	ver	FACW species x 2 =	
50% of total cover: 12	20% of	total cove	r:	FAC species x 3 =	
Sapling/Shrub Stratum (Plot size: 3077 x 2071)	10	V	E AI	FACU species x 4 =	
1. Her rubrum	10		PRC	UPL species x 5 =	
2		an de la cara de Francis porte des	•	Column Totals: (A)	(B)
3	ere e alle e del sure Transforment e porte an	to contractor del Transportantes del			
4	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		Restaura L. Re.	Prevalence Index = B/A =	-
5		A MARINE AND		Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7		Transformer		2 - Dominance Test is >50%	
8				3 - Prevalence Index is ≤3.0'	
C.	10	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain	n)
50% of total cover:	_ 20% of	total cove	r: <u> </u>		
Herb Stratum (Plot size: 30++ × 30++)	2.5	~	chair	¹ Indicators of hydric soil and wetland hydrology m	nust
1. Arundinaria gigantea	20		FHCW	be present, unless disturbed or problematic.	all a start
2. Osmundastrum Cinnamomeur	<u>n 10</u>	<u> </u>	PHEW	Definitions of Four Vegetation Strata:	
3. Athyrium aspleniodes	10	<u> </u>	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 d	cm) or
<u>4.</u> <u>5.</u>				more in diameter at breast height (DBH), regardle height.	ess of
6				Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall.	less
8				Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	dless
10.			and the second second	Woody vine - All woody vines greater than 3.28	ft in
11.	Maria da Cara Maria. Maria da Cara Maria	and an and a second second	- assa - er co gener	height.	
12.					
	40	= Total Co	ver _		1997 - 1997 -
50% of total cover: 20	20% of	total cove	r: <u>8</u>		
Woody Vine Stratum (Plot size: 30++ × 30++)			- 11		
1. Vitis rotunditulia		<u> </u>	PHC		
2	TRANS IN THE				
3		Carl Contar	<u>A. 12</u>		
4	and the state of the	- Second Color	<u></u>		
5	111111		A Little Start	Hydrophytic	
	10	= Total Co	ver	Vegetation No.	
50% of total cover: 5	20% of	total cove	r:_2_	Present r res v No	
Remarks: (If observed, list morphological adaptations below	w).	and a state of the	ST. ST. ST. ST.		1770727
temener (i obserred, int merphologiour adaptations belo					

wjoo 033_u

C	0	11
9	U	

	Sampling Point:							
tor	or confirm	the absence of i	ndicators.)					
e	Loc ²	Texture	Remarks					

Profile Desc	ription: (Describe to	o the depth ne	eded to docu	ment the indicator o	r confirm the	absence of in	dicators.)	
Depth	Matrix		Redu	x Features	1002 -	"exture	Domorko	
(inches)	Color (moist)	<u> </u>	olor (moist)	%(ype'	L0C		Remarks	
0-5	2.0 4011	100		-				CALCULATION PROVIDENCE
5-16	2.5441	100				<u> </u>		
16-20	2.5/5/2	100						
The second second second								
	an ann an ann an Anna a			Charles and Antonio a	No.			
1-				P-Marked C. Ha			Pore Lining M-Matri	
Hudele C=C	oncentration, D=Depl	ble to all I BB.	uced Matrix, M	o=masked Sand Gra	115.	ndicators for P	Problematic Hydric S	ioils ³ :
	(A1)		Polyvalue P	alow Surface (SR) // E	RS.T.IN	1 cm Muck	(A9) (LRR O)	
Histic F	pipedon (A2)	F	Thin Dark S	urface (S9) (LRR S. 1	r, U)	2 cm Muck	(A10) (LRR S)	
Black H	istic (A3)	E	Loamy Muc	ky Mineral (F1) (LRR	O) _	Reduced Vo	ertic (F18) (outside M	/LRA 150A,B)
Hydroge	en Sulfide (A4)	Ī	Loamy Gley	ed Matrix (F2)		Piedmont F	loodplain Soils (F19)	(LRR P, S, T)
Stratifie	d Layers (A5)	т.н. [Depleted Ma	atrix (F3) Surface (FC)	1018 B	Anomalous	53B)	-20)
Organic	ucky Mineral (AT) (LRR P,		Depleted D	Surface (F6)		Red Parent	Material (TF2)	
Muck P	resence (A8) (LR		Redox Depr	essions (F8)		Very Shallo	w Dark Surface (TF1)	2)
	uck (A9) (LRR P. T)	1	Marl (F10) (LRR U)	1	Other (Expl	lain in Remarks)	
Deplete	d Below Dark Surface	• (A11) 🕺 🗍	Depleted Oc	chric (F11) (MLRA 15	1)			ation t
Thick D	ark Surface (A12)		Iron-Manga	nese Masses (F12) (L	RR O, P, T)	Indicator	s of hydrophytic vegel	esent
Coast P	rairie Redox (A16) (N	RRO C	Delta Cohri	ace (F13) (LRR P, T,	0)	wetland unless d	listurbed or problema	tic.
Sandy I	Gleved Matrix (S4)		Reduced Ve	rtic (F18) (MLRA 15))A, 150B)	unicas (Problema	
Sandy F	Redox (S5)	1	Piedmont Fi	oodplain Soils (F19)	(MLRA 149A)	1		
Stripped	d Matrix (S6)	Ī	Anomalous	Bright Loamy Soils (F	20) (MLRA 1	49A, 153C, 153	3D)	
Dark Su	urface (S7) (LRR P, S	, T, U)				Allen allen	Roll Production and Color	Selection of the select
Restrictive	Layer (if observed):							
Type:								No 1
Depth (in	nches):				ŀ	nydric Soil Pre	sentr res	, NO
Remarks:	all a state of the second	and a subset of the						
Sec. 1988								
						C.A. Shaoman		and the straight



Upland data point wjoo033_u facing southwest.



Upland data point wjoo033_u facing south.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region city/County: Johnston Sampling Date: 4120 Project/Site: ACP Applicant/Owner: Dominion State: NC Sampling Point: wi0003 Investigator(s): L. ROPER, S. Bryan Section, Township, Range: NONE Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): none Slope (%): D Subregion (LRR or MLRA): LRR P Lat: 35,45034 Long: -78,32059 Datum: WGS Soil Map Unit Name: Wehadkee - Chastain association ____ NWI classification: ____ Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No No Is the Sampled Area Hydric Soil Present? Wetland Hydrology Present? Yes _____ No _____ within a Wetland? Yes No Remarks: Abnormally dry conditions NCWAM: Headwater Forest HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) V Drainage Patterns (B10) Marl Deposits (B15) (LRR U) High Water Table (A2) Moss Trim Lines (B16) Dry-Season Water Table (C2) Saturation (A3) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) Water Marks (B1) Crayfish Burrows (C8) Sediment Deposits (B2) Presence of Reduced Iron (C4) 85 Saturation Visible on Aerial Imagery (C9) Recent Iron Reduction in Tilled Soils (C6) Drift Deposits (B3) Geomorphic Position (D2) Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5) Jaundation Visible on Aerial Imagery (B7) Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: NĐ Yes _____ No ____ Depth (inches): __ Surface Water Present? No Depth (inches): >20 Yes Water Table Present? Yes No Depth (inches): Surfue Wetland Hydrology Present? Yes Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

یں_sampling Point:

VEGETATION (F	our Strata) -	Use scientific	names of plants.
---------------	---------------	----------------	------------------

2051 2051	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: DUT+ x DUT+)	% Cover	Species?	Status	Number of Dominant Species 7
1. Her rubrum	20	_ <u>Y</u> _	FAC	That Are OBL, FACW, or FAC: (A)
2. Itex opaca	10	<u> </u>	FAC	Total Number of Dominant 7
3		-	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	Species Across All Strata: (B)
4.				Barrier Barrier (Barrier
5.				That Are OBL, FACW, or FAC: (A/B)
6.	T. Shares	ALC: U.S.W.		
7	Service and			Prevalence Index worksheet:
9			The second second	Total % Cover of: Multiply by:
B	30	- Total Car		OBL species x 1 =
15			/er	FACW species x 2 =
	20% of	total cover	: <u> </u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: DUTT & DUTT)	10	V	CALD	FACU species x 4 =
1. Vallinium Corymbosom			FACO	IIPI species x 5 =
2				Column Totals: (A) (B)
3		1.018.02.0		
4				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6.				1- Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8				\square 2. Brownlonge Index is <3.0 ¹
	ID	= Total Cov	ler	S - Flevalence Index is 35.0
ED% of total cover: 5	20% of	total cover	. 2	
Hat Statum (Plateine 304 x 30ft)	_ 20 /0 01	total cover		
Herb Stratum (Plot size: DOTT ADOTT)	10	V	EALID	Indicators of hydric soil and wetland hydrology must
1. mondition de gigartiea	10		PILL	be present, unless disturbed of problematic.
2. WODDWORDIA OFEDIATA			Chall	Definitions of Four Vegetation Strata:
3. Domundastrum Linnamomeun	5		FHEW	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4			- Carternale	more in diameter at breast height (DBH), regardless of
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 berbaceous (non-woody) plants, regardless
9	C. Standard	TRACE OF	A TRANSPORTATION OF	of size, and woody plants less than 3.28 ft tall.
10				the state of the s
11				beight
12	A STATISTICS	STOLD STOL		neight.
12	40		Territorian and	
20	10		8	
	20% 01	total cover	:	
Woody Vine Stratum (Plot size: 3017 ADUTT)	2-	N	CAL	
1. Smilax rotunditolia	20		FHU	
2. Vitis rotunditolia	10	<u> </u>	FAC	
3				
4		and the second		
5				Hydrophytic
	30	= Total Cov	ver	Vegetation
50% of total cover: 15	20% of	total cover	6	Present? Yes V No
Remarks: (If observed list mombological adaptations belo				
Tremarka. (ii uuseivea, iist morphological adaptations beio				
	and the second	Restances and	1532833 And 164	

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JOIL				1.	Mar Bas State	Stand States and	AND ALL ALL ALL ALL ALL ALL ALL ALL ALL AL	
Profile Desc	ription: (Describe t	o the depth	h needed to docur	ment the i	ndicator	or confirm	the absence of i	indicators.)
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture	Remarks
0-5	101 R31	100					L	
5-10	107R 4/2	90	107R516	10	C	M	SL	
10-20	1 54 9 41.	90	IDYP51.	17	1	M	51	
10-10	TOLK I		- 11-10		<u> </u>			
		Transie and					AND THE REAL PROPERTY OF THE PARTY OF THE PA	
Sale of the second							REAL STREET	
Type: 0-0	Incentration D-Dool	etion RM-I	Reduced Matrix M	S=Masker	I Sand Gr	ains.	² Location: Pl	=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless othe	rwise not	ed.)		Indicators for	Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow Surfa	ce (S8) (L	RR S, T, U	1 cm Muc	k (A9) (LRR O)
Histic Et	pipedon (A2)		Thin Dark Su	urface (S9)) (LRR S,	T, U)	2 cm Muc	k (A10) (LRR S)
Black Hi	stic (A3)		Loamy Muck	y Mineral	(F1) (LRR	10)	Reduced	Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gley	ed Matrix ((F2)		Piedmont	Floodplain Soils (F19) (LRR P, S, T)
Stratified	Layers (A5)	T 10	Depleted Ma	trix (F3)	161			153B)
Urganic	icky Mineral (AT) (LRR P,	RPTIN	Depleted Dark	Surface (F	(F7)		Red Pare	nt Material (TF2)
Muck Pr	esence (A8) (I RR II)	Redox Depr	essions (F	(8)		U Very Shal	llow Dark Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (I	LRR U)			Other (Ex	plain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)		
Thick Da	ark Surface (A12)		Iron-Mangar	nese Mass	ies (F12) (LRR O, P,	T) ³Indicato	ors of hydrophytic vegetation and
Coast P	rairie Redox (A16) (M	ALRA 150A) Umbric Surf	ace (F13)	(LRR P, T	, U)	wetlan	a nyarology must be present,
Sandy N	Aucky Mineral (S1) (L	.RR 0, S)	Delta Ochric	: (F17) (MI	(MI BA 151)	04 4500	unless	disturbed of problematic.
Sandy C	Jeyea Matrix (S4)		Reduced Ve	oodolain F	oile (E10)	(MI PA 14	(A(
Strinner	Matrix (S6)		Anomalous	Bright Loa	my Soils (F20) (MLR	A 149A, 153C. 1	53D)
Dark Su	face (S7) (LRR P. S	i, T, U)		3.4 204	,			
Restrictive	Layer (if observed):			NAME OF T	NY CALL	Dector Vite		
Type:								/
Depth (in	ches):						Hydric Soil Pr	resent? Yes V No
Remarks:		KAN STANAN		1022.023.029	CEASE AND		An and the second s	



Wetland data point wjoo032f_w facing south.



Wetland data point wjoo032f_w facing southwest.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region _ city/county: Johnston _____ sampling Date: 4/20116 Project/Site: HCP State: NC Sampling Point: wj00032-w Applicant/Owner: Dominion Investigator(s): L. Roper, S. Bryan Section, Township, Range: NONE Landform (hillslope, terrace, etc.): flat Local relief (concave, convex, none): _____ののも_____ Slope (%): ____ Subregion (LRR or MLRA): LRR P Lat: 35,45046 Long: -78.32055 Datum: WUS84 Soil Map Unit Name: Wehadkee- Chastain association NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No ____ (If no, explain in Remarks.) 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. Yes _____ No ____ Yes _____ No ____ Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? Yes No within a Wetland? Wetland Hydrology Present? Yes No Remarks: Abnormally dry conditions HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Sparsely Vegetated Concave Surface (B8) Aquatic Fauna (B13) Surface Water (A1) High Water Table (A2) Drainage Patterns (B10) Marl Deposits (B15) (LRR U) 12 Moss Trim Lines (B16) Saturation (A3) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Water Marks (B1) Cravfish Burrows (C8) Presence of Reduced Iron (C4) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Shallow Aquitard (D3) Other (Explain in Remarks) Iron Deposits (B5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Yes No V Depth (inches): Surface Water Present? Yes ____ No ___ Depth (inches): _____ Water Table Present? Yes ____ No ___ Depth (inches): ____ Wetland Hydrology Present? Yes ____ No __ >20 Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absoluto	Dominant	Indicator	Dominance Test worksheet	N XCS (UCROW)
Tree Stratum (Plot size: 30ft x 30ft)	% Cover	Species?	Status	Number of Dominant Species	
1. ALEr rubrum	10	Y	FAC	That Are OBL, FACW, or FAC:	_ (A)
2. Pinus taeda	30	Y	FAC	Total Number of Dominant	
3. Liquidambar styraciflua	10	Y	FAC	Species Across All Strata:	_ (B)
4.					
5.				That Are OBL FACW or FAC:	(A/B)
6.			No.		_ (/
7.			States and	Prevalence Index worksheet:	
3				Total % Cover of:Multiply by:	<u></u>
and the second	50	= Total Cov	er	OBL species x 1 =	
50% of total cover: 2.5	20% of	total cover	. ID	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30F4 × 30F4)				FAC species x 3 =	
Aur rubrum	ID	Y	FAL	FACU species x 4 =	_
Liquidampor styravitlua	7.0	Y	FAL	UPL species x 5 =	
			110	Column Totals: (A)	(B)
	•				
			The second s	Prevalence Index = B/A =	
5			100000 (000, 000) 	Hydrophytic Vegetation Indicators:	
3	Construction of the second sec	TTAL STREET		Rapid Test for Hydrophytic Vegetation	
7		Level due for est		2 - Dominance Test is >50%	
B				□ 3 - Prevalence Index is $\leq 3.0^{1}$	
		= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Expl	lain)
50% of total cover: 15	20% of	total cover			
Herb Stratum (Plot size: 30++ x 30++)				¹ Indicators of hydric soil and wetland hydrology	/ must
1. Athyrium asplenioides	15	<u> </u>	FAC	be present, unless disturbed or problematic.	
2.				Definitions of Four Vegetation Strata:	
3.	an a			Tree Weeds pleate excluding since 3 in (7)	6 cm) or
4		TORES	A MARCEN	more in diameter at breast height (DBH), regard	dless of
5				height.	
			A CONTRACTOR	Sapling/Shrub - Woody plants, excluding vine	
		12000		than 3 in. DBH and greater than 3.28 ft (1 m) ta	all.
		THE REAL	Torona total	the second se	
		States and	The second second	Herb – All herbaceous (non-woody) plants, reg	jardiess
				of alze, and woody plants less than elle it tam	
			- 100 - 100	Woody vine - All woody vines greater than 3.2	28 ft in
11		1.1776-02-07-07		neight.	
12	15				
7	_ 15	= Total Cov	ver 7		
50% of total cover: 11-	20% of	total cover	<u> </u>		
Noody Vine Stratum (Plot size: 30++ x 30++)		~1			
1. Smilax rotunditolia	15	1	FAL		
2. Vitis rotunditolia	15	Y	PAL		
3. Lonilera japonica	10	<u> </u>	FACU		
4.	S. Martine				
5.				Hydrophytic	
	40	= Total Cov	/er	Vegetation	
50% of total cover: 20	20% of	total cover	. 8	Present? Yes V No	
Remarks: (If observed, list morphological adaptations belo	(wr		1		10.000

S	OI	L
_		_

SUL								Samping Point.	
Profile Desc	ription: (Describe t	o the depth	needed to docu	ment the in	idicator	or confirm	the absence of I	ndicators.)	
Depth	Matrix		Red	ox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc ²	Texture	Remarks	Sector Sector
0-5	2.5433	100					L		
5-14	2.5Y5/3	602	.545/4	40	C	M	L		3
14-7D	7.54 5/3	100 7	515/4	40	6	M	SL		
1100	200115								118
						•			
	and the second of the second s			-	ten generalis	-			
	A CONTRACTOR OFFICE			_		Add to be to the			
Sales and the		<u></u>					terre and the second		
¹ Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, M	IS=Masked	Sand G	rains.	² Location: PL	=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Application	able to all LR	Rs, unless othe	erwise note	ed.)		Indicators for	Problematic Hydric Soils":	
Histosol	(A1)		Polyvalue B	elow Surfac	ce (S8) (I	LRR S, T, U		k (A9) (LRR O)	
Histic Ep	opedon (A2)		L camy Muc	kv Mineral ((LRR 5,	3 (1)	Reduced	Vertic (F18) (outside MLRA 15	50A,B)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix (F2)	,	D Piedmont	Floodplain Soils (F19) (LRR P,	S, T)
Stratified	d Layers (A5)		Depleted Ma	atrix (F3)			Anomalou	us Bright Loamy Soils (F20)	
Organic	Bodies (A6) (LRR P	, T, U)	Redox Dark	Surface (F	6)		(MLRA	153B)	
5 cm ML	ucky Mineral (A7) (LF	RRP,T,U)	Depleted Da	ark Surface	(F7)		Red Pare	nt Material (1F2)	
	resence (A8) (LRR U	,	Marl (F10)	IRR II))		Other (Ex	plain in Remarks)	
Depleter	d Below Dark Surface	e (A11)	Depleted O	chric (F11)	(MLRA 1	51)	_		
Thick Da	ark Surface (A12)		Iron-Manga	nese Mass	es (F12)	(LRR O, P,	T) ³ Indicato	ors of hydrophytic vegetation an	d
Coast P	rairie Redox (A16) (N	ALRA 150A)	Umbric Sur	face (F13) (LRR P,	r, U)	wetlan	d hydrology must be present,	
Sandy M	Aucky Mineral (S1) (L	RR O, S)	Delta Ochri	c (F17) (ML	RA 151)	50A 150B)	uniess	disturbed or problematic.	
Sandy G	Bleyed Matrix (54)		Piedmont F	loodolain S	oils (F19	(MLRA 14	9A)		
Stripped	Matrix (S6)		Anomalous	Bright Loar	ny Soils	(F20) (MLR.	A 149A, 153C, 1	53D)	
Dark Su	uface (S7) (LRR P, S	5, T, U)							Sec. 1
Restrictive	Layer (if observed):								
Type:									1
Depth (in	iches):		—			Section 201	Hydric Soil Pr	resent? Yes No	
Remarks:	and an an a start and								
See See									
Sec. 19									
				Contraction of	A Awards & C.		Selection and		1



Upland data point wjoo032_u facing northwest.



Upland data point wjoo032_u facing west.

Project/Site: ACP	city/County: Johnston sampling Date: 4120116
Applicant/Owner: Dominion	State: NC Sampling Point: wjooD31F-W
Investigator(s): L. ROPER, S. BRYON	Section, Township, Range: NONE
Landform (billslope terrace etc.): flot	Local relief (concave convex none): NONE Slope (%): 0-2
Schooling (IBD as MI DA): / P. R. D. Lat. 35.	44/a/a Jana: -78, 31784 Datum: W6584
Subregion (LRR of MLRA).	National PEO
Soil Map Unit Name: MITAVISTA FINE SAMAY	
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	disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (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
Hydric Soil Present? Yes No	within a Wotland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	I I I I I I I I I I I I I I I I I I I
Benver activity; Abnormal	ily dry conditions
	0
Arrivan . Bottomland Hardwood	od Forest
NCWHITT. Dollar in a rate	
HYDROLOGY	2
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1)	3) Sparsely Vegetated Concave Surface (B0)
High Water Table (A2)	b) (LKR U) Dranage Patterns (B10)
Saturation (A3)	Ddor (C1) Moss Thin Lifes (B10)
Water Marks (B1)	
Sediment Deposits (B2)	ced Iron (C4)
Drift Deposits (B3)	
Iron Deposits (B5)	Remarks)
Mater Stained Leaves (B0)	Sphaonum moss (D8) (LRR T. U)
Field Observations:	
Surface Water Present? Yes No Depth (inches	NA NA
Water Table Present? Yes No Depth (inches	052 ::
Saturation Present? Yes Vo Depth (inches	s): Wetland Hydrology Present? Yes No
(includes capillary fringe)	as provious inspections) if available:
Describe Recorded Data (Stream gauge, monitoring weil, aenal prot	
Remarks:	
antipos of wateriad	in up do to l
portions of wetland	Inuncated
and the second	

د. + 15000 زدر

2- 61 . 20 64	Absolute	Dominant	Indicator	Dominance Test worksheet:		
<u>Tree Stratum</u> (Plot size: <u>2017 X 2017</u>) 1. Auer rubrum	<u>% Cover</u>	Species?	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	5	(A)
2. Liquidambar styraciflua	15	<u> </u>	FAC	Total Number of Dominant	5	(B)
4				Species Across All Strata.	100	_ (0)
5	-			That Are OBL, FACW, or FAC:	100	(A/B)
6	•			Prevalence Index worksheet:		
8		Constant and		Total % Cover of:	Multiply by:	
0	30	= Total Co	ver	OBL species >	< 1 =	
50% of total cover: 15	20% 0	f total cover	. 6	FACW species >	< 2 =	
Sanling/Shruh Stratum (Plot size: 30Ft × 30Ft)		10121 00101	Contract Mas	FAC species	< 3 =	
1 NONE				FACU species >	x 4 =	
2				UPL species >	x 5 =	
3		7.757.55 <u>6</u>		Column Totals: (A)	(B)
4				Prevalence Index = B/A =	. Sharthalan dhe	
5		A NAVID-S-	the second	Hydrophytic Vegetation Indic	ators:	
6		1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 		1 - Rapid Test for Hydroph	ytic Vegetation	
7		100000000		2 - Dominance Test is >50	%	
8				3 - Prevalence Index is ≤3.	0 ¹	
		= Total Co	ver	Problematic Hydrophytic V	egetation ¹ (Expl	ain)
50% of total cover:	20% of	total cover	1 <u></u>			
1 Chasman them la rum	30	Y	FACID	¹ Indicators of hydric soil and we be present, unless disturbed or	etland hydrology problematic.	must
2.			11100-	Definitions of Four Vegetatio	n Strata:	
3.		de la constante		Tree - Woody plants, excluding	nvines 3 in (7 f	S cm) or
<u>4</u>	-		-	more in diameter at breast heig height.	ht (DBH), regard	dless of
6.				Sapling/Shrub – Woody plants	s, excluding vine n 3.28 ft (1 m) ta	s, less
8				Herb – All herbaceous (non-wo	oody) plants, reg	ardless
9	-			of size, and woody plants less	than 3.28 ft tall.	
10	-	1000 - 100 - 100 	Car Arean Al-	Woody vine - All woody vines	greater than 3.2	28 ft in
11		Tana ang		neight.		
12	30	= Total Co	ver			
50% of total cover: 15	20% 0	f total cover	- 6			
Woody Vine Stratum (Plot size: 30ff x 30ff)			Constanting			
1 Smilax rotunditalia	20	У	FAC			
2 Vitis rotunditalia	20	Y	FAC			
3	100000		<u> </u>			
A.						
5	0111338			Hudrophytic		
	40	= Total Co	ver	Vegetation /		
50% of total cover: 20	20% 0	f total cove	r: 8	Present? Yes V	No	
			the second se			

OIL								Sampling Point:
Profile Desc	cription: (Describe	to the depth	needed to docu	ment the in	dicator	or confirm	the absence of	f indicators.)
Depth	Matrix		Red	ox Features				
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture	Remarks
0-5	101/25/2	92	101K5/8	3	C	M	L	
5-70	101R 42	75	10125/2	25	C	M	CL	
	1-11 1-		1-11-10				The second s	
Sec. A.		No. 1 Start		<u> 11.5</u>				
					and all	Section Section	San She She .	
	a the second second second					Contraction of the second		
	Carrier Contractor						21 postion:	-Roro Lining M-Matrix
Type: C=C	oncentration, D=Dep	netion, RM=F	Reduced Matrix, M	S=Masked	d)	ams.	Indicators for	or Problematic Hydric Solls ³ :
	Indicators: (Applic		D Behavalue R	olow Surfac	a.)	PPSTI		
Histoso	rianden (A2)		Thin Dark S	urface (SQ)		T II)		ick (A10) (LRR S)
HISTIC E	intic (A2)		Loamy Muc	ky Mineral (E1) (I RE	20)	Reduced	d Vertic (F18) (outside MLRA 150A,
Hydron	n Sulfide (A4)			red Matrix (F	2)	,	D Piedmor	t Floodplain Soils (F19) (LRR P, S, 1
Stratifie	d Lavers (A5)		Depleted M	atrix (F3)	-1		D Anomalo	ous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P	ν, Τ, U)	Redox Dark	Surface (Fe	5)		(MLR/	A 153B)
5 cm M	ucky Mineral (A7) (L	RR P, T, U)	Depleted Da	ark Surface	(F7)		Red Par	rent Material (TF2)
Muck P	resence (A8) (LRR L	(ר	Redox Depi	ressions (F8)		Very Sh	allow Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, T)		Marl (F10) (LRR U)		2	D Other (E	Explain in Remarks)
Deplete	d Below Dark Surfac	ce (A11)	Depleted O	chric (F11) (MLRA 1	51)	T) ³ Indian	tere of budrophytic vegetation and
Thick D	ark Surface (A12)		Iron-Manga	nese Masse	S (F12) (1) Indica wotis	and hydrology must be present.
Coast	rairie Redox (A16) (MERA ISUA	Delta Ochri	c (F17) (MI)	RA 151)	, 0)	unles	ss disturbed or problematic.
Sandy I	Gleved Matrix (S4)	LKK 0, 3)	Reduced Vi	ertic (F18) (MLRA 1	50A. 150B)		
Sandy	Redax (S5)		Piedmont F	loodplain Sc	oils (F19)	(MLRA 14	9A)	
Strippe	d Matrix (S6)		Anomalous	Bright Loan	ny Soils	(F20) (MLR	A 149A, 153C,	153D)
Dark S	urface (S7) (LRR P,	S, T, U)						a da sa
Restrictive	Layer (if observed)):			of the test		and a course	And the second
Type:			<u></u>					. /
Depth (in	nches):						Hydric Soil I	Present? Yes <u>V</u> No
Remarks:		AND A COMPANY		and and the	T. C. S. C.		Constant Constant	an in the second se



Wetland data point wjoo031f_w facing north.



Wetland data point wjoo031f_w facing west.

Photo Sheet 1 of 2

Project/Site: ALP	City/County: Johnston Sampling Date: 4120/16					
Applicant/Owner: Dominion	State: NC Sampling Point: wj00031-0					
Investigators): Li Loger, Si Brian	Section Townshin Range: NONE					
Landform (hillologo torsage ato): flot	Local relief (concave, convex, none): NDNC Slope (%): 0-2					
Landrorm (missiope, tenace, etc.).	441 L/c Datum: -78 31777 Datum: W/r584					
Subregion (LRR or MLRA): <u>C F F I</u> Lat: <u>33</u> ,	Price Long: 18:51172 Datan. NA					
Soil Map Unit Name: ITITAVISTA TINE SANDY I	NWI classification: IV TI					
Are climatic / hydrologic conditions on the site typical for this time of year	ar? 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 pro	blematic? (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 Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No					
Abnorally dry conditions						
HYDROLOGÝ						
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)	13) Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2)) (LRR U) Drainage Patterns (B10)					
Saturation (A3)	ares along Living Roots (C3) Dry-Season Water Table (C2)					
Sediment Deposits (B2)	ed Iron (C4)					
Drift Deposits (B3)	tion 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)	emarks) 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:	NA					
Surface Water Present? Yes No Depth (inches)						
Water Table Present? Yes No Depth (inches)						
Saturation Present? Yes No Depth (inches) (includes capillary fringe)	Wetland Hydrology Present? Yes No					
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:					
Remarks:						

VEGETATION ((Four Strata) -	Use scientific	names of plants.
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ree Stratum (Plot size: 30ff x 30ff)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
Carya glabra		<u> </u>	PHCU	That Are OBL, FACW, or FAC: (A)
Liquidambar styracitlua	20	<u> </u>	FAC	Total Number of Dominant
0				Species Across All Strata:(B)
	- Anna -		_	Percent of Dominant Species
	C.S.S.SAR	22.201686		That Are OBL, FACW, or FAC: (A/B)
		CONTRACT.	THE STATE	Prevalence Index worksheet:
		Contraction of the local		Total % Cover of: Multiply by:
	4D	= Total Cov	lor	OBL species x 1 =
ED% of total cover: 20	20% of	total cover	. 8	FACW species x 2 =
Sold of total cover.	_ 20% 01	total cover		FAC species x 3 =
(Piot size: <u>DOT 1 ADOT 1</u>)	5	V	FACIL	FACU species x 4 =
Carva glabia var. Obbiaia	5		EN	UPL species x 5 =
Likuidamisar styralitua			FAC	Column Totals: (A) (B)
•				
				Prevalence Index = B/A =
	<u></u>	ALC: NO.		Hydrophytic Vegetation Indicators:
	ada da cana		4.4.4.5724	1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
				☐ 3 - Prevalence Index is ≤3.0 ¹
	D	= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20% of	total cover	: 2	
erh Stratum (Plot size: 30FF x 30FF)				¹ Indicators of hydric soil and wetland hydrology must
Chasmanthium laxum	10	V	FALW	be present, unless disturbed or problematic.
	TO PROVED			Definitions of Four Vegetation Strata:
•	THE REAL PROPERTY.			
A REAL PROPERTY OF A REAL PROPER				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
				height.
	100 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200 - 200			
				Sapling/Shrub – Woody plants, excluding vines, less
			Barristering	tilan 3 in. Don and greater than 3.20 it (1 in) tail.
and a second				Herb - All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
D		Contraction of the	<u>erestienten</u>	Woody vine - All woody vines greater than 3.28 ft in
1	a Secondar			height.
2				
	ID	= Total Co	ver	
50% of total cover: 5	20% of	total cover	: 2	
Voody Vine Stratum (Plot size: 30FF x 30Ff)			ALL STREET	
Vitis rotunditolia	10	Y	FAC	
Smilax rotionditalia	10	V	FAL	
		C. C. C. C. C. S.	11.0	
	TRANSFER STREET	194361 1657		
•	The second second	1.19.2015/11/	179795 V21 177	
	10			Hydrophytic
6	_10	= Total Co	ver	Present? Yes No
50% of total cover:	20% of	f total cover		
emarks: (If observed, list morphological adaptations belo	w).			

|--|

wj00031-c

SOIL				A DESCRIPTION OF THE OWNER OF THE	Samping Font.
Profile Desc	ription: (Describe	to the depth	needed to document the indicator or confi	irm the absence of inc	licators.)
Depth	Matrix		Redox Features		
(inches)	Color (moist)	%	Color (moist) % Type ¹ Loc ²	Texture	Remarks
0-4	10/R 3/3	100			
4-11	10YR-4/10	100		SCL	
11-20	101R 5/6	IDD		SCL	
	1011-10				
		•		-	the second s
				The second s	
	Second and second	<u> </u>	Contraction of the second second second second		
¹ Type: C=Co	oncentration, D=Dep	letion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location: PL=F	Pore Lining, M=Matrix.
Hydric Soil I	Indicators: (Applic	able to all LI	RRs, unless otherwise noted.)	Indicators for P	roblematic Hydric Solis :
Histosol	(A1)		Polyvalue Below Surface (S8) (LRR S, 1		A9) (LRR U)
Histic Ep	stic (A3)		Loamy Mucky Mineral (E1) (LRR O)	Reduced Ve	rtic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleyed Matrix (F2)	Piedmont FI	oodplain 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 15	i3B)
5 cm Mu	icky Mineral (A7) (LI	RR P, T, U)	Depleted Dark Surface (F7)	Red Parent	Material (TF2)
H Muck Pr	esence (A8) (LRR U	")	Marl (E10) (LBR U)	Other (Expla	ain in Remarks)
Depleter	d Below Dark Surfac	e (A11)	Depleted Ochric (F11) (MLRA 151)		
Thick Da	ark Surface (A12)		Iron-Manganese Masses (F12) (LRR O,	P,T) ³ Indicators	of hydrophytic vegetation and
Coast P	rairie Redox (A16) (I	MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	wetland I	hydrology must be present,
Sandy M	lucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless di	isturbed or problematic.
Sandy G	Bleyed Matrix (S4)		Reduced Vertic (F18) (MLRA 150A, 150	149A)	
Stripped	Matrix (S6)		Anomalous Bright Loamy Soils (F20) (M	ILRA 149A, 153C, 153	D)
Dark Su	face (S7) (LRR P,	S, T, U)	-		
Restrictive	Layer (if observed)	:		Carl State of the State of the	
Type:					./
Depth (in	ches):			Hydric Soil Pres	sent? Yes <u>No</u>
Remarks:		an ha na filiant	and the second		and the state of the state of the state of the
A Starting of the					



Upland data point wjoo031_u facing northeast.



Upland data point wjoo031_u facing east.

Project/Site: ACP City	County: Johnston sampling Date: 4/20/16
Applicant/Owner: Dominion	State: NC Sampling Point: wicob301.
Investigatoria): L. RODER S. Bryan Ser	tion Townshin Range: NONe>
log diam (hill have demons als). Ele +	
	43 h7 -78 316417 Detur W/584
Subregion (LRR or MLRA): LRR P Lat: 33, 4	1302 Long: -70.310 [17 Datum: 10000]
Soil Map Unit Name: Altavista tine sandy loa	MWI classification:
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 dist	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation . Soil . or Hydrology naturally proble	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	impling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Wetland Hydrology Present?	within a Wetland? Yes V No
Remarks: OL	
Honormany dry conditions	
NCWAM: Headwater Forest	
HYDROLOGÝ	
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)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (L	RR U) Drainage Patterns (B10)
Saturation (A3)	(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 I	ron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)) Geomorphic Position (D2)
Iron Deposits (B5) Uther (Explain in Rema	arks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR 1, U)
Field Observations:	Δ.V.A
Surface Water Present? Yes No Depth (inches):	170
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Remarks:	

VEGETATION	(Four Strata)	- Use scientific	names of plants.	
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wjoo 030 f_w Sampling Point:

A	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft)	% Cover	Species	Status	Number of Dominant Species
1. ALEV rubrum	15	Y	FAC	That Are OBL, FACW, or FAC: (A)
2 Liquidambar styraciflua	15	Y	PAL	
3 Precents witharrii	10	Y	FACIA	Total Number of Dominant
S. GVELOUS MICHAVAIL			11/000	Species Across All Strata (D)
4		and the second s		Percent of Dominant Species 7,83
5	The second second		The the second	That Are OBL, FACW, or FAC: (A/B)
6	TO ALL ASSESS	TINCH GERE		Brevalence Index worksheet:
7	1. C. D. S.L.	A. alleria	-	Tatal 9/ Cover of Multiply by
8		Section S		
	40	= Total Co	ver	OBL species x 1 =
50% of total cover: 20	20% of	total cove	. 8	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ff x 30ff)				FAC species x 3 =
Saping Stratun (Flot Size. DOTT FOOTT)				FACU species x 4 =
				UPL species x 5 =
2		The second second		Column Totals: (A) (B)
3.		ALLON TO BELLE		
4	and a second	Alexander Sec.		Prevalence Index = B/A =
5.			and thereby	Hydrophytic Vegetation Indicators:
6.				A 1-Rapid Test for Hydrophytic Vegetation
7				A Deminance Test is 50%
8				
·	0	- Total Ca		
		- Total Co	vei	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover:	20% of	total cove	F	
Herb Stratum (Plot size: DOTT x 30++)	11-	N	EMID	¹ Indicators of hydric soil and wetland hydrology must
1. Chasmanthium laxum	40		FHCW	be present, unless disturbed or problematic.
2. Larex sp.	10	Y	OBL/FAC	Definitions of Four Vegetation Strata:
3			A State State	Tree - Woody plants, excluding vines 3 in (7.6 cm) or
4.			Lanan	more in diameter at breast height (DBH), regardless of
5		MARSING		height.
G	Constant State	Sector Sector	Sector Charles	
0	VANY GOOD		A CHERENE STREET	than 3 in DBH and greater than 3 28 ft (1 m) tall
1	SALASSE AND T	Contraction and the second	and the second se	
8	-	Part of States	-	Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10	A. S. S. S. S. S. S.		-	Woody vine - All woody vines greater than 3.28 ft in
11	M. M. S. W. S.			height.
12.	ALC: NOTE: C		ALL MARKED	
	SD	= Total Co	ver	
EDW of total power: 25	20% -	total covo	- 10	
Martin Charter (Plater 30fL - 30fL)	20% 01	total cove		
voody vine Stratum (Piot size: DUTT X DUTT)	10	V	EN	
1. zmilax colonditolla	10		FAC	
2	1104-1242	ALL SALES		
3		Lan Charles	a service and	
4.	245241232			
5				Hudrophytic
	10	= Total Co	Ver	Vegetation
FOX - Field - Second	2001/ -	- Total CO	. 2	Present? Yes No
50% of total cover:	20% 01	total cove		
Remarks: (If observed, list morphological adaptations below	w).			

SOIL

Sampling Point: wipo030f.

Profile Desc	ription: (Describe t	to the depth r	eeded to docu	ment the in	ndicator	or confirm	the absence of	f indicators.)
Depth	Matrix		Redo	x Features	3		Tester	Demarke
(inches)	Color (moist)		Color (moist)		Type'	LOC	exture	Remarks
0-5	1016-12	12 10	JK 1B	8		_ <u>M</u>		
5-12	2.57 6/2	75 10	51K518	25	C	M	CL	
12-20	10-12 6/2	60 11	DYR5/R	4D	C.	M	CL	
1000	IF_IV		- 11 10					
							1.	
		· · · · · · · · · · · · · · · · · · ·		-	Loss States			
			Shele Shellow	in the second second	Southern.		- Number	
			and the state					
¹ Type: C=C	oncentration, D=Dep	letion, RM=Re	duced Matrix, M	S=Masked	Sand Gr	ains.	² Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Application	able to all LR	Rs, unless othe	rwise note	ed.)		Indicators fo	or Problematic Hydric Soils ³ :
Histosol	(A1)		Polyvalue Be	elow Surfac	ce (S8) (L	RR S, T, U) 1 cm Mu	ick (A9) (LRR O)
Histic Ep	pipedon (A2)		Thin Dark St	urface (S9)	(LRR S,	T, U)	2 cm Mu	ICK (A10) (LRR S)
Black Hi	stic (A3)		Loamy Muck	y Mineral ((F1) (LRR	(0)	Reduced	T Eloodolain Soils (E10) (I RR P S T)
Hydroge	en Sulfide (A4)		Deploted Ma	ed Matrix (F2)		Anomale	us Bright Loamy Soils (F20)
Organic	Bodies (A5) /I RP P	т. пр	Redax Dark	Surface (F	6)		(MLR/	A 153B)
5 cm Mi	icky Mineral (A7) (LF	RR P, T. U)	Depleted Da	irk Surface	(F7)		Red Par	ent Material (TF2)
Muck Pr	esence (A8) (LRR U)	Redox Depr	essions (Fi	8)		Very Sh	allow Dark Surface (TF12)
1 cm Mu	uck (A9) (LRR P, T)	He second	Marl (F10) (LRR U)	Ster Sta		Other (E	Explain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	chric (F11)	(MLRA 1	51)	- 1	
Thick Da	ark Surface (A12)		Iron-Mangar	nese Mass	es (F12) (LRR O, P,	T) "Indica	tors of hydrophytic vegetation and
Coast P	rairie Redox (A16) (M	NLRA 150A)	Dolta Oshrig	ace (F13) (RA 151	, 0)	wetla	and hydrology must be present,
Sandy A	Reved Matrix (S1) (L	LRR 0, 5)	Reduced Ve	rtic (E18)	MLRA 1	0A. 150B)	umes	se distance of procentation
Sandy F	Redox (S5)		Piedmont FI	oodplain S	oils (F19)	(MLRA 14	9A)	
Stripped	Matrix (S6)		Anomalous	Bright Loan	my Soils (F20) (MLR	A 149A, 153C,	153D)
Dark Su	rface (S7) (LRR P, S	S, T, U)						
Restrictive	Layer (if observed):	:					The second	
Type:			-					
Depth (in	ches):		-	Stradi			Hydric Soil F	Present? Yes No
Remarks:	ALC: NO CONTRACTOR							
The second								
3 3543 14 State								



Wetland data point wjoo030f_w facing south.



Wetland data point wjoo030f_w facing west.

Photo Sheet 1 of 2

Project/Site: ACP	City/	county: Johnst	5 Sampling Date: 4120/16
Applicant/Owner: Dominion	1	5	state: NC Sampling Point: wipp030.
Investigator(s): LIROPER. S.	Bryan Sect	ion, Township, Range: V	ione
Landform (hillslope terrace etc.): Fla	+ Loca	I relief (concave, convex, r	none): NONE Slope (%): 0 - 2
Carlandini (initisiope, tenace, etc.).	D 101 35 44	3 Dla Long: =	78.311.34 Datum: W638
Subregion (LRR or MLRA):	Lat	<u></u> Long	NA NA
Soil Map Unit Name: HITAVISTA	Tine sandy loa	m /	NWI classification:I
Are climatic / hydrologic conditions on the	site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hy	drology significantly distu	rbed? Are "Normal	Circumstances" present? Yes No
Are Vegetation, Soil, or Hy	drology naturally problem	atic? (If needed, e	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Atta	ach site map showing sar	npling point locatio	ns, 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 No	within a wetland	
Abnormally dry	conditions		
HYDROLOGY			
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is re	quired: 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) (LR	RU)	Drainage Patterns (B10)
Saturation (A3)	Hydrogen Sulfide Odor	(C1) -lans Livias Basta (C2)	Dry Seesen Water Table (C2)
		along Living Roots (C3)	Cravfish Burrows (CB)
Drift Deposits (B3)	Recent Iron Reduction i	n 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 Remain	'ks)	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:	/		we want the second s
Surface Water Present? Yes	No Depth (inches):		,
Water Table Present? Yes	No Depth (inches):	20	
Saturation Present? Yes (includes capillary fringe)	_ No Depth (inches):	Wetland H	ydrology Present? Yes No
Describe Recorded Data (stream gauge	, monitoring well, aerial photos, pr	evious inspections), if avai	ilable:
Remarks:			
the second second			

VEGETATION (Four Strata) – Use scientific na	mes of pl	ants.		wjeo ()30_w Sampling Point:
2.61 2.61	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30++ x 30++)	% Cover	Species?	FACU	Number of Dominant Species 5 (A)
2. L'quidambar styraciflua 3.	20	Ý	FAC	Total Number of Dominant Species Across All Strata: (B)
4 5				Percent of Dominant Species 711, (A/B)
6 7				Prevalence Index worksheet:
8.				Total % Cover of:Multiply by:
	40	= Total Cov	rer	OBL species x 1 =
50% of total cover: 20	20% of	total cover	8	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ff x 30 ff)				FAC species x 3 =
1 Liguidambar styracitlua	5	Y	FAL	FACU species x 4 =
2 Carva alubra	5	Y	FACH	UPL species x 5 =
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5		La La Alt	tinder and the	Hydrophytic Vegetation Indicators:
6	and the second	and the second		Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8		1.0.00		$\boxed{\Box}$ 3 - Prevalence Index is $\leq 3.0^{1}$
	10	= Total Cov	rer	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20% of	total cover	: 2	
Herb Stratum (Plot size: 30ff x 30ff)				Indicators of hydric soil and wetland hydrology must
1 Chasman thium laxum	10	Y	FACW	be present, unless disturbed or problematic.
1		The second second	1.1	Definitions of Four Vegetation Strata:
2	CRASS COM			
3		- and the second		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
<u>4</u>		The spectrum of		height.
5	n ar yn y hydregae Transaeg y sy'r			
6	Contraction of the second s		17.30 CAN 24 CA	Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 m. DBH and greater than 3.20 m (1 m) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9		Contra contra de la contra de l	Top of the second	
10		Colora di stati		Woody vine – All woody vines greater than 3.28 ft in
11	Representation of the second s	Contraction and the		neight.
12	10	= Total Cov	/er	
50% of total cover: 5	20% of	total cover	: 2	
Woody Vine Stratum (Plot size: 30 ft + 30 ft)			A STREAM	
1 Vitis cotunditatia	10	Y	FAC.	
2 Shailing costunditation	10	Y	EAL	
2. JMITAX TOTMOTOTICA		-/	FIIC	
3				
4			The second second	
5	- 70			Hydrophytic
50% of total cover:	20% of	= Total Cov f total cover	'er 4	Present? Yes <u>Ves</u> No
Remarks: (If observed, list morphological adaptations belo	w).	ilige stationed cos, any stationed cos,	1.5765115.77	
Nomaria, (ii observed, iist morphological adaptations beit				
	241 SH2 30 C 1.2.	ALC: NUMBER OF	Sold Well and the	

SOIL

Sampling Point: Wj00030-4

Profile Description: (Describe to the dept	h needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	Texture Remarks
D-4 INVP3/2 UNC		L
H-11 101-15 100		504
11-20 1010 100		4(L
11-00 10/K-16 100		
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	*Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators: (Applicable to all	Rohyalus Polow Surface (St) (LBB S T 1)	1 cm Muck (A9) (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)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Bedox 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)	Uther (Explain In Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O. P.	T) ³ Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 1504	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)	9A)
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Type:		Hudrig Sell Property Ver No.
Depth (inches):		nyone son Presentry Tes NO
Remarks:		



Upland data point wjoo030_u facing east.



Upland data point wjoo030_u facing northeast.

Photo Sheet 2 of 2
WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site:ACP	City/County: Sampling Date: 4-2/-16
Applicant/Owner: Dominion	State: NC Sampling Point: WOOD344-M
Investigator(s): EST (L. Roper, U. Vaughan)	Section, Township, Range:
Landform (hillslope, terrace, etc.): clramage	Local relief (concave, convex, none): Concave Slope (%): O-3
Subregion (LRR or MLRA); LRRD Lat: 35.4	13940565 Long: 78.31881182 Datum: WG584
Soil Man Unit Name: Welndkee - Chastain assuce	Han NWI classification: DFO
Are climatic / bydrologic conditions on the site typical for this time of y	vear? Yes No (If no, explain in Remarks.)
Are Vegetetien Soil or Hydrology significantly	v disturbed? Are "Normal Circumstances" present? Yes V No
Are Vegetation, Soil, or Hydrology significants	roblematic? (If needed, explain any answers in Remarks.)
Are vegetation, soil, or Hydrology hatdrany p	
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: Income of the second s	- Is the Sampled Area - within a Wetland? Yes No
Abnormally dy conditions NGWAM: Headwater Forest	
HYDROLOGY	Occupation Indicates (minimum of two required)
Wetland Hydrology Indicators:	Secondary Indicators (minimum or two required)
Primary Indicators (minimum of one is required: check all that apply)	12) Sparsely Vegetated Concave Surface (B8)
L Sufface Water (A1) Adduit Faulta (B	(15) (I RR U)
Saturation (A3)	Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosp	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	uced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	ction in Tilled Soils (C6)
Algal Mat or Crust (B4)	e (C7) Geomorphic Position (D2)
Iron Deposits (B5)	Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Sobagnum moss (D8) (LRR T. U)
Vater-Stained Leaves (B9)	
Surface Water Present? Yes No Depth (inche	is): NA
Water Table Present? Yes No Depth (inche	s): Sinches
Saturation Present? Yes V No Depth (inche	s): Surface Wetland Hydrology Present? Yes No No
(includes capillary fringe)	tos provinus inspections) if available:
Describe Recorded Data (stream gauge, monitoring weil, aenai pho	tos, previous inspections), il avaliable.
Remarks:	
Nondride .	

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

Sampling Point: wie 034F-w

= c; = A	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: SOF4 x So FF)	% Cover	Species?	Status	Number of Dominant Species	28	
1. Acer Kubrum	20	yes	FAC	That Are OBL, FACW, or FAC:		(A)
2. Liouidanter Styrneiflug	20	yes	FAC	Total Number of Dominant Species Across All Strata	9	(B)
		111111		opecies / cross / cross		(-)
	Stora Con			Percent of Dominant Species	7,89	(A/B)
5	NUN HARM	1919-108-8-10	Conversion of	That Are OBL, FACVV, of FAC.		(~0)
B		-0.791805		Prevalence Index worksheet:		
/·		STATISTICS OF		Total % Cover of:	Multiply by:	_
8	Un			OBL species x	1 =	
		= Total Co	ver S	FACW species x	2 =	<u>9</u>
50% of total cover: <u>20</u>	20% of	total covel	: <u> 0 </u>	FAC species x	3 =	<u>_</u>
Sapling/Shrub Stratum (Plot size: 3044 × 3044)	15	Lier	FARL	FACU species x	4 =	
1. Vaccinium Corymbosum	10	- Yes	FACU	UPL species X	5 =	
2. Acer rubrum	10	yes	FAC	Column Totals: (A)	(B)
3. Lieuidambar streettua	20	yed	FAC			
4	-		-	Prevalence Index = B/A =		
5		A SALE AND A		Hydrophytic Vegetation Indica	tors:	
6	La Contraction	And the Alle	-	1 - Rapid Test for Hydrophyl	tic Vegetation	
7				2 - Dominance Test is >50%	2	
8.				3 - Prevalence Index is ≤3.0	1	
	45	= Total Co	ver	Problematic Hydrophytic Ver	getation ¹ (Expla	in)
50% of total cover: 22.5	20% of	total cover	r: 9		5	
Herb Stratum (Plot size: 30ft x 30ft)				¹ Indicators of bydric soil and wet	and hydrology	must
1 Chasmathing laxin	50	Ves	FACW	be present, unless disturbed or p	problematic.	indot
2 Carry SP	15	45	FACU/OBL	Definitions of Four Vegetation	Strata:	
2 Baelmaria civilindrica	10	00	FARD			
S. Dachmeria Contra			TRUM	Tree – Woody plants, excluding	vines, 3 in. (7.6	cm) or
4,			The second	height.	it (DDiri), regard	1033 01
5						
6				Sapling/Shrub – Woody plants,	3 28 ft (1 m) tal	s, less
7		ya sa Carikova (may na tanasa)	-	than 5 m. Don and greater than	0.20 11 (1 11) 121	
8,				Herb - All herbaceous (non-woo	ody) plants, rega	ardless
9			-	of size, and woody plants less th	1811 3.20 It tall.	
10			· · · · · · · · · · · · · · · · · · ·	Woody vine - All woody vines g	reater than 3.2	B ft in
11		- denie w sta		height.		
12						
	75	= Total Co	ver			1997
50% of total cover: 37.5	20% of	f total cove	r: <u>15</u>			
Woody Vine Stratum (Plot size: 30ft x 30ft)						
1. Smilar rotundifolia	15	YES	FAC			
2. Vita rotand. folla	15	yes	FAC			
3			18383.03			
4			A MARINE			
F.	19872973			II. Janahadia		
5	30	- Total Co	Vor	Vegetation	-	
FOR statelenuer 15	200% at	- Total coup	6	Present? Yes	No	
50% of total cover:	20% 0	i total cove	·		Same and	9 - 1. 1 - N - N - N - N - N - N - N - N - N -
Remarks: (If observed, list morphological adaptations belo	w).					
	S	Tax Second	len one daalle			

Atlantic and Gulf Coastal Plain Region - Version 2.0

SOIL

Sampling Point: 100034F_W

cohest Columniant % Tope' Tope' Texture Remarks -2.0 10-yr. 4/1 90 10-yr. 5/6 0 C P LC yae: 10-yr. 4/1 90 10-yr. 5/6 0 C P LC yae: 10-yr. 4/1 90 10-yr. 5/6 0 C P LC yae: 10-yr. 4/1 90 10-yr. 5/6 0 C P LC yae: C-concentration D-Debeloin RMARA Sand Koley Indicators of Problemate Hydric Solis': yae: C-concentration D-Debeloin RAR, unless otherwise noted. Indicators for Problemate Hydric Solis': Histic Spheton (A2) Indicators (S0) (LRR 5, 10) Indicators for Problemate Hydric Solis': Indicators for Problemate Hydric Solis': Bardifield Layers (A6) Indicators (A0) Indicators (S0) (LRR 5, 10) Reduced Hydric F(10) (LRR 7, 10) Depideed Dark Surface (A1) Depideed Dark Surface (F7) Indicators of Hydrophylic vegatation and uncess disturbed or problemate. Depideed Dark (A1) Depideed Corin (F11) (MLR 4, 151) Indicators of Hydrophylic vegatation and uncess disturbed or problemate. <th>Depth</th> <th>Matrix</th> <th></th> <th>Redo</th> <th>ox Features</th> <th>5</th> <th></th> <th></th> <th></th>	Depth	Matrix		Redo	ox Features	5			
-20 low f. 4/1 90 low f. 5/6 ID C FD Low -20 low f. 4/1 90 low f. 5/6 ID C FD Low -20 low f. 4/1 90 low f. 5/6 ID C FD Low f. 4/1 Low f	(inches)	Color (moist)	<u>%</u>	Color (moist)		_Type ¹	Loc		Remarks
yre: C=Concentration, D=Depletion, RM-Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. Hidicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable) Indicators: (Applicable) Hidicators: (Applicable) Polyvalue Below Surface (S0) (LRR S, T, U) Immunol (ARR O) Back Hisic (A3) Immunol Dark Surface (S0) (LRR S, T, U) Immunol (ARR O) Back Hisic (A3) Immunol Gloged Matrix (F2) Pelyvalue Below Surface (F6) Grain Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Perform Matrix (F2) Grain Mucky Mineral (A7) (LRR P, T, U) Depleted Depressions (F8) Perform Matrix (F2) Grain Mucky Mineral (A7) (LRR P, T, U) Depleted Depressions (F8) Perform Matrix (F2) Grain Mucky Mineral (A7) (LRR P, T, U) Depleted Celvic (F10) (MLR A 151) Perform Matrix (F2) Dopleted Depressions (F8) Immunol (Matrix (S4) Perform Matrix (F2) Standy Mucky Mineral (S1) (LRR P, T, U) Depleted Defre (F10) (MLR A 151) Immunol (F12) (MLR A 150) Standy Mucky Mineral (S1) (LRR P, T, U) Depleted Defre (F10) (MLR A 150) Immunol (K14) Standy Mecky (S1) Hidde Defre (F10) (MLR A 151) Immunol (K14) (MIN K14) Stand Mecky (S1) Hidde Defre (F10) (MLR A 150)	1-20	10 yr 4/1	90 /	04r 5/6		_C	<u></u>		
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Lecation: Flactors for Problematic Hydric Solls*: Hidiscopiedon (A2)									
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ¹ Location: PL=Pore Lining, M=Matrix Indicators for Problematic Hydric Soils ¹ : 1 or Muck (A010 (LRR 6) Histice Gipedon (A2) Black Hulic (A3) Hydrogen Suida (A4) Larny Mucky Mineral (F1) (LRR 0) Loarny Mucky Mineral (F1) (LRR 0) Loarny Mucky Mineral (F1) (LRR 0) Depleted Dark Surface (F6) Completed Below Dark Surface (F7) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Redox Dark Surface (F7) Hulic K10 (LRR 0, 1) Depleted Dark Surface (F7) Hore (F6) (LRR 0, 1) Tink Cark (F1) (LRR 0, 5) Depleted Dark Surface (F7) Hore (F6) (LRR 0, 7, 1) Depleted Dark Surface (F7) Hore (F6) (MLR 153) Trick Dark Surface (A1) Thick Dark Surface (A1) Umbric Surface (F7) (LRR 0, 7, 1) Depleted Dark Surface (F7) (LRR 0, 7, 1) Depleted Dark Surface (F2) (LRR 0, 7, 1) Depleted Dark Surface (F2) (LRR 0, 7, 1) Depleted Dark Surface (F2) (LRR 0, 7, 1) Sandy Mucky Mineral (S1) (LRR 0, 5) Sandy Mucky (B0) (MLRA 150A, 150B) Dark Surface (F7) (LRR 0, 8, 7, 1) Surface (F2) (LRR 0, 8, 7, 1) Surface (F2) (MLR A 149A, 153C, 153D) Dark Surface (F7) (LRR 0, 8, 7, 1) Surface (F2) (LRR 0, 8, 7, 1) Surface (F2) (LRR 0, 7, 7, 1) Extremations Bioli (F9) (MLR A 149A, 153C, 153D) Dark Surface (F7) (LR 0, 8, 7, 1) Extremations Bioli (F9) (MLR A 149A, 149A, 153C, 153D) Depleted Dark Surface (F2) (MLR 0,									
ype: C-Concentration D-Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix Indicators for Problematic Mydric Solls*: Indicators for Problematic Mydric Solls*: I cm Muck (A0) (LRR 0) Histosof (A1) Polynatue Below Surface (S3) (LRR 5, T, U) Black Histic (A3) I cm Muck (A0) (LRR 0) I cm Muck (A0) (LRR 0) Black Histic (A3) Polynatue Below Surface (F6) Reduced Varit (F2) Anomalous Bright Leamy Solis (F20) Organic Bodie (A6) (LRR P, T, U) Depleted Dark Surface (F7) Anomalous Bright Leamy Solis (F20) Anomalous Bright Leamy Solis (F20) 1 cm Muck (A3) (LRR P, T, U) Depleted Dark Surface (F6) Mard (F10) (LRR U) Depleted Dark Surface (F12) 1 cm Muck (A3) (LRR P, T, U) Depleted Dark Surface (F12) Mard (F10) (LRR D, T) Depleted Dark Surface (F12) 1 cm Muck (A3) (LRR P, T, U) Depleted Dark Surface (F13) (LRR P, T, U) Mard (F10) (LRR U) Depleted Dark Surface (F12) 1 cm Muck (A3) (MLR P, T, U) Depleted Dark Surface (F13) (MLRA 151) Dumbric Surface (F13) (MLRA 151) Polynetic (F6) 2 Sandy Nedox (S1) Mard (F10) (LRR D, T) Depleted Dark Surface (F12) (MLRA 150) Polynetic Solid (F20) (MLRA 150) 3 Sandy Nedox (S1) Polynetic Order (F13) (MLRA 150) Polynetic Order (F12) (MLRA 150) Polynetanot (F12) (MLRA 150) <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
grafer Soul Indicators: (Applicable to all LKKs, unless otherwise noted.) Indicators of Applicable to all LKKs, unless otherwise noted.) Histes (A1) Dynkub Eldow Surface (S9) (LRR S, T, U) I cm Muck (A9) (LRR O) Black Histic (A3) Daary Gleyed Matrix (F2) Reduced Vertic (F18) (outside MLRA 150A) Organic Boiles (A0) (LRR P, T, U) Depleted Matrix (F2) Red ZD Ark Surface (F7) Grafie Mode (A9) (LRR P, T, U) Depleted Dark Surface (F7) Red ZD Ark Surface (F7) Muck Y Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red ZD Ark Surface (F7) Timk Dark Surface (A1) Depleted Cohrin (F11) (MLRA 151) Depleted Dark Surface (F12) (LRR O, P, T) Depleted Below Dark Surface (A1) Depleted Chrin (F11) (MLRA 151) Panile Surface (A12) Sandy Mucky Mineral (S1) (LRR O, S) Bela Ochrin (F11) (MLRA 151) Panile Surface (A12) Sandy Mucky Mineral (S1) Reduced Vertic (F18) (MLRA 150A, 150B) Panile Surface (A12) Sandy Mucky Mineral (S1) Reduced Vertic (F18) (MLRA 150A, 150B) Panile Surface (S1) (MLR P, S, T, U) Stripped Matrix (S5) Reduced Vertic (F18) (MLRA 150A, 150B) Panile Surface (S1) (MLR P, S, T, U) Dettrict Layer (If Observed): The Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Deptet Inchees):	Type: C=C	oncentration, D=Dep	letion, RM=Re	duced Matrix, M	IS=Masked	I Sand Gra	ains.	² Location: PL	=Pore Lining, M=Matrix.
Stripped Matrix (S6) Image: Predmont Hoodplain Solis (F19) (MLHA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Solis (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Hydric Soli (F20) (MLRA 149A, 153C, 153D) estrictive Layer (If observed): Hydric Soli Present? Yes No Type: Hydric Soli Present? Yes No emarks: No	Histoso Histic E Black H Hydroge Stratifie Organic 5 cm M Muck P 1 cm M Deplete Thick D Coast F Sandy I Sandy I	I (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) : Bodies (A6) (LRR P ucky Mineral (A7) (LI resence (A8) (LRR U uck (A9) (LRR P, T) d Below Dark Surfac ark Surface (A12) 'rairie Redox (A16) (I Mucky Mineral (S1) (I 3leyed Matrix (S4)	י, T, U) RR P, T, U) ויפ (A11) MLRA 150A) LRR O, S)	Polyvalue B Thin Dark S Loamy Mucl Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (Depleted Od Iron-Manga Umbric Surf Delta Ochrid Reduced Ve	elow Surfa surface (S9 ky Mineral red Matrix (atrix (F3) : Surface (F ark Surface ressions (F LRR U) chric (F11) nese Mass face (F13) c (F17) (MI ertic (F18)	ce (S8) (L) (LRR S, (F1) (LRF (F2) 6) (F7) 8) (MLRA 1 es (F12) ((LRR P, T _RA 151) (MLRA 15	ERR S, T, U T, U) CO) LRR O, P, U) 50A, 150B)) 1 cm Muci 2 cm Muci Reduced V Piedmont Anomalou (MLRA Red Parer Very Shall Other (Exp T) ³ Indicator wetland unless	k (A9) (LRR O) k (A10) (LRR S) Vertic (F18) (outside MLRA 150A, Floodplain Soils (F19) (LRR P, S, T is Bright Loamy Soils (F20) 153B) nt Material (TF2) low Dark Surface (TF12) plain in Remarks) rs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
setricive Layer (if observed): Type: Depth (inches): emarks:	Sandy Stripped Dark St	Redox (S5) d Matrix (S6) urface (S7) (LRR P, S	s, T, U)	Anomalous	Bright Loa	my Soils (F19)	(MLRA 14 (F20) (MLR	9A) A 149A, 153C, 15	53D)
emarks:	Type:	Layer (if observed)	:	-				Hydric Soil Pro	esent? Yes 🔨 No
	Remarks:								

Environmental Field Surveys Wetland Photo Page



Wetland data point wjoo034f_w facing east.



Wetland data point wjoo034f_w facing south.

Photo Sheet 1 of 2

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: A-CP	City/County: Johnston Sampling Date: 4-21-16
Applicant/Owner: Dominion	State: NC Sampling Point: Wico 034_u
Investigator(s): EST (1 Roper, W. Varushen)	Section, Township, Range: none
Landform (billslope terrace etc.): drainage	Local relief (concave, convex, none): Convex Slope (%): 0-3
Subragion (I BB or MI BA): R.R.P. Lat: 35	43966818 Long: 78.31851295 Datum: WGS 84
Sublegion (ERR of MERA)	NWI classification: NA
Soli Map Unit Name: Or Onancee Chastrain Cooleration	
Are climatic / hydrologic conditions on the site typical for this time of	year year yes No (in ito, explain in remarker)
Are Vegetation, Soil, or Hydrology significan	lly disturbed? Are Normal Circumstances present? Tes No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	In the Sampled Area
Hydric Soil Present? Yes No	- within a Wetland? Yes No
Wetland Hydrology Present? Yes No	NO NO
Abnormally dry conditions	
HYDROLOGÝ	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	V) Surface Soil Cracks (B6)
Surface Water (A1)	313) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	15) (LRR U) Drainage Patterns (B10)
Saturation (A3)	beres along Living Roots (C3)
Sediment Deposits (B2)	luced Iron (C4)
Drift Deposits (B3)	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	ce (C7) Geomorphic Position (D2)
Iron Deposits (B5)	Remarks)
Inundation Visible on Aerial Imagery (B7)	
Li vvater-Stained Leaves (89)	
Surface Water Present? Yes No Denth (inch	es): XIA
Water Table Present? Yes No Depth (inch	es): 220 inches
Saturation Present? Yes No Depth (inch	es): >20 inches Wetland Hydrology Present? Yes No
(includes capillary fringe)	ates provious inspections) if available:
Describe Recorded Data (stream gauge, monitoring weil, aenar pri	olos, previous inspections), in available.
Remarks:	

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

Sampling Point: www.034-w

7011 2.11	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: DOF1 x SOFF)	% Cover	Species?	Status	Number of Dominant Species
1. Liauidembar Styraciflue	30	yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	40	Yes	FAC	Total Number of Dominant
3. Carpinus caroliniana	10	no	FAC	Species Across All Strata: (B)
4.				Barrent of Deminent Species
5.				That Are OBL FACW or FAC: 288 (A/B)
6		NU UNEDE	S. W. Stall	
7	STORE ME		1.51.0557 2	Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8:	80	- Total Car		OBL species x 1 =
40				FACW species x 2 =
	_ 20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: <u>SOFF X SOFF</u>)	10		FA-	FACU species x 4 =
1. Carpinus Caroliniana		yes	PAC	UPL species x 5 =
2		1.100.11.00.1	Contraction of the	Column Totals: (A) (B)
3		del ingener.	<u></u>	
4				Prevalence Index = B/A =
5	o fine that and	Cong A che Les	Ski Lisets	Hydrophytic Vegetation Indicators:
6.	MARGINE	法法的政治		1 - Rapid Test for Hydrophytic Vegetation
7				1 2 - Dominance Test is >50%
8			S. States	\square 2 Brownlance Index is $\leq 3.0^{1}$
5	16	= Total Co	ver	S - Plevalence index is 35.0
EDW of total powers	20% of	total cover	. 2	
Het Statum (Blat along 30 ft an 20 ft a)	_ 20% 01	total cover		
Herb Stratum (Plot size: 2077 x 3074)	LIR	iler	then	Indicators of hydric soil and wetland hydrology must
1. Chasmanthum lakum	-10	YES	Encular	De present, uness distabled of problematic.
2. Larcy Sp.		<u></u>	FACUTOOL	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	No. and and			height.
6		an ta an an		Sapling/Shrub - Woody plants, excluding vines, less
7.	ABATE			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Herb - All berbaceous (non-woody) plants, regardless
9	ENG-SAGE	S. AVER		of size, and woody plants less than 3.28 ft tall.
10				with the Alline devices see that then 2.28 ft in
10:				Woody vine – All woody vines greater than 3.26 it in
	1723/27429.1			neight.
12,	45	T-1-10-		
22.6		= Total Co	ver 9	
50% of total cover: 22.5	20% of	total cove		
Woody Vine Stratum (Plot size: 3041 x 5041)	1-		the	
1. rarthenocissus guinquetolia	12	yes	FACU	
2. Toxicodendran redicens	15	yes	FAC	
3. Smilax rotunditolia	10	yes	FAC	
4. Vitis rotanditolia	10	yes	FAC	
5.				Hydrophytic
	50	= Total Co	ver	Vegetation
50% of total cover: 25	20% 0	f total cove	10	Present? Yes <u>No</u>
Remarke: (If observed list morphological adaptations halo	w)			
	1022102211201	THE SECOND	References and a	

Atlantic and Gulf Coastal Plain Region - Version 2.0

SOIL

Sampling Point: WanD34-4

Profile Desc	ription: (Describe	to the depth r	needed to docu	ment the i	indicator	or confirm	the absence of indicators.)	
(inches)	Color (moist)	%	Color (moist)	%	Type	Loc ²	Texture Re	emarks
0-7	10453/2	100		NAC .		26.4	CL	
7-17	25,5/2	90 1	Dur Str.	10	C	m	C	
17-20	25.54	90 1	aves/c	10	(m	6	
			7190	1		SWART TO SA		
A COLORADORE DE LA		-		1				
								and the second se
	-				10	-	21	MaMatrix
Hydric C=C	Indicatore: (Accil	able to all LP	Rs. unless other	o=Masked	ed.)	a1115.	Indicators for Problematic	Hydric Soils ³ :
Historel	(A1)	Land to all LR	Polyvalue P	elow Surfa	ce (S8) /	RR S. T. U	1) 1 cm Muck (A9) (LRR C))
Histic Er	pipedon (A2)		Thin Dark S	urface (S9) (LRR S,	T, U)	2 cm Muck (A10) (LRR	S)
Black H	istic (A3)		Loamy Muc	ky Mineral	(F1) (LRR	10)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Deploted to	atrix (E2)	(F2)		Anomalous Bright Loan	ny Soils (F20)
Organic	Bodies (A6) (LRR F	ν, Τ , U)	Redox Dark	Surface (F	-6)		(MLRA 153B)	
5 cm Mu	ucky Mineral (A7) (L	RR P, T, U)	Depleted Da	ark Surface	e (F7)		Red Parent Material (Th	F2)
Muck P	resence (A8) (LRR L	(ר	Redox Depi	ressions (F	-8)		Very Shallow Dark Sur	ace (TF12)
	d Below Dark Surfa	e (A11)	Depleted C	chric (E11)	(MLRA 1	51)	Uner (Explain in Rema	
Thick D	ark Surface (A12)	((()) .	Iron-Manga	nese Mass	ies (F12) (LRR O, P.	T) ³ Indicators of hydroph	ytic vegetation and
Coast P	rairie Redox (A16) (MLRA 150A)	Umbric Sur	face (F13)	(LRR P, T	", U)	wetland hydrology n	nust be present,
Sandy	Mucky Mineral (S1) (LRR O, S)	Delta Ochrie	c (F17) (Mi	LRA 151)		unless disturbed or	problematic.
Sandy Sandy	Sedox (S5)		Piedmont F	loodplain G	Soils (F19)	(MLRA 14	19A)	
Stripped	d Matrix (S6)		Anomalous	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 153D)	
Dark Su	urface (S7) (LRR P,	S, T, U)	7.3.8.3	10 J (6	No. P. L.			
Restrictive	Layer (if observed)):		20.6				
Type:	ichoc):		-				Hydric Soil Brosont2	s No
Depth (ir	icites):			1. M. (19)	WHEELS ST		rigano don Present? Ye	
Remarks:								
Start Star								
11 J. 13 I								
4								
1								
1								

hay

Environmental Field Surveys Wetland Photo Page



Upland data point wjoo034_u facing north.



Upland data point wjoo034_u facing east.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u> Cit	y/County: Johnston Sampling Date: 4-21-16
Applicant/Owner: Pominion	State: NC Sampling Point: W100 035P-W
Investigator(s): ESI(W. Vaushan, L. Rober) Se	ection, Township, Range: None
Landform (hillslope terrace etc.): draidage	cal relief (concave convex none): Concave Slope (%): 0-3
Earlier (I BB ochi BA): 1 P PP	872 Long -79.32/07 Datum: WGS84
Subregion (LRR of MLRA). <u>LRR I</u> Charles Cost N	NIAN classification: PEO
Soil Map Unit Name: Wch ad Kee - Chastain Ossociati	
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 dis	sturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally proble	ematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing s	ampling 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
NCWAM: Headwater Forest	
HYDROLOGÝ	
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)	
High Water Table (A2)	LRR U) Drainage Patterns (B10)
A Water Marke (B1)	as along Living Roots (C3)
Sediment Deposits (B2)	Iron (C4)
Drift Deposits (B3)	n in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C	7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Ren	narks) 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 Depth (inches):	10
Water Table Present? Yes No Depth (inches):	Via C No No
Saturation Present? Yes <u>No</u> Depth (inches): <u>-</u>	wetland Hydrology Present r Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
2017년 2017년 1월 2017년 2	. 소리는 동안에 집에 가지 않는 것 같은 것이 같이 많이 많이 많이 같이 같이 같이 같이 같이 같이 같이 않는 것이 같이 많이 많이 했다.

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

Sampling Point: Willow 035-----

2-0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>SOFT + 30F+</u>)	% Cover	Species?	Status	Number of Dominant Species > 8
1. Liquidambar Styracifica	30	yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Acar rubrum	_25_	yes	FAC	Total Number of Dominant
3	A LINE STOR	The second second		
4	10000			Percent of Dominant Species > 89
5				That Are OBL, FACW, of FAC (AB)
B		TO PACTOR	Transferra	Prevalence Index worksheet:
(*	1.100.0000.000	Constant of the		Total % Cover of: Multiply by:
8	10			OBL species x 1 =
77 5		= Total Co	/er	FACW species x 2 =
50% of total cover: <u>22</u>	20% of	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: <u>SO4+ x SO4+</u>)	1-		TAC	FACU species x4 =
1. Acer rubrum		yes	FAL	UPL species x 5 =
2. Liquidambar Styrnciflua		-yes	FAC	Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5.	- Ander Lander	A DEAL MARKED	Contraction of the	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7		10.11.11.1		2 - Dominance Test is >50%
8		Colden and		☐ 3 - Prevalence Index is ≤3.0 ¹
	20	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 10	20% of	total cover	: 4	
Herb Stratum (Plot size: 30ft + 30ft)				¹ Indicators of hydric soil and wetland hydrology must
1. Soururus Cernuus	5	no	OBL	be present, unless disturbed or problematic.
2 Carex SP	10	Yes	FACU/OBL	Definitions of Four Vegetation Strata:
3 Chasmanthium laxum	30	yes	FACW	T Westerlaste evaluting vince 2 in (7.6 cm) of
		-(Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
	COT GAMES	No. 12 Martin	THE REAL PROPERTY OF	height.
5	an a part of	Transfer of the second		C - W Charth Weady plants excluding vises less
D				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
1. The same of the second s		Contraction of the	(Start Colorisate)	
8,	-			Herb – All herbaceous (non-woody) plants, regardless
9		1	A CARGO CONTRACTOR	or size, and woody plants less than 5.20 it tan.
10		La Sala su da se		Woody vine - All woody vines greater than 3.28 ft in
11		1999 1997 1998 1998 1999 1999 1999 1999	THE REAL PRIME	height.
12	110		Constant Constant	
	45	= Total Co	ver	a second and the second se
50% of total cover: 22-5	20% of	f total cover	:	
Woody Vine Stratum (Plot size: 30 FF + 30 FF)			tu	
1. Smilax rotunditolia	20	yes	FAC	
2. Vitis rotundifolia	10	yes	FAC	
3. Toxicodendron radicans	15	yes	FAC	
4.	and a stream			
5.				Hydrophytic
	45	= Total Co	ver	Vegetation
50% of total cover: 22,5	20% 0	f total cove	9	Present? Yes V No
Benedice (If sheeping list membelsging) adaptations hole		i total cove		
Remarks: (If observed, list morphological adaptations beid	w).			
	Real Parka Sala	Part Parts and Part	Alexandrasian	