Profile Des	cription: (Describe	to the dep	th nee	ded to docu	ment the i	ndicator	or confirm	n the absence of in	dicators.)
Depth	Matrix	%	Col	Redo or (moist)	ox Feature %		_Loc²	Texture	Remarks
(inches) G-5	10 yr 3/2	100		or (moist)		Type		L	
a de area de la compansión de la compans	ALL STREET, AND ALL STREET, AN	85	10 -	5/4	15	-	m	1c	AND THE RESERVE AND THE PROPERTY OF THE PARTY.
5-20	25,5/1	- 82	1095	0/4	_ /3				
							-		
			1						
			2000						
Type: C=C	Concentration, D=Dep	oletion, RM=	Redu	ced Matrix, M	IS=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL=	Pore Lining, M=Matrix.
lydric Soil	Indicators: (Applic	able to all	LRRs,	unless other	erwise not	ed.)			Problematic Hydric Soils <sup>3</sup> :
Histoso				Polyvalue B					(A9) (LRR O)
THE RESERVE OF THE PROPERTY OF THE PARTY OF	pipedon (A2)			Thin Dark S					(A10) (LRR S) ertic (F18) (outside MLRA 150A,B)
	listic (A3) en Sulfide (A4)		H	Loamy Muc Loamy Gley			(0)		loodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)		T.	Depleted Ma		(-)			Bright Loamy Soils (F20)
	c Bodies (A6) (LRR F	P, T, U)		Redox Dark				(MLRA 1	
	lucky Mineral (A7) (L			Depleted Da				The Control of the Co	t Material (TF2)
	Presence (A8) (LRR L		H	Redox Depr Marl (F10) (		8)			ow Dark Surface (TF12) Iain in Remarks)
	luck (A9) (LRR P, T) ed Below Dark Surfac		H	Depleted O		(MLRA 1	51)	Outer (Exp	
	Dark Surface (A12)	( ,		Iron-Manga			PARTY OF THE PARTY		s of hydrophytic vegetation and
Coast	Prairie Redox (A16) (		A) 🔲	Umbric Surf					hydrology must be present,
	Mucky Mineral (S1) (	LRR O, S)	H	Delta Ochri					disturbed or problematic.
1000 CONTROL C	Gleyed Matrix (S4)		H	Reduced Vo					
	Redox (S5) ed Matrix (S6)							RA 149A, 153C, 15	3D)
	urface (S7) (LRR P,	S, T, U)							
Restrictive	Layer (if observed)	):				and state of			
Type: _									
Depth (i	nches):							Hydric Soil Pre	sent? Yes No
Remarks:									
		in Cartain Bala			in the seal of the	Markett.			



Wetland data point wjoo035f\_w facing west.



Wetland data point wjoo035f\_w facing north.

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

Project/Site: ACP City/C	County: Johnston Sampling Date: 4-21-16
TO THE STATE OF THE PROPERTY O	State: NC Sampling Point: Wigo 035-4
Applicant/Owner: Dominion	State: 100 Sampling Point.
Investigator(s): EST (L. Roper, W. Vaughan Section	on, Township, Range: 710100
Landform (hillslope, terrace, etc.):	relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LR2P Lat: 35, 43864	
Soil Map Unit Name: With ad Kee - chastain association	NWI classification:
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 problems	
SUMMARY OF FINDINGS - Attach site map showing san	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No  Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Access Road - fill material	
Abnormally dry condition	S
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) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  High Water Table (A2)  High Water Table (A2)	IMAS [40] 다 그리시 아이 아이는 것이 많아 이 사이 되는 전기에 들어가 하는데
Saturation (A3)  Hydrogen Sulfide Odor (C	: 19 10 10 10 10 10 10 10 10 10 10 10 10 10
Water Marks (B1) Sediment Deposits (B2) Oxidized Rhizospheres a	#####################################
Drift Deposits (B3)	수선 사람은 사용하는 것이 하는 것이 없는 것이 하는 그 것이 하는 그는 사람들에 들어나면 하는 사람들이 살아내면 하는데 그렇게 되었다. 그렇게 되었다면 그렇게 되었다. 그렇게 되었다면 그렇게
Algal Mat or Crust (B4)  Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	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): _>	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Remarks.	
	A CONTRACTOR OF THE STATE OF TH

Sampling Point: (2)00 035-4 VEGETATION (Four Strata) - Use scientific names of plants. Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: 10 ft 20ft)

Absolute Dominant Indicator % Cover Species? Status

1. None Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species 00 \_ (A/B) That Are OBL, FACW, or FAC: 6. Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_\_ 6 = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_ FAC species \_\_\_\_\_ x 3 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: /off x 2off ) FACU species \_\_\_\_\_ x 4 = \_\_\_\_ 1. None UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = \_\_\_\_\_ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 \_\_\_\_ = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: \_\_\_\_\_ 20% of total cover: \_\_\_\_ Herb Stratum (Plot size: 10ft x 20ft) <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Microstegium Vinineum 10 yes FAC be present, unless disturbed or problematic. 2. Chasman theun laxum 15 yes FACW Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height. 25 = Total Cover 50% of total cover: 12-5 20% of total cover: 5 Woody Vine Stratum (Plot size: 10ft x 20ft ) 1. hone Hydrophytic \_\_\_ = Total Cover Vegetation Yes No \_\_\_\_ Present? 50% of total cover: \_\_\_\_\_ \_ 20% of total cover: \_\_ Remarks: (If observed, list morphological adaptations below). mowed road weeds

	cription: (Describe	to the depth n			dicator	or confirm	the absence of inc	licators.)
Depth (inches)	Matrix Color (moist)  1045 5/4	/00	Red Color (moist)	ox Features%	Type <sup>1</sup>	Loc²	Texture SL	Remarks
Hydric Soil Histoso Histic E Black H Hydrog Stratifie Organic 5 cm M Muck P 1 cm M Deplete Thick D Coast F Sandy Sandy Strippe Dark S	Concentration, D=Dep Indicators: (Applications) I (A1) Indicators: (Applications) I (A1) Indicators: (Applications) Indicators: (A2) Indicators: (A3) Indicators: (A5) Indicators: (A5) Indicators: (A6) (LRR P. T.) Indicators: (A6) (LRR P. T.) Indicators: (A12) Indicators: (A12) Indicators: (A13) (Indicators: (A14) (Indicators: (A15) (Indicators: (A16) (I	able to all LRF [ ] ] ] ] ] ] ] ] ] ] ] [ ] ] [ ] ] [	Rs, unless other Polyvalue B Thin Dark S Loamy Muc Loamy Gley Depleted M Redox Dark Depleted D Redox Dep Marl (F10) Depleted O Iron-Manga Umbric Sur Delta Ochri Reduced V Piedmont F	erwise noted Below Surface Burface (S9) ( ky Mineral (Foundament) yed Matrix (F3) c Surface (F6 ark Surface (F6 ark Surface (F8) (LRR U) chric (F11) (Innese Masses face (F13) (L c (F17) (MLF ertic (F18) (M	d.) e (S8) (L [LRR S, -1) (LRR S, -1) (LRR S) ) (F7) ) MLRA 1: s (F12) (.RR P, T RA 151) MLRA 15: ils (F19)	RR S, T, U T, U) (O) (M) (MLRA 14	Indicators for P  1 cm Muck (	Material (TF2) w Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and hydrology must be present, isturbed or problematic.
Type:	nches):		- - - -	5 1	1	. ,	Hydric Soil Pres	sent? Yes No
				J. neue	2 O/L	C Ti	s gravel t	Dag



Upland data point wjoo035\_u facing east.



Upland data point wjoo035\_u facing south.

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

Project/Site: ACP	City/County: Johns-ton Sampling Date: 6/11/15
Applicant/Owner: <u>Dominion</u>	City/County: <u>Johnston</u> Sampling Date: <u>6/1/15</u> State: <u>NC</u> Sampling Point: <u>wop D36f</u> -w
investigator(s): ESI (Roper, Markham)	Section, Township, Range: NDNC
Landform (hillstope, terrace, etc.): + Cyrace	Local relief (concave, convex, none): NDVX   Slope (%): 0-31
Subregion (LRR or MLRA): LRR P Lat: 35.	44032 Long: -78.32436 Datum: W6584
Soil Map Unit Name: Wehadkee-Chastain ass	
Are climatic / hydrologic conditions on the site typical for this time of y	rear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantl	y disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS - Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Remarks:  Yes No	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Consider to the test of the te
Primary Indicators (minimum of one is required: check all that apply	Secondary Indicators (minimum of two required)
Surface Water (A1)  Aquatic Fauna (E	· · · · · · · · · · · · · · · · · · ·
High Water Table (A2)  Mart Deposits (B	
Saturation (A3) Hydrogen Sulfide	
Water Marks (B1) Coxidized Rhizosp	oheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Red	
	uction in Tilled Soils (C6)
Algal Mat or Crust (B4)  Thin Muck Surface	
Iron Deposits (B5) Unother (Explain in Ingundation Visible on Aerial Imagery (B7)	=/
Water-Stained Leaves (B9)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:	Spriagram moss (Do) (ERR 1, 0)
4	es): NA
Surface Water Present? Yes No Depth (inch. Water Table Present? Yes No Depth (inch.	es): >20
Saturation Present? Yes No Depth (inch (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	
romano.	
}	,

VEGETATION (Four Strata) – Use scientific nai	nes of pi	ants.		Sampling Point:
1705 17 -		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 + x30 + )	<u>% Cover</u>	Species?		Number of Dominant Species -
1. Acer rubrum	20	1	FAC	That Are OBL, FACW, or FAC: (A)
2. Fraxinus Denneylvanica	10	7	FACH	(1)
				Total Number of Dominant
3				Species Across All Strata: (B)
4				<u>-</u>
5				Percent of Dominant Species That Are OBL, FACW, or FAC:   D D (A/B)
				That Are OBL, FACW, or FAC:
6				Prevalence Index worksheet:
7.				
8				Total % Cover of: Multiply by:
	77)	= Total Co	uor.	OBL species x 1 =
16				FACW species x 2 =
50% of total cover: 15	20% of	f total cover	:_ <u></u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: <u>Sリナイメンリテ</u> )				ł
1. Aur robrum	15	No.	FAC	FACU species x 4 =
				UPL species x 5 =
2,				Column Totals: (A) (B)
3				(A)(D)
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 îs ≤3.0¹
	1	= Total Co		
west 6				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	<u>≠</u> 20% o	f total cove	r:	
Herb Stratum (Plot size: 30ft x30ft)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Avundinaria gigantea	7	Y	FACH	be present, unless disturbed or problematic.
2. Wisteria frotescens	<u> </u>	- <del>'\</del>	FACW	
				Definitions of Four Vegetation Strata:
3		<u> </u>		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
				height.
5.				
6				Sapling/Shrub - Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10		_		Woody vine – All woody vines greater than 3.28 ft in
				height.
11 12.		_		, Troight.
				, }
		_ = Total C	over	
50% of total cover:	O 20%	of total cov	er: U	
Woody Vine Stratum (Plot size: 30ft x30ft)				•
	i m	<b>N</b> 1	EWr	
1. Smilax rotundifolia	15		<u> </u>	_
2. Toxilodendron radicans	-5	У	FAC	
3				•
·				-
4.				-
5				- Hydrophytic
	7.0	_ = Total C	`over	Vegetation
1 1	data.		11	Present? Yes No
50% of total cover: 1	<u>√</u> 20%	of total cov	/er:	- 1000m2 163 <u>V</u> 110
Remarks: (If observed, list morphological adaptations be	low).			
the first the first the first term of the first				
İ				

OIL								Sampling Point: 433 F
Profile Desc	ription: (Describe	to the dept	h needed to docum	ent the in	dicator	or confirm	the absence of ind	icators.)
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	K Features	Τγρε¹	Loc <sup>2</sup>	*Tt	Description
O-Z	104/24/z	10 O	COIOI ([[IOISI)	%	туре	LOC*	S; Clay	Remarks
2-6	101/2/1/2	- <del>100</del> -	104 6 94			11		
	10位		_ <u>`</u>	<u> </u>	${}$		SiLohn	****
6-18	10 1K 2V	<u>80                                    </u>		<u> 15</u>	<u> </u>	<u></u>		
			5712416	_5_	<u> </u>	<u> </u>		я
			š 7 š					
Type: C=C	ncentration, D=De	oletion RM=	Reduced Matrix, MS	S=Masked	Sand Gr		<sup>2</sup> l ocation: PI =F	ore Lining, M=Matrix.
			LRRs, unless other			411 10.		roblematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) (L	RR S, T, I		A9) (LRR O)
	oipedon (A2)		Thin Dark Su				2 cm Muck (	A10) (LRR S)
	stic (A3)		Loamy Muck			(O)		rtic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		=2)			oodplain Soils (F19) (LRR P, S, T)
	d Layers (A5) Bodies (A6) ( <b>L</b> RR I	> T II)	Depleted Mar Redox Dark		6)		Anomalous I	Bright Loamy Soils (F20)
_	ucky Mineral (A7) (L	-	=	,	-		11'	Material (TF2)
➡	esence (A8) (LRR		Redox Depre		• /		4 1	w Dark Surface (TF12)
1 cm Mt	uck (A9) (LRR P, T)	•	Marl (F10) (L	.RR U)	•		[·····]	ain in Remarks)
	d Below Dark Surfa	ce (A11)	Depleted Oct				_	
=	ark Surface (A12)		Iron-Mangan				-	of hydrophytic vegetation and
=	rairie Redox (A16) ( Mucky Mineral (S1)		· —			', U)		hydrology must be present,
<b>=</b> '	Gleyed Matrix (S4)	(LKK 0, 3)	☐ Delta Ochric ☐ Reduced Ve			150Β		sturbed or problematic.
	Redox (S5)		Piedmont Flo				-	
<del></del> -	d Matrix (S6)					-	, RA 149A, 153C, 153	D)
	ırface (S7) (LRR P,							,
Restrictive	Layer (if observed	):						-
Туре:								
Depth (in	nches):						Hydric Soil Pres	sent? Yes V No No
Remarks:								
0						**	*	
COI	mpact	EN.	day,	C.C	$l \in \mathcal{U}$	J 1/	n+n	
Marie Marie Marie		• .	Olocy ,		, ,	۷ ⊂ښي	01 0	uger
	ひるす	18,	1					$\cup$
Door	,	10						
	•							
•								



Wetland data point wjop036f\_w1 facing southwest.



Wetland data point wjop036f\_w1 facing southeast.

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

Project/Site: ACP City/C	County: Johnston Sampling Date: 6/11/15
Applicant/Owner: Dominion	State: NC Sampling Point: Wiop036£w
Investigator(s): ESI (Roper, Markham) Section	on, Township, Range: MONE
Landform (hillslope, terrace, etc.): Terrace Local	relief (concave, convex none): VONE Sione (%): 0-31
Subregion (LRR or MLRA): LRP Lat: 35.44	039 Long: 78,32446 Datum: W6589
Soil Map Unit Name: Wehadkee Chastain ass	· · · · · · · · · · · · · · · · · · ·
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 problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	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 apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (	
☐ Water Marks (B1) ☐ Oxidized Rhizospheres ☐ Sediment Deposits (B2) ☐ Presence of Reduced In	
Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced In Recent Iron Reduction in	
Algal Mat or Crust (B4)  Algal Mat or Crust (B4)  Thin Muck Surface (C7)	funcial and the second
Iron Deposits (B5)  Other (Explain in Remai	=
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):	<u>NA</u>
Water Table Present? Yes No Depth (inches):	220
Saturation Present? Yes No 1 Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	revious inspections), if available:
Remarks:	

Sampling Point: wjop 036 f. w2

	Abadula	Dominant	Indiania I	
Tree Stratum (Plot size: 30ft x 30ft)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:
1. Acer rubrum	25	Opecies:	FAC	Number of Dominant Species
		$\rightarrow$		That Are OBL, FACW, or FAC: (A)
2. Fraxinos pennsylvanica	$\underline{\square}$		<u>FACW</u>	Total Number of Dominant
3. <u>Carpinus caroliniana</u>		_/_	FAC	Species Across Ali Strata:
4. Platanus occidentalis	5	$\mathcal{N}$	FACW	
5				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7.				
8				Total % Cover of: Multiply by:
	45	= Total Cov	/er	OBL species x 1 =
50% of total cover: 22	5 20%	total anyon	. 9	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30++ x30++	20 /0 01	IOIAI COVEI		FAC species x 3 =
	176	<b>.</b>	cac	FACU species x 4 =
1. Acer rubrum	10		<u>fac</u>	
2				UPL species x 5 =
3.				Column Totals: (A) (B)
4.				
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6			<del></del>	1 Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8				
	10	= Total Co	uor.	3 - Prevalence Index is ≤3.0¹
50% of total cover:				Problematic Hydrophytic Vegetation¹ (Explain)
	20% o	t total cover	· ———	ļ
Herb Stratum (Plot size: 30+ x 30+)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Avundinaria gigantea	<u> </u>	<u> </u>	FACW	be present, unless disturbed or problematic.
2. Wisteria frutescens	<u> </u>	V	FACIN	Definitions of Four Vegetation Strata:
3.				- The state of the
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5.				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	10	= Total Co	)Ver	
50% of total cover:		of total cove		
	ZU70 (	or total cove	il	
Woody Vine Stratum (Plot size: 30ft x 30ft)	10	5.7	per to a	
1. Smilax rotundifolia	<u> 10</u>	. <u> </u>	<u> FAC</u>	
2.				
3				
4				
5	_			Hydrophytic
	10	_ = Total C	over	Vegetation
50% of total cover:				Present? Yes V No
Remarks: (if observed, list morphological adaptations be				- [
Transina. (ii obaci ved, iist morphological abaptations be	iow).			

UIL								Sampling Point: V
rofile Descriptio	n: (Describe t	o the depth	needed to docu	nent the in	ndicator	or confirm	the absence o	f indicators.)
Depth	Matrix			x Features				·
	olor (maist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
>-20 10	Y241.	90	10/125/4	σl	<i>.</i>	M	Si Clay	
	11-11-		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10				
<del></del>			1					
	-							
			educed Matrix, M			ains.		PL=Pore Lining, M=Matrix.
ydric Soil Indica	ators: (Applica	able to all LF	RRs, unless othe	rwise note	∍d.)		Indicators f	or Problematic Hydric Soils³:
Histosol (A1)			. Polyvalue B	elow Surfa	ce (S8) (L	.RR S, T, L	J) 📙 1 cm Mi	uck (A9) (LRR O)
] Histic Epipedo	on (A2)		Thin Dark S	urface (S9)	(LRR S,	T, U)	2 cm Mi	uck (A10) (LRR S)
Black Histic (A	43)		Loamy Mucl	ky Mineral	(F1) (LRF	R O)		d Vertic (F18) (outside MLRA 150A,
] Hydrogen Sul	fide (A4)		Loamy Gley	ed Matrix (	F2)		L Piedmo	nt Floodplain Soils (F19) (LRR P, S, T
Stratified Laye	ers (A5)		Depleted Ma	atrix (F3)			L Anomal	lous Bright Loamy Soils (F20)
Organic Bodie	es (A6) (LRR P,	, T, U)	Redox Dark	Surface (F	6)		(MLR	A 153B)
	Mineral (A7) (LF		Depleted Da	ark Surface	(F7)		∐ Red Pa	rent Material (TF2)
Muck Present	ce (A8) (LRR U	)	Redox Depr	essions (F	8)			nallow Dark Surface (TF12)
] 1 cm Muck (A	\9) (LRR P, T)		☐ Mari (F10) (	LRR U)			Other (I	Explain in Remarks)
Depleted Belo	ow Dark Surface	e (A11)	Depleted O	chric (F11)	(MLRA 1	51)		
] Thick Dark Sເ	urface (A12)		Iron-Manga	nese Mass	es (F12)	(LRR O, P.	, T) <sup>3</sup> indica	ators of hydrophytic vegetation and
Coast Prairie	Redox (A16) (N	VILRA 150A)	Umbric Sur	ace (F13)	(LRR P,	r, u)		and hydrology must be present.
] Sandy Mucky	/ Mineral (S1) (L	LRR O, S)	Delta Ochri	c (F17) (MI	RA 151)			ess disturbed or problematic.
Sandy Gleye	d Matrix (S4)		Reduced Vo	ertic (F18)	(MLRA 1	50A, 150B		·
Sandy Redox	(S5)		Piedmont F	loodplain S	Soils (F19	) (MLRA 1-	49A)	
🗍 Stripped Matı	rix (S6)		Anomalous	Bright Loa	my Soils	(F20) (MLF	RA 149A, 153C,	, 153D)
Dark Surface	(S7) (LRR P, S	3, T, U)		-	-			•
Restrictive Laye								
Туре:							}	
							I lived at a Codi	Present? Yes No
	):						Hydric Soil	Present? Yes No
Remarks:								



Wetland data point wjop036f\_w2 facing west.



Wetland data point wjop036f\_w2 facing north.

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

Project/Site: ACP	City/County: Johnston Sampling Date: 611115
Applicant/Owner: Dominion	State: NC Sampling Point: Wjop 036-CA
Investigator(s): EST (Roper, Markham)	Section, Township, Range: VOVI f
	Local relief (concave, convex, none): NONC Slope (%): 0 -3 1
Subregion (LRR or MLRA): LRR P Lat: 35.	. 44036 Long: -78.32440 Datum: W1584
Soil Map Unit Name: Networker-Chastain	association NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	•
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Remarks:	Is the Sampled Area within a Wetland? Yes No
gravel road	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply  Surface Water (A1)  Aquatic Fauna (B	
High Water Table (A2)  Marl Deposits (B	
Saturation (A3) Hydrogen Sulfide	
☐ Water Marks (B1) ☐ Oxidized Rhizosp ☐ Sediment Deposits (B2) ☐ Presence of Red	cheres along Living Roots (C3) Dry-Season Water Table (C2)  Luced Iron (C4) Crayfish Burrows (C8)
	uction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	· · · · · · · · · · · · · · · · · · ·
Iron Deposits (B5) Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes NoDepth (inch	es): N/A
Water Table Present? Yes No Depth (inch	es): \( \sum_{0.5} \)
Saturation Present? Yes No Depth (inch (includes capillary fringe)	· · · · · · · · · · · · · · · · · · ·
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks: # could not auger through grav fill surface approx. 2ft	above adjacent wetland surface

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

- 20217 (Four Otrata) - 030 300 mile hai		Sampling Point: **3" ["
Tree Stratum (Plot size: 30ft x30ft)	Absolute Dominant Indicator	Dominance Test worksheet:
	% Cover Species? Status	Number of Dominant Species
1. <u>Mone</u>		That Are OBL, FACW, or FAC:
2.		
2		Total Number of Dominant
3		Species Across All Strata: 2 (B)
4.		D-11. ( D ) 1 ( D )
5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
		That Are OBL, FACW, or FAC: 100 (A/B)
6		Prevalence Index worksheet:
7.		1
8		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 =
		FACW species x 2 =
50% of total cover:	20% of total cover:	
Sapling/Shrub Stratum (Plot size: 30++ x 30++)		FAC species x 3 =
· MANP		FACU species x 4 =
		UPL species x 5 =
2,		
3.		Column Totals: (A) (B)
4		
		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6.		1_Rapid Test for Hydrophytic Vegetation
7.		
		2 - Dominance Test is >50%
8,		3 - Prevalence Index is ≤3.01
	O = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of total cover:	· · · · · · · · · · · · · · · · ·
Herb Stratum (Plot size: 30ft x 30ft)		
	1 V 501	Indicators of hydric soil and wetland hydrology must
1. Persicaria hydropiperoides	2 Y OBL	be present, unless disturbed or problematic.
2. Bidens frondosa	/ N FACH	Definitions of Four Vegetation Strata:
3. Boehmeria cylindrica	2 Y, FACW	- The state of the
		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Microstegium vimineum	N_FAC_	more in diameter at breast height (DBH), regardless of
5		height.
6,		Sapling/Shrub - Woody plants, excluding vines, less
7.		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Horb All harbana and ( unactivativativativativativativativativativa
		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		of size, and woody plants less than 3.26 it tall.
10.		Woody vine - All woody vines greater than 3.28 ft in
11,		height.
12		.
		• ]
0	= Total Cover	TO THE TOTAL CONTRACTOR OF THE
50% of total cover: 3	20% of total cover:	
Woody Vine Stratum (Plot size: 30-ft x 30-ft)		
1. none		-
2		
3.		`
		-
4		_
5.		12 - 1 - 1 - 1
	0 =	- Hydrophytic
	= Total Cover	Vegetation Present? Yes No
50% of total cover:	20% of total cover:	Present? Yes No No
Remarks: (If observed, list morphological adaptations be	low)	
the second of the business and broken and br		
}		
7		

Depth	iption: (Describe to Matrix	aspell		Features			
nches)	Color (moist)	%	Color (moist)		Loc <sup>2</sup> Te	exture _	Remarks
dric Soil In Histosol ( Histic Epi Black His Hydroger Stratified Organic E 5 cm Muc Muck Pre 1 cm Muc Depleted Thick Da Coast Pre	pedon (A2)	to all L T, U) R P, T, U) (A11) LRA 150A)	RRs, unless other Polyvalue Bel Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Oct Iron-Mangan Umbric Surfa	wise noted.) flow Surface (S8) (LR S, T, face (S9) (LRR S, T, Mineral (F1) (LRR C) d Matrix (F2) rix (F3) Surface (F6) k Surface (F7) ssions (F8) RR U) nric (F11) (MLRA 151 ese Masses (F12) (L ce (F13) (LRR P, T,	In (R S, T, U) (F) (F) (F) (F) (F) (F) (F) (F) (F) (F	dicators f  1 cm Mi 2 cm Mi Reduce Piedmo Anomal (MLR Red Pa Very St Other (i	PL=Pore Lining, M=Matrix.  for Problematic Hydric Soils <sup>3</sup> :  uck (A9) (LRR O)  uck (A10) (LRR S)  ed Vertic (F18) (outside MLRA 150A  ont Floodplain Soils (F19) (LRR P, S,  lous Bright Loamy Soils (F20)  (A 153B)  arent Material (TF2)  hallow Dark Surface (TF12)  Explain in Remarks)  ators of hydrophytic vegetation and land hydrology must be present,
Sandy G Sandy R Stripped Dark Sur	leyed Matrix (S4) edox (S5) Matrix (S6) face (S7) (LRR P, S,		Reduced Ver	(F17) (MLRA 151) tic (F18) (MLRA 150 oodplain Soils (F19) ( Bright Loamy Soils (F	VILRA 149A)		ess disturbed or problematic.
	.ayer (if observed):						
Type: Depth (inc	ches):	10			Н	ydric Soil	Present? Yes No
emarks:					<u> </u>		
gr	road surf	oad	, Loulc	l not ately 2ft	abovi	er e ad	to evaluate jacent wetlands



Upland data point wjop036\_u facing southwest.



Upland data point wjop036\_u facing northeast.

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

Project/Site: ACP	City/County: Johnston Sampling Date: 6/1115
Applicant/Owner: Dominian	State: NC Sampling Point: wiop 0356.
14 11 11	Section, Township, Range: NA
Landform /hillstone terrace etc.): Terrace	Local relief (concave convey page): CONCAVE Clare (84): 5%
Subragion (I BB or MI BA): LBRP	4310885 1 - 78 33112 Stope (%).
Soil Map Unit Name: Chewa Cla loam, fr	.43685 Long: -78.33112 Datum: NGS 84
on map office teastor.	The state of the s
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantle	•
Are Vegetation, Soil, or Hydrology naturally p	oroblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesNo	- Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No No	-
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2)  Saturation (A3)  Hydrogen Sulfide	The state of the s
	pheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
<del>                                    </del>	uction in Tilled Solls (C6) Saturation Visible on Aerial Imagery (C9)
Algai Mat or Crust (B4)  Thin Muck Surfa	<u> </u>
Iron Deposits (B5) Other (Explain in	
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:	The Springfilm moss (Do) (ERR 1, 0)
Surface Water Present? Yes No Depth (inch	ies): NA
Water Table Present? Yes No Depth (inch	ies): > 20
Saturation Present? Yes No Depth (inch	nes): >20 Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos previous inspections), if available:
become recorded bata (shearn gauge, morntoning west, defias pr	iotos, previous hispections), ii available.
Remarks:	
	i

GETATION (Four Strata) - Use scientific na		Dominant	Indicator	Sampling Point: woods
ee Stratum (Plot size: 30ft x30ft)		Species?		Dominance Test worksheet:
Fraxinus pennsylvanica	20	Y	FACW	Number of Dominant Species That Are OBL FACW or FAC:
Acerrubrum	40	7	FAC	That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant
Quercus Pagoda	_30_	<u> </u>	<u>FACW</u>	Species Across Ali Strata: (B)
Liquidambar styraciflux	10	<u>N</u>	FAC	
· /				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				That Are OBL, FACW, or FAC: 100 (A/B)
				Prevalence Index worksheet:
			<del></del>	Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
50% of total cover: 5	O 20% of	total cover	20	FACW species x 2 =
pling/Shrub Stratum (Plot size: 30f+ x30f+)	<del></del>			FAC species x 3 =
Acer rubrom	20	V	FAC	FACU species x 4 =
Nussee Lift of				
Nyssa biflora			OBL	UPL species x 5 =
Quercus phellos	10_		FACW	Column Totals: (A) (B)
ž				
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				☐ 1 Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
, and the second	_			3 - Prevalence Index is ≤3.0¹
		= Total Co	ver	
50% of total cover: 2				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
erb Stratum (Plot size: 30 ft x 30 ft)	20/6 0	i total covel		
	1	\ \	001	Indicators of hydric soil and wetland hydrology must
Carex glaucescens	<u> </u>		OBL	be present, unless disturbed or problematic.
	_			Definitions of Four Vegetation Strata:
				_
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
			·	height.
				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				Herb - All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
)			- <u> </u>	Woody vine - All woody vines greater than 3.28 ft in
-				height.
2.				
		_ = Total Co	wer	
		_		
50% of total cover:	<u>1</u> 20% (	of total cove	er: <u>U, T</u>	
(Plot size: 30ft x30ft)				
Vitis rotundifolia	2	Y	FAC	
		- <del></del>		
				·
				. ]
				.
·				Hydronhydia
	Z	= Total C	over	- Hydrophytic Vegetation
	. ——	_		Present? Yes No
50% of total cover:	20%	of total cov	er: <u>U\ 7</u>	162 140
emarks: (If observed, list morphological adaptations b	elow).		-	1
	¥.			

Sampling Point: word 354...

	cription: (Describe	to the depth				or confirm	n the absence of indi	icators.)
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	x Features %	Type <sup>1</sup>	_Loc²	Toytura	Domesto
0-8	1078 5/4	- <u>70                                    </u>	GOIOI (IIIUISI)		TANE	LUG	Texture 	Remarks
8-16	10YR5/2		oei 27 D					<del>-</del>
	<del></del>	<u>-60</u> -	10 YR 5/6	<u> 40 </u>		<u></u>	Si, Clay	
16-20	1048 5/1	<u> 90 </u>	10 YR 5/6	10		<u> </u>	5ì C	
1								
	oncentration, D=Deplicators: (Applicators)					ains.	*Location; PL=P	ore Lining, M=Matrix.
1		rable to all L			•	DD 0 T		oblematic Hydric Soils³:
Histosol	pipedon (A2)		Polyvalue Be Thin Dark Su				· — ·	
I ===	istic (A3)		Loamy Muck				2 cm Muck (A	tic (F18) (outside MLRA 150A,B)
_	en Sulfide (A4)		Loamy Gleye			` ` ' '		odplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma		,			Bright Loamy Soils (F20)
	Bodies (A6) (LRR I	P, T, U)	Redox Dark		<del>-</del> 6)		(MLRA 153	
5 cm Mi	ucky Mineral (A7) (L	RR P, T, U)	Depleted Da					Material (TF2)
	resence (A8) (LRR I		Redox Depre		8)			/ Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (L				U Other (Expla	in in Remarks)
,	d Below Dark Surfa	ce (A11)	Depleted Oc					
_	ark Surface (A12)	/881 D.A. 450 A	Iron-Mangan					of hydrophytic vegetation and
	Prairie Redox (A16) ( Mucky Mineral (S1) (		· -					ydrology must be present,
	Gleyed Matrix (S4)	(LKK O, S)	Delta Ochric Reduced Ve					sturbed or problematic.
	Redox (S5)		Piedmont Flo					
	d Matrix (S6)						.707, .RA 149A, 153C, 153[	0)
	urface (S7) (LRR P,	S, T, U)		<b>3</b>	,	·/ ·		-,
Restrictive	Layer (if observed	):						
Type:			·					/
Depth (ir	nches):						Hydric Soil Pres	ent? Yes No
Remarks:								
1								
-								
1								



Wetland data point wjop035f\_w facing south.



Wetland data point wjop035f\_w facing east.

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

A - m
Project/Site: ACP City/County: Johnston Sampling Date: 411113
Applicant/Owner: Dominion State: NC Sampling Point: wipp 035 a
Investigator(s): ESI (Roper, Markham) Section, Township, Range: none
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 0-31
Subregion (LRR or MLRA): LRR P 1at: 35, 43696 1000: -) 8,33112 Datum: \N/\sigma 1884
Soil Map Unit Name: Chewacla loan, frequently flooded NWI classification: NA
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 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? Hydric Soil Present? Wetland Hydrology Present? Yes No Wetland Hydrology Present? Remarks:  Is the Sampled Area within a Wetland? Yes No
gravel road through swamp
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Soit 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)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Drift Deposits (B3)  Presence of Reduced Iron (C4)  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): NA  Water Table Present? Yes No Depth (inches): 270*
Water Table Fleschit Tes No Deptit (Inches).
Saturation Present? Yes No Depth (inches): > \(\frac{1}{2}\) Wetland Hydrology Present? Yes No \(\frac{1}{2}\)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
# could not auger through gravel road, hydrology based on road fill surface approx. 3ft above adjacent wetland surface.
approx. 3ft above adjacent wetland surface.

Sampling Point: Wjop035\_

5. C1 - C1	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x30f4)	% Cover Species? Status	Number of Dominant Species
1. <u>Novie</u>		That Are OBL, FACW, or FAC:(A)
2.		
3		Total Number of Dominant
		Species Across All Strata: (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7	· :	
8		Total % Cover of: Multiply by:
	= Total Cover	OBL species x1=
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3014 x 3014)		FAC species x 3 =
		FACU species x 4 =
		UPL species x 5 =
2		1
3		Column Totals: (A) (B)
4		Providence Index = R/A =
5		Prevalence Index = B/A =
6		Hydrophytic Vegetation Indicators:
		Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0 <sup>1</sup>
	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 3047 x 3047)		Indicators of hydric call and calls and to duly
1. Boehmeria cylindrica	2YFACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Persicaria hydropiperoides	TOBE	
		Definitions of Four Vegetation Strata:
3. Conyza canadensis	Z Y FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
5		height.
6		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tail.
10		Woody vine - All woody vines greater than 3.28 ft in
11.		height.
12		
	= Total Cover	
50% of total cover:3		
Woody Vine Stratum (Plot size: 30f+ x30f+)	ZU /0 OI (OIGI COVEL, 1 *	
1 hm . A		
1. VIONE		
2.		
3.		
4		
5.		•
٥-		Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes V No No
Remarks: (If observed, list morphological adaptations be	elow).	
	-	
1		

oth Matrix ches) Color (moist)	Redox F % Color (moist)	eatures  % Type¹ Loc²	Texture	Remarks
Histosol (A1) Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratifled Layers (A5) Organic Bodies (A6) (LRR 5 cm Mucky Mineral (A7) (I Muck Presence (A8) (LRR 1 cm Muck (A9) (LRR P, T Depleted Below Dark Surfa Thick Dark Surface (A12) Coast Prairie Redox (A16) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4)	Thin Dark Surfa Loamy Mucky M Loamy Gleyed Depleted Matrix Redox Dark Su Redox Dark Su Redox Depress Marl (F10) (LR Depleted Ochri Iron-Manganes (MLRA 150A) Unbric Surface Reduced Vertic	ise noted.)  w Surface (S8) (LRR S, T, U)  wineral (F1) (LRR O)  Matrix (F2)  x (F3)  urface (F6)  Surface (F7)  sions (F8)  R U)  c (F11) (MLRA 151)  ise Masses (F12) (LRR O, Pe  c (F13) (LRR P, T, U)  c (F18) (MLRA 151)  c (F18) (MLRA 151)  c (F18) (MLRA 151)	2 cm Muck (A10) ( Reduced Vertic (F Piedmont Floodpla Anomalous Bright (MLRA 153B) Red Parent Mater Very Shallow Darl Other (Explain in I) , T)  3Indicators of hywetland hydrol unless disturbed	matic Hydric Soils <sup>3</sup> : .RR 0) (LRR S) (18) (outside MLRA 150A,Eain Soils (F19) (LRR P, S, T Loamy Soils (F20) ial (TF2) < Surface (TF12)
Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR Postrictive Layer (if observed Type:	Anomalous Bri , S, T, U)	dplain Soils (F19) (MLRA 1 ght Loamy Soils (F20) (MLI	RA 149A, 153C, 153D)	
Depth (inches): marks:	, , , , , , , , , , , , , , , , , , ,		Hydric Soil Present?	Yes No
gravel ro	ad, could not	t auger,	road surface 3ft abou	e is approx. le Wetland



Upland data point wjop035\_u facing southwest.

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

Project/Site: ACP C	City/County: Johnston Sampling Date: 6111/15
Applicant/Owner: Dorning	State: NC Sampling Point: wib p D34f- w
Investigator(s): ESI [Roper, Markham) s	Section, Township, Range: None
Landform (hillslope, terrace, etc.): +evrace L	ocal relief (concave, convex, none): nove Slope (%): 0-3'/.
Subregion (LRR or MLRA): LRP P Lat: 35,	43695 Long: -78.33117 Datum: W6584
Soil Map Unit Name: Chewalla loam, freau	
Are climatic / hydrologic conditions on the site typical for this time of yea	ır? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly of	
Are Vegetation, Soil, or Hydrology naturally prot	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?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B15) High Water Table (A2) Marl Deposits (B15)	
Saturation (A3)  Hydrogen Sulfide C	· · · · · · · · · · · · · · · · ·
Water Marks (B1) Oxidized Rhizosphe	eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	tion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface  Other (Explain in R	
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	): <u>NH</u>
Water Table Present? Yes NoDepth (inches	): 320
Saturation Present? Yes No Depth (inches (includes capillary fringe)	s): >20   Wetland Hydrology Present? Yes _ No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	

Sampling Point: Wiop034£w

- Use scientific flat					pling Point: 🔼 🔾	
Tree Stratum (Plot size: 30ft x30ft)		Dominant		Dominance Test worksheet:		
1. Acer rubrum	<u> </u>	Species?	PAC.	Number of Dominant Species That Are OBL, FACW, or FAC:	7	(A)
2. Quercus pagodo	_5	<u> </u>	FACW	Total Number of Dominant	-	. ,
3. Populus heterophylla	5	<u> </u>	<u>0BL</u>	Species Across All Strata:	<del></del>	(B)
4 5				Percent of Dominant Species	100	(A (D)
6.				That Are OBL, FACW, or FAC:		(A/B)
7				Prevalence Index worksheet:		
8	-70			Total % Cover of: ; OBL species ;		
50% of total cover: 12.5	<u></u>	= Total Cov	er Ç	FACW species		
50% of total cover: 1 <u>1 とい</u> Sapling/Shrub Stratum (Plot size: <u>30 日 入30日</u> )	<u>~</u> 20% of	total cover		FAC species		
1. Acer rubrum	15	4	EAr	FACU species		
2. Ulmus rubra	3	<u>`\</u>	FAC	UPL species	x 5 =	
3.			-	Column Totals: (	(A)	(B)
4,				Prevalence Index = B/A	<del></del>	
5				Hydrophytic Vegetation India		
6				1 - Repid Test for Hydroph		
7				2 - Dominance Test is >50	-	
8				☐ 3 - Prevalence Index is ≤3	.0 <sup>1</sup>	
50% of total cover:		= Total Co		Problematic Hydrophytic V	egetation¹ (Expl	ain)
Herb Stratum (Plot size: 30ft x30ft)	20% 0	total cover	: <u> </u>			
1. Care x turgescens	30	Y	OBL	<sup>1</sup> Indicators of hydric soil and w be present, unless disturbed o	etland hydrology r problematic.	must
2. Avundinaria gigaritea	5	N.	FACW	d	· · · · · · · · · · · · · · · · · · ·	
3. Bochmeria cilindrica	TD	N	FACW			
4. Rubus hispidas	5	N	FACW	Tree – Woody plants, excludir more in diameter at breast hei		
5. Carex glaucescens	3_	_ <u>N</u>	OBL	height.		
6. Toxicodenerous radicars 7.	5_	<u> </u>	FAC	Sapling/Shrub – Woody plant than 3 in. DBH and greater tha	ts, excluding vine an 3.28 ft (1 m) ta	es, less
8				Herb - All herbaceous (non-w	voody) plants, reg	gardless
9				of size, and woody plants less		
11.			-	Woody vine – All woody vine height.	s greater than 3.3	28 ft in
12.	48	_ = Total Co				
50% of total cover: 29			er: 11.6			
Woody Vine Stratum (Plot size: 30 Ft x 30 ft)						
1. Smilax rotundifolia	<u>40</u>		FAC			
2. Vitis rotundifolia	10		FAC			
3				.		
4				-		
5		-		- Hydrophytic	,	
		_ = Total C		Vegetation	/	
50% of total cover: 25	<u> </u>	of total cov	er: <u>10</u>	Present? Yes	No	-
Remarks: (If observed, list morphological adaptations be						

1	ription: (Describe	to the depti	needed to docur	nent the i	ndicator	or confirm	the absence of in	dicators.)
Depth (inches)	Matrix Color (moist)	<del></del>	Redo Color (moist)	x Features		Loc <sup>2</sup>	Tandona	D 1:
D-6	10 YR 4/n	60	IDYR 4/6	40	Type'	Loc_	Texture	Remarks
	10/6/15		10/K 16	<del></del>			Si Clay	
6-20	1011-12	<u> 70</u> .	IOYRY	30	<u> </u>	<u>M</u>	<u>sicky</u>	
						****		
			***************************************					
¹Type: C=Co	oncentration, D=Dep	letion, RM=I	Reduced Matrix, M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL=I	<sup>⊃</sup> ore Lining, M≃Matrix.
Hydric Soil I	ndicators: (Applic	able to all L	.RRs, unless othe	rwise note	ed.)		Indicators for F	roblematic Hydric Soils³:
Histosol			Polyvalue Be				J) 📙 1 cm Muck	(A9) (LRR O)
	oipedon (A2)		Thin Dark St					(A10) (LRR S)
	stic (A3)		Loamy Muck			(O)		ertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley		F2)			loodplain Soils (F19) (LRR P, S, T)
	d Layers (A5) Bodies (A6) (LRR F	T 11\	Depleted Ma		:e\			Bright Loamy Soils (F20)
	rcky Mineral (A7) (LI		Depleted Da	-			(MLRA 18	Material (TF2)
	esence (A8) (LRR L		Redox Depre					w Dark Surface (TF12)
	ıck (A9) (LRR P, T)	•	Marl (F10) (I		٠,			ain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)		
	ark Surface (A12)		Iron-Mangar				T) <sup>3</sup> Indicators	of hydrophytic vegetation and
	rairie Redox (A16) (					', U)	wetland	hydrology must be present.
	Nucky Mineral (S1) (	LRR O, S)	Delta Ochrid					listurbed or problematic.
	Sleyed Matrix (S4)		Reduced Ve					
	Redox (S5) I Matrix (S6)		Piedmont Fi					
	rface (S7) (LRR P,	S T 11)	☐ Anomaious	Bright Loa	my Sons i	(ML)	RA 149A, 153C, 153	3D)
Restrictive	Layer (if observed)	· · · · · · · · · · · · · · · · · · ·					<del></del>	
Type:	<b>-</b> uj 0: (// 0000: 700/	.•						
	ches):						Houses Call Day	
Remarks:							Hydric Soil Pre	sent? Yes V No
Remarks.								
,								
}								
1								
į								



Wetland data point wjop034f\_w facing southwest.



Wetland data point wjop034f\_w facing northeast.

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

Project/Site: ACP City/County: Johnston sampling Date: 6111/15
Applicant/Owner: Dominion State: NC Sampling Point: wjo p D34_L
Investigator(s): ESI (Roper, Markham) Section, Township, Range: MONE
Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Nove Slope (%): 0-31
Subregion (LRR or MLRA): LPP Lat: 35,43694 Long: -78,33115 Datum: W6584
Soil Map Unit Name: Chewalca loam, Frequently floodently classification: NA
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 Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Yes No Is the Sampled Area  Hydric Soil Present?  Yes No Vegetation Present?  Yes No Vegetation Present?  Wetland?  Yes No Vegetation Present?
Wetland Hydrology Present? Yes No Within a Wetland? Yes No
Remarks:
gravel road
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)  Mari Deposits (B15) (LRR U)  Drainage Patterns (B10)  Hydrogen Sulfide Odor (C1)  Moss Trim Lines (B16)
Saturation (A3)  Hydrogen Sulfide Odor (C1)  Water Marks (B1)  Hydrogen Sulfide Odor (C1)  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)
Surface Water Present? Yes No Depth (inches):
Water Table Present?  Yes No Depth (inches): >20 *
Saturation Present? Yes No Depth (inches): >20 * Wetland Hydrology Present? Yes No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Remarks: * could not auger through gravel road, hydrology based on road fill surface approx. 3 ft. above adjacent wetland surface
annox. 3 ft. above adjacent wetland surface

10pD34\_n

EGETATION (Four Strata) – Use scientific nan	nes or pr	anto.	Sampling Point: WJ 97
- 20C+ - 20C+		Dominant Indicator	Dominance Test worksheet:
T <u>ree Stratum</u> (Plot size: <u>3の什 x 3の针</u> ) 1. <u>いのいと</u>		Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2.			Total Number of Description
3			Total Number of Dominant Species Across All Strata: (B)
			· · · · · · · · · · · · · · · · · · ·
			Percent of Dominant Species That Are OBL, FACW, or FAC: 301. (A/B)
			That Are OBL, FACW, or FAC: 301. (A/B)
			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
	0	= Total Cover	OBL species x1 =
50% of total cover:		total cover:	OBL species x 1 = FACW species
apling/Shrub Stratum (Plot size: 30ff x30ff)	207001	total cover.	FAC species x 3 =
· none			FAC species x 3 = FACU species x 4 = l 6
			UPL species x 5 =
•			Column Totals: (A) 20 (B)
			Prevalence Index = B/A = 3.33
\			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0¹
	_ O	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover:	LT Problematic Hydrophylic vegetation (Explain)
lerb Stratum (Plot size: 30ft x30ft)	<del></del>		Stantington of trustein - 19 and on the state of the stat
1. Boehmeria cylindrica	2	Y FACY	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
. Ambrosia artemisiifolia	-	V FACU	Definitions of Four Vegetation Strata:
. Conyza canadensis	2	FACU	_
			more in diameter at breast height (DBH), regardless of
5,			height.
			Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
3,			Herb – All herbaceous (non-woody) plants, regardless
)			of size, and woody plants less than 3.28 ft tall.
10.			Woody vine – All woody vines greater than 3.28 ft in
11		-	height.
12.			
		= Total Cover	
50% of total cover: 3			
Woody Vine Stratum (Plot size: 30ft x30ft)		<del></del>	
1. none			- - - -
2.	-		.
			-
3			-
4			·
0.			- Hydrophytic
		_ = Total Cover	Vegetation Present? Yes No
50% of total cover:			rresenti tes NO *

Depth _	Matrix	h needed to document the indicator or confin Redox Features	• •
(inches)	Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
·			
			The second secon
		Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
iydric Soil Ind	icators: (Applicable to all I	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A	•	Polyvalue Below Surface (S8) (LRR S, T,	U) 1 cm Muck (A9) (LRR O)
Histic Epipe	• •	Thin Dark Surface (S9) (LRR S, T, U)	
Black Histic	• •	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B
	Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T
Stratified L		Depleted Matrix (F3)	L Anomalous Bright Loamy Soils (F20)
<del>-</del>	dies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
	y Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
	ence (A8) (LRR U)	Redox Depressions (F8)	☐ Very Shallow Dark Surface (TF12)
	(A9) (LRR P, T) elow Dark Surface (A11)	Mari (F10) (LRR U)	L Other (Explain in Remarks)
	Surface (A12)	Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR 0, 1	The 3Indicators of business button and attended
<del></del>	ie Redox (A16) (MLRA 150A	Tanana and a same and a same and a same a	,
	cky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	wetland hydrology must be present, unless disturbed or problematic.
_	yed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150I	
Sandy Red		Piedmont Floodplain Soils (F19) (MLRA	•
Stripped M	•	Anomalous Bright Loamy Soils (F20) (MI	•
<del></del> ''	ce (S7) (LRR P, S, T, U)		
	yer (if observed):	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Type:			
			Hydric Soil Present? Yes No
• • • • • • • • • • • • • • • • • • • •	es):	<del></del>	Try dric con Fresenti Tes No
Depth (inch	es):		
Depth (inche Remarks:			
Depth (inche Remarks:		1 0001	
Depth (inche Remarks:		d, coold not a	Vae.c
Depth (inche Remarks:		d, coold not a	uger
Depth (inche Remarks:		d, coold not a approx. 3 ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3 ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3 ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3 ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3 ft. above	wetland.
Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
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Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
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Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3ft. above	uger wetland.
Depth (inche Remarks:		d, coold not a approx. 3ft. above	wetland.
Depth (inche temarks:		d, coold not a approx. 3ft. above	wetland.



Upland data point wjop034\_u facing southwest.

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

Project/Site: ACP City/C	County: Tohnston Sampling Date: 4/21/16				
Applicant/Owner: Dominion	State: NC Sampling Point: W1000366				
Investigator(s): EST (L. Roper, W. Vaushan Secti					
Landform (hillstone terrace etc.): (Its. 1994)	I relief (concave, convex, none): Con Cave Slope (%): 0-3				
	2 Long: -78.32.565 Datum: WGS84				
Soil Map Unit Name: Chewacla loam 0-2% S					
Are climatic / hydrologic conditions on the site typical for this time of year?	병원 회원 등에 가장하는 이번 시간에 살아가는 일반이 있다면 살아가는 살아가지 않는데 가장 보이지 않는데 사람들이 되었다면 살아 되었다면 살아 나를 하는데 그 나를 하는데 되었다.				
Are Vegetation, Soil, or Hydrology significantly distu					
Are Vegetation, Soil, or Hydrology naturally problem	atic? (If needed, explain any answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map showing sar	npling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No	Is the Sampled Area within a Wetland?  Yes No				
NCWAM: Bottomland Hardwood					
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)  R U)  Drainage Patterns (B10)				
High Water Table (A2)  Saturation (A3)  Hydrogen Sulfide Odor (	(g)				
Water Marks (B1) Oxidized Rhizospheres	. 그런 선생님은 그리는 하는데 얼마는 그는데 이번 전 요즘 이번 점점 ### 이렇게 보고 ### 이렇게 하는데 보고 ###################################				
Sediment Deposits (B2)	(1) 전통 이 전문 이 전문 전투 보다 보다 보고 있는데 이 그는 경우에서 생각하다 생각하다 하는데 이 전문에 대한 경우를 하는데 되었다. 그는 사람이 되었다고 있다.				
Drift Deposits (B3)	(B. 1971 - 1945 - 1975				
Algal Mat or Crust (B4)	Geomorphic Position (D2)				
☐ Iron Deposits (B5) ☐ Other (Explain in Remar	ks)				
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)				
Field Observations:					
Surface Water Present? Yes No Depth (inches):	)V				
Water Table Present? Yes No Depth (inches):	20 in				
Saturation Present? Yes Vo Depth (inches): 6 with Wetland Hydrology Present? Yes No No					
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:				
Remarks:					

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

- C C	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30ft x 30ft)  1. Acer rubrum	% Cover 25	Species?	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
	15	Ves	FACU			
3. Lianidanbar Straciflua	20	ves	FAC	Total Number of Dominant	4	(B)
THE DESIGNATION OF THE WAY TO SHOW THE THE TRANSPORT OF THE PARTY OF T		and the street	170	Species Across All Strata:		. (6)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: _	75	(A/B)
6.				Prevalence Index worksheet:		
7.					Multiply by:	
8.				DAL COLORS DE L'ONNE DEL MAN DE L'ANNE DE L'AN		5147 Z (C) JR
		= Total Co		OBL species x 1 :		120
50% of total cover: 30	20% of	total cover	: 12	FACW species x 2		THE PARTY OF THE PARTY.
Sapling/Shrub Stratum (Plot size: 30ft x30ft )				FAC species x 3		STATE OF THE STATE
1. None				FACU species x 4		
2.				UPL species x 5	=	_
				Column Totals: (A)		_ (B)
		Translation of the same				
4.	MODERNA MATERIA			Prevalence Index = B/A = _	and the second second second second	-
5.				Hydrophytic Vegetation Indicato		
6.				- Rapid Test for Hydrophytic	Vegetation	
7. According to the control of the c				2 - Dominance Test is >50%		
8.		Total State State	61 Act 120 Etc.	3 - Prevalence Index is ≤3.01		
[ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [	_ 6			Problematic Hydrophytic Vege	tation1 (Expla	ain)
50% of total cover:	20% of	total cover	;			
Herb Stratum (Plot size: 30f4 ×30f4 )				<sup>1</sup> Indicators of hydric soil and wetlan		must
1. none		Market Service	100	be present, unless disturbed or pro	blematic.	
2.				Definitions of Four Vegetation S	trata:	
3.				Tree - Woody plants, excluding vii	nos 3 in /7 f	cm) or
4.				more in diameter at breast height (	DBH), regard	dess of
5.				height.		
[[사용자] 1945년 1일 : 1945년 1947년 1947년 1947년 19				S War IShark Wheely sleets of	veluding vino	e loce
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-wood) of size, and woody plants less that	y) plants, rega	ardless
9.				of size, and woody plants less than	1 J.20 It tall.	
10.		To the break		Woody vine - All woody vines gre	ater than 3.2	8 ft in
		The second		height.		
12.		11861				
		= Total Co	ver	The state of the s	(58% ***5750*	
50% of total cover:	20% of	total cover				
Woody Vine Stratum (Plot size: 30f+ x 30f+ )						
1. Smilex rotundifolia	15	ves	FAC			
2.						
3.	317 57 - 14 31					
5.			(100)			
	15	= Total Co		Hydrophytic Vegetation		
75	Server and Server and Advanced to the		2	Present? Yes	No	
50% of total cover: 7.5	AND DESCRIPTION OF THE PERSON	total cove	r:	The second secon		
Remarks: (If observed, list morphological adaptations belo	w).					

Depth (inches)         Matrix         Redox Features           Color (moist)         %         Color (moist)         %         Type¹         Loc²           6-20         7.5 y 5/l         85         7.5 y 5/l         15         C         M	Texture Remarks
	LC
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B) Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  T)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Stripped Matrix (S6)  Anomalous Bright Loamy Soils (F20) (MLR	



Wetland data point wjoo036f\_w facing south.



Wetland data point wjoo036f\_w facing west.

Project/Site: ACP City/County: Tohnston Sampling Date: 4-21-16	
아일에는 아이들의 아이들은 아이들은 아이들은 아이들은 아이들은 아이들은 아이들은 아이들은	ч
Applicant/Owner: Dominion State: NC Sampling Point: WJ00030-	
Investigator(s): FST (L. Roper, L. Vaughan)  Section, Township, Range: None  Landform (hillslope, terrace, etc.): drainage: Local relief (concave, convex, none): Con Vet Slope (%): 0-3  Subregion (LRR or MLRA): LRRD Lat: 35. 43577 Long: -79. 32549  Datum: WGS9	188
Landform (hillslope, terrace, etc.): Aramage Local relief (concave, convex, none): Convex Slope (%): 05	1.
Subregion (LRR or MLRA):	2
Soil Map Unit Name: Chewada lan 0-2 % slopes NWI classification: NA	
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 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?  Hydric Soil Present?  Wetland Hydrology Present?  Yes No  No  No  No  Is the Sampled Area  within a Wetland?  Yes No	
Hydric Soil Present? Yes No within a Wetland? Yes No	
	4
Remarks: Abnormally 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) High Water Table (A2) Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)	
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)  Hydrogen Sulfide Odor (C1)  Moss Trim Lines (B16)	
Water Marks (B1)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)	
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)	
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)  Thin Muck Surface (C7)  Geomorphic Position (D2)	
☐ Iron Deposits (B5) ☐ Other (Explain in Remarks) ☐ Shallow Aquitard (D3) ☐ Inundation Visible on Aerial Imagery (B7) ☐ FAC-Neutral Test (D5)	
☐ 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 _ <a href="#">No _<a href="#">No _<a href="#">Mo _<a href="#">Depth (inches): _<a href="#">NO _<a href="#">N</a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a>	
Water Table Present? Yes No X Depth (inches): > 20 inches	
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No No	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks:	

			and the second second	
260 300			t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 36F4 , 30F4 )			? Status	Number of Dominant Species 7
1. Liquidambar Styraci Flua	40	IRS	FAC	That Are OBL, FACW, or FAC: (A)
2. Ulmus americana	10	no	FAC	
2. William artier Cana	P-			Total Number of Dominant
3. Quercus velutina	5	no	MPL	Species Across All Strata: (B)
4				
[MANDA NEW YORK HONE HONE MANDA MANDA NEW MANDA NEW YORK				Percent of Dominant Species That Are OBL FACW or FAC:  (A/B)
5.				That Are OBL, FACW, or FAC: (A/B)
6.		PRATITION		and the control of th
7.				Prevalence Index worksheet:
		Charles bereit	( ) - min paramete	Total % Cover of: Multiply by:
B				A STATE OF THE PROPERTY OF THE
	55	= Total Co	ver	OBL species x 1 =
				FACW species x 2 =
50% of total cover: 22	20% 0	total cove	r: _//	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30f4 x 30f4 )				FAC species x3
1. Carpinus Caroliniana	7<	VAC	EA	FACU species x 4 =
1. Carpinas Coroliniana	25	Yes	7/10	UPL species x 5 =
2. Liandamber Straciflia	25	yes	FAC	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
3. Asimina triloba			FAC	Column Totals: (A) (B)
UNITED BY A SERVICE OF THE PROPERTY OF THE PRO		STREET STREET,		
4.	The second second			Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
[4] [4] [4] [4] [4] [4] [4] [4] [4] [4]				2017年 - 1994年 - 1994
6.		The same of the same		1,- Rapid Test for Hydrophytic Vegetation
7:				2 - Dominance Test is >50%
B.				- 1 (1)
Company of the control of the contro				☐ 3 - Prevalence Index is ≤3.01
	60	= Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 33	20% 0	f total cove	r: /2	
			ARREST AL	
Herb Stratum (Plot size: 30f4 x 30f4)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Chasmanthium layum	10	ves	FACW	be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
2.		SETTING DATES A		Delinitions of Four Vegetation Circuit
3.			30.000.000	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4.				more in diameter at breast height (DBH), regardless of
				height.
5, 2001 300 400 400 400 400 400 400 400 400 400	CARLO ARGINE	Encare Chips		Height.
6.				Sapling/Shrub - Woody plants, excluding vines, less
CONTROL TO AN ADMINISTRATION OF THE PROPERTY O				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7.				than 5 m. Don and greater than 5 = 5 m (1 m)
THE SECRETARY WAS ASSESSED AND ASSESSED AND ASSESSED ASSE		100000	with the state of the state of the	
THE CONTROL OF SUMMERS AND ADDRESS OF SECTION OF SUMMERS AND ADDRESS OF SUMERS AND ADDRESS OF SUMMERS AND ADDRESS OF SUMERS AND				Herb - All herbaceous (non-woody) plants, regardless
8.				Herb – All herbaceous (non-woody) plants, regardless
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
8.				of size, and woody plants less than 3.28 ft tall.
8				of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8				of size, and woody plants less than 3.28 ft tall.
8			1970 (1970) 1970 (	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8			1970 (1970) 1970 (	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Co	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10		over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Co	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Co	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Co	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Co	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Co	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Cove	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Cover	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
8	10	= Total Cover	over	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
8	20% o	= Total Covered total covered yes	FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic
8	10 20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	10 20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
8	20% o	= Total Covered	FAC FAC FAC FAC FAC FAC	of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation

Depth	cription: (Describe		Redo	x Features				Remarks
nches)	Color (moist)		Color (moist)	THE PARTY OF		Loc²	Texture	Remarks
-G	104 3/3	100 _		25.5		ALCO TO SE	CL _	
-20	104 4/3	100_						
				Section 1				
					7.00	versioner con i		
							Company of the Company of the Company	
						MANAGE COL	2 200 170	
/pe: C=C	Concentration, D=De	pletion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ins.		Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
	Indicators: (Appli	cable to all Li						[발표] [[전기 : [전기 : [2] [전기 : [2] [2] [2] [2] [2] [2] [2] [2] [2] [2]
Histoso			Polyvalue Be					(A9) (LRR O) (A10) (LRR S)
	pipedon (A2)		Thin Dark Su Loamy Muck					ertic (F18) (outside MLRA 150A,E
Automotive the control of the	listic (A3) en Sulfide (A4)		Loamy Gleye	CASC WAS DESIGNED BY BUILDING TO	VINELE ALT HOUSEN	٥,		loodplain Soils (F19) (LRR P, S, T
	ed Layers (A5)		Depleted Ma		-1			Bright Loamy Soils (F20)
	Bodies (A6) (LRR I	P, T, U)	Redox Dark		5)		(MLRA 1	
	lucky Mineral (A7) (L		Depleted Da	rk Surface	(F7)			Material (TF2)
1701; 380000 M 2000 MA	resence (A8) (LRR		Redox Depre		)			w Dark Surface (TF12)
Charles and Charles	luck (A9) (LRR P, T)		Marl (F10) (L			-41	Other (Expl	ain in Remarks)
(1000/00/20LE_201215/00/20	ed Below Dark Surfa	ce (A11)	Depleted Oc				T) 3Indicators	of hydrophytic vegetation and
	Dark Surface (A12) Prairie Redox (A16) (	(MI RA 150A)						hydrology must be present,
	Mucky Mineral (S1)		Delta Ochric					listurbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve			0A, 150B)		
	Redox (S5)		Piedmont Flo	odplain So	ils (F19)	(MLRA 14	19A)	
	d Matrix (S6)		Anomalous I	Bright Loan	ny Soils (	F20) (MLR	A 149A, 153C, 153	BD)
	urface (S7) (LRR P,							
	Layer (if observed							/
			<u> </u>				1	No. Vo.
Depth (i	nches):						Hydric Soil Pre	sent? Yes No
emarks:								



Upland data point wjoo036\_u facing north.



Upland data point wjoo036\_u facing east.

Project/Site: ACP	City/County: Johnston Sampling Date: 6/11/15
Applicant/Owner: Dominion	State: NC Sampling Point: W100032e
Investigator(s): ESI (Roper, Markham)	Section, Township, Range: NONE
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none): NONE Slope (%): $0-3\frac{1}{2}$
Subregion (LRR or MLRA): LPP Lat: 35.	43391 Long: -78.3343Z Datum: Wb584
Soil Map Unit Name: Chewalla loam, frequ	
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally p	•
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Remarks: dirt road through swamp, mowed/r	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1)	
High Water Table (A2)  High Water Table (A2)  Marl Deposits (B	
Saturation (A3) Hydrogen Sulfide  Water Marks (B1) Oxidized Rhizos	e Odor (C1) Moss Trim Lines (B16) pheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Red	
	uction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5) Uher (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 NoDepth (inch	and MA
Water Table Present? Yes No Depth (inch	es): >20
Saturation Present? Yes No Depth (inch	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	

Sampling Point: wjop 032 e\_w

2.11.2.12	Absolute	Dominant Indicato	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft × 30 ft)	% Cover	Species? Status	— I Number of Dominant Species (
			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3.			Species Across All Strata: (B)
4			Percent of Dominant Species
5			That Are OBL, FACW, or FAC:
6			
7.			Prevalence Index worksheet:
8			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
50% of total cover:			FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30f+ x30f+)	20,00	, , , , , , , , , , , , , , , , , , , ,	FAC species x 3 =
0			FACU species x 4 =
•			
2			Column Totals: (A) (B)
3			<del>-</del> [
4			
5.			Hydrophytic Vegetation Indicators:
6.			— ا Rapid Test for Hydrophytic Vegetation
7.			2 - Dominance Test is >50%
8.		· ·	3 - Prevalence Index is ≤3.01
	<u> </u>	_= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:			
Herb Stratum (Plot size: 30ft x 30ft)			
1. Boehmeria cylindrica	110	N FAC	'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Persicaria hydropiperoide			<del></del>
3. Eleocharis Sp.	10D	Y EFAC	<del></del> (
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4			more in diameter at breast height (DBH), regardless of height.
5			<b>—</b> [
6			
7.			<b>.</b>
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			
	80	= Total Cover	
50% of total cover:			0
Woody Vine Stratum (Plot size: 30ft x 30ft)			
4 10 -1-4			
2			
3			<del></del>
4			
5			Hydrophytic
	_0	= Total Cover	Vegetation
50% of total cover:	20%	of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations b			
in the first transfer of the first transfer			
-			

Profile Description: (Describe to the	e depth needed to document the indicator or confirm	n the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
	00	5. Clay
4-20 1048 4/2 7	6 101 R 3/2 25 D M	Si Clay soft bodies
	10/10 41. E C M	
	- 10/K 16 5 0 11	
-		
<sup>1</sup> Type: C=Concentration D=Depletion	n, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
	to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
☐ Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T,	
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)
1 == 1		
Stratified Layers (A5)	Depleted Matrix (F3)  Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, I	· · · · · · · · · · · · · · · · · · ·	(MLRA 153B) Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P	, T, U) Depleted Dark Surface (F7) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
Muck Presence (A8) (LRR U)	Mari (F10) (LRR U)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A		La Ouier (exprair in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, F	P, T) Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLR	punney.	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR		unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B	
Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLKA	·
1 —		-RA 148A, 163C, 163D)
Dark Surface (S7) (LRR P, S, T,		
Restrictive Layer (if observed):		
Restrictive Layer (if observed): Type:		/
Restrictive Layer (if observed):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No



Wetland data point wjop032e\_w facing east.



Wetland data point wjop032e\_w facing north.

Project/Site: ACP	City/County: Johnston Sampling Date: 6/11/15
Applicant/Owner: Dominion	State: NC Sampling Point: Wiop 032-f.
Investigator(s): ESI (Roper, Markham)	Section, Township, Range: none
	Local relief (concave, convex, none): <u>VOVIC</u> Slope (%): <u>0-3/</u>
	0.433972 Long: -78,334407 Datum: W6384
	requently flood and classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantly	· · ·
Are Vegetation, Soil, or Hydrology naturally pr	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	` '
Surface Water (A1)  Aquatic Fauna (B	
High Water Table (A2)  Saturation (A3)  Hydrogen Sulfide	
	pheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	ce (C7) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Li Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inch	
Water Table Present? Yes No Depth (inch	es). 7.0
Saturation Present? Yes No 1 Depth (inch	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial ph	notes previous inspections) if available:
Social News and Salar (Steam gauge, memoring wen, acrial pro	otes, previous inspections, it available.
Remarks:	

0. 0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 H x 30 H)	% Cover	Species?		Number of Descious Constant
1. Fraxinus pennsylvanica	20	7	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2. Carpinus caroliniana	10	$\overline{\gamma}$	FAC	Matrice Obe, 1 Aovi, Bill Ao (A)
				Total Number of Dominant
3				Species Across All Strata: (B)
4				
5			Ī	Percent of Dominant Species That Are OBL. FACW, or FAC: 100 % (A/B)
				That Are OBL, FACW, or FAC: 100 /o (A/B)
6				Prevalence Index worksheet:
7				: I
8				Total % Cover of: Multiply by:
	30_	= Total Cov	er	OBL species x 1 =
50% of total cover: 15		total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30++ x30++)	20/3 (1	total cover		FAC species x 3 =
Sapinio/Stratum (Plot size:	l den	V	FACW	FACU species x 4 =
1. Querous pagoda	10			
2. Corpinus caroliniana	<u> </u>	<u> </u>	FAC	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.				
0.	"" ×.			☐ 3 - Prevalence Index is ≤3.01
		= Total Co	k as	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 10	20% o	f total cover	:	
Herb Stratum (Plot size: 30ft x 30ft)				Undicators of harding all and and hard and and
1. Arundinaria giganteum	15	Y	FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Microstegium Vimineum		· <del></del>		
			FAC	Definitions of Four Vegetation Strata:
3. Dichanthelium dichotomum	_5_	. <u>N</u>	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
				height.
5.				l lieight.
5				
6.		-		
7		· · · · · · · · · · · · · · · · · · ·		
7		· · · · · · · · · · · · · · · · · · ·		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6		· · · · · · · · · · · · · · · · · · ·		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6		_ = Total Co		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	니	_ = Total Co	over	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6		_ = Total Co		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	니	_ = Total Co	over	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	10 10	_ = Total Co	ever 8 FAC FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6.  7.  8.  9.  10.  11.  12.  50% of total cover: 20  Woody Vine Stratum (Plot size: 30ft x 30ft)  1. Vitis rotundifolia  2. Campsis radicans  3. Parthenocissus quinquefoli	10 10 10 10	_ = Total Co	FAC FACU	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	10 10	_ = Total Co	ever 8 FAC FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6.  7.  8.  9.  10.  11.  12.  50% of total cover: 20  Woody Vine Stratum (Plot size: 30ft x 30ft)  1. Vitis rotundifolia  2. Campsis radicans  3. Parthenocissus quinquefoli	10 10 10 10	_ = Total Co	FAC FACU	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 22  Woody Vine Stratum (Plot size: 30ft x 30ft)  1. Vitis rotundifolia  2. Campsis radicans  3. Parthenocissus quinquefoli  4. Smilax rotundifolia	10 10 10 10	= Total Co	FAC FAC FAC FAC FACU	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12.  Solve of total cover: 20  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.	10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  Solve of total cover: 20  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation

	onpaon: (Describe	o and and	th needed to docur	nent the m	igicator	or commi	n the absence of	mulcators	··,	,
Depth	Matrix			x Features						
<u>(inches)</u>	Color (moist)	%	Color (moist)		_Type <sup>1</sup> _	_Loc <sup>2</sup>	Texture		Remarks	
LO-8	101243	100					s: Clay			
8-20	10424/2	70	104R5/2	25	$\overline{D}$	C	51 Clay	یل 2 م	bodie	
	1-11- /-						<u> </u>	SOTT	DOGIE	_
			104R4/6		<u> </u>	<u>M</u>				
			• •							
•		<del></del>				-				
			A-ma-							
						-				
17							7		·	<del></del>
	oncentration, D=Dep					ains.			ing, M=Matrix	
l	Indicators: (Application	able to all			•		<del></del>		atic Hydric S	oils*:
<u>   </u> Histoso			Polyvalue Be				U) 🖳 1 cm Mu	ick (A9) (LF	RR O)	
Histic E	pipedon (A2)		Thin Dark St	urface (S9)	(LRR S,	T, U)		ick (A10) (L	.RR S)	
Black H	istic (A3)		Loamy Muck	y Mineral (	F1) (LRF	R O)	Reduced	d Vertic (F1	8) (outside N	ILRA 150A,B)
☐ Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (F	F2)		L Piedmor	nt Floodplai	n Soils (F19)	(LRR P, S, T)
│	d Layers (A5)		Depleted Ma	ıtrix (F3)			4 1		oamy Soils (F	
	Bodies (A6) (LRR P		Redox Dark	Surface (F	6)			A 153B)	. ,	
5 cm M	ucky Mineral (A7) (LF	RR P, T, U)	Depleted Da	rk Surface	(F7)			rent Materia	il (TF2)	
	resence (A8) (LRR U		Redox Depr		-				Surface (TF1:	2)
	uck (A9) (LRR P, T)		☐ Marl (F10) (I	-				Explain in R		•
	d Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)		,	,	
Thick D	ark Surface (A12)		☐ Iron-Mangar				·. T) <sup>3</sup> Indica	tors of hyd	rophytic veget	ation and
	Prairie Redox (A16) (f	VILRA 150							gy must be pr	
	Mucky Mineral (S1) (I		Delta Ochrid						i or problema	
	Gleyed Matrix (S4)		Reduced Ve					do diotalbet		(10.
	Redox (S5)		Piedmont FI				•			
	d Matrix (S6)									
					mv Saile	(巨つの) (MI	መለ ተለወለ ላፎነው	イモクロノ		
		2 T III	Anomaious	bright Luai	ny Soils	(F20) (ML	RA 149A, 153C,	153D)		
☐ Dark S	urface (S7) (LRR P, S		Anomaious	DIIGIII LUZI	my Soils	(F20) (ML	RA 149A, 153C,	153D)		
Dark Strictive			Anomaious	bright Luar	ny Soils	(F20) (ML	RA 149A, 153C,	153D)		
Dark Son Restrictive	urface (S7) (LRR P, S Layer (if observed)		Anomaious	bright Luar	ny Soils	(F20) (ML	RA 149A, 153C,	153D)		
Dark Sin Restrictive	urface (S7) (LRR P, S		Allomatous	biigiit Loai	my Soils	(F20) (ML	RA 149A, 153C,		Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed)	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Single Property Control of the	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Single Property Control of the	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No



Wetland data point wjop032f\_w facing west.



Wetland data point wjop032f\_w facing north.

Project/Site: ACP	City/County: Johns ton Sampling Date: 6/11/15
Applicant/Owner: Downin ion	State: NC Sampling Point: W10D032-W
Investigator(s): ESI (Poper, Markham)	Section, Township, Range: NONC
	Local relief (concave, convex, none): MONE Slope (%): 53/
Subregion (LRR or MLRA): LPPP Lat: 35	.43382 Long: -78.33428 Datum: W6584
Soil Map Unit Name: Chewalca loam;	Frequently Flooden Wiclassification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	· — — — — — — — — — — — — — — — — — — —
	roblematic? (If needed, explain any answers in Remarks.) g sampling point locations, transects, important features, etc.
	g sampling point locations, transects, important reactives, etc.
Hydrophytic Vegetation Present? Yes No V	Is the Sampled Area
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present?	within a Wetland? Yes No
Wetland Hydrology Present? Yes No No Remarks:	-
dirt road through swamp	
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 (E	· · · · · · · · · · · · · · · · · · ·
High Water Table (A2)  Marl Deposits (B	15) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide	· · · · · · · · · · · · · · · · · · ·
	oheres along Living Roots (C3)
Sediment Deposits (B2)  Presence of Red  Presence of Red	
☐ Drift Deposits (B3) ☐ Recent Iron Rediction Algal Mat or Crust (B4) ☐ Thin Muck Surface	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)  Other (Explain in	
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 (inch	es): <u>VM</u>
Water Table Present? Yes NoDepth (inch	es): <u>&gt; 20</u>
Saturation Present? Yes No Depth (inch (includes capillary fringe)	es): >20   Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	

VEGETATION (Four Strata) - Ose scientific ha	arries or pr	ants.		Sampling Point:
Tree Stratum (Plot size: 30ff x30ff		Dominant		Dominance Test worksheet:
1. Mone		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				
3				Total Number of Dominant Species Across All Strata:  (B)
4				Species Across All Strata: (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50% (A/B)
6				Prevalence index worksheet:
7				Total % Cover of: Multiply by:
8.				1
	_O_	= Total Co	ver	OBL species x 1 =
50% of total cover:	20% of	total cover	•	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30++ x30++)				FAC species x 3 =
1. Liquidambar styraciflua	<u> </u>	1	FAC	FACU species <u>90</u> x4= <u>360</u>
2	_	•		UPL species x 5 =
3				Column Totals: 95 (A) 375 (B)
4.				
5				Prevalence Index = B/A = 3, 95
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.	<u> </u>			☐ 3 - Prevalence Index is ≤3.01
_		= Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 2	<u> &gt;</u> 20% o	f total cove	г:	
Herb Stratum (Plot size: 30ft x 30ft)  1. Festura rubra	80	V	FA(U	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2. Trifolium repens	- <del>~~</del>		FACU	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3,				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4,				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7.	<b>.</b>			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Nowb All backgroups (see a see to be less to see all see
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
				Woody vine – All woody vines greater than 3.28 ft in
11.		·	<del> </del>	height.
12		-		
1.		_ = Total C		
50% of total cover: 4.	<u> </u>	of total cove	er: <u>1                                   </u>	
Woody Vine Stratum (Plot size: 30ft x 30ft)				
1. hone		<del>-</del>		
2				
3.				
				•
4	_			-
5				- Hydrophytic
		_ = Total C		Vegetation
50% of total cover:	20%	of total cov	er:	Present? Yes No
Remarks: (If observed, list morphological adaptations b	elow).			
•	•			

Profile Description: (Describe to the depth r	eeded to docum	ent the ind	icator o	confirm	the absence of ind	icators.)
Depth Matrix		r Features		<del></del>		
	Color (moist)		Type'	Loç <sup>2</sup>	<u>Texture</u>	Remarks
0-16 107/24/4 100	<del></del>	<del></del>			5: Clay	
16-20 104K44 80 1	DYK 4/4	20		M	5i Clay	
4	,					
						<u> </u>
	***************************************					
		· <del></del>			· · · · · · · · · · · · · · · · · · ·	
1			<del></del> -	···	•	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Re				ns.		ore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LR			-		<del></del> 1	oblematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Be				· — `	
Histic Epipedon (A2)	Thin Dark Su					A10) (LRR S)
Black Histic (A3)	Loamy Muck			O)		rtic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleye	•	2)			podplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma					Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark				(MLRA 15	·
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da	•	•			Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depre					v Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11)	Marl (F10) (L Depleted Oc	-	N D A 45	41	Unter (Expla	in in Remarks)
Thick Dark Surface (A11)	Iron-Mangan				T) 3Indicators	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surfa				•	nydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric			٥,		sturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Ve			)Δ 150B		starbed of problematic.
Sandy Redox (S5)	Piedmont Fl	-			•	
Stripped Matrix (S6)		•		•	RA 149A, 153C, 153	מו
Dark Surface (S7) (LRR P, S, T, U)		<b>3</b>	, (-	, <b>(</b>		-'
Restrictive Layer (if observed):						1 C + March more white an addition of
Type:					1	
Depth (inches):	_				Hydric Soil Pres	ent? Yes No 1
· · · · · · · · · · · · · · · · · · ·					Tryunc 3011 Fres	No
Remarks:						
compacted in	<pre>: \]</pre>		1	0.1	ام صلمیا	
1 compacies in	3011	100		+11	( Material	
1						



Upland data point wjop032\_u facing southwest.



Upland data point wjop032\_u facing southeast.

Project/Site: ACP	City/County: Johnston Sampling Date: 6/11/15
Applicant/Owner: Dominion	State: NC Sampling Point: W100032e
Investigator(s): ESI (Roper, Markham)	Section, Township, Range: NOYIC
Landform (hillslope, terrace, etc.): Terrace	Local relief (concave, convex, none): NONE Slope (%): D -3'/
Subregion (LRR or MLRA): LPP Lat: 35	.43391 Long: -78.3343Z Datum: Wb584
Soil Map Unit Name: Chewacla loam, Free	
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantl	
	· · · · · · · · · · · · · · · · · · ·
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesNo	- In the Commission
Hydric Soil Present? YesNo	- Is the Sampled Area - within a Wetland? Yes No
Wetland Hydrology Present? Yes No	- Tes No
Remarks: dirt road through swamp, mowed/1	maintained
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (B	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B	
Saturation (A3) Hydrogen Sulfide	
	pheres along Living Roots (C3)
Sediment Deposits (B2)  Presence of Rec	
☐ Drift Deposits (B3) ☐ Recent Iron Red☐ ☐ Algal Mat or Crust (B4) ☐ Thin Muck Surfa	luction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)  ace (C7)  Geomorphic Position (D2)
Iron Deposits (B5)  Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	4.710
Surface Water Present? Yes No Depth (inch	
Water Table Present? Yes No Depth (inch	
Saturation Present? Yes No Depth (includes capillary fringe)	nes): > 2 D   Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial pl	notos, previous inspections), if available:
Remarks:	
Noniding.	

Sampling Point: wjop 032 e\_w

2.11.2.12	Absolute	Dominant Indicato	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ft × 30 ft)	% Cover	Species? Status	— I Number of Dominant Species (
			That Are OBL, FACW, or FAC: (A)
2			Total Number of Dominant
3.			Species Across All Strata: (B)
4			Percent of Dominant Species
5			That Are OBL, FACW, or FAC:
6			
7.			Prevalence Index worksheet:
8			Total % Cover of: Multiply by:
		= Total Cover	OBL species x 1 =
50% of total cover:			FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30f+ x30f+)	20,00	, , , , , , , , , , , , , , , , , , , ,	FAC species x 3 =
0			FACU species x 4 =
•			
2			Column Totals: (A) (B)
3			<del>-</del> [
4			
5.			Hydrophytic Vegetation Indicators:
6.			— ا Rapid Test for Hydrophytic Vegetation
7.			2 - Dominance Test is >50%
8.		· ·	3 - Prevalence Index is ≤3.01
	<u> </u>	_= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:			
Herb Stratum (Plot size: 30ft x 30ft)			
1. Boehmeria cylindrica	110	N FAC	'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Persicaria hydropiperoide			<del></del>
3. Eleocharis Sp.	10D	Y EFAC	<del></del> (
			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4			more in diameter at breast height (DBH), regardless of height.
5			<b>—</b> [
6			
7.			<b>.</b>
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			
	80	= Total Cover	
50% of total cover:			0
Woody Vine Stratum (Plot size: 30ft x 30ft)			
4 10 -1-4			
2			
3			<del></del>
4			
5			Hydrophytic
	_0	= Total Cover	Vegetation
50% of total cover:	20%	of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations b			
in the first transfer of the first transfer			
-			

Profile Description: (Describe to the	e depth needed to document the indicator or confirm	n the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
	00	5. Clay
4-20 1048 4/2 7	6 101 R 3/2 25 D M	Si Clay soft bodies
	10/10 41. E C M	
	- 10/K 16 5 0 11	
-		
<sup>1</sup> Type: C=Concentration D=Depletion	n, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
	to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
☐ Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T,	
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)
1 == ' ' ' ' '		
Stratified Layers (A5)	Depleted Matrix (F3)  Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, I	· · · · · · · · · · · · · · · · · · ·	(MLRA 153B) Red Parent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P	, T, U) Depleted Dark Surface (F7) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
Muck Presence (A8) (LRR U)	Mari (F10) (LRR U)	Other (Explain in Remarks)
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A		La Oulei (Expiair in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, F	P, T) Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLR	punney.	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR		unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B	
Sandy Redox (S5)	☐ Piedmont Floodplain Soils (F19) (MLRA	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLKA	·
1 —		-RA 149A, 103C, 103D)
Dark Surface (S7) (LRR P, S, T,		
Restrictive Layer (if observed):		
Restrictive Layer (if observed): Type:		/
Restrictive Layer (if observed):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soil Present? Yes No



Wetland data point wjop032e\_w facing east.



Wetland data point wjop032e\_w facing north.

Project/Site: ACP	City/County: Johnston Sampling Date: 6/11/15
Applicant/Owner: Dominion	State: NC Sampling Point: Wiop 032-f.
Investigator(s): ESI (Roper, Markham)	Section, Township, Range: none
	Local relief (concave, convex, none): <u>VOVIC</u> Slope (%): <u>0-3/</u>
	0.433972 Long: -78,334407 Datum: W6384
	requently flood and classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantly	· · ·
Are Vegetation, Soil, or Hydrology naturally pr	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	` '
Surface Water (A1)  Aquatic Fauna (B	
High Water Table (A2)  Saturation (A3)  Hydrogen Sulfide	
	pheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	ce (C7) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Li Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inch	
Water Table Present? Yes No Depth (inch	es). 7.0
Saturation Present? Yes No 1 Depth (inch	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial ph	notes previous inspections) if available:
Social News and Salar (Steam gauge, memoring wen, acrial pro	otes, previous inspections, it available.
Remarks:	

0. 0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 H x 30 H)	% Cover	Species?		Number of Descious Constant
1. Fraxinus pennsylvanica	20	7	FACW	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2. Carpinus caroliniana	10	$\overline{\gamma}$	FAC	Matrice Obe, 1 Aovi, Bill Ao (A)
				Total Number of Dominant
3				Species Across All Strata: (B)
4				
5			Ī	Percent of Dominant Species That Are OBL. FACW, or FAC: 100 % (A/B)
				That Are OBL, FACW, or FAC: 100 /o (A/B)
6				Prevalence Index worksheet:
7				: I
8				Total % Cover of: Multiply by:
	30_	= Total Cov	er	OBL species x 1 =
50% of total cover: 15		total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30++ x30++)	20/3 (1	total cover		FAC species x 3 =
Sapinio/Stratum (Plot size:	l den	V	FACW	FACU species x 4 =
1. Querous pagoda	10			
2. Corpinus caroliniana	<u> </u>	<u> </u>	FAC	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.				
0.	"" ×.			☐ 3 - Prevalence Index is ≤3.01
		= Total Co	k as	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 10	20% o	f total cover	:	
Herb Stratum (Plot size: 30ft x 30ft)				Undicators of harding all and and hard and and
1. Arundinaria giganteum	15	Y	FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Microstegium Vimineum		· <del></del>		
			FAC	Definitions of Four Vegetation Strata:
3. Dichanthelium dichotomum	_5_	. <u>N</u>	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
				height.
5.				l lieight.
5				
6.		-		
7		· · · · · · · · · · · · · · · · · · ·		
7		· · · · · · · · · · · · · · · · · · ·		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6		· · · · · · · · · · · · · · · · · · ·		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6		_ = Total Co		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	니	_ = Total Co	over	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6		_ = Total Co		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	니	_ = Total Co	over	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	10 10	_ = Total Co	ever 8 FAC FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6.  7.  8.  9.  10.  11.  12.  50% of total cover: 20  Woody Vine Stratum (Plot size: 30ft x 30ft)  1. Vitis rotundifolia  2. Campsis radicans  3. Parthenocissus quinquefoli	10 10 10 10	_ = Total Co	FAC FACU	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6	10 10	_ = Total Co	ever 8 FAC FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
6.  7.  8.  9.  10.  11.  12.  50% of total cover: 20  Woody Vine Stratum (Plot size: 30ft x 30ft)  1. Vitis rotundifolia  2. Campsis radicans  3. Parthenocissus quinquefoli	10 10 10 10	_ = Total Co	FAC FACU	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 22  Woody Vine Stratum (Plot size: 30ft x 30ft)  1. Vitis rotundifolia  2. Campsis radicans  3. Parthenocissus quinquefoli  4. Smilax rotundifolia	10 10 10 10	= Total Co	FAC FAC FAC FAC FACU	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12.  Solve of total cover: 20  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.	10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  Solve of total cover: 20  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
6. 7. 8. 9. 10. 11. 12.  50% of total cover: 2?  Woody Vine Stratum (Plot size: 30ft x 30 ft) 1. Vitis rotundifolia 2. Campsis radicans 3. Parthenocissus quinquefoli 4. Smilax rotundifolia 5.  50% of total cover: 2	10 10 10 10 10 40	= Total Coof total cove	FAC FACU FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation

	onpaon: (Describe	o and and	th needed to docur	nent the m	igicator	or commi	n the absence of	mulcators	··,	,
Depth	Matrix			x Features						
<u>(inches)</u>	Color (moist)	%	Color (moist)	%	_Type <sup>1</sup> _	_Loc <sup>2</sup>	Texture		Remarks	
LO-8	101243	100					s: Clay			
8-20	10424/2	70	104R5/2	25	$\overline{D}$	C	51 Clay	یل 2 م	bodie	
	1-11- /-						<u> </u>	SOTT	DOGIE	_
			104R4/6		<u> </u>	<u>M</u>				<u> </u>
			• •							
•		<del></del>				-				
			A-ma-							
						-				
17							7		·	<del></del>
	oncentration, D=Dep					ains.			ing, M=Matrix	
l	Indicators: (Application	able to all			•		<del></del>		atic Hydric S	oils*:
<u>   </u> Histoso			Polyvalue Be				U) 🖳 1 cm Mu	ick (A9) (LF	RR 0)	
Histic E	pipedon (A2)		Thin Dark St	urface (S9)	(LRR S,	T, U)		ick (A10) (L	.RR S)	
Black H	istic (A3)		Loamy Muck	y Mineral (	F1) (LRF	R O)	Reduced	d Vertic (F1	8) (outside N	ILRA 150A,B)
☐ Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (F	F2)		L Piedmor	nt Floodplai	n Soils (F19)	(LRR P, S, T)
│	d Layers (A5)		Depleted Ma	ıtrix (F3)			4 1		oamy Soils (F	
	Bodies (A6) (LRR P		Redox Dark	Surface (F	6)			A 153B)	. ,	
5 cm M	ucky Mineral (A7) (LF	RR P, T, U)	Depleted Da	rk Surface	(F7)			rent Materia	il (TF2)	
	resence (A8) (LRR U		Redox Depr		-				Surface (TF1:	2)
	uck (A9) (LRR P, T)		☐ Marl (F10) (I	-				Explain in R		•
	d Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)		,	,	
Thick D	ark Surface (A12)		☐ Iron-Mangar				·. T) <sup>3</sup> Indica	tors of hyd	rophytic veget	ation and
	Prairie Redox (A16) (f	VILRA 150							gy must be pr	
	Mucky Mineral (S1) (I		Delta Ochrid						i or problema	
	Gleyed Matrix (S4)		Reduced Ve					do diotalbet		(10.
	Redox (S5)		Piedmont FI				•			
	d Matrix (S6)									
					mv Saile	(巨つの) (MI	መለ ተለወለ ላፎነው	イモクロノ		
		2 T III	Anomaious	bright Luai	ny Soils	(F20) (ML	RA 149A, 153C,	153D)		
☐ Dark S	urface (S7) (LRR P, S		Anomaious	DIIGIII LUZI	my Soils	(F20) (ML	RA 149A, 153C,	153D)		
Dark Strictive			Anomaious	bright Luar	ny Soils	(F20) (ML	RA 149A, 153C,	153D)		
Dark Son Restrictive	urface (S7) (LRR P, S Layer (if observed)		Anomaious	bright Luar	ny Soils	(F20) (ML	RA 149A, 153C,	153D)		
Dark Sin Restrictive	urface (S7) (LRR P, S		Allomatous	biigiit Loai	my Soils	(F20) (ML	RA 149A, 153C,		Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed)	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Single Property Control of the	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Strictive Type: Depth (in	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No
Dark Single Property Control of the	urface (S7) (LRR P, S Layer (if observed) nches):	:				(F20) (ML			Yes	No



Wetland data point wjop032f\_w facing west.



Wetland data point wjop032f\_w facing north.

Project/Site: ACP	City/County: Johns ton Sampling Date: 6/11/15
Applicant/Owner: Downin ion	State: NC Sampling Point: W10D032-W
Investigator(s): ESI (Poper, Markham)	Section, Township, Range: NONC
	Local relief (concave, convex, none): MONE Slope (%): 53/
Subregion (LRR or MLRA): LPPP Lat: 35	.43382 Long: -78.33428 Datum: W6584
Soil Map Unit Name: Chewalca loam;	Frequently Flooden Wiclassification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	· — — — — — — — — — — — — — — — — — — —
	roblematic? (If needed, explain any answers in Remarks.) g sampling point locations, transects, important features, etc.
	g sampling point locations, transects, important reactives, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Wetland Hydrology Present?	within a Wetland? Yes No
Wetland Hydrology Present? Yes No No Remarks:	-
dirt road through swamp	
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 (E	· · · · · · · · · · · · · · · · · · ·
High Water Table (A2)  Marl Deposits (B	15) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide	· · · · · · · · · · · · · · · · · · ·
	oheres along Living Roots (C3)
Sediment Deposits (B2)  Presence of Red  Presence of Red	
☐ Drift Deposits (B3) ☐ Recent Iron Rediction Algal Mat or Crust (B4) ☐ Thin Muck Surface	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)  Other (Explain in	
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 (inch	es): <u>VM</u>
Water Table Present? Yes NoDepth (inch	es): <u>&gt; 20</u>
Saturation Present? Yes No Depth (inch (includes capillary fringe)	es): >20   Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	

VEGETATION (Four Strata) - Ose scientific ha	arries or pr	ants.		Sampling Point:
Tree Stratum (Plot size: 30ff x30ff		Dominant		Dominance Test worksheet:
1. Mone		Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				
3				Total Number of Dominant Species Across All Strata:  (B)
4				Species Across All Strata: (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50% (A/B)
6				Prevalence index worksheet:
7				Total % Cover of: Multiply by:
8.				1
	_O_	= Total Co	ver	OBL species x 1 =
50% of total cover:	20% of	total cover	•	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30++ x30++)				FAC species x 3 =
1. Liquidambar styraciflua	<u> </u>	1	FAC	FACU species <u>90</u> x4= <u>360</u>
2	_	•		UPL species x 5 =
3				Column Totals: 95 (A) 375 (B)
4.				
5				Prevalence Index = B/A = 3, 95
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.	<u> </u>			☐ 3 - Prevalence Index is ≤3.01
_		= Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 2	<u> &gt;</u> 20% o	f total cove	г:	
Herb Stratum (Plot size: 30ft x 30ft)  1. Festura rubra	80	V	FA(U	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2. Trifolium repens	- <del>~~</del>		FACU	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3,				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4,				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7.	<b>.</b>			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Nowb All backgroups (see a see to be less to see all see
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
				Woody vine – All woody vines greater than 3.28 ft in
11.		·	<del> </del>	height.
12		-		
1.		_ = Total C		
50% of total cover: 4.	<u> </u>	of total cove	er: <u>1                                   </u>	
Woody Vine Stratum (Plot size: 30ft x 30ft)				
1. hone		<del>-</del>		
2				
3.				
				•
4	_			-
5				- Hydrophytic
		_ = Total C		Vegetation
50% of total cover:	20%	of total cov	er:	Present? Yes No
Remarks: (If observed, list morphological adaptations b	elow).			
•	•			

Profile Description: (Describe to the depth r	eeded to docum	ent the ind	icator o	confirm	the absence of ind	icators.)
Depth Matrix		r Features		<del></del>		
	Color (moist)		Type'	Loç <sup>2</sup>	<u>Texture</u>	Remarks
0-16 107/24/4 100	<del></del>	<del></del>			5: Clay	
16-20 104K44 80 1	DYK 4/4	20		M	5i Clay	
4	,					
			<del></del> -			
						<u> </u>
	***************************************					
		· <del></del>			· · · · · · · · · · · · · · · · · · ·	
1			<del></del> -	···	•	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Re				ns.		ore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LR			-		<del></del> 1	oblematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Be				· — `	
Histic Epipedon (A2)	Thin Dark Su					A10) (LRR S)
Black Histic (A3)	Loamy Muck			O)		rtic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleye	•	2)			podplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma					Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark				(MLRA 15	·
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da	•	•			Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depre					v Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11)	Marl (F10) (L Depleted Oc	-	N D A 45	41	Unter (Expla	in in Remarks)
Thick Dark Surface (A11)	Iron-Mangan				T) 3Indicators	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surfa				•	nydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric			٥,		sturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Ve			)Δ 150B		starbed of problematic.
Sandy Redox (S5)	Piedmont Fl	-			•	
Stripped Matrix (S6)		•		•	RA 149A, 153C, 153	מו
Dark Surface (S7) (LRR P, S, T, U)		<b>3</b>	, (-	, <b>(</b>		-'
Restrictive Layer (if observed):						1 C + March more which which which is
Type:					1	
Depth (inches):	_				Hydric Soil Pres	ent? Yes No 1
· · · · · · · · · · · · · · · · · · ·					Tryunc 3011 Fres	No
Remarks:						
compacted in	<pre>: \]</pre>		1	0.1	ام صلمیا	
1 compacies in	3011	100		+11	( Material	
1						



Upland data point wjop032\_u facing southwest.



Upland data point wjop032\_u facing southeast.

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Johnston	Sampling Date: 2/12/2015
Applicant/Owner: Dominion		State: NC Sampling Point: wjob112f_w
Investigator(s): TP, RH	Section, Township, Range	
Landform (hillslope, terrace, etc.): drainage way		
Subregion (LRR or MLRA): P	Lat: 35.43818088 Long:	-78.33421125 Datum: WGS 1984
Soil Map Unit Name: Chewacla loam, 0 to 2 percentage	ent slopes, frequently flooded	NWI classification: None
Are climatic / hydrologic conditions on the site typ	ical for this time of year? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	z significantly disturbed? Are "No	rmal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		
		ations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _	V No le the Sempled An	
Hydric Soil Present? Yes _	Is the Sampled Ar	
	within a Wetland?	162 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)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
<u>✓</u> High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Living Roots (0)	
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	
✓ Drift Deposits (B3)	Thin Muck Surface (C7) Other (Explain in Remarks)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1) 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):11	
	Depth (inches):10 Wetla	nd Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monito	ring well aerial photos, previous inspections), if	available:
Booting Recorded Bata (circum gauge, memic	mig won, dendi priotoc, providuo mopecacino), n	aranasis.
Remarks:		

Sampling	Point: wjob112f_	w
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	Absolute	Dominant In	dicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species
1. Acer rubrum	30	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Populus deltoides	25	Yes	FAC	Total Niverbay of Dansin aut
3. Ulmus rubra	20	Yes	FAC	Total Number of Dominant Species Across All Strata:  5 (B)
4				(2)
				Percent of Dominant Species That Are OBL EACING or EAC: 100 (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6		-		Prevalence Index worksheet:
7	75			Total % Cover of: Multiply by:
27.5		= Total Cover	15	OBL species0 x 1 =0
50% of total cover: 37.5	20% of	total cover:		0
Sapling/Shrub Stratum (Plot size:)				FACW species X Z = 320
1. Acer rubrum	30	Yes	FAC	FAC species x s =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals:110 (A)330 (B)
5			-	
				Prevalence Index = B/A = 3
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
4-		= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:15	20% of	total cover:	6	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				, ,
1				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
3.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
F				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				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				<b>Herb</b> – 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	Man harden Allera de la constantida e O OO (i in
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. Smilax rotundifolia	5	Yes	FAC	noight.
2				
3				
4		<del></del> -		Hydrophytic
5				Vegetation Present? Yes No
0.5		= Total Cover	. 1	Present? Yes No
50% of total cover: 2.5	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			•

inchec)	Matrix			x Features	_ 1	. 2		
inches) 0-12	Color (moist) 10YR 4/1	<u>%</u> 90	Color (moist) 10YR 4/6	<u>%</u> 10	Type <sup>1</sup> C	Loc <sup>2</sup>	<u>Texture</u> CL	Remarks
0-12	10114/1	90	10113 4/0					
			<del></del>					· -
	_							
			<del></del>					
-								
	naontration D_Dan	lotion DM	L-Paduaad Matrix, MS		Sand Cr	ino	<sup>2</sup> L continue F	OL -Doro Lining M-Motrix
	ndicators:	etion, Riv	1=Reduced Matrix, MS	s=iviaskeu	Sand Gra	iins.		PL=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(97)				2 cm Muck (A10) (MLRA 147)
	ipedon (A2)		Polyvalue Be		- (SR) <b>(</b> M	I D A 1/17		Coast Prairie Redox (A16)
_ Histic Ep _ Black His			Tolyvalde Be		. , .		140) (	(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			-11, 1-10)	F	Piedmont Floodplain Soils (F19)
	Layers (A5)		<u>✓</u> Depleted Ma		_,		<u> </u>	(MLRA 136, 147)
	ck (A10) <b>(LRR N)</b>		Redox Dark		3)		\	/ery Shallow Dark Surface (TF12)
	Below Dark Surface	e (A11)	Depleted Dar	•	•			Other (Explain in Remarks)
	rk Surface (A12)	` ,	Redox Depre					,
_ Sandy M	lucky Mineral (S1) (L	.RR N,	Iron-Mangan	ese Masse	s (F12) <b>(</b> I	RR N,		
	147, 148)		MLRA 13					
_ Sandy G	leyed Matrix (S4)		Umbric Surfa	ce (F13) <b>(</b>	MLRA 13	6, 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
_ Sandy R	edox (S5)		Piedmont Flo	odplain Sc	ils (F19)	(MLRA 148	3) w	etland hydrology must be present,
_ Stripped	Matrix (S6)		Red Parent N	1aterial (F2	21) <b>(MLR</b> .	<b>A</b> 127, 147	) ur	nless disturbed or problematic.
estrictive L	ayer (if observed):							
Туре:								
Depth (inc	ches):						Hydric Soi	l Present? Yes <u>✓</u> No
emarks:								



Photo 1
Wetland data point wjob112f\_w facing north



Photo 2
Wetland data point wjob112f\_w facing south

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline		City/County: Johr	ston	S	Sampling Date: 2/12/2015	
Applicant/Owner: Dominion			State	: NC	Sampling Point: wjob112s_w	
Investigator(s): TP, RH Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc.): depress					Slope (%): 0	
Subregion (LRR or MLRA): P		1128	Long: -78.336745	1	Datum: WGS 1984	
Soil Map Unit Name: Chewacla loam, 0 to	2 percent slopes, freq	uently flooded	N	WI classificat	ion: None	
Are climatic / hydrologic conditions on the s	site typical for this time	e of year? Yes	No (If no, e	explain in Ren	narks.)	
Are Vegetation, Soil, or Hyd	drology signifi	cantly disturbed?	Are "Normal Circun	nstances" pre	sent? Yes No	
Are Vegetation, Soil, or Hyd						
SUMMARY OF FINDINGS – Atta						
Hydrophytic Vegetation Present?	Yes V No					
Hydric Soil Present?	Yes / No_	is the San	npled Area	v V	No	
	Yes No		retiand?	res	NO	
Remarks:		I				
HYDROLOGY						
Wetland Hydrology Indicators:			Secon	dary Indicato	rs (minimum of two required)	
Primary Indicators (minimum of one is red	quired; check all that a	pply)	Sı	urface Soil Cr	acks (B6)	
Surface Water (A1)		atic Plants (B14)			tated Concave Surface (B8)	
High Water Table (A2)		Sulfide Odor (C1)		rainage Patte		
Saturation (A3)	✓ Oxidized	Rhizospheres on Living	Roots (C3) M	oss Trim Line	es (B16)	
Water Marks (B1)	Presence	of Reduced Iron (C4)	Di	ry-Season Wa	ater Table (C2)	
Sediment Deposits (B2)	Recent Ir	on Reduction in Tilled S	oils (C6) Cı	rayfish Burrov	ws (C8)	
Drift Deposits (B3)		k Surface (C7)	Sa	aturation Visil	ole on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Other (Ex	plain in Remarks)			essed Plants (D1)	
Iron Deposits (B5)	(=-)			eomorphic Po		
Inundation Visible on Aerial Imagery	(B7)		_	hallow Aquita		
Water-Stained Leaves (B9)				icrotopograpi AC-Neutral Te	nic Relief (D4)	
Aquatic Fauna (B13)			<u> </u>	AC-Neutral 16	=St (Do)	
Field Observations: Surface Water Present? Yes	_ No 🔽 Depth (ii	achae):				
	No Depth (ii					
	_ No Depth (ii _ No Depth (ii		Wetland Hydrolo	D	. Vaa 🗸 Na	
(includes capillary fringe)	_ No Depth (ii	iches):	wetiand nydroid	gy Present?	Yes No	
Describe Recorded Data (stream gauge,	monitoring well, aerial	photos, previous inspec	tions), if available:			
Devente						
Remarks:						

Sampling Point wjob i 125_W	Sampling	Point: wjob112s_	w
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00	Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 4 (A)
2				
3				Total Number of Dominant Species Across All Strata:  4 (B)
4				Species Across Air Strata.
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Dravial and a landov weather act.
7				Prevalence Index worksheet:
	0	= Total Cover	r	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover:	0	OBL species x 1 = 10
Sapling/Shrub Stratum (Plot size: 15 )		_		FACW species65
1 Acer rubrum	20	Yes	FAC	FAC species 20 x 3 = 60
2. Baccharis halimifolia	10	Yes	FACW	FACU species 0 x 4 = 0
2. Dacchans Hallitillolla		165	TACVV	0
3				UPL species $\frac{0}{95}$ $x = \frac{0}{200}$
4				Column Totals: (A) (B)
5				Prevalence Index - R/A - 2.1
6				1 Tevalence mack = B/A =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	30	= Total Cover	r	
50% of total cover:15	20% of	total cover:	6	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1 Scirpus cyperinus	35	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	20	Yes	FACW	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3Typha latifolia	10	No	OBL	be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				John Mondo of Four Vogotation Official
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
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.
11.				Herb – All herbaceous (non-woody) plants, regardless
	65	= Total Cover	•	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32.5		total cover:	13	
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
· · · · · · · · · · · · · · · · · · ·				height.
1				
2				
3				
4				Llydraphytia
5				Hydrophytic Vegetation
	0 .	= Total Cover	-	Present? Yes No
50% of total cover: 0		total cover:	0	
		total cover	-	
Remarks: (Include photo numbers here or on a separate si	neet.)			

(inches) Color (molst) % Tope Loc* Texture Remarks 0-12 10VR 5/2 95 10VR 4/6 5 C PL CL    Tope Co-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   Tope Color (MILE)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Variable   Variabl	narks
Adric Soil Indicators:  - Histosol (A1) - Histosol (A2) - Histic Epipedon (A2) - Black Histic (A3) - Thin Dark Surface (S9) (MLRA 147, 148) - Hydrogen Sulfide (A4) - Stratified Layers (A5) - Depleted Below Dark Surface (A11) - Thick Dark Surface (A12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) - Sandy Gleyed Matrix (S4) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Stratified Layer (K5) - Stratified Layer (K12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 136) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Red Parent Material (F21) (MLRA 148) - Strictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes  - Hydric Soil Present? Yes Hydric Soil Present? Yes	
Histosol (A1)	
Adric Soil Indicators:  - Histosol (A1) - Dark Surface (S7) - Polyvalue Below Surface (S8) (MLRA 147, 148) - Black Histic (A3) - Thin Dark Surface (S9) (MLRA 147, 148) - Hydrogen Sulfide (A4) - Stratified Layers (A5) - Depleted Matrix (F3) - Depleted Below Dark Surface (A11) - Thick Dark Surface (A12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) - Sandy Gleyed Matrix (S4) - Sandy Redox (S5) - Stratified Layer (F13) (MLRA 136, 122) - Sandy Redox (S5) - Piedmont Floodplain Soils (F19) (MLRA 148) - Sandy Redox (S6) - Red Parent Material (F21) (MLRA 148) - Strictive Layer (if observed):  Type: Depth (inches):	
ydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Defement Floodplain Soils (F13) (MLRA 147, 148)  MLRA 136, 122)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12) (LRR N, MLRA 147, 148)  MLRA 136)  Sandy Mucky Mineral (S1) (LRR N)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Sandy Redox (S5)  Red Parent Material (F21) (MLRA 148)  Wetland hydrology must be prestrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes	-
Adric Soil Indicators:  - Histosol (A1) - Histosol (A2) - Histic Epipedon (A2) - Black Histic (A3) - Thin Dark Surface (S9) (MLRA 147, 148) - Hydrogen Sulfide (A4) - Stratified Layers (A5) - Depleted Below Dark Surface (A11) - Thick Dark Surface (A12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) - Sandy Gleyed Matrix (S4) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Stratified Layer (K5) - Stratified Layer (K12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 136) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Red Parent Material (F21) (MLRA 148) - Strictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes  - Hydric Soil Present? Yes Hydric Soil Present? Yes	
ydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Depleted Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12)  Loamy Gleyed Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148)  MLRA 147, 148)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 127, 147)  Depth (inches):  Type:  Depth (inches):  Hydric Soil Present? Yes	
ydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Depleted Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12)  Loamy Gleyed Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148)  MLRA 147, 148)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 127, 147)  Depth (inches):  Type:  Depth (inches):  Hydric Soil Present? Yes	
ydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Depleted Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12)  Loamy Gleyed Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148)  MLRA 147, 148)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 127, 147)  Depth (inches):  Type:  Depth (inches):  Hydric Soil Present? Yes	
Histosol (A1)	Motrix
Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (S9)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Striped Matrix (S6)  Striped Matrix (S6)  Polyvalue Below Surface (S9) (MLRA 147, 148)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Stripped Matrix (S6)  Strictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes	
Histic Epipedon (A2)	
Black Histic (A3)	•
Stratified Layers (A5)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Stripped Matrix (S6) Stripped Matrix (S6) Depth (inches):  Depth (inches):  Depleted Dark Surface (F7) Depleted Dark Surface (F12) (LRR N, Depleted Dark Surface (F	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	
MLRA 147, 148)  _ Sandy Gleyed Matrix (S4)  _ Sandy Redox (S5)  _ Stripped Matrix (S6)  _ Strictive Layer (if observed):  Type:  _ Depth (inches):  _ Hydric Soil Present? Yes	
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) 3Indicators of hydrophytic vegeta Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pre Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic estrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pre Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic estrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes	
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic estrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes	tic vegetation and
Depth (inches): Hydric Soil Present? Yes	ist be present,
Type:	oblematic.
Depth (inches): Hydric Soil Present? Yes	
emarks:	<u> </u>



Photo 1 Wetland data point wjob112s\_w facing east



Photo 2
Wetland data point wjob112s\_w facing west

Project/Site: Atlantic Coast Pipeline		City/Cou	unty: Johnston		Sampling Date: 2/12/2015	
Applicant/Owner: Dominion					Sampling Point: wjob112_u	
			, Township, Range: No			
Landform (hillslope, terrace, etc.): levee					Slope (%):0	
Subregion (LRR or MLRA): P					Datum: WGS 1984	
Soil Map Unit Name: Chewacla loam, 0 to 2	percent slopes, fre	quently flooded		NWI classific	ation: None	
Are climatic / hydrologic conditions on the site	e typical for this tim	ne of year? Yes	s No (	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydro	ology signi	ficantly disturbe	ed? Are "Normal	Circumstances" p	present? Yes No	
Are Vegetation, Soil, or Hydro						
SUMMARY OF FINDINGS – Attac						
Hydrophytic Vegetation Present? Y	es No	_				
	es No	'	s the Sampled Area	Vaa	No	
Wetland Hydrology Present? Y	es No_	<u> </u>	within a Wetland?	res	NO	
Remarks:		<b>'</b>				
Upland point taken at edge of clear cut.						
HYDROLOGY						
Wetland Hydrology Indicators:					tors (minimum of two required)	
Primary Indicators (minimum of one is requi	ired; check all that	apply)		Surface Soil	Cracks (B6)	
Surface Water (A1)		uatic Plants (B		Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2)	-	en Sulfide Odor		Drainage Par		
Saturation (A3)			• ,	Roots (C3) Moss Trim Lines (B16)		
Water Marks (B1)	<del></del>	e of Reduced I	, ,		Water Table (C2)	
Sediment Deposits (B2)			in Tilled Soils (C6)	Crayfish Buri		
Drift Deposits (B3)		ck Surface (C7			sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Other (E	xplain in Rema	ırks)		tressed Plants (D1)	
Iron Deposits (B5)	_,			Geomorphic		
Inundation Visible on Aerial Imagery (B	37)			Shallow Aqui		
Water-Stained Leaves (B9)					aphic Relief (D4)	
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)	
Field Observations:		" · · · ·				
	No Depth (					
	No Pepth (					
Saturation Present? Yes (includes capillary fringe)	No Pepth (	(inches):	Wetland H	lydrology Presen	it? Yes No	
Describe Recorded Data (stream gauge, mo	onitoring well, aeria	al photos, previ	ous inspections), if ava	ilable:		
Remarks:						

Sampling Poing	∩t: <sup>wjob112</sup> _u
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00	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				
3				Total Number of Dominant Species Across All Strata: 5 (B)
				Species Across Air Strata(D)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 20 (A/B)
6				Bassalan a la dassara da la ser
7				Prevalence Index worksheet:
	0	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover:_	0	OBL species x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )		_		FACW species5
1 Ligustrum sinense	10	Yes	FACU	FAC species5 x 3 =15
2. Liquidambar styraciflua	5	Yes	FAC	FACU species 55 x 4 = 220
2. Liquidambar Styraciilda		165	TAC	0
3				UPL species $\begin{array}{c} 0 \\ \hline \\ 65 \\ \hline \end{array}$ $\begin{array}{c} x \ 5 = \\ \hline \\ 245 \\ \hline \end{array}$
4				Column Totals: (A) (B)
5				Prevalence Index = B/A = 3.76
6				Trevalence mack = B/TC =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	15	= Total Cove		
50% of total cover: 7.5	20% of	total cover:_	3	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5				data in Remarks or on a separate sheet)
1. Rubus argutus	20	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Andropogon virginicus	15	Yes	FACU	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Eupatorium capillifolium	10	Yes	FACU	be present, unless disturbed or problematic.
4. Scirpus cyperinus	5	No	FACW	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				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.				Herb – All herbaceous (non-woody) plants, regardless
	50	= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 25		total cover:_		
Woody Vine Stratum (Plot size: 30 )				Woody vine – All woody vines greater than 3.28 ft in
· · · · · · · · · · · · · · · · · · ·				height.
1				
2				
3				
4				Hadron bad's
5.		· ·		Hydrophytic Vegetation
<u> </u>	0	= Total Cove		Present? Yes No
50% of total cover: 0		total cover:_	0	
30 % of total cover		total cover	_	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix		Redox Fea			
(inches)	Color (moist)	%	Color (moist)	<u>6 Type<sup>1</sup> Loc<sup>2</sup></u>	Texture	Remarks
0-12	10YR 4/3	100			SCL	<u>.                                  </u>
			<del></del> -	<del></del>		
					· ·	
					-	
			<del></del>			
Tupo: C-C	oncontration D_Dan	lotion BM_Ba	educed Matrix, MS=Ma	akad Sand Crains	<sup>2</sup> Location: D	L=Pore Lining, M=Matrix.
	Indicators:	ietion, Rivi=Re	educed Matrix, MS=Ma	skeu Sanu Grains.		ators for Problematic Hydric Soils <sup>3</sup> :
-			Davis Confess (C7)			
Histosol			Dark Surface (S7)			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)			Surface (S8) (MLRA 147		Coast Prairie Redox (A16)
	stic (A3)			(S9) (MLRA 147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Ma	, ,	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F			(MLRA 136, 147) /ery Shallow Dark Surface (TF12)
	ick (A10) <b>(LRR N)</b> d Below Dark Surface	· (A11)	Redox Dark Surfa	, ,		Other (Explain in Remarks)
_	ark Surface (A12)	e (A11)	<ul><li>Depleted Dark Su</li><li>Redox Depression</li></ul>			oner (Explain in Remarks)
	Aucky Mineral (S1) <b>(L</b>	DD N		Masses (F12) <b>(LRR N,</b>		
		.KK N,		dasses (F12) (LKK N,		
	A 147, 148)		MLRA 136)	42\ /MLD	3 <sub>1m d</sub>	liantary of hydrophytic vagatation and
	Gleyed Matrix (S4) Redox (S5)			13) <b>(MLRA 136, 122)</b> ain Soils (F19) <b>(MLRA 1</b>		licators of hydrophytic vegetation and etland hydrology must be present,
	Matrix (S6)			al (F21) <b>(MLRA 127, 1</b> 4		lless disturbed or problematic.
	Layer (if observed):		Red Falent Mater	ai (F21) (WILKA 121, 12	- <i>r)</i> un	liess disturbed of problematic.
	Layer (II Observeu).					
Type:			=		1	
Depth (in	ches):		_		Hydric Soil	Present? Yes No
Remarks:						



Photo 1 Upland data point wjob112\_u facing east



Photo 2 Upland data point wjob112\_u facing west

Project/Site: Atlantic Coast Pipeline	City/County: Johnston	Sampling Date: 2/12/2015
Applicant/Owner: Dominion		State: NC Sampling Point: wjob112f_w
Investigator(s): TP, RH	Section, Township, Range	
Landform (hillslope, terrace, etc.): drainage way		
Subregion (LRR or MLRA): P	Lat: 35.43818088 Long:	-78.33421125 Datum: WGS 1984
Soil Map Unit Name: Chewacla loam, 0 to 2 percentage	ent slopes, frequently flooded	NWI classification: None
Are climatic / hydrologic conditions on the site typ	ical for this time of year? Yes No	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	z significantly disturbed? Are "No	rmal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology		
		ations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes _	V No le the Sempled An	
Hydric Soil Present? Yes _	Is the Sampled Ar	
	within a Wetland?	162 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)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)
<u>✓</u> High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)
Saturation (A3)	Oxidized Rhizospheres on Living Roots (0)	
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	
✓ Drift Deposits (B3)	Thin Muck Surface (C7) Other (Explain in Remarks)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1) 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):11	
	Depth (inches):10 Wetla	nd Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monito	ring well aerial photos, previous inspections), if	available:
Booting Recorded Bata (circum gauge, memic	mig won, dendi priotoc, providuo mopecacino), n	aranasio.
Remarks:		

Sampling	Point: wjob112f_	w
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	Absolute	Dominant In	dicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species
1. Acer rubrum	30	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Populus deltoides	25	Yes	FAC	Total Niverbay of Dansin aut
3. Ulmus rubra	20	Yes	FAC	Total Number of Dominant Species Across All Strata:  5 (B)
4				(2)
		<del></del> -		Percent of Dominant Species That Are OBL EACING or EAC: 100 (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	75			Total % Cover of: Multiply by:
27.5		= Total Cover	15	OBL species0 x 1 =0
50% of total cover: 37.5	20% of	total cover:		0
Sapling/Shrub Stratum (Plot size:)				FACW species X Z = 320
1. Acer rubrum	30	Yes	FAC	FAC species x s =
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals:110 (A)330 (B)
5				
				Prevalence Index = B/A = 3
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
4-		= Total Cover		4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:15	20% of	total cover:	6	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				, ,
1				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2				
3.				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
F				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				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				<b>Herb</b> – 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	Man harden Allera de la constantida e O OO (i in
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1 Smilax rotundifolia	5	Yes	FAC	noight.
2				
3				
4				Hydrophytic
5				Vegetation Present? Yes No
0.5		= Total Cover	. 1	Present? Yes No
50% of total cover: 2.5	20% of	total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix			x Features	S1	. 2		
inches) 0-12	Color (moist) 10YR 4/1	<u>%</u> 90	Color (moist) 10YR 4/6	<u>%</u> 10	Type <sup>1</sup> C	Loc <sup>2</sup>	<u>Texture</u> CL	Remarks
0-12	10 TK 4/ T		101K 4/0					
		- ——						
"no: C-C	oncontration D_Dan	lotion DM	— Poducod Motrix MS		Sand Cr		<sup>2</sup> Location: D	U - Doro Lining M-Matrix
	oncentration, D=Dep Indicators:	ieuon, Riv	=Reduced Matrix, MS	<u>s=iviaskeu</u>	Sand Gr	airis.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface	(97)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		ca (SR) <b>(N</b>	II D A 1/17	· · · · · · · · · · · · · · · · · · ·	Coast Prairie Redox (A16)
	istic (A3)		Tolyvalde Be		. , .		(	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			71, 170)	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mat				<u> </u>	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		6)		V	/ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar	•	,			Other (Explain in Remarks)
	ark Surface (A12)	` ,	Redox Depre					,
_ Sandy N	Mucky Mineral (S1) (L	_RR N,	Iron-Mangane	ese Masse	es (F12) (	LRR N,		
	A 147, 148)		MLRA 130					
_ Sandy G	Bleyed Matrix (S4)		Umbric Surfa	ce (F13) (	MLRA 13	6, 122)	<sup>3</sup> Inc	dicators of hydrophytic vegetation and
_ Sandy F	Redox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	<b>8)</b> we	etland hydrology must be present,
_ Stripped	l Matrix (S6)		Red Parent M	faterial (F	21) <b>(MLR</b>	A 127, 147	) un	less disturbed or problematic.
estrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	l Present? Yes <u> </u>
emarks:								



Photo 1
Wetland data point wjob112f\_w facing north



Photo 2
Wetland data point wjob112f\_w facing south

Project/Site: Atlantic Coast Pipeline		City/County: Johr	nston		Sampling Date: 2/12/2015
Applicant/Owner: Dominion				State: NC	Sampling Point: wjob112s_w
Investigator(s): TP, RH		Section, Townshi			
Landform (hillslope, terrace, etc.): depress					
Subregion (LRR or MLRA): P		<u> </u>	Long: -78.336	67451	Datum: WGS 1984
Soil Map Unit Name: Chewacla loam, 0 to	2 percent slopes, freq	uently flooded	- · · · · ·	_ NWI classific	eation: None
Are climatic / hydrologic conditions on the	site typical for this time	e of year? Yes	No (If r	no, explain in R	emarks.)
Are Vegetation, Soil, or Hyd	drology signifi	cantly disturbed?	Are "Normal Ci	rcumstances" p	present? Yes No
Are Vegetation, Soil, or Hyd					
SUMMARY OF FINDINGS – Atta					
Hydrophytic Vegetation Present?	Yes V No				
Hydric Soil Present?	Yes No	is the San	npled Area	V V	No
	Yes No		vetiand?	res	NO
Remarks:		l			
HYDROLOGY					
Wetland Hydrology Indicators:			Se	econdary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is red	quired; check all that a	pply)		_ Surface Soil	Cracks (B6)
Surface Water (A1)		atic Plants (B14)	_		getated Concave Surface (B8)
High Water Table (A2)		Sulfide Odor (C1)	V	Drainage Pa	
Saturation (A3)	✓ Oxidized	Rhizospheres on Living	Roots (C3)	_ Moss Trim L	ines (B16)
Water Marks (B1)	Presence	of Reduced Iron (C4)		_ Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Recent Ir	on Reduction in Tilled S	oils (C6)	_ Crayfish Bur	rows (C8)
Drift Deposits (B3)		k Surface (C7)	_	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Other (Ex	plain in Remarks)	_		tressed Plants (D1)
Iron Deposits (B5)	(=-)		_		Position (D2)
Inundation Visible on Aerial Imagery	(B7)			_ Shallow Aqu	
Water-Stained Leaves (B9)			<u>v</u>	Microtopogra FAC-Neutral	aphic Relief (D4)
Aquatic Fauna (B13)			<u> </u>	_ FAC-Neutral	Test (D5)
Field Observations: Surface Water Present? Yes	_ No 🔽 Depth (ii	a ab a a \.			
	No Depth (ii				
	_ No Depth (ii _ No Depth (ii		Matlemal Head	lasta au Dansa	nt? Yes No
(includes capillary fringe)	_ No Depth (ii	iches):	wetiand nyd	irology Preser	nt? Yes No
Describe Recorded Data (stream gauge,	monitoring well, aerial	photos, previous inspe	ctions), if availab	ble:	
Devente					
Remarks:					

Sampling Point wjob i 125_W	Sampling	Point: wjob112s_	w
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00	Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	<u>Status</u>	Number of Dominant Species
1				That Are OBL, FACW, or FAC: 4 (A)
2				
3				Total Number of Dominant Species Across All Strata:  4 (B)
4				Species Across Air Strata.
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Describence Index workshoot.
7				Prevalence Index worksheet:
	0	= Total Cover		Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover:	0	OBL species 10 x 1 = 10
Sapling/Shrub Stratum (Plot size: 15 )		_		FACW species65
1 Acer rubrum	20	Yes	FAC	FAC species 20 x 3 = 60
2. Baccharis halimifolia	10	Yes	FACW	FACU species 0 x 4 = 0
2. Dacchans naiminola		163	TACVV	0
3				UPL species $0 \times 5 = 0$
4				Column Totals: (A) (B)
5				Prevalence Index - R/A - 2.1
6				Trevalence index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0¹
		= Total Cover		4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:15	20% of	total cover:	6	
Herb Stratum (Plot size:)				data in Remarks or on a separate sheet)
1 Scirpus cyperinus	35	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Juncus effusus	20	Yes	FACW	
3. Typha latifolia	10	No	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Typha lathona			OBL	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				Ŭ
0				Sapling/Shrub – Woody plants, excluding vines, less
··				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
		= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: <u>32.5</u>	20% of	total cover:	13	Woody vine All woody vines greater than 2.29 ft in
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				- range w
2				
3		-		
4				Hydrophytic
5				Vegetation
	0 :	= Total Cover		Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			1
	,			

(inches) Color (molst) % Tope Loc* Texture Remarks 0-12 10VR 5/2 95 10VR 4/6 5 C PL CL    Tope Co-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.   Tope Color (MILE)	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.    Variable   Variabl	narks
Adric Soil Indicators:  - Histosol (A1) - Histosol (A2) - Histic Epipedon (A2) - Black Histic (A3) - Thin Dark Surface (S9) (MLRA 147, 148) - Hydrogen Sulfide (A4) - Stratified Layers (A5) - Depleted Below Dark Surface (A11) - Thick Dark Surface (A12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) - Sandy Gleyed Matrix (S4) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Stratified Layer (K5) - Stratified Layer (K12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 136) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Red Parent Material (F21) (MLRA 148) - Strictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes  - Hydric Soil Present? Yes Hydric Soil Present? Yes	
Histosol (A1)	
Adric Soil Indicators:  - Histosol (A1) - Dark Surface (S7) - Polyvalue Below Surface (S8) (MLRA 147, 148) - Black Histic (A3) - Thin Dark Surface (S9) (MLRA 147, 148) - Hydrogen Sulfide (A4) - Stratified Layers (A5) - Depleted Matrix (F3) - Depleted Below Dark Surface (A11) - Thick Dark Surface (A12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) - Sandy Gleyed Matrix (S4) - Sandy Redox (S5) - Stratified Layer (F13) (MLRA 136, 122) - Sandy Redox (S5) - Piedmont Floodplain Soils (F19) (MLRA 148) - Sandy Redox (S6) - Red Parent Material (F21) (MLRA 148) - Strictive Layer (if observed):  Type: Depth (inches):	
ydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Sandy Redox (S5)  Defement Floodplain Soils (F13) (MLRA 147, 148)  MLRA 136, 122)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12) (LRR N, MLRA 147, 148)  MLRA 136)  Sandy Mucky Mineral (S1) (LRR N)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Sandy Redox (S5)  Red Parent Material (F21) (MLRA 148)  Wetland hydrology must be prestrictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes	-
Adric Soil Indicators:  - Histosol (A1) - Histosol (A2) - Histic Epipedon (A2) - Black Histic (A3) - Thin Dark Surface (S9) (MLRA 147, 148) - Hydrogen Sulfide (A4) - Stratified Layers (A5) - Depleted Below Dark Surface (A11) - Thick Dark Surface (A12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) - Sandy Gleyed Matrix (S4) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Stratified Layer (K5) - Stratified Layer (K12) - Sandy Mucky Mineral (S1) (LRR N, MLRA 136) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Sandy Redox (S5) - Red Parent Material (F21) (MLRA 148) - Strictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes  - Hydric Soil Present? Yes Hydric Soil Present? Yes	
ydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Depleted Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12)  Loamy Gleyed Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148)  MLRA 147, 148)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 127, 147)  Depth (inches):  Type:  Depth (inches):  Hydric Soil Present? Yes	
ydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Depleted Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12)  Loamy Gleyed Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148)  MLRA 147, 148)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 127, 147)  Depth (inches):  Type:  Depth (inches):  Hydric Soil Present? Yes	
ydric Soil Indicators:  Histosol (A1)  Dark Surface (S7)  Polyvalue Below Surface (S8) (MLRA 147, 148)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Matrix (F3)  Depleted Below Dark Surface (A11)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Depleted Matrix (S4)  Sandy Redox (S5)  Piedmont Floodplain Soils (F12)  Loamy Gleyed Matrix (F3)  Redox Dark Surface (F6)  Depleted Dark Surface (F7)  Redox Depressions (F8)  Iron-Manganese Masses (F12) (LRR N, MLRA 147, 148)  MLRA 147, 148)  Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (MLRA 148)  Stripped Matrix (S6)  Red Parent Material (F21) (MLRA 127, 147)  Depth (inches):  Type:  Depth (inches):  Hydric Soil Present? Yes	
Histosol (A1)	Motrix
Histosol (A1)  Histic Epipedon (A2)  Black Histic (A3)  Hydrogen Sulfide (A4)  Stratified Layers (A5)  Depleted Below Dark Surface (S9)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Striped Matrix (S6)  Striped Matrix (S6)  Polyvalue Below Surface (S9) (MLRA 147, 148)  Loamy Gleyed Matrix (F2)  Depleted Matrix (F2)  Depleted Matrix (F3)  Redox Dark Surface (F6)  Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Sandy Mucky Mineral (S1) (LRR N, MLRA 136, 122)  Sandy Gleyed Matrix (S4)  Sandy Redox (S5)  Stripped Matrix (S6)  Stripped Matrix (S6)  Strictive Layer (if observed):  Type:  Depth (inches):  Hydric Soil Present? Yes	
Histic Epipedon (A2)	
Black Histic (A3)	•
Stratified Layers (A5)	
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Stripped Matrix (S6) Stripped Matrix (S6) Stripped Matrix (S6) Depth (inches):  Depth (inches):  Depleted Dark Surface (F7) Depleted Dark Surface (F12) (LRR N, Depleted Dark Surface (F	
Thick Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	
MLRA 147, 148)  _ Sandy Gleyed Matrix (S4)  _ Sandy Redox (S5)  _ Stripped Matrix (S6)  _ Strictive Layer (if observed):  Type:  _ Depth (inches):  _ Hydric Soil Present? Yes	
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) 3Indicators of hydrophytic vegeta Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pre Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic estrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pre Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic estrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes	
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problematic estrictive Layer (if observed):  Type: Depth (inches): Hydric Soil Present? Yes	tic vegetation and
Depth (inches): Hydric Soil Present? Yes	ist be present,
Type:	oblematic.
Depth (inches): Hydric Soil Present? Yes	
emarks:	<u> </u>



Photo 1 Wetland data point wjob112s\_w facing east



Photo 2
Wetland data point wjob112s\_w facing west

Project/Site: Atlantic Coast Pipeline		City/Cou	unty: Johnston		Sampling Date: 2/12/2015		
Applicant/Owner: Dominion					Sampling Point: wjob112_u		
			, Township, Range: No				
Landform (hillslope, terrace, etc.): levee					Slope (%):0		
Subregion (LRR or MLRA): P					Datum: WGS 1984		
Soil Map Unit Name: Chewacla loam, 0 to 2	percent slopes, fre	quently flooded		NWI classific	ation: None		
Are climatic / hydrologic conditions on the site	e typical for this tim	ne of year? Yes	s No (	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydro	ology signi	ficantly disturbe	ed? Are "Normal	Circumstances" p	present? Yes No		
Are Vegetation, Soil, or Hydro							
SUMMARY OF FINDINGS – Attac							
Hydrophytic Vegetation Present? Y	es No	_					
	es No	'	s the Sampled Area	Vaa	No		
Wetland Hydrology Present? Y	es No_	<u> </u>	within a Wetland?	res	NO		
Remarks:		<b>'</b>					
Upland point taken at edge of clear cut.							
HYDROLOGY							
Wetland Hydrology Indicators:					tors (minimum of two required)		
Primary Indicators (minimum of one is requi	ired; check all that	apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)		uatic Plants (B		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	-	en Sulfide Odor		Drainage Par			
Saturation (A3)			• ,	Moss Trim Li			
Water Marks (B1)	<del></del>	e of Reduced I	, ,		Water Table (C2)		
Sediment Deposits (B2)			in Tilled Soils (C6)	Crayfish Buri			
Drift Deposits (B3)		ck Surface (C7			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (E	xplain in Rema	ırks)		tressed Plants (D1)		
Iron Deposits (B5)	_,			Geomorphic			
Inundation Visible on Aerial Imagery (B	37)			<ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>			
Water-Stained Leaves (B9)							
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:		" · · · ·					
	No Depth (						
	No Pepth (						
Saturation Present? Yes (includes capillary fringe)	No Pepth (	(inches):	Wetland H	Wetland Hydrology Present? Yes No			
Describe Recorded Data (stream gauge, mo	onitoring well, aeria	al photos, previ	ous inspections), if ava	ilable:			
Remarks:							

Sampling Poing	∩t: <sup>wjob112</sup> _u
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00	Absolute	Dominant I		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				
3				Total Number of Dominant Species Across All Strata: 5 (B)
				Species Across Air Strata(D)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 20 (A/B)
6				Bassalan a la dassara da la ser
7				Prevalence Index worksheet:
	0	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover:_	0	OBL species x 1 =0
Sapling/Shrub Stratum (Plot size: 15 )		_		FACW species5
1 Ligustrum sinense	10	Yes	FACU	FAC species5 x 3 =15
2. Liquidambar styraciflua	5	Yes	FAC	FACU species 55 x 4 = 220
2. Elquidambar Styracillua		165	TAC	0
3				UPL species $\begin{array}{c} 0 \\ \hline \\ 65 \\ \hline \end{array}$ $\begin{array}{c} x \ 5 = \\ \hline \\ 245 \\ \hline \end{array}$
4				Column Totals: (A) (B)
5				Prevalence Index = B/A = 3.76
6				Trevalence mack = B/TC =
				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	15	= Total Cove		
50% of total cover: 7.5	20% of	total cover:_	3	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5				data in Remarks or on a separate sheet)
1. Rubus argutus	20	Yes	FACU	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Andropogon virginicus	15	Yes	FACU	
				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Eupatorium capillifolium	10	Yes	FACU	be present, unless disturbed or problematic.
4. Scirpus cyperinus	5	No	FACW	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				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.				Herb – All herbaceous (non-woody) plants, regardless
	50	= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 25		total cover:_		
Woody Vine Stratum (Plot size: 30 )				Woody vine – All woody vines greater than 3.28 ft in
· · · · · · · · · · · · · · · · · · ·				height.
1				
2				
3				
4				Hadron bad's
5.		· ·		Hydrophytic Vegetation
<u> </u>	0	= Total Cove		Present? Yes No
50% of total cover: 0		total cover:_	0	
30 % of total cover		total cover	_	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix		Redox Fea			
(inches)	Color (moist)	%	Color (moist)	<u>6 Type<sup>1</sup> Loc<sup>2</sup></u>	Texture	Remarks
0-12	10YR 4/3	100			SCL	<u>.                                  </u>
			<del></del> -	<del></del>		
					· ·	
					-	
			<del></del>			
Tupo: C-C	oncontration D_Dan	lotion BM_Ba	educed Matrix, MS=Ma	akad Sand Crains	<sup>2</sup> Location: D	L=Pore Lining, M=Matrix.
	Indicators:	ietion, Rivi=Re	educed Matrix, MS=Ma	skeu Sanu Grains.		ators for Problematic Hydric Soils <sup>3</sup> :
-			Davis Confess (C7)			
Histosol			Dark Surface (S7)			2 cm Muck (A10) (MLRA 147)
	pipedon (A2)			Surface (S8) (MLRA 147		Coast Prairie Redox (A16)
	stic (A3)			(S9) (MLRA 147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Ma	, ,	F	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F			(MLRA 136, 147) /ery Shallow Dark Surface (TF12)
	ick (A10) <b>(LRR N)</b> d Below Dark Surface	· (A11)	Redox Dark Surfa	, ,		Other (Explain in Remarks)
_	ark Surface (A12)	e (A11)	<ul><li>Depleted Dark Su</li><li>Redox Depression</li></ul>			oner (Explain in Remarks)
	Aucky Mineral (S1) <b>(L</b>	DD N		Masses (F12) <b>(LRR N,</b>		
		.KK N,		dasses (F12) (LKK N,		
	A 147, 148)		MLRA 136)	42\ /MLD	3 <sub>1m</sub> d	liantary of hydrophytic vagatation and
	Gleyed Matrix (S4) Redox (S5)			13) <b>(MLRA 136, 122)</b> ain Soils (F19) <b>(MLRA 1</b>		licators of hydrophytic vegetation and etland hydrology must be present,
	Matrix (S6)			al (F21) <b>(MLRA 127, 1</b> 4		lless disturbed or problematic.
	Layer (if observed):		Red Falent Mater	ai (F21) (WILKA 121, 12	- <i>r)</i> un	liess disturbed of problematic.
	Layer (II Observeu).					
Type:			=		1	
Depth (in	ches):		_		Hydric Soil	Present? Yes No
Remarks:						



Photo 1 Upland data point wjob112\_u facing east



Photo 2 Upland data point wjob112\_u facing west

Project/Site: SERP		City/C	ounty: Johnston	;	Sampling Date: 7/29/2014
Applicant/Owner: DOMINION					Sampling Point: WJOA013f_W
		Section	on, Township, Range: No	PLSS in this area	<del>-</del> ,
Landform (hillslope, terrace, etc.)		Local reli			Slope (%): <u>1</u>
Subregion (LRR or MLRA): P		Lat: 35.43164359	Long: -78.	33961003	Datum: WGS 1984
Soil Map Unit Name: Chewacla	loam, 0 to 2 perce	ent slopes, frequently floode	ed	NWI classifica	tion: PFO1C
Are climatic / hydrologic condition	ns on the site typi	ical for this time of year? Y	es <u> </u>	(If no, explain in Re	marks.)
Are Vegetation, Soil	. or Hydrology	significantly distur	bed? Are "Norma	l Circumstances" pre	esent? Yes 🗸 No
Are Vegetation, Soil					
SUMMARY OF FINDING					
			<u> </u>	<u> </u>	
Hydrophytic Vegetation Presen Hydric Soil Present?		V No	Is the Sampled Area	4	
Wetland Hydrology Present?		✓ No	within a Wetland?	Yes	No
Remarks:					
ditch. There is a two track pass and ditch intercepts grounwater		curvert crossing. Teature is	s on the hoodplain of Ne	use river. Conveys	s bacwater nooding nom niver
HYDROLOGY					( ) ) ( ) ( ) ( )
Wetland Hydrology Indicators					ors (minimum of two required)
Primary Indicators (minimum of	one is required;			Surface Soil C	
Surface Water (A1)		True Aquatic Plants (I			etated Concave Surface (B8)
<ul><li> High Water Table (A2)</li><li>✓ Saturation (A3)</li></ul>		Hydrogen Sulfide Odd Oxidized Rhizosphere		✓ Drainage Patte _ Moss Trim Lin	
✓ Water Marks (B1)		Presence of Reduced			ater Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burro	
✓ Drift Deposits (B3)		Thin Muck Surface (C		-	ble on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Ren			essed Plants (D1)
Iron Deposits (B5)			,	Geomorphic P	, ,
Inundation Visible on Aeria	ıl Imagery (B7)			Shallow Aquita	` '
Water-Stained Leaves (B9	)			Microtopograp	hic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral T	est (D5)
Field Observations:					
Surface Water Present?		Depth (inches):			
Water Table Present?	Yes No _	Depth (inches):	4		
Saturation Present?	Yes _ No _	Depth (inches):1	Wetland H	Hydrology Present	? Yes <u>'</u> No
(includes capillary fringe)  Describe Recorded Data (strea	m gauge, monito	ring well, aerial photos, pre	vious inspections), if ava	nilable:	
2000	gaage, meme	g, aona. priotos, pro	,,, a.r.		
Remarks:					

Sampling Point: WJOA013f_W
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00	Absolute	Dominant In		Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species _
1. Populus heterophylla	12	Yes	OBL	That Are OBL, FACW, or FAC:7 (A)
2. Taxodium distichum	10	Yes	OBL	Total Number of Dominant
3. Carya aquatica	8	No	OBL	Species Across All Strata: 7 (B)
4. Salix nigra	8	No	OBL	
5. Platanus occidentalis	6	No	FACW	Percent of Dominant Species That Are OBL, FACW, or FAC:  100 (A/B)
6				That Are ODE, I AGW, OF I AG.
7				Prevalence Index worksheet:
''-	44	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 22		total cover:_	8.8	OBL species87
Sapling/Shrub Stratum (Plot size: 15 )	2070 01			FACW species44
1 Populus heterophylla	10	Yes	OBL	FAC species 15 x 3 = 45
2. Salix nigra	8	Yes	OBL	FACU species0
3. Platanus occidentalis	3	No	FACW	UPL species 0 x 5 = 0
	3	No	OBL	146 220
4. Carya aquatica				Column Totals:(A)(B)
5. Fraxinus pennsylvanica	3	No	FACW	Prevalence Index = B/A =1.5
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9.				
	27	= Total Cove		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:13.5	20% of	total cover:_	5.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1. Carex lupuliformis	20	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Hibiscus moscheutos	20	Yes	OBL	
3. Microstegium vimineum	15	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Scirpus atrovirens	8	No	OBL	be present, unless disturbed or problematic.
5 Bidens tripartita	8			Definitions of Four Vegetation Strata:
0		No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Boehmeria cylindrica	4	<u>No</u>	FACW	more in diameter at breast height (DBH), regardless of
7				height.
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.
11				Herb – All herbaceous (non-woody) plants, regardless
	75	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:37.5		total cover:_		W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1				noight.
2.				
3				
4				Hydrophytic
5				Vegetation
2		= Total Cove	_	Present? Yes No
50% of total cover:0	20% of	total cover:_	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: WJOA013f\_W

Profile Desc	ription: (Describe to	o the de	oth needed to docum	ent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 4/2	85	10YR 4/6	15	С	PL/M	SIC	
6-20	10YR 5/2	70	7.5YR 4/6	30	С	PL/M	SIC	
					-			
					-			
					-			
			-					
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indica	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	ipedon (A2)		Polyvalue Be	ow Surfa	ce (S8) <b>(N</b>	ILRA 147,	<b>148)</b> C	Coast Prairie Redox (A16)
Black His	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (	F2)		P	riedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat					(MLRA 136, 147)
	ck (A10) <b>(LRR N)</b>		Redox Dark S	,	,			ery Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dar				c	Other (Explain in Remarks)
	rk Surface (A12)		Redox Depre					
	lucky Mineral (S1) <b>(L</b> l	RR N,	Iron-Mangane		es (F12) <b>(</b>	LRR N,		
	147, 148)		MLRA 136				3	
-	leyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
-	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F	21) <b>(MLR</b>	A 127, 147	<u>')</u> un	less disturbed or problematic.
Restrictive L	ayer (if observed):							
Type: CL	^							
Depth (inc	ches): <u>0</u>						Hydric Soil	Present? Yes No
Remarks:								



Photo 1
Wetland data point WJOA013f\_w facing west



Photo 2
Wetland data point WJOA013f\_w facing south

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

Project/Site: ACP	City/County: Johnston Sampling Date: 7/20/20
Applicant/Owner: Dominion	State: NC Sampling Point: W10a013s
Investigator(s): 1. Harbour, K. Murchrey	Section Township Range: NA
Landform (hillslope, terrace, etc.): Deplession	Local relief (concave convex none): (COCAVE Slone (9/)) Or 2
Subragion (IBB of MIDA) / RRT	Local relief (concave, convex, none): CONCAVE Slope (%): 0-2 +3+2+ Long: -78.33161  Datum: W65 84
Soil Map Unit Name: (hewlaca loan, 0-2 in Sto	Datum: VV
<del>_</del>	•
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Sôil, or Hydrology significantly	· · · · · · · · · · · · · · · · · · ·
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil 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 Water (A1) Aquatic Fauna (B	
High Water Table (A2)  High Water Table (A2)  Marl Deposits (B1)	in the second of
Saturation (A3) Hydrogen Sulfide Water Marks (B1) Oxidized Rhizosp	
Sediment Deposits (B2)	
	uction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5) Other (Explain in	Remarks)
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?  YesNo Depth (inchest)	N/A
Surface Water Present?  YesNo Depth (inche   Water Table Present? YesNo Depth (inche   No Depth   No Depth (inche   No Depth   No	
Saturation Present? Yes V No Depth (inche	es): 61' Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Damada	· · · · · · · · · · · · · · · · · · ·
Remarks:	
·	
1	
· [	
	**

	Absolute	Dominant	Indiantas	Dominous Testas debest
Tree Stratum (Plot size: 3054 X 3054)		Dominant Species?		Dominance Test worksheet:
1. None Present	-10 COACI	<u>ohecies i</u>	Status	Number of Dominant Species That Are OBL. FACW. or FAC:
				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3				Species Across All Strata: (B)
				openios / in otrata.
4				Percent of Dominant Species That Are OBL, FACW, or FAC: > 67% (A/B)
5				That Are OBL, FACW, or FAC:
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
0.	$\overline{}$			OBL species x1 =
		= Total Cov	/er	1
	20% of	ftotal cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 308+X308+)				FAC species x 3 =
1. Diosyros virginiana	20	<i>y</i>	FAC	FACU species x 4 =
1. 2100 4103 : VIVAIVIANA		$\frac{1}{\lambda}$	OBL	UPL species x 5 =
2 Taxodium distichum		<del>-10</del>		1
3. Acer rubrum	<u>_5_</u>	$\sim$	FAC	Column Totals: (A) (B)
4. Carya illinoinensis	ユー		FACU	Paraminana ladau = B/A
- ,				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				
0	$\overline{\Delta}$			3 - Prevalence Index is ≤3.0¹
ر		= Total Co		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% o	f total cover	: <u> </u>	
Herb Stratum (Plot size: 308+X308+)				I limitantons of budger and and analysis and budge land and
1. Hibiscus moscheutos	$\mathcal{Z}$	١٨	081	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		<del>- (\)-</del>		
	10	. <u> </u>	UNK	Definitions of Four Vegetation Strata:
3. CAVER Jurida	20		<u> </u>	Tree Medicalanta audicalanta aires 2 in 77 0 and an
4. Scirpus cyperinus	5	ΛI	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	· <del></del>	, , ,		height.
5				l noight.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				<u> </u>
8				Herb - All herbaceous (non-woody) plants, regardless
9			. <del></del>	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.
				Tioight.
12	27	<del></del>	•	
	2/	_= Total Co	ver	
50% of total cover: 18.	<u>5</u> 20% d	of total cove	r: <u>/,</u> 4	
Woody Vine Stratum (Plot size: ろのそれ スのをす)	_			
LANGE OVEREAL !				
2				
3				
1 .				
4				
5				Hydrophytic
1	<u>O</u>	_ = Total Co	over	Vegetation
50% of total cover:				Present? Yes No No
		or total COVE	"· <del></del>	
Remarks: (If observed, list morphological adaptations be	low).			
,				
				•

Profile Desc	cription: (Describe	to the depth	needed to docun	nent the i	ndicator o	r confirm	the absence of in	dicators.)
Depth	Matrix		Redo	x Features				,
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc2	<u>Texture</u>	Remarks
0-10	104RS/1	90	JGR 5/6	10			CL	1
	<del> </del>		, ,,,,					
			<u> </u>					
							<del></del>	
							<del></del>	
		<del></del>		. <del></del>	<del></del> -	<del></del> ,		
<sup>1</sup> Type: C=C	oncentration, D=De	oletion RM≒R	educed Matrix, MS	S=Masked	Sand Grai	ins	<sup>2</sup> l ocation: Pl =	Pore Lining, M=Matrix.
	Indicators: (Applic							Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be		•	11 T 2 C		(A9) (LRR O)
. =	pipedon (A2)		Thin Dark Su					(A10) (LRR S)
	istic (A3)		Loamy Muck					ertic (F18) (outside MLRA 150A,B)
. =	en Sulfide (A4)		Loamy Gleye			<b>-</b> ,		loodplain Soils (F19) (LRR P, S, T)
_ , ,	d Layers (A5)		Depleted Ma	•	· <b>-</b> ,			Bright Loamy Soils (F20)
) <del>)                                    </del>	: Bodies (A6) (LRR F	Ρ, Τ, ህ)	Redox Dark		<del>-</del> 6)		(MLRA 1	1
	ucky Mineral (A7) (L		☐ Depleted Date	-	•			Material (TF2)
	resence (A8) (LRR I		Redox Depre					w Dark Surface (TF12)
	uck (A9) (LRR P, T)		☐ Marl (F10) (L	•	•			ain in Remarks)
	d Below Dark Surfac		Depleted Oc	hric (F11)	(MLRA 15	1)		·
Thick D	ark Surface (A12)		☐ Iron-Mangan	ese Mass	es (F12) (L	.RR O, P,	T) <sup>3</sup> Indicators	s of hydrophytic vegetation and
📗 Coast F	rairie Redox (A16) (	(MLRA 150A)	Umbric Surfa	ce (F13)	(LRR P, T,	U)		hydrology must be present,
Sandy I	Mucky Mineral (S1) (	(LRR O, S)	Delta Ochric	(F17) (ML	LRA 151)		unless d	listurbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) (	(MLRA 150	A, 150B)		
	Redox (S5)		Piedmont Flo					
	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (F	20) (MLR.	A 149A, 153C, 153	SD)
	urface (S7) (LRR P,		·					
Restrictive	Layer (if observed	):						
Type:			_					
Depth (ir	nches):		<u> </u>				Hydric Soil Pres	sent? Yes V No
Remarks:								-
				•				
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### Environmental Field Surveys Wetland Photo Page



Wetland data point wjoa013s\_w facing south.



Wetland data point wjoa013s \_w facing north.

Project/Site: SERP	City/County: Johnston	Sampling Date: 7/29/2	2014			
Applicant/Owner: DOMINION		State: NC Sampling Point: WJ	OA013_U			
Investigator(s): GB, TP, LE	Section, Township, Range: N					
Landform (hillslope, terrace, etc.): FLOODPLAIN			); <sup>2</sup>			
Subregion (LRR or MLRA): P	Lat: 35.43170166 Long: -78	33957838 Datum: WG	3S 1984			
Soil Map Unit Name: Chewacla loam, 0 to 2 perce	ent slopes, frequently flooded	NWI classification: None				
Are climatic / hydrologic conditions on the site typi	cal for this time of year? Yes No	(If no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norma	I Circumstances" present? Yes	No			
Are Vegetation, Soil, or Hydrology						
	te map showing sampling point location		res, etc.			
Hydrophytic Vegetation Present? Yes	✓ No Is the Sampled Area					
	No. 4/	Yes No				
	within a Wetland?	Yes No				
Remarks:	l e e e e e e e e e e e e e e e e e e e					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two re	equired)			
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	ce (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)	Sediment Deposits (B2)  Recent Iron Reduction in Tilled Soils (C6)					
✓ 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)				
<ul><li> Inundation Visible on Aerial Imagery (B7)</li><li> Water-Stained Leaves (B9)</li></ul>		<ul><li>Shallow Aquitard (D3)</li><li>Microtopographic Relief (D4)</li></ul>				
Aquatic Fauna (B13)		✓ FAC-Neutral Test (D5)				
Field Observations:		<u></u> 1710 Notice 1001 (20)				
	Depth (inches):					
	Depth (inches):					
	_	Hydrology Present? Yes No	ı			
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitor	ring well, aerial photos, previous inspections), if av	illable:				
Remarks:						

Sampling Point Woodo 13_0	Sampling	Point: WJOA013_	U
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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% Cover 30	Species?	Status FAC	Number of Dominant Species
1. Liquidambar styraciflua	30	Yes Yes	FAC	That Are OBL, FACW, or FAC:10 (A)
2. Pinus taeda	10	No	FACW	Total Number of Dominant
3. Celtis laevigata	10	No	FAC	Species Across All Strata:10 (B)
4. Acer rubrum			<u> </u>	Percent of Dominant Species
5	-			That Are OBL, FACW, or FAC: 100 (A/B)
6	-			Prevalence Index worksheet:
7	80			Total % Cover of: Multiply by:
50% of total cover· 40	:	= Total Cove	er 16	OBL species0 x 1 =0
15	20% 01	total cover:		FACW species 57 x 2 = 114
Sapling/Shrub Stratum (Plot size: )  1. Crataegus viridis	15	Yes	FACW	FAC species 110 x 3 = 330
2. Liquidambar styraciflua	10	Yes	FAC	FACU species0 x 4 =0
3. Acer rubrum	10	Yes	FAC	UPL species
4. Ilex decidua	5	No	FACW	Column Totals: 167 (A) 444 (B)
5. Celtis laevigata	5	No	FACW	, , ,
<u> </u>				Prevalence Index = B/A =2.65
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9	45	Total Caus		3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 22.5	. ——— ՝	= Total Cover:	er 9	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size: 5	2070 01			data in Remarks or on a separate sheet)
1. Carex grayi	10	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2 Carex lupuliformis	10	Yes	FACW	
3. Boehmeria cylindrica	2	No	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4.	-			be present, unless disturbed or problematic.
5				Definitions of Four Vegetation Strata:
6.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
7	-			more in diameter at breast height (DBH), regardless of height.
8.				
9.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.				m) tall.
11.				Harb All harbassaya (non woody) planta regardless
	22	= Total Cove	er	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover:11		total cover:	4.4	
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1. Smilax rotundifolia	10	Yes	FAC	
2. Toxicodendron radicans	5	Yes	FAC	
3. Campsis radicans	5	Yes	FAC	
4				Lhudronhudio
5.				Hydrophytic Vegetation
	20	= Total Cove	er	Present? Yes No
50% of total cover:10		total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			
Tromante. (molade photo hambers here of our a separate of	need.)			

Sampling Point: WJOA013\_U

Profile Desc	ription: (Describe t	o the depth	needed to document th	ne indicator or confirm	n the abs	ence of indicators.)
Depth	Matrix		Redox Feat			
(inches) 0-15	Color (moist) 10YR 4/3	100	Color (moist) %		Textu SC	
15-20	10YR 4/2	100			SC	L
	10YR 4/2	100			SC	L
		etion, RM=R	educed Matrix, MS=Mas	ked Sand Grains.		on: PL=Pore Lining, M=Matrix.
Hydric Soil						Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface (S7)	(00) (01) 51 (45)		2 cm Muck (A10) <b>(MLRA 147)</b>
	pipedon (A2)		-	rface (S8) (MLRA 147	, 148)	Coast Prairie Redox (A16)
Black Hi				S9) <b>(MLRA 147, 148)</b>		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleyed Matr	, ,		Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Matrix (F3			(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b> d Below Dark Surface	. / ^ 4 4 \	Redox Dark Surface		•	Very Shallow Dark Surface (TF12)
	ark Surface (A12)	(A11)	<ul><li>Depleted Dark Surfa</li><li>Redox Depressions</li></ul>			Other (Explain in Remarks)
	fucky Mineral (S1) <b>(L</b>	RR N	Iron-Manganese Ma			
	147, 148)	,	MLRA 136)	(112) <b>(Littie)</b>		
	Gleyed Matrix (S4)		Umbric Surface (F1	3) (MLRA 136, 122)		<sup>3</sup> Indicators of hydrophytic vegetation and
	ledox (S5)			n Soils (F19) <b>(MLRA 1</b> 4	48)	wetland hydrology must be present,
	Matrix (S6)			l (F21) <b>(MLRA 127, 14</b>		unless disturbed or problematic.
	_ayer (if observed):			· (· = · ) (···= · · · · · · · · · ·	1	amood distanced of prezionname.
Type: NC	DNE					
	ches):		<del>-</del>		Hydrid	Soil Present? Yes No
Remarks:						



Photo 1 Upland data point WJOA013\_u facing north



Photo 2
Upland data point WJOA013\_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	City/County: JOhn Ston Sampling Date: 7/20/15 State: NC Sampling Point: wjoa013-u3
Investigator(s): ESI-J. Harbour, 12. Murphrey	Section Township Range: ALA
Landform (hillslone terrace etc.): hillslone	Local relief (concave convex pone): Concave Sione (%): 2-4
Subsection (LINE or MERA): / R R T	Local relief (concave, convex, none): <u>Concave</u> Slope (%): <u>2-4-5.43422</u> Long: <u>78.33955</u> Datum: <u>W6584</u> Mently Figure 1 No (If no, explain in Remarks.)
Subjection (LRX of MERA). CT. C. 1000 0-2°L. Eregs	rentic Figure A
Soil Map Unit Name: Newacia 10001/0-215,4 1215	NVVI classification:
	if year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signification	
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	ing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Presents:	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)
Surface Water (A1)	
	(B15) (LRR U)
Saturation (A3) Hydrogen Sulf	ide Odor (C1)  Moss Trim Lines (B16)  pospheres along Living Roots (C3)  Dry-Season Water Table (C2)
	educed Iron (C4) Crayfish Burrows (C8)
1 <b></b> ' '	eduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Su	
Iron Deposits (B5) Under (Explain	/
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 (in	phon). NA
Surface Water Present? Yes No Depth (in Water Table Present? Yes No Depth (in Present)	iches). 720
Saturation Present? Yes No Depth (in	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:
Remarks:	
1	

Sampling Point: wjoa013\_42

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 F+ X 30 F4)		Species?		
. NOND Dresant				Number of Dominant Species
1. 110the 11236717	<del></del>	<del></del>		That Are OBL, FACW, or FAC: (A)
2				Tatal March and Danis and
3				Total Number of Dominant Species Across All Strata: (B)
				Species Across All Strata: (B)
4				Percent of Dominant Species 40 6
5				That Are OBL, FACW, or FAC:
6				(35)
				Prevalence Index worksheet:
7				Total % Cover of:Multiply_by:
8				1
		= Total Cov		OBL species x 1 =
500/ -51-1-1				FACW species x 2 =
	20% 0	f total cover	:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 308+×3084)	<b></b>		- 4 /	t 1
1. Diospyros virginiana	20	9	FAC	FACU species x 4 =
2. Carya illinoinensis	5	<u> </u>	FACH	UPL species x 5 =
•		<del>-/</del>	1 31 257	Column Totals: (A) (B)
3				Column rotals. (A)
4		÷		Brouplance Index - D/A =
				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 ≤3.01
	<u> よう</u>	= Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 12.	5 20% o	f total cover	r: 5	
Herb Stratum (Plot size: 308+X308+		(0(0) 0010	·	
Hero Stratum (Plot size: 200 17000)	15	\ \ \	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. PO 14 aunum a royrocoleum	13	<u> </u>		be present, unless disturbed or problematic.
2 Carex leurida	10	1/	OBL	Definitions of Four Vegetation Strata:
3. Bochmeria Cylinetica		7	FACH	
3. 13CE MILLE CO. 1.12			CHOVY	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		- <del></del>		more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7			- <del></del>	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb - All herbaceous (non-woody) plants, regardless
9			- <del></del>	of size, and woody plants less than 3.28 ft tall.
10.			- <del></del>	Woody vine - All woody vines greater than 3.28 ft in
11				height.
1				, noight.
12.	~~~	<del></del>		
	30	_ = Total Co	over 🗡	
50% of total cover:(5	20%	of total cove		1
Woody Vine Stratum (Plot size: 30 x 30 ++ )				·
	Δ	\ \ /	-4-1	j
1. CAMPSIS YANIFORS	<u> </u>	<u>-                                    </u>	- Fr C	.
2.		,		· [
		<del> </del>		• ]
3				<u>.</u> ļ
4	_			_ ]
5.				
J				- Hydrophytic
,		_ = Total C	1.	Vegetation
50% of total cover:	20%	of total cov	er: O.H	Present? Yes No
				-
Remarks: (If observed, list morphological adaptations be	iow).			

Sampling Po	<sub>oint:</sub> Wj oa	013_42
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SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm to the Depth Matrix Redox Features (Inches) Color (moist) % Color (moist) % Type¹ Loc²  O-20 10484/4 1600	the absence of Indicators.)  Texture Remarks  SL
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U)  Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)  Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)  Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)  Stratified Layers (A5) Depleted Matrix (F3)  Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6)  5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)  Muck Presence (A8) (LRR U) Redox Depressions (F8)  1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U)  Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)  Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T)  Sandy Mucky Mineral (S1) (LRR O, S)  Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)  Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 145  Anomalous Bright Loamy Soils (F20) (MLRA 1450A)  Dark Surface (S7) (LRR P, S, T, U)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B) Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No

#### Environmental Field Surveys Wetland Photo Page



Upland data point wjoa013\_u2 facing south.



Upland data point wjoa013\_u2 facing north.

Project/Site: SERP		City/C	ounty: Johnston		Sampling Date: 7/29/2014
Applicant/Owner: DOMINION					Sampling Point: WJOA013f_W
		Section	on, Township, Range: No	PLSS in this area	
Landform (hillslope, terrace, etc.)		Local reli			Slope (%): 1
Subregion (LRR or MLRA): P		Lat: 35.43164359	Long: -78.	33961003	Datum: WGS 1984
Soil Map Unit Name: Chewacla I	oam, 0 to 2 perce	ent slopes, frequently floode	ed	NWI classifica	tion: PFO1C
Are climatic / hydrologic condition	ns on the site typi	cal for this time of year? Y	es <u> </u>	(If no, explain in Re	marks.)
Are Vegetation, Soil	. or Hydrology	significantly distur	bed? Are "Normal	l Circumstances" pr	esent? Yes 🗸 No
Are Vegetation, Soil					
SUMMARY OF FINDING					
			<u> </u>	<u> </u>	
Hydrophytic Vegetation Present Hydric Soil Present?		V No	Is the Sampled Area	4	
Wetland Hydrology Present?		✓ No	within a Wetland?	Yes	
Remarks:					
ditch. There is a two track pass and ditch intercepts grounwater.		curvert crossing. T eature is	s on the hoodplain of Ne	use river. Conveys	s bacwater nooding nom niver
HYDROLOGY					( ) ( ) ( )
Wetland Hydrology Indicators					ors (minimum of two required)
Primary Indicators (minimum of	one is required;			Surface Soil C	
Surface Water (A1)		True Aquatic Plants (			etated Concave Surface (B8)
High Water Table (A2) ✓ Saturation (A3)		<ul><li>Hydrogen Sulfide Odd</li><li>Oxidized Rhizosphere</li></ul>		✓ Drainage Patte _ Moss Trim Lin	
✓ Water Marks (B1)		I Iron (C4)		ater Table (C2)	
Sediment Deposits (B2)		n in Tilled Soils (C6)	Crayfish Burro		
✓ Drift Deposits (B3)		· ·	ible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Thin Muck Surface (C Other (Explain in Ren			essed Plants (D1)
Iron Deposits (B5)			,	Geomorphic P	, ,
Inundation Visible on Aeria	I Imagery (B7)			Shallow Aquita	, ,
Water-Stained Leaves (B9)	)			Microtopograp	hic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral T	est (D5)
Field Observations:					
		Depth (inches):			
Water Table Present?	Yes No _	Depth (inches):	4		
Saturation Present?	Yes No _	Depth (inches):1	Wetland H	Hydrology Present	? Yes <u>/</u> No
(includes capillary fringe)  Describe Recorded Data (strea	m gauge, monitor	ring well, aerial photos, pre	vious inspections), if ava	nilable:	
2000	gaage,e.me.	g, acriai prictos, pro	mode inspectione, in are		
Remarks:					

Sampling Point: WJOA013f_W	WJOA013f_W
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00	Absolute	Dominant Ir		Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species _
1. Populus heterophylla	12	Yes	OBL	That Are OBL, FACW, or FAC:7 (A)
2. Taxodium distichum	10	Yes	OBL	Total Number of Dominant
3. Carya aquatica	8	No	OBL	Species Across All Strata: 7 (B)
4. Salix nigra	8	No	OBL	
5. Platanus occidentalis	6	No	FACW	Percent of Dominant Species That Are OBL, FACW, or FAC:  100 (A/B)
6		·		That Are ODE, I AGW, OF I AG.
7				Prevalence Index worksheet:
''-	44	= Total Cove		Total % Cover of: Multiply by:
50% of total cover: 22		total cover:	8.8	OBL species87
Sapling/Shrub Stratum (Plot size: 15 )	2070 01			FACW species44
1 Populus heterophylla	10	Yes	OBL	FAC species 15 x 3 = 45
2. Salix nigra	8	Yes	OBL	FACU species0
3. Platanus occidentalis	3	No	FACW	UPL species 0 x 5 = 0
	3	No	OBL	146 220
4. Carya aquatica				Column Totals:(A)(B)
5. Fraxinus pennsylvanica	3	No	FACW	Prevalence Index = B/A =1.5
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9.		· ·		
	27	= Total Cove		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover:13.5	20% of	total cover:_	5.4	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1. Carex lupuliformis	20	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. Hibiscus moscheutos	20	Yes	OBL	
3. Microstegium vimineum	15	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Scirpus atrovirens	8	No	OBL	be present, unless disturbed or problematic.
5 Bidens tripartita	8			Definitions of Four Vegetation Strata:
0		No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6. Boehmeria cylindrica	4	<u>No</u>	FACW	more in diameter at breast height (DBH), regardless of
7				height.
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.
11				Herb – All herbaceous (non-woody) plants, regardless
	75	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:37.5		total cover:		W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Woody Vine Stratum (Plot size:)				Woody vine – All woody vines greater than 3.28 ft in height.
1				noight.
2.				
3				
4				Hydrophytic
5				Vegetation
2		= Total Cove	_	Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: WJOA013f\_W

Profile Desc	ription: (Describe to	o the de	oth needed to docum	ent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	Features				
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 4/2	85	10YR 4/6	15	С	PL/M	SIC	
6-20	10YR 5/2	70	7.5YR 4/6	30	С	PL/M	SIC	
					-			
					-			
					-			
			-					
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	=Masked	Sand Gr	ains.		L=Pore Lining, M=Matrix.
Hydric Soil I	ndicators:						Indica	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)			2	cm Muck (A10) (MLRA 147)
Histic Ep	ipedon (A2)		Polyvalue Be	ow Surfa	ce (S8) <b>(N</b>	ILRA 147,	<b>148)</b> C	Coast Prairie Redox (A16)
Black His	stic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)		(MLRA 147, 148)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (	F2)		P	riedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Mat					(MLRA 136, 147)
	ck (A10) <b>(LRR N)</b>		Redox Dark S	,	,			ery Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dar				c	Other (Explain in Remarks)
	rk Surface (A12)		Redox Depre					
	lucky Mineral (S1) <b>(L</b> l	RR N,	Iron-Mangane		es (F12) <b>(</b>	LRR N,		
	147, 148)		MLRA 136				3	
-	leyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
-	edox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F	21) <b>(MLR</b>	A 127, 147	<u>')</u> un	less disturbed or problematic.
Restrictive L	ayer (if observed):							
Type: CL	^							
Depth (inc	ches): <u>0</u>						Hydric Soil	Present? Yes No
Remarks:								



Photo 1
Wetland data point WJOA013f\_w facing west



Photo 2
Wetland data point WJOA013f\_w facing south

Project/Site: ACP	City/County: Johnston Sampling Date: 7/20/20
Applicant/Owner: Dominion	State: NC Sampling Point: W10a013s
Investigator(s): J. Hubour, K. Murchrey	Section, Township, Range: NA
Landform (hillslope, terrace, etc.): Deplession	Section, Township, Range: NA  Local relief (concave, convex, none): CONCAVE  Slope (%): O-2  H3424  Long: -78.33961  Datum: W65 84
Subregion (LRR or MLRA): LRRT Lat 35.4	+3+2+ Inno: -78,33961 Datum: W65 84
Soil Map Unit Name: (hewlaca loam, 0-2 10 Sto	opes. Frequent 16 Flords & NIMI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of y	,
Are Vegetation, Sôil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	
	ng sampling point locations, transects, important features, etc.
, teach site map district	g camping point roduction, autocoto, important reatures, etc.
Hydrophytic Vegetation Present? Yes No	- Is the Sampled Area
Hydric Soil Present? Yes No No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks:	
remars.	
	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (E	
High Water Table (A2)  Marl Deposits (B	15) (LRR U)
Saturation (A3) Hydrogen Sulfide	e Odor (C1) Moss Trim Lines (B16)
	pheres along Living Roots (C3) 📙 Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	uction in Tilled Soils (C6)
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surfact ☐ Iron Deposits (B5) ☐ Other (Explain in	
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? YesNo Depth (inche	es): NA
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes No Depth (inch	es):   Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	
	·
	†
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1	

	Absoluto	Dominani	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 305 X 3054)		Species?		
· DADA RERECONT				Number of Dominant Species That Are OBL, FACW, or FAC:(A)
				That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant
3	. ———		i	Species Across All Strata: (B)
4				
				Percent of Dominant Species That Are OBL, FACW, or FAC: > 67% (A/B)
5				That Are OBL, FACW, or FAC:
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
		= Total Co	wer .	OBL species x 1 =
				FACW species x 2 =
50% of total cover:	20% o	f total cove	r:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 308+X308+)	~ ~	١.,	_	
1. Diosuros virginiana	20	У.	FAC	FACU species x 4 =
2 Taxodium distichum	<del>- 3</del>	N	OBL	UPL species x 5 =
A. A. A. A. A. A. A. A. A. A. A. A. A. A		7	FAC	Column Totals: (A) (B)
3. Acer rubrum	궃			Column rotals: (v)
4. Carya illinoinensis	<u>. ユ</u>	<u> </u>	FACU	Prevalence Index = B/A =
5				
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	30	= Total Co		1 <del></del>
50% of total cover:				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	<u>20%</u> 0	t total cove	er:	
Herb Stratum (Plot size: 308+X308+)	•		- 1	Indicators of hydric soil and wetland hydrology must
1 Hibiscus moscheutos	$\mathcal{Z}$	Λl	OBL	be present, unless disturbed or problematic.
2. POLYBOOUM SP.	10	<del></del>	UNK	
	- +>			Definitions of Four Vegetation Strata:
3. Carex lurida	20	. <del>- X</del>	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Scirpus cyperinus	5	Ń	OBL	more in diameter at breast height (DBH), regardless of
				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				The house and the second secon
0	_			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				of size, and woody plants less than 3.20 it tail.
10			<del>-</del>	Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	37	- Tatal C		
	<u> </u>	_ = Total C	over	
50% of total cover: 18	<u>·&gt;</u> 20% (	of total covi	er: // T	
Woody Vine Stratum (Plot size: ろのそれ スピッチャ)				
L. ACAG OVACAGE				
2				
3				
4				
5				Hydrophytic
		_ = Total C	over	Vegetation
50% of total cover:				Present? Yes No
		or total oot		
Remarks: (If observed, list morphological adaptations be	elow).			
, i				

Profile Desc	cription: (Describe	to the depth	needed to docun	nent the i	ndicator o	r confirm	the absence of in	dicators.)
Depth	Matrix		Redo	x Features				,
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc2	<u>Texture</u>	Remarks
0-10	104RS/1	90	JGR 5/6	10			CL	1
	<del> </del>		7					
			<u>.                                    </u>					
							<del></del>	
							<del></del>	
		<del></del>		. <del></del>	<del></del> -	<del></del> ,		<u> </u>
<sup>1</sup> Type: C=C	oncentration, D=De	oletion RM≒R	educed Matrix, MS	S=Masked	Sand Grai	ins	<sup>2</sup> l ocation: Pl =	Pore Lining, M=Matrix.
	Indicators: (Applic							Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be		•	11 T 2 C		(A9) (LRR O)
. =	pipedon (A2)		Thin Dark Su					(A10) (LRR S)
	istic (A3)		Loamy Muck					ertic (F18) (outside MLRA 150A,B)
. =	en Sulfide (A4)		Loamy Gleye			<b>-</b> ,		loodplain Soils (F19) (LRR P, S, T)
_ , ,	d Layers (A5)		Depleted Ma	•	· <b>-</b> ,			Bright Loamy Soils (F20)
) <del>)                                    </del>	: Bodies (A6) (LRR F	Ρ, Τ, ህ)	Redox Dark		<del>-</del> 6)		(MLRA 1	1
	ucky Mineral (A7) (L		☐ Depleted Date	-	•			Material (TF2)
	resence (A8) (LRR I		Redox Depre					w Dark Surface (TF12)
	uck (A9) (LRR P, T)		☐ Marl (F10) (L	•	•			ain in Remarks)
	d Below Dark Surfac		☐ Depleted Oc	hric (F11)	(MLRA 15	1)		·
Thick D	ark Surface (A12)		☐ Iron-Mangan	ese Mass	es (F12) (L	.RR O, P,	T) <sup>3</sup> Indicators	s of hydrophytic vegetation and
📗 Coast F	rairie Redox (A16) (	(MLRA 150A)	Umbric Surfa	ce (F13)	(LRR P, T,	U)		hydrology must be present,
Sandy l	Mucky Mineral (S1) (	(LRR O, S)	Delta Ochric	(F17) (ML	LRA 151)		unless d	listurbed or problematic.
	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) (	(MLRA 150	A, 150B)		
	Redox (S5)		Piedmont Flo					
	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (F	20) (MLR.	A 149A, 153C, 153	SD)
	urface (S7) (LRR P,		·					
Restrictive	Layer (if observed	):						
Type:			_					
Depth (ir	nches):		<u> </u>				Hydric Soil Pres	sent? Yes V No
Remarks:								-
				•				
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	ı							
1								



Wetland data point wjoa013s\_w facing south.



Wetland data point wjoa013s \_w facing north.

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: SERP	City/County: Johnston	nston Sampling Date: 7/29/					
Applicant/Owner: DOMINION		State: NC Sampling Point: WJOA					
Investigator(s): GB, TP, LE	Section, Township, Range:						
Landform (hillslope, terrace, etc.): FLOODPLAIN							
Subregion (LRR or MLRA): P	at: 35.43170166 Long: -7	8.33957838	Datum: WGS 1984				
Soil Map Unit Name: Chewacla loam, 0 to 2 percent	slopes, frequently flooded	NWI classifica	ation: None				
Are climatic / hydrologic conditions on the site typical	for this time of year? Yes No	_ (If no, explain in Re	emarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed? Are "Norn	nal Circumstances" p	resent? Yes No				
Are Vegetation, Soil, or Hydrology							
SUMMARY OF FINDINGS – Attach site							
Hydrophytic Vegetation Present? Yes <u>✓</u>	No Is the Sampled Area						
	is the Sampled Area		No				
	No within a Wetland?	Yes	NO				
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)				
Primary Indicators (minimum of one is required; che	eck all that apply)	Surface Soil (					
Surface Water (A1)	_ True Aquatic Plants (B14)		getated Concave Surface (B8)				
	_ Hydrogen Sulfide Odor (C1)	Drainage Pat					
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3	B) Moss Trim Li	nes (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 Burr	rows (C8)				
✓ Drift Deposits (B3)	_ Thin Muck Surface (C7)		sible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	Other (Explain in Remarks)		tressed Plants (D1)				
Iron Deposits (B5)		Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3) Microtopographic Relief (D4)					
Water-Stained Leaves (B9)		<del></del>	` '				
Aquatic Fauna (B13)		<u>✓</u> FAC-Neutral	Test (D5)				
Field Observations:  Surface Water Present? Yes No	Depth (inches):						
	Depth (inches):						
		Wetland Hydrology Present? Yes No					
(includes capillary fringe)	Deptil (iliches) Wetland	Wettalid Hydrology Present? Tes No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							
Remarks.							

Sampling Point Woodo 13_0	Sampling	Point: WJOA013_	U
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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% Cover 30	Species?	Status FAC	Number of Dominant Species
1. Liquidambar styraciflua	30	Yes Yes	FAC	That Are OBL, FACW, or FAC:10 (A)
2. Pinus taeda	10	No	FACW	Total Number of Dominant
3. Celtis laevigata	10	No	FAC	Species Across All Strata:10 (B)
4. Acer rubrum				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6		<u> </u>		Prevalence Index worksheet:
7	80			Total % Cover of: Multiply by:
50% of total cover: 40		= Total Cove	er 16	OBL species x 1 = 0
15	20% of	total cover:		FACW species 57
Sapling/Shrub Stratum (Plot size: )  1. Crataegus viridis	15	Yes	FACW	FAC species 110 x 3 = 330
2. Liquidambar styraciflua	10	Yes	FAC	FACU species 0 x 4 = 0
3. Acer rubrum	10	Yes	FAC	UPL species 0 x 5 = 0
		No	FACW	Column Totals: 167
4. Ilex decidua		No	FACW	Column rotals (A) (B)
5. Celtis laevigata			TACVV	Prevalence Index = B/A = 2.65
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				∠ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total cover: 22.5		= Total Cove	er 9	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
E	20% of	total cover:_		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)  1. Carex grayi	10	Voo	EAC)A/	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	10	Yes	FACW FACW	
2. Carex lupuliformis	2	Yes		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3. Boehmeria cylindrica		No	FACW	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				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				Herb – All herbaceous (non-woody) plants, regardless
		= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 11	20% of	total cover:	4.4	Woody vine – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size:)	40	V	<b>540</b>	height.
1. Smilax rotundifolia		Yes	FAC	
2. Toxicodendron radicans	5	Yes	FAC	
3. Campsis radicans	5	Yes	FAC	
4				Hydrophytic
5				Vegetation
40		= Total Cove		Present? Yes No No
50% of total cover: 10		total cover:		
Remarks: (Include photo numbers here or on a separate sl	heet.)			

Sampling Point: WJOA013\_U

Profile Desc	ription: (Describe t	o the depth	needed to document th	ne indicator or confirm	n the abs	sence of indicators.)
Depth	Matrix		Redox Feat			
(inches) 0-15	Color (moist) 10YR 4/3	100	Color (moist) %		Textu SC	
15-20	10YR 4/2	100			SC	L
	10YR 4/2	100			SC	L
		etion, RM=R	educed Matrix, MS=Mas	ked Sand Grains.		on: PL=Pore Lining, M=Matrix.
Hydric Soil I						Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface (S7)	(00) (01)		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)			rface (S8) (MLRA 147,	, 148)	Coast Prairie Redox (A16)
Black Hi				S9) <b>(MLRA 147, 148)</b>		(MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleyed Matr	` '		Piedmont Floodplain Soils (F19)
	Layers (A5)		Depleted Matrix (F3			(MLRA 136, 147)
	ick (A10) <b>(LRR N)</b> d Below Dark Surface	. / ^ 4 4 \	Redox Dark Surface			Very Shallow Dark Surface (TF12)
	ark Surface (A12)	(A11)	<ul><li>Depleted Dark Surfa</li><li>Redox Depressions</li></ul>			Other (Explain in Remarks)
	lucky Mineral (S1) <b>(L</b>	RR N	Iron-Manganese Ma			
	147, 148)	,	MLRA 136)	20000 (1 12) <b>(Little)</b>		
	sleyed Matrix (S4)		•	3) <b>(MLRA 136, 122)</b>		<sup>3</sup> Indicators of hydrophytic vegetation and
	edox (S5)			n Soils (F19) <b>(MLRA 1</b> 4	48)	wetland hydrology must be present,
	Matrix (S6)			l (F21) <b>(MLRA 127, 14</b> )		unless disturbed or problematic.
	_ayer (if observed):			· (· = · ) (···= · · · · · · · · · ·	<del>''</del>	unico dictando en prozionnamo.
Type: NC	NE					
	ches):		<del>-</del> -		Hydri	c Soil Present? Yes No
Remarks:						



Photo 1 Upland data point WJOA013\_u facing north



Photo 2
Upland data point WJOA013\_u facing east

Project/Site: ACP	4	City/County: Jの	na ston	Sampling Date: 7/20//5
Applicant/Owner: Dominion		_ , ,	State: N C	Sampling Date: 7/20/15 Sampling Point: wjoa013_u2
Investigator(s): ESI-J. Harbon	ur, 12. Murphrey	Section, Township	Range: ALA	
Landform (hillslone terrace etc.):	Ilslope	Local relief (concav	e convey none) Con Co	ave sione (%): 2-4
Landform (hillslope, terrace, etc.): h Subregion (LRR or MLRA): LR R Soil Map Unit Name: (hewacla I Are climatic / hydrologic conditions on	T 1at 35	5.43422	Longs-78.3395	Dotum: NGS 84
Sail Man Linit Name (Special Color)	1000 0-2°4. Exely	rentic Floride	Long. 77755125	Datum. VI
Soil Map Unit Name: Chewacia	000170-215,4 1C16	1 07 /	NVVI classific	cation:
		of year? Yes N	o (If no, explain in F	Remarks.)
Are Vegetation, Soil, o			re "Normal Circumstances" ¡	oresent? Yes No
Are Vegetation, Soil, o	r Hydrology naturally	y problematic? (I	f needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - A	Attach site map show	ing sampling poir	nt locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No Yes No Yes No	Is the Samp		No
				-
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one	is required: check all that ap	(ylq	Surface Soi	Cracks (B6)
Surface Water (A1)	Aquatic Fauna	(B13)	Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2)		(B15) (LRR U)	_	atterns (B10)
Saturation (A3)	Hydrogen Sulf		Moss Trim	
☐ Water Marks (B1) ☐ Sediment Deposits (B2)	— ·	ospheres along Living R leduced Iron (C4)	Crayfish Bu	Water Table (C2)
Drift Deposits (B3)		eduction in Tilled Soils (		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Su	`	· · · =	c Position (D2)
Iron Deposits (B5)	Other (Explain	ı in Remarks)	☐ Shallow Aq	uitard (D3)
Inundation Visible on Aerial Ima	agery (B7)		FAC-Neutra	
Water-Stained Leaves (B9)			<u></u> Sphagnum	moss (D8) (LRR T, U)
Field Observations:		NA		
Surface Water Present? Yes		iches): 771		,
	Depth (in Depth (in		Motton d Hudunia au Dun-	
(includes capillary fringe)		•	Wetland Hydrology Pres	ent? Yes No
Describe Recorded Data (stream g	auge, monitoring well, aenal	pnotos, previous inspec	cuons), it available:	
Remarks:				
				-
				'
		,		
<u> </u>				

Sampling Point: wjoa013\_42

- G()(G)(G)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 3084 X 3084)	% Cover	Species?	_Status_	Number of Dominant Species
1. none Present		<del></del>		That Are OBL, FACW, or FAC: (A)
2				Tatalahan C
3				Total Number of Dominant Species Across All Strata:  (B)
4.				(b)
5				Percent of Dominant Species 40%
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Cov	/er	
	20% of	ftotal cover	;	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 308+×3084)	<b></b>		- 4 /	FAC species x 3 =
1. Diospyros virginiana	20	$\overline{\mathcal{Y}}$	FAC	FACU species x 4 =
2. Carya illinoinensis	5	4	FACH	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 ≤3.01
_		= Total Co		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 12.	<u>5</u> 20% o	f total cover	r: <u>5</u>	
Herb Stratum (Plot size: 308+X308)				Indicators of hydrin pail and watened hydrology must
1.PO MAUNUM AGYROCOLEON	15	$\vee$	OBL	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Carex leurida	10	3/	OBL	Definitions of Four Vegetation Strata:
3. Bochmerie Cyline rice	· <del>- \</del>	N	FACW	Definitions of Four Vegetation Strata:
	u)			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4	- —			more in diameter at breast height (DBH), regardless of
5			<u> </u>	height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Health All health and the control of
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12	- <del> </del>			
/ -	30	_ = Total Co	/	
50% of total cover:	20%	of total cove	er: <u> </u>	. 1
Woody Vine Stratum (Plot size: 30 x 30 th.)			٠. ؍	
1. Campsis radicons	<u> </u>	- <del>-</del> 7	FAC	
2				
3	-			·
J	<del>-</del>			•
4				
5				- Hydrophytic
	2	_ = Total C	over	Vegetation
50% of total cover:	20%	of total cov	er: <u>O. H</u>	Present? Yes No
Remarks: (If observed, list morphological adaptations be	low).			<u> </u>
	,			

Sampling Po	<sub>int:</sub> Wj oa	013_42
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SOIL

Profile Description: (Describe to the depth needed to document the indicator or conf Depth Matrix Redox Features (Inches) Color (moist) % Color (moist) % Type Loc²  O-20 10424/4 100	_
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)  Histosol (A1)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B) Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  7, P, T)  3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  10B) A 149A)
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	Hydric Soil Present? Yes No



Upland data point wjoa013\_u2 facing south.



Upland data point wjoa013\_u2 facing north.

Project/Site: ACP City/C	County: Johnston Sampling Date: 10/19/16
Applicant/Owner: Dominion	State: NL Sampling Point: 300040f.
Investigator(s): ESI- Roper, Johnson Section	on, Township, Range: none
Landform (hillslope, terrace, etc.): floodplain Local	relief (concave, convex, none): none Slope (%): 0 - 2 1/
Subregion (LRR or MLRA): LRR P Lat: 35,4315	54 Long: -78.34123 Datum:W6584
Soil Map Unit Name: Chewada loam, 0-21/ 5/000	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
0.00	
NCWAM: Bottomland Hardwood F	prest
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) (LRI	
Saturation (A3) Hydrogen Sulfide Odor (6	CONTROL OF THE PROPERTY OF THE
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2)  Presence of Reduced Iro	
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)	and the state of t
Iron Deposits (B5) Other (Explain in Remark	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:	
Surface Water Present? Yes NoDepth (inches):	NH
Water Table Present? Yes No Depth (inches):	/
Saturation Present? Yes No Depth (inches):	→ 2D Wetland Hydrology Present? Yes V No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
P 7 5 H 947 5 L 3	

2061 2061		Dominant		Dominance Test worksheet:	
Tree Stratum (Plot size: 30f4 x 30f4)		Species?		Number of Dominant Species	
1. Pinus taeda	30		FAL	That Are OBL, FACW, or FAC:	(A)
2. Liquidambar styraciflua	10	N	FAL	Total Number of Dominant	
1 - 1 - 1 - 1	15	γ	FAL	Species Across All Strata:	(B)
4.					\-'
				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC:	(A/B)
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8					
	55	= Total Cov	er	OBL species x 1 =	
50% of total cover: _27				FACW species x 2 =	- 1
Sapling/Shrub Stratum (Plot size: 30f4 x 30f4)				FAC species x 3 =	_ 1
Ace Cubcumo	10	V	FAC	FACU species x 4 =	_
1. Acer rubrum	10			UPL species x 5 =	
2 Liquidambar styraciflua	10	Α	FAL	Column Totals: (A)	- 1
3. 0				Column rotals (A)	_ (b)
4				Prevalence Index = B/A =	
5					
				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8				3 - Prevalence Index is ≤3.01	
	70	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explai	in)
50% of total cover:	20% o	f total cover:	4		
Herb Stratum (Plot size: 30ft x 30ft)				<sup>1</sup> Indicators of hydric soil and wetland hydrology r	nuet
				be present, unless disturbed or problematic.	ilust
				Definitions of Four Vegetation Strata:	
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), regard	ess of
5				height.	
6				Sapling/Shrub - Woody plants, excluding vines	less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall	
8				Herb - All herbaceous (non-woody) plants, rega	rdless
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	22 524 5525 . 554 1 - 55				
	0	= Total Cov	er		
50% of total cover:					
	20700	total cover.			
Woody Vine Stratum (Plot size: 30ff x 30ff)					
1. none					
2					
3					
4					
5				Hudesshade	
	n	= Total Cov		Hydrophytic Vegetation	
				Present? Yes No	
50% of total cover:		total cover:		DOMESTIC STORY STO	
Remarks: (If observed, list morphological adaptations below	ow).				
71					

4 2245 SYTC	cription: (Describe	to the depth n				or confirm	the absence	of Indicators.)
Depth (inches)	Color (moist)	% (	Redo Color (moist)	x Features %	Type	Loc²	Texture	Remarks
0-4	10YR 3/3	100					L	
4-12	104036	0 - 1	VD 4/11	1/2		M	1	
	1018 72		7 K 7/4			1-1	71	
12-20	101K 3/2	80 11	DY K-1/4	10		M	SL	
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	cable to all LRR	s, unless other	rwise note	d.)		Indicators	for Problematic Hydric Solls <sup>3</sup> :
Histosol		_	_ Polyvalue Be				) 1 cm N	Muck (A9) (LRR O)
	pipedon (A2)	-	_ Thin Dark Su					Muck (A10) (LRR S)
	istic (A3)	_	_ Loamy Muck	-		l (O)		ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)	_	Loamy Gleye Depleted Mar		-2)			ont Floodplain Soils (F19) (LRR P, S, T) alous Bright Loamy Soils (F20)
_	d Layers (A5) Bodies (A6) (LRR F	- T III	Redox Dark		6)		_	RA 153B)
	ucky Mineral (A7) (Li		Depleted Dar					arent Material (TF2)
_	resence (A8) (LRR L		_ Redox Depre					Shallow Dark Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (L		,			(Explain in Remarks)
	d Below Dark Surfac		_ Depleted Oct	hric (F11) (	MLRA 1	51)		
Thick Da	ark Surface (A12)	<u>-</u>	_ Iron-Mangan	ese Masse	s (F12) (	LRR O, P,	•	cators of hydrophytic vegetation and
	rairie Redox (A16) (I					, U)		land hydrology must be present,
	Mucky Mineral (S1) (	LRR O, S) _	_ Delta Ochric					ess disturbed or problematic.
	Gleyed Matrix (S4)	_	_ Reduced Ver					
	Redox (S5) I Matrix (S6)	-	_ Piedmont Flo				9A) A 149A, 153C	153D)
	rface (S7) (LRR P, \$	S T II)	_ Anomalous E	origint Loan	iy Solis (	F20) (WLK	A 149A, 133C	, 1330)
	Layer (If observed)		10 10 10 10 10 10 10 10					
Type:	, (,	7						,
Depth (in	ches).						Hydric Soll	Present? Yes No
Remarks:	circ <i>3)</i> .						Tiyano con	11030111 103 110
Remarks.								
ļ.								



Wetland data point wjoo040f\_w facing north.



Wetland data point wjoo040f\_w facing east.

Project/Site: ALP City/0	County: Johnston Sampling Date: 10/19/16
Applicant/Owner: Dominion	State: N C Sampling Point: 12:00040-c
Investigator(s): ESI-Roper, Johnson Secti	
	I relief (concave, convex, none): NDDC Slope (%): D-Z
Subregion (LBB or MLBA): LRRP Lat: 35,43	162 Long: -78.34123 Datum:W 6586
Soil Map Unit Name: Chewacla loam, 0-21, 5/01	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distu	
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sar	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Desiration	
Road bed - could not auger through	gravel All
1 2000	
l ×	
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) (LR	
Saturation (A3) Hydrogen Sulfide Odor (	
Water Marks (B1) Oxidized Rhizospheres a Presence of Reduced Inc	
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
Iron Deposits (B5) Other (Explain in Remar	
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):	NA
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Could not amore to be according	
and the anger into grave	ciroad to determine
subset Plat	
substrace hydrology.	· ·
, 0,	

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

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 15ft x30ft)	% Cover Species? Status	Number of Dominant Species
1. none		That Are OBL, FACW, or FAC:(A)
2		Total Number of Descions
3.		Total Number of Dominant Species Across All Strata:  (B)
4		,
		Percent of Dominant Species That Are OBL, FACW, or FAC: 50'/ (A/B)
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species 20 x1= 20
	= Total Cover	FACW species x 2 =
50% of total cover:	20% of total cover:	
Sapling/Shrub Stratum (Plot size: 15 ft x 30 ft)		FAC species x 3 = FACU species \( \text{ \text{ V}} \) x 4 = \( \text{ \text{ V}} \)
1. none		1
2		UPL species x 5 =
3		Column Totals: 30 (A) 60 (B)
4		Prevalence Index = B/A =
5		
		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8	= Total Cover	3 - Prevalence Index is ≤3.01
		Problematic Hydrophytic Vegetation¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 15f+ x 30ff)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Persicaria punctata	20 Y OBL	be present, unless disturbed or problematic.
2. Allium canadense	10 Y FACU	Definitions of Four Vegetation Strata:
3		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
5		height.
6.		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		or size, and woody plants less than 5.20 it tail.
10		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12		
	30 = Total Cover	
50% of total cover: 15	20% of total cover:	
Woody Vine Stratum (Plot size: 15f4 x 30f4)		
1. none		
2.		
3.		
4.		
5.		
5	0 = Total Cover	Hydrophytic Vegetation
a		Present? Yes No
50% of total cover:		
Remarks: (If observed, list morphological adaptations below	w).	

Profile Description: (Describe to the depth needed to document the Indicator or confirm	n the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc2	Texture Remarks
0 - ?	gravel fill
	-
True Co-Consentation De Depletion BM-Bodyand Makin MC-Macked Sand Crains	21 continue DI - Doro Lining M-Matrix
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solis <sup>3</sup> :
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	13 Carlo 14
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U	
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) Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P,	T) 3Indicators of hydrophytic vegetation and
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)  Sandy Gleyed Matrix (S4)  Reduced Vertic (F18) (MLRA 150A, 150B)	. C. 1977 B. 2017 19-4 E. 19 F. 19 F. 1977 B. 1977 B. 1977 B. 1977 B. 1977 B. 1977 B. 1977 B. 1977 B. 1977 B.
Sandy Redox (S5)  — Reduced Veric (P16) (MERA 130A, 130B)  — Piedmont Floodplain Soils (F19) (MERA 14	
Stripped Matrix (S6)  — Anomalous Bright Loamy Soils (F20) (MLRA 14)	
Dark Surface (S7) (LRR P, S, T, U)	1400, 1000, 1000)
Dair Odilaco (0/) (EINT 1, 0, 1, 0)	
Restrictive Layer (if observed):	
Restrictive Layer (if observed):  Type:	Hudde Sell Bresent2 - Vee - No.
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soli Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	Hydric Soli Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	Hydric Soli Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks: Could not auger through gravel road bed	Hydric Soli Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks: Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	
Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:  Could not auger through gravel road bed	



Upland data point wjoo040\_u facing west.



Upland data point wjoo040\_u facing east.

Project/Site: ALP	City/County: J	ohnston	Sampling	Date: 10/19/16
Applicant/Owner: Dominion		State:	Sampling	Point: Wjo 0041f-u
Investigator(s): ESI- Roper, Johnson	Section. Townshi	p. Range: non	e	•
Landform (hillslope, terrace, etc.): floodplain				Slope (%): () -2'/
				Datum: W 6-584
Soil Map Unit Name: Wehad Kee-Chastain as				TPU
Are climatic / hydrologic conditions on the site typical for this time of ye				
Are Vegetation, Soil, or Hydrology significantly		Are "Normal Circums	stances" present? Y	es No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic?	(If needed, explain a	ny answers in Rema	rks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling po	int locations, tra	ansects, importa	ant features, etc.
Hydrophytic Vegetation Present? Yes No				
Hydric Soil Present? Yes No	Is the San	npled Area	/	
Wetland Hydrology Present? Yes No	within a V	Vetland?	Yes No_	
Remarks:				
NCWAM: Bottomland Hardwood	Forest			
HYDROLOGY				
Wetland Hydrology Indicators:		Second	lary Indicators (minim	um of two required)
Primary Indicators (minimum of one is required; check all that apply)	si oction	Sur	rface Soil Cracks (B6	)
Surface Water (A1) Aquatic Fauna (B1)	3)	Spa	arsely Vegetated Cor	ncave Surface (B8)
High Water Table (A2) Marl Deposits (B15	(LRR U)		ainage Patterns (B10)	\$11.000 to 11.000 to 12.000
Saturation (A3) Hydrogen Sulfide C	Odor (C1)	Mo	ss Trim Lines (B16)	
Water Marks (B1) Oxidized Rhizosph	eres along Living	Roots (C3) Dry	-Season Water Table	e (C2)
✓ Sediment Deposits (B2) Presence of Reduc	ed Iron (C4)	Cra	ayfish Burrows (C8)	
Drift Deposits (B3) Recent Iron Reduc	tion in Tilled Soils	(C6) Sat	turation Visible on Ae	rial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	(C7)	Ge	omorphic Position (D	2)
Iron Deposits (B5) Other (Explain in R	emarks)	Sha	allow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)			C-Neutral Test (D5)	
✓ Water-Stained Leaves (B9)		Spi	hagnum moss (D8) (I	_RR T, U)
Field Observations:	10			
Surface Water Present? Yes NoDepth (inches				
Water Table Present? Yes No Depth (inches	1: 120			/
Saturation Present? Yes No Depth (inches (includes capillary fringe)	):	Wetland Hydrolog	gy Present? Yes _	✓ No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspe	ctions), if available:		
Remarks:				

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft )		Species?		Number of Dominant Species
1. Pinus taeda	30	y	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidumbar styraciflya	10	N	FAC	
3. Aver rubrum	15			Total Number of Dominant Species Across All Strate:  (B)
			FAL	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8.				Total % Cover of:Multiply by:
0	55	= Total Cov		OBL species x 1 =
77				FACW species x 2 =
50% of total cover: 27.	20% of	total cover:	- 11	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft )				
1. ALEr rubrum	10		FAC	FACU species x 4 =
2. Liquidambar styraciflua	10	_ Y	FAC	UPL species x 5 =
3.				Column Totals: (A) (B)
4.				
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
		= Total Cov	ег	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:10				Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30ft x 30ft)	_ 207001	total cover.		
				Indicators of hydric soil and wetland hydrology must
1. none				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5.				height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 m. Don and greater than 5.20 it (1 m) tail.
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.	7	- Tetal Car		
		= Total Cov		
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 30ft x 30ft)	-			
1. Toxicodendron radicans	5	<u>y</u>	FAL	
2				
3.				
4				
5	t*			Hydrophytic
		= Total Cov	er .	Vegetation
50% of total cover: 2.5	20% of	total cover:		Present? Yes V No No
Remarks: (If observed, list morphological adaptations below	w).			

Profile Desc	ription: (Describe	to the depti	needed to docur	nent the l	ndicator	or confirm	the absence o	f Indicators.)
Depth	Matrix	%		x Features	_Type <sup>1</sup> _	Loc²	Texture	Remarks
(inches)	Color (moist)	100	Color (moist)	%	Туре	LOC	rexture	Remarks
	1 - 1 0 31		1541141			D. A	- Lawre	
3-15	VOIR IL	95	104R4/6	5		17		10 July 10 Jul
15-20	101R 3/2	90	10 YR4/5	10		M		
	-							
	. 4							
1= 0.0			D - 4 4 84 - 4 84			·	21	N - Dana Lining Manhatriy
	oncentration, D=Dep Indicators: (Applic					ins.		PL=Pore Lining, M=Matrix. or Problematic Hydric Solis <sup>3</sup> :
Histosol		able to all E	Polyvalue Be			RRSTII		ick (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					ick (A10) (LRR S)
	stic (A3)		Loamy Muck				Reduced	d Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)			nt Floodplain Soils (F19) (LRR P, S, T)
_	Layers (A5)	22723	Depleted Ma					ous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P		Redox Dark Depleted Da					A 153B) ent Material (TF2)
	cky Mineral (A7) (LF esence (A8) (LRR U		Redox Depre					allow Dark Surface (TF12)
	ck (A9) (LRR P, T)	,	Marl (F10) (L	,	-,			explain in Remarks)
Depleted	Below Dark Surface	e (A11)	Depleted Oc		(MLRA 15	51)	_	
	ark Surface (A12)		Iron-Mangan				7	tors of hydrophytic vegetation and
_	rairie Redox (A16) (M lucky Mineral (S1) (L					U)		nd hydrology must be present, as disturbed or problematic.
	Gleyed Matrix (S4)	-KK 0, 3)	Delta Ochric Reduced Ver			0A. 150B)	dilles	is distarbed of problematic.
	edox (S5)		Piedmont Flo				9A)	
	Matrix (S6)		Anomalous E	Bright Loan	ny Soils (F	20) (MLR/	A 149A, 153C,	153D)
	rface (S7) (LRR P, S							
Restrictive I	_ayer (if observed):							
Type:			_					Present? Yes No
	ches):						Hydric Soll P	Present? Yes No
Remarks:								
7								



Wetland data point wjoo041f\_w facing west.



Wetland data point wjoo041f\_w facing north.

Project/Site: ALP City/	County: Johnston Sampling Date: 10/19/16
	State: NC Sampling Point: Wj00041-4
Investigator(s): ESI - Roper, Johnson Sect	
	I relief (concave, convex, none):none Slope (%):
Subsection (IRR) or MIRAN, I P P	126 Long: -78.34321 Datum: W6589
Soil Map Unit Name: Wehadkee-Chastain associo	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distu	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sar	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydrophytic Vegetation Present? Yes No Yes N	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Demarke:	
Road Bed - could not anger through gr	ravel fill
Those Boo are	
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) (LR	하게 하게 가는 그 살아보다 하는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이다.
Saturation (A3) Hydrogen Sulfide Odor (	100 C C C C C C C C C C C C C C C C C C
Water Marks (B1) Oxidized Rhizospheres : Sediment Deposits (B2) Presence of Reduced In	있다. 발구하는 BIC 15 이번에는 BIC 15 전에 보냈다 10 15 전에 있는 10 15 전에 되었다. 그런데 그렇게 되었다 12 12 12 12
Sediment Deposits (B2) Presence of Reduced Iro Drift Deposits (B3) Recent Iron Reduction in	2018 10 10 10 10 10 10 10 10 10 10 10 10 10
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
Iron Deposits (B5) Other (Explain in Remar	Balling and a second of the se
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):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
could not auger into gravel rou	d to determine subsurface
hydrology	
	Ša
	×

1561 3561	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 15ft x 30ft) 1. none	% Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2.		
3.		Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 50/( (A/B)
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species 20 x1 = 20
	= Total Cover	FACW species x 2 =
	20% of total cover:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 15ft x 30ft)		FACU species 10 x4= 40
1. none		UPL species x 5 =
2		Column Totals: 30 (A) 60 (B)
3		Courin Totals. 30 (A) 00 (B)
4		Prevalence Index = B/A = 0 .5
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.01
	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 15ft x 30ft)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Persicaria punctata	20 Y OBL	be present, unless disturbed or problematic.
2. Allium Lanadense	10 Y FAW	Definitions of Four Vegetation Strata:
3		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
5		height.
6		Sapling/Shrub – Woody plants, excluding vines, less
7.		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine – All woody vines greater than 3.28 ft in
11		height.
42		1/52/32
	30 = Total Cover	
50% of total cover:15		
Woody Vine Stratum (Plot size: 15ft x 30ft)		
1. none		
2.		
3.		
4.		
5		Hudrophutle
	O = Total Cover	Hydrophytic Vegetation
50% of total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations belo		
Transaction of the property and	,.	

Profile Description: (Describe to the depth needed to	o document the Indicator or confirm	the absence of Indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) % Color (m		Texture Remarks
0-?		gravel fill
9		
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced M	latrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unle		Indicators for Problematic Hydric Solis <sup>3</sup> :
	value Below Surface (S8) (LRR S, T, U)	And the second s
	Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
1. <del></del>	ny Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
	ny Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	eted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
	ox Dark Surface (F6)	(MLRA 153B)
	eted Dark Surface (F7)	Red Parent Material (TF2)
	ox Depressions (F8)	Very Shallow Dark Surface (TF12)
	(F10) (LRR U)	Other (Explain in Remarks)
	eted Ochric (F11) (MLRA 151)	
	Manganese Masses (F12) (LRR O, P, 7	생활
	ric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
	a Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Redu	uced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5) Pied	mont Floodplain Soils (F19) (MLRA 149	PA)
Stripped Matrix (S6) Anor	malous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):		
Restrictive Layer (if observed):  Type:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:	ravel road bed.	Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type: Depth (inches): Remarks:		Hydric Soll Present? Yes No
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:		Hydric Soll Present? Yes No



Upland data point wjoo041\_u facing west.



Upland data point wjoo041\_u facing east.

Project/Site: ACP City/County: Johnston Sampling Date: 10/19/16
Applicant/Owner: Dominion State: NC Sampling Point/V300042F
Investigator(s): ESI- Roper, Johnson Section, Township, Range: none
Landform (hillslope, terrace, etc.): flood plain Local relief (concave, convex, none): None Slope (%): 0-21
Subregion (LRR or MLRA): _LRR P
A A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No le the Sampled Area
Hydric Soil Present? Yes No
Wetland Hydrology Present? Yes No within a Wetland? Yes No
Remarks:
3.71 - 5 (27 mm) S.
NUWAM: Bottom land Hardwood Forest
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 (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): N
Water Table Present? Yes No Depth (inches): Surface
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
portions of wetland inundated
portions of working mondated

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

2.51 255.	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft)		Species?		Number of Dominant Species
1. Pinos taeda	15	<u> </u>	FAL	That Are OBL, FACW, or FAC:(A)
2. Hur rubrum	5		FAL	Total Number of Dominant
3				Species Across All Strata: (B)
4.				
				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	2 -			OBL species x1 =
522		= Total Cov		
50% of total cover:	20% of	total cover:	4	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)				FAC species x 3 =
1. Alex rubrum	10	У	FAL	FACU species x 4 =
2.				UPL species x 5 =
				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
	10	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 5	20% of	total cover	2	Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30f+ x 30f+)	_ 207001	total cover.		1
1. Persicaria ponetata	30	γ	DRI	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3.				
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
11.				Woody vine – All woody vines greater than 3.28 ft in height.
The state of the s				neight.
12	3.0			10.00
10		= Total Cov		
50% of total cover:15	20% of	total cover:	<u> </u>	
Woody Vine Stratum (Plot size: 30f4 x 30f4)				
1. none				
2				
3				
4				
-				
5				Hydrophytic
	0	= Total Cov	er	Vegetation Present? Yes No
50% of total cover:	20% of	total cover:		11030111
Remarks: (If observed, list morphological adaptations belo	w).			
II				

	ription: (Describe	to the depth				or confirm	the absence	of Indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features %	Type	Loc²	Texture	Remarks
0-20	107/25/	90	101/25/6	10	C	M	CI	Kentarks
	10/12/1	10	10/10				0_	
			<u> </u>					
								100 100 100 100 100 100 100 100 100 100
1Type: C=C	oncentration, D=Dep	lation DM-E	Paduaad Matrix M	S-Maskad	Sand Cr	inc	21 ocation:	PL=Pore Lining, M=Matrix.
	ndicators: (Applic					ams.		for Problematic Hydric Solls <sup>3</sup> :
Histosol		abio to all E	Polyvalue Be			RRS T.U		luck (A9) (LRR O)
	pipedon (A2)		Thin Dark St					luck (A10) (LRR S)
	stic (A3)		Loamy Muck					ed Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley		F2)			ont Floodplain Soils (F19) (LRR P, S, T)
5557	Layers (A5)		✓ Depleted Ma		-:			lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P cky Mineral (A7) (LF		Redox Dark Depleted Da					RA 153B) arent Material (TF2)
	esence (A8) (LRR U		Redox Depre		100			hallow Dark Surface (TF12)
	ck (A9) (LRR P, T)	,	Marl (F10) (I		7			Explain in Remarks)
Deplete	Below Dark Surfac	e (A11)	Depleted Oc	hric (F11) (				
	rk Surface (A12)		Iron-Mangan					ators of hydrophytic vegetation and
	rairie Redox (A16) (M					, U)		and hydrology must be present, ess disturbed or problematic.
	lucky Mineral (S1) (L Bleyed Matrix (S4)	-KK U, S)	Delta Ochric Reduced Ve			0A 150B)	unie	ess disturbed or problematic.
	edox (S5)		Piedmont Flo				9A)	
	Matrix (S6)						4 149A, 153C,	153D)
	rface (S7) (LRR P, S							
Restrictive	.ayer (if observed):							
Type:			_					
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								



Wetland data point wjoo042f\_w facing west.



Wetland data point wjoo042f\_w facing northwest.

Project/Site: ACP City/	County: Johnston Sampling Date: 10/19/16					
Applicant/Owner: Pominion	State: NC Sampling Point: Wjpo 042-4					
Investigator(s): ESI-Roper, Johnson Sect	ion Township Range: NOV 6					
	al relief (concave, convex, none): Slope (%): _D - Z 1/.					
	118 Long: <u>-78,34235</u> Datum: <u>W6584</u>					
Soil Map Unit Name: Wehadkee - Chastain assoc	NWI 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 distu	irbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology naturally problem						
SUMMARY OF FINDINGS - Attach site map showing said	mpling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No						
	Is the Sampled Area					
Hydric Soil Present? Yes No  Wetland Hydrology Present? Yes No	within a Wetland? Yes No					
Remarks:						
Road bed - could not auger through gravel fill						
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) (LR						
Saturation (A3)  Hydrogen Sulfide Odor						
Water Marks (B1) — Oxidized Rhizospheres	5					
Sediment Deposits (B2)  Presence of Reduced In						
Drift Deposits (B3) Recent Iron Reduction is						
Algal Mat or Crust (B4) Thin Muck Surface (C7)						
Iron Deposits (B5)  Other (Explain in Remai	1					
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):	1					
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:					
Remarks:						
Could not auger through gra subscrface hydrology	avel road to evaluate					
subsurface hydrology						
70.039						
A						

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

17.01	Absolute D	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 15 ft x 3 oft)	% Cover	Species?	Status	Number of Dominant Species
1. none				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4.				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC:
6				mat A e OBL, FACW, of FAC.
7.				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8	0 =	T-4-1 O-		OBL species 20 x1= 20
				FACW species x 2 =
50% of total cover:	20% of to	tal cover	-	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 15ff x 30ff)				FACU species 10 x 4 = 40
1. none				UPL species x 5 =
2				Column Totals: 3D (A) 6D (B)
3				
4				Prevalence Index = B/A = 0.5
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	=	Total Cov	/er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of to	tal cover	:	
Herb Stratum (Plot size: 15ft x 30ft)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Persicaria punctata	20	Y	OBL	be present, unless disturbed or problematic.
2. Allium canadense	ID	Y	FALU	Definitions of Four Vegetation Strata:
3.				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5.				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 m. Don and greater than 5.25 k (1 m) tan.
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				
	30 =	Total Cov	/er	
50% of total cover:15	20% of to	tal cover	:_6_	
Woody Vine Stratum (Plot size: 15ft x 30ft)				
1. none				
2				
3.			-	
4.				
5.				Hudaaahuda
J	0 -	Total Cov	/OF	Hydrophytic Vegetation
50% of total cover:				Present? Yes No
		aai covei		
Remarks: (If observed, list morphological adaptations belo	w).			
				*

Tromo Dosci			ai nocaca to	document the n	idioator or commi	n the absence	of illuloutor	3.7	
Depth	M	atrix		Redox Features	<b>3</b>				
(inches)	Color (mo	oist) %	Color (mo	oist) %	Type Loc2	Texture		Remarks	
0 - ?							gravel	GII	
								- M - C - C - C - C - C - C - C - C - C	
-									
¹Type: C=Co	ncentration I	D=Depletion, RM=	Reduced Ma	trix. MS=Masked	Sand Grains.	<sup>2</sup> Location:	PL=Pore Lin	ing, M=Matri	ix.
		Applicable to all					for Problem		
		ippirousio to un						en and a second	
Histosol (					ce (S8) (LRR S, T, L		fluck (A9) (LF		
	ipedon (A2)			Dark Surface (S9)			fuck (A10) (L		11 DA 450A D
Black His	1440 C. 12. C. 12. L			y Mucky Mineral (					MLRA 150A,B)
	Sulfide (A4)			y Gleyed Matrix (	F2)				(LRR P, S, T)
	Layers (A5)			ted Matrix (F3)			lous Bright L	oamy Soils (	F20)
_		LRR P, T, U)		x Dark Surface (F	A. C. Control of the		RA 153B)		
_		47) (LRR P, T, U)		ted Dark Surface			arent Materia		
Muck Pre	esence (A8) (	LRR U)	Redox	x Depressions (F8	3)		hallow Dark		(2)
1 cm Mud	ck (A9) (LRR	P, T)	Marl (	F10) (LRR U)		Other	Explain in Re	emarks)	
Depleted	Below Dark	Surface (A11)	Deple	ted Ochric (F11)	(MLRA 151)				
Thick Dat	rk Surface (A	12)	Iron-N	Manganese Masse	es (F12) (LRR O, P,	T) <sup>3</sup> India	ators of hydr	ophytic vege	tation and
Coast Pra	airie Redox (A	A16) (MLRA 150A	A) Umbri	ic Surface (F13) (	LRR P, T, U)	wet	land hydrolog	gy must be p	resent,
		(S1) (LRR O, S)		Ochric (F17) (ML	RA 151)	uni	ess disturbed	or problema	itic.
Sandy GI	leyed Matrix (	(S4)	Reduc	ced Vertic (F18) (	MLRA 150A, 150B)				
	edox (S5)				oils (F19) (MLRA 14				
	Matrix (S6)				ny Soils (F20) (MLR		. 153D)		
Dark Sur	face (S7) (LR	(R P. S. T. U)							
		(R P, S, T, U)							
Restrictive L									
Restrictive L	ayer (If obse		_						/
Restrictive L	ayer (If obse		_		*******	Hydric Soll	Present?	Yes	No
Restrictive L	ayer (If obse		_			Hydric Soll	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):				Hydric Soll	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	rnad	Hydric Soli	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse		into	gravel	road	Hydric Soli	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soli	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soll	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soll	Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soll	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soll	Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soll	Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soll	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soll	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):	into	gravel	road	Hydric Soll	Present?	Yes	. No
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soll	Present?	Yes	No_V
Restrictive L Type: Depth (inc	ayer (If obse	erved):		gravel	road	Hydric Soll	Present?	Yes	No_V
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soll	Present?	Yes	No_V
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soli	Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soli	Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soli	Present?	Yes	No_V
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soli	Present?	Yes	No_V
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soli	Present?	Yes	No_V
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soli	Present?	Yes	No_V
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soli	Present?	Yes	No_V_
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soll	Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soll	Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soll	Present?	Yes	No
Restrictive L Type: Depth (inc	ayer (If obse	erved):		0	road	Hydric Soll	Present?	Yes	No

### Environmental Field Surveys Wetland Photo Page



Upland data point wjoo042\_u facing southwest.



Upland data point wjoo042\_u facing northeast.

Project/Site: ALP Cit	ly/County: Johnston Sampling Date: 10119116
Applicant/Owner: Dominion	State: NC Sampling Point: Wj00044F-w
Investigator(s): ESI-Roper, Johnson se	ection, Township, Range: NDNC
	cal relief (concave, convex, none): NDNC Slope (%): D-Z1/s
	3024 Long: -78.34341 Datum: W6584
Soil Map Unit Name: Leaf 5:1+ 1Dam, D-21. 5/2	
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.)
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	,
NUMAM: Bottomland Hardwood	Forest
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 Odd	or (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosphere	es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced	
Drift Deposits (B3) Recent Iron Reduction	
Algal Mat or Crust (B4) Thin Muck Surface (C	
Iron Deposits (B5) Other (Explain in Ren	380
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (B9) Field Observations:	Spriagram noss (bb) (ERR 1, 0)
Surface Water Present? Yes No Depth (inches):	NA
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	

Sampling Point:

2 (1 2 (1	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ffx 30ff)		Species?		Number of Dominant Species
1. Pinus taeda			FAC	That Are OBL, FACW, or FAC:
2. Carpinus caroliniana			FAL	Total Number of Dominant
3. Aur rubrum	10		FAL	Species Across All Strata: (B)
4. Liquidam bar styraciflua	5	N	FAC	Barrier A. Barrier A. Barrier
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6.				mat Ac obe, 1 Act, a 1 Ac.
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
0.	50	= Total Cov	/or	OBL species x 1 =
50% of total cover: 25				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30++ x 30++)		total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 3077 x 3077)	10	V	EDA	FACU species x 4 =
1. Carpinus caroliniana	10	-	500	UPL species x 5 =
2. Aur rubrum			FAC	Column Totals: (A) (B)
3				(7)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	25	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 12	5 20% 0	f total cover	5	
Herb Stratum (Plot size: 30ff x 30ff)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. hphl				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
				201111111111111111111111111111111111111
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				noigh.
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				
	0	= Total Co	ver	
50% of total cover:				
Woody Vine Stratum (Plot size: 30f4 x 30f4)				
1. None				
2				^
3.				
4				
5				Hydrophytic
		= Total Co		Vegetation Present? Yes No
50% of total cover:	20% (	of total cove	r:	
Remarks: (If observed, list morphological adaptations be	low).			

Profile Description: (Describe to the dep	oth needed to document the Indicator or confirm	the absence of indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-5 10/R 3/3 100		SL
5-10 104R 3/2 95	10YR 9/4 5 C M	SL
10-20 10YR412 95	10YR414 5 C M	SL
<sup>1</sup> Type: C=Concentration D=Depletion RM	=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to al		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, L	J) 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		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8) Marl (F10) (LRR U)	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11)	Man (F10) (LRR 0) Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	T) <sup>3</sup> Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150		wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S	70 ° 70 ° 70 ° 70 ° 70 ° 70 ° 70 ° 70 °	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	)
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14)	49A)
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLF	RA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Туре:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		π
1		

### Environmental Field Surveys Wetland Photo Page



Wetland data point wjoo044f\_w facing northeast.



Wetland data point wjoo044f\_w facing east.

Project/Site: ACP City/C	County: Johnston Sampling Date: 10/19/16
	State: N.C. Sampling Point: wios 044-4
Investigator(s): ESI- Roper, Johnson Secti	
Landform (hillslope, terrace, etc.): floods lain Local	
0.0	
Soil Map Unit Name: Leaf Silt loam, 0-21	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? YesNo
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	,
Road bed	
7000	
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) (LR	
Saturation (A3) Hydrogen Sulfide Odor ( Water Marks (B1) Oxidized Rhizospheres a	1 17 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Water Marks (B1) Oxidized Rhizospheres a Presence of Reduced Iro	
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
Iron Deposits (B5) Other (Explain in Remark	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:	NA
Surface Water Present? Yes No Depth (inches):	IV H
Water Table Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	wetland Hydrology Present? Tes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
Call wat asses bland	200101
Could not auger through	gravel road to evaluate
(1) 10 10 10 10 10 10 10 10 10 10 10 10 10	0
substitute ny oroto gy	
, 0,	
I .	I

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

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 15ff x 30f4)	% Cover Species? Status	Number of Dominant Species
1. none		That Are OBL, FACW, or FAC:(A)
		That 700 OBE, 171000, or 1710.
2		Total Number of Dominant Species Across All Strate: 2 (B)
3		Species Across All Strata: (B)
4		Bosset of Bossin ant Species
5		Percent of Dominant Species That Are OBL, FACW, or FAC: 501, (A/B)
6.		That we obe, thew, at the:
Programment and the programment of the programment		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species $AD$ $x1 = AD$
	= Total Cover	1997 300 310 300 400 400 400 400 400 400 400 400 40
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 Ft x 30 Ft)		FAC species x 3 =
		FACU species x 4 = 46
1. none		UPL species x 5 =
2		Column Totals: 30 (A) 60 (B)
3		Column Totals (A) (B)
4		Prevalence Index = B/A = 0 .5
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7.		2 - Dominance Test is >50%
		1 —
8	= Total Cover	3 - Prevalence Index is ≤3.01
		Problematic Hydrophytic Vegetation¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 15f4 x 30f4)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Persilaria punctata	20 Y BBL	be present, unless disturbed or problematic.
2. Allium unadense		Definitions of Four Vegetation Strata:
3		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
5		height.
6		Sapling/Shrub – Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb - All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		Woody vine – All woody vines greater than 3.28 ft in
11		height.
12.		
14.	30 = Total Cover	
17		
50% of total cover: 15	20% of total cover:	
Woody Vine Stratum (Plot size: 15ff x 30ff)		
1. None		
2		À
3.		
4		
5		Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No No
Remarks: (If observed, list morphological adaptations belo		
Trainanta. (Il abbatta), ilst ilia pitalogiati dauptationa bata	,	

	cription: (Desc	ribe to the depth	needed to document th	ne indicator or confir	m the absence	of Indicators.)	
Depth	Mai		Redox Feat				
(inches)	Color (mois	st) %	Color (moist) %	Type Loc2	Texture	Remarks	
0-?						gratel All	
			Reduced Matrix, MS=Mas			PL=Pore Lining, M=Matr	
7		pplicable to all L	RRs, unless otherwise r			for Problematic Hydric	Solls":
Histosol			Polyvalue Below Su			Muck (A9) (LRR O)	
	pipedon (A2) istic (A3)		Thin Dark Surface ( Loamy Mucky Mine			Muck (A10) (LRR S) ed Vertic (F18) (outside	MIRA 150A R)
_	en Sulfide (A4)		Loamy Gleyed Matr			ont Floodplain Soils (F19	
	d Layers (A5)		Depleted Matrix (F3			alous Bright Loamy Soils	A Color to the second of the second of the
Organic	Bodies (A6) (LI	RR P, T, U)	Redox Dark Surface	e (F6)	(MLI	RA 153B)	
		7) (LRR P, T, U)	Depleted Dark Surfa	ace (F7)		arent Material (TF2)	
	resence (A8) (L		Redox Depressions			Shallow Dark Surface (TF	12)
	ick (A9) (LRR F d Below Dark S		Marl (F10) (LRR U) Depleted Ochric (F1		Other	(Explain in Remarks)	
	ark Surface (A1			asses (F12) (LRR O, P	P. T) <sup>3</sup> India	ators of hydrophytic vege	etation and
_		16) (MLRA 150A)				land hydrology must be p	
Sandy N	Mucky Mineral (	S1) (LRR O, S)	Delta Ochric (F17)	MLRA 151)	unl	ess disturbed or problems	atic.
	Sleyed Matrix (S	64)		8) (MLRA 150A, 150B	-		
	Redox (S5)			n Soils (F19) (MLRA 1		4500)	
	Matrix (S6)		Anomalous Bright L	oamy Soils (F20) (MLI	RA 149A, 153C	. 1530)	10
	Maca (C7) / DE	PETIN				,	
	rface (S7) (LRF Laver (If obser				T		
Restrictive	rface (S7) (LRF Layer (If obser					,,	,
Restrictive Type:	Layer (If obser		_				No /
Restrictive Type:			_			Present? Yes	No
Restrictive Type: Depth (in Remarks:	Layer (If obser	ved):			Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	Layer (If obser	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	Layer (If obser	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	
Restrictive Type: Depth (in Remarks:	ches):	ved):	through		Hydrlc Soll	Present? Yes	

### Environmental Field Surveys Wetland Photo Page



Upland data point wjoo044\_u facing southwest.



Upland data point wjoo044\_u facing northeast.

Project/Site: ACP City/Co	ounty: Johnston Sampling Date: 10/19/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wipd043f_W
Investigator(s): FSI- Roper, Johnson Section	n, Township, Range:
Landform (hillslope, terrace, etc.): floodokin Local	
Subregion (LRR or MLRA): LRR P Lat: 35.430	
Soil Map Unit Name: Leaf 5:1+ 10am, D-2% slope:	
Are climatic / hydrologic conditions on the site typical for this time of year? You	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturb	ped? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	
Hydrophytic Vegetation Present? Yes No	
Hydrophytic Vegetation Present?  Yes No Yes No No No No No No No No No No No No No	Is the Sampled Area
Wetland Hydrology Present? Yes No No	within a Wetland? Yes No
Remarks:	,
NCWAM: Bottomland Hardwood	Forest
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) (LRF	R U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C	
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Iro	
Drift Deposits (B3) Recent Iron Reduction in	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remark	
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? YesNo Depth (inches):	NA
Water Table Present? Yes No Depth (inches):	2
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	
portions of wetland inundated	
POT TIONS OF WE HAVE THOUGHT OF	,
	•

Sampling Point: WOOD 43F W

1745 17-5	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft)  1. Liquidam bar styraciflua		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Aler rubrum 3.	10	,		Total Number of Dominant Species Across All Strata:
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8	- Alla			
	20	= Total Cov		OBL species x 1 =
50% of total cover:	20% of	total cover	:_4_	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ff x 30ff)	-			FAC species x 3 =
1. Liquidambar styraciflua	_5_		FAL	FACU species x 4 =
2 Ater rubrum	5	<u> </u>	FAL	UPL species x 5 =
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1- Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
		= Total Co		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% 0	f total cover	_ 2_	
Herb Stratum (Plot size: 30f4 x 30f4)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Persicuria punctata	10	Y	OBL	be present, unless disturbed or problematic.
1				Definitions of Four Vegetation Strata:
2. 3.				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.				height.
				San Hand Shouth Million de la landa avaluation vines la co
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12	- 12			
		= Total Co		
50% of total cover:	20% 0	f total cove		
Woody Vine Stratum (Plot size: 30ff x 30ff)				
1. hone	_			
2				λ
3				
4				
5				Hydrophytic
AT 1987-201 960-9-7-1-1000-999-3-1-1007-900-2019-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	0	= Total Co	ver	Vegetation
50% of total cover:	20% c	of total cove	r:	Present? Yes No
Remarks: (If observed, list morphological adaptations be				
	7			

Profile Des	cription: (Describe	to the dept	h needed to docu	ment the l	ndicator	or confirm	the absence of	f Indicators.)
Depth	Matrix	. 04		x Features		1 2	Tautura	Remarks
(inches)	Color (moist)	- % 1 - D	Color (moist)	%	Type	_Loc <sup>2</sup>	Texture	Remarks
0-2	10 Y R 3/1	100	0 111					
2-20	10/R 4/1	90	10YR 4/5	10	0	_M_		
		and the same of						
1= - 0 0			Dadward Maddy N	C-Maskad			2t acation: D	21 - Dece Lining M-Metrix
	oncentration, D=De Indicators: (Applie					diffs.		PL=Pore Lining, M=Matrix. or Problematic Hydric Soils <sup>3</sup> :
		cable to all i						
Histoso			Polyvalue B					ick (A9) (LRR O)
	pipedon (A2)		Thin Dark S					ick (A10) (LRR S) d Vertic (F18) (outside MLRA 150A,B)
	istic (A3) en Sulfide (A4)		Loamy Muc Loamy Gley	-		. 0)		nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted M		(2)			ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR I	P T III	Redox Dark		6)		_	A 153B)
_	ucky Mineral (A7) (L		Depleted Da	A STATE OF THE STA				ent Material (TF2)
	resence (A8) (LRR		Redox Depr					allow Dark Surface (TF12)
	uck (A9) (LRR P, T)	•	Marl (F10) (	,	-,			Explain in Remarks)
	d Below Dark Surfa		Depleted O		(MLRA 1	51)		
	ark Surface (A12)		Iron-Manga				T) <sup>3</sup> Indical	tors of hydrophytic vegetation and
Coast F	rairie Redox (A16)	MLRA 150A	) Umbric Surf	ace (F13)	LRR P, T	, U)	wetla	and hydrology must be present,
Sandy l	Mucky Mineral (S1)	(LRR O, S)	Delta Ochri	(F17) (ML	.RA 151)		unles	ss disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced Ve					
Sandy	Redox (S5)		Piedmont F					
	d Matrix (S6)		Anomalous	Bright Loar	my Soils (	F20) (MLR	A 149A, 153C, 1	153D)
	ırface (S7) (LRR P,							
Restrictive	Layer (if observed	):						
Type:								
Depth (in	nches):						Hydric Soll F	Present? Yes No
Remarks:								

### Environmental Field Surveys Wetland Photo Page



Wetland data point wjoo043f\_w facing west.



Wetland data point wjoo043f\_w facing northwest.

Project/Site: ALP City	County: Johnston Sampling Date: 10/19/16
Applicant/Owner: Pominion	State: NC Sampling Point: wjoo043_u
Investigator(s): ESI-Roper, Johnson Sec	
Landform (hillslope, terrace, etc.): Flood plain Loca	al relief (concave, convex, none): none Slope (%): 0-21/4
Subrection (LRR or MLRA): LRR P Lat: 35, 43	DDS Long: -78.34379 Datum: W6584
Soil Map Unit Name: Leaf silt loam, 0-21/ Slop	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distr	
Are Vegetation, Soil, or Hydrology naturally problem	matic? (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	In the Samulad Area
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Demarks:	
Road bed - could not auger through	gravel fill
1.000 200	
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) (L	RR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor	(C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres	
Sediment Deposits (B2) Presence of Reduced	
Drift Deposits (B3) Recent Iron Reduction	production for the first term of the first term
Algal Mat or Crust (B4) Thin Muck Surface (C7	1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 - 1988 -
Iron Deposits (B5) Other (Explain in Rema	**************************************
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:	Spriagram moss (50) (Error 1, 0)
Surface Water Present? Yes No/ Depth (inches): _	NA
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	Treatment for the second secon
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if available:
Remarks:	
Could not auger through subsurface hydrology	gravel road to evaluate
subservations building	
Substitute Hydrology	
. 01	
9	

1=5: 2. C:	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 15ff x 30ff)	% Cover Species? Status	Number of Dominant Species
1. none		That Are OBL, FACW, or FAC:(A)
2		Total Number of Dominant
3.		Total Number of Dominant Species Across All Strata:  (B)
4.		
5		Percent of Dominant Species
		That Are OBL, FACW, or FAC:
6		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		OBL species 20 x1 = 20
	= Total Cover	FACW species x 2 =
50% of total cover:	20% of total cover:	
Sapling/Shrub Stratum (Plot size: 15ft x 30ft)		FAC species x 3 = FACU species 1
1. hone		
2.		UPL species x 5 =
3.		Column Totals: <u>30</u> (A) <u>60</u> (B)
4.		Prevalence Index = B/A = 0.5
5		Hydrophytic Vegetation Indicators:
6		
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.01
	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 15ft x 30ft)		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Persicaria punctata	20 Y OBL	be present, unless disturbed or problematic.
2. Allium Lanadense	10 Y FAW	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		
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		Trouble Time Time Time Security
12.		
14.	36 = Total Cover	
50% of total cover: 15		
Woody Vine Stratum (Plot size: 15f+ x30f+)	20% of total cover.	
1. none		-
2		λ
3		
4		_
5		- Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No V
		-
Remarks: (If observed, list morphological adaptations bel	iow).	

Depth (inches)			th needed to docu				.,			
0 - ?	Color (moi	trix st) %	Color (moist)	ox Features %		Loc <sup>2</sup>	Texture	gravel	Remarks Fil	
								0		
			Reduced Matrix, N LRRs, unless oth			ns.		PL=Pore Linin for Problema		
Histosol	(A1) pipedon (A2)		Polyvalue E					luck (A9) (LRF luck (A10) (LR		
_	istic (A3) en Sulfide (A4)		Loamy Mud	-		0)		ed Vertic (F18) ont Floodplain		
	d Layers (A5) Bodies (A6) (L	.RR P, T, U)		Surface (F				llous Bright Lo RA 153B)	amy Soils (F	20)
	ucky Mineral (A resence (A8) (L	.7) (LRR P, T, U) .RR U)	Depleted D Redox Dep					arent Material hallow Dark S		)
	d Below Dark S	21 22 40 72 40 72 40 6	Marl (F10) Depleted O	(LRR U) chric (F11)	(MLRA 151	1)	Other	(Explain in Rer	marks)	
	ark Surface (Af rairie Redox (A	12) (16) (MLRA 150)		nese Masse face (F13) (			*	ators of hydro land hydrology		
	Mucky Mineral ( Sleyed Matrix (	(S1) (LRR O, S) S4)	Delta Ochri	c (F17) (ML ertic (F18) (		A, 150B)	unl	ess disturbed o	or problemat	C.
	Redox (S5) d Matrix (S6)		Piedmont F Anomalous	loodplain S Bright Loan				, 153D)		
	rface (S7) (LR Layer (if obse									
	ches):						Hydric Soll	Present?	/as	No V
				210000			Tiyano don			
Remarks:				4 1						
	d not	auger	into gr	avel	roac	d be	d to	evalu	vate	soils
	d not	auger	into gr	avel	roac	d be	d to	evali	vate	soils
	d not	auger	into gr	avel	road	d be	d to	evalu	vate	Soils
	d not	auger	into gr	avel	roac	d be	d to	evalu	vate	Soils
	d not	auger	into gr	-avel	road	d be	d to	evalu	vate	soils
	d not	auger	into gr	-avel	road	d be	d to	evalu	vate	soils
	d not	auger	into gr	-avel	road	d be	d to	eval	vate	soils
	d not	auger	into gr	-avel	road	d be	d to	eval	vate	soils
	d not	auger	into gr	-avel	road	d be	d to	eval	vate	Soils
	d not	auger	into gr	avel	road	d be	d to	eval	vate	Soils
	d not	auger	into gr	-avel	road	d be	d to	evalu	vate	Soils

### Environmental Field Surveys Wetland Photo Page



Upland data point wjoo043\_u facing southwest.



Upland data point wjoo043\_u facing northeast.

Project/Site: Atlantic Coast Pipeline	City/County: Johnston	Sampling Date	te: 4/9/2015
Applicant/Owner: Dominion		State: NC Sampling Poi	
• •	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Flat			Slope (%). 1
Subregion (LRR or MLRA): P L			
Soil Map Unit Name: Leaf silt loam, 0 to 2 percent slopes		NWI classification: None	Datum.
Are climatic / hydrologic conditions on the site typical for this			<b>.</b>
Are Vegetation, Soil, or Hydrologys			
Are Vegetation, Soil, or Hydrology r	aturally problematic? (If needed	, explain any answers in Remarks.	.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locat	ions, transects, important	t features, etc.
Hydrophytic Vegetation Present? Yes <u>✓</u> N	0		
Hydric Soil Present? Yes V N	o lis the cumpled Area		
Wetland Hydrology Present? Yes V		Yes No	
Remarks:			
Wetland data point for the PFO portion of a seasonally surf	ace saturated wetland complex located	on a disturbed flat; water table is p	perched above a
heavy sandy clay.			
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)	<u>. oo .oquou,</u>
	Fauna (B13)	Sparsely Vegetated Conca	ve Surface (B8)
<u> </u>	posits (B15) (LRR U)	Drainage Patterns (B10)	ve canace (Bo)
	en Sulfide Odor (C1)	Moss Trim Lines (B16)	
	d Rhizospheres along Living Roots (C3)		C2)
	ce of Reduced Iron (C4)	Crayfish Burrows (C8)	<i>-</i> ,
	Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial	I Imagery (C9)
	ick Surface (C7)	Geomorphic Position (D2)	3 <i>,</i> , ,
	Explain in Remarks)	✓ Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)	,	FAC-Neutral Test (D5)	
✓ Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRF	R T, U)
Field Observations:			
Surface Water Present? Yes No De	oth (inches):		
Water Table Present? Yes No De	oth (inches):		
Saturation Present? Yes No De	oth (inches): 0 Wetland	Hydrology Present? Yes 🗸	No
(includes capillary fringe)		railable.	
Describe Recorded Data (stream gauge, monitoring well,	aeriai priotos, previous irispections), ii a	valiable.	
Remarks:			
Water is perched above a heavy sandy clay layer; soil is sa	aturated from 0"-8"		
Tracer to peromote above a mounty same stay that the sec	narated from 5° 5		

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	20	Yes	FAC	That Are OBL, FACW, or FAC: 9 (A)
2. Quercus phellos	20	Yes	FACW	Total Number of Dominant
3. Liquidambar styraciflua	10	No	FAC	Species Across All Strata:10 (B)
4. Acer rubrum	10	No	FAC	Descent of Deminent Species
5. Quercus michauxii	10	No	FACW	Percent of Dominant Species That Are OBL, FACW, or FAC:  90 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	70	= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:	14	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 )				FAC species x 3 = 8
1. Ilex opaca	8	Yes	FAC	FACU species x 4 =
2. Quercus phellos	7	Yes	FACW	UPL species $0 \times 5 = 0$
3. Liquidambar styraciflua	6	Yes	FAC	Column Totals:136 (A)373 (B)
4 Acer rubrum	5	No	FAC	Prevalence Index = R/A = 2.74
5 Carpinus caroliniana	4	No	FAC	Trevalence index B//
•				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	30	= Total Cov		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total answer. 15			_	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 15	20% 01	total cover:		
Herb Stratum (Plot size:)  1. Athyrium asplenioides	2	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Mitchella repens		Yes	FACU	
3 Carex blanda		Yes	FAC	Definitions of Four Vegetation Strata:
3. Carex bianda		165	TAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
		= Total Cov		
50% of total cover:3	20% of	total cover:	1.2	
Woody Vine Stratum (Plot size:)				
1 Smilax rotundifolia	20	Yes	FAC	
2. Vitis rotundifolia	10	Yes	FAC	
3				
4				
5				Hydrophytic
	30	= Total Cov	er	Vegetation
50% of total cover:15	20% of	total cover:	6	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wjoa021f\_w

	cription: (Describe t	o the depti				or confirm	the absence	e of indicators.)
Depth (inches)	Matrix Color (moist)	<del></del> _	Color (moist)	x Feature %	S Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 4/2	100	Color (moist)		<u> </u>		SCL	Nemano
3-8	10YR 5/2		10YR 5/8	15	C	PL/M	SCL	
8-24	10YR 5/1		10YR 5/8	25		M	SC	heavy sandy clay
Hydric Soil  Histoso Histic E Black H Hydrogo Stratifie Organic 5 cm Mo Muck P 1 cm Mo Deplete Thick D Coast F Sandy N Sandy N Stripped Dark St	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, Lucky Mineral (A7) (LR resence (A8) (LRR U) Luck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rrairie Redox (A16) (M Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Inface (S7) (LRR P, S) Layer (if observed): ndy clay	T, U) R P, T, U) (A11) LRA 150A) RR O, S)	.RRs, unless other	wise not low Surfa rface (S9 y Mineral d Matrix (F3) Surface (F k Surface ssions (F RR U) nric (F11) ese Mass ce (F13) (F17) (ML tic (F18) (odplain S	ed.) ice (S8) (L ) (LRR S, (F1) (LRR (F2)  6 (F7) 8)  (MLRA 15 es (F12) ( (LRR P, T LRA 151) (MLRA 15 Goils (F19)	RR S, T, U T, U) O) LRR O, P, U) OA, 150B) (MLRA 14	Indicators	



Photo 1
Wetland data pint wjoa012f\_w facing northwest



Photo 2
Wetland data pint wjoa012f\_w facing southeast

Project/Site: Atlantic Coast Pipeline	City/County: Johnston		Sampling Date: 4/9/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: wjoa021s_w
	Section, Township, Range		
Landform (hillslope, terrace, etc.): flat			
	at: 35.41849293 Lon		
Soil Map Unit Name: Leaf silt loam, 0 to 2 percent slopes	at ton		
Are climatic / hydrologic conditions on the site typical for this			
	· · · · · · · · · · · · · · · · · · ·		
Are Vegetation, Soil, or Hydrologys			
Are Vegetation, Soil, or Hydrologyn	aturally problematic? (If need	ed, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map	showing sampling point loc	ations, transects,	important features, etc.
Hydrophytic Vegetation Present? Yes <u>✓</u> N			
Hydric Soil Present? Yes V	no the dampied A		
Wetland Hydrology Present? Yes N	WILIIII a WELIAIIU :	Yes_	No
Remarks:			
Wetland data point for the PSS portion of a PSS/PFO wetland	and complex located on a disturbed flag	at; PSS portion is a thre	e-year-old pine plantation;
water is perched above a heavy sandy clay layer.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all t	hat apply)	Surface Soil (	Cracks (B6)
Surface Water (A1) Aquatic	Fauna (B13)	Sparsely Veg	etated Concave Surface (B8)
High Water Table (A2) Marl De	posits (B15) (LRR U)	Drainage Pat	
✓ Saturation (A3) Hydroge	n Sulfide Odor (C1)	Moss Trim Lir	nes (B16)
Water Marks (B1) Oxidized	Rhizospheres along Living Roots (C	C3) Dry-Season V	Vater Table (C2)
Sediment Deposits (B2) Presence	e of Reduced Iron (C4)	Crayfish Burro	ows (C8)
Drift Deposits (B3) Recent	ron Reduction in Tilled Soils (C6)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Mu	ck Surface (C7)	Geomorphic F	Position (D2)
Iron Deposits (B5) Other (E	xplain in Remarks)	✓ Shallow Aquit	ard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)		✓ Sphagnum m	oss (D8) <b>(LRR T, U)</b>
Field Observations:			
Surface Water Present? Yes No Dep	oth (inches):		
Water Table Present? Yes No Dep	oth (inches):		
Saturation Present? Yes No Dep		nd Hydrology Present	? Yes <u>/</u> No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, a	porial photos, provious inspections) i	f available:	
Describe Recorded Data (stream gauge, monitoring well, a	ieriai priotos, previous irispectioris), ii	i avaliable.	
Remarks:			
Soil is saturated from 0'-8" due to heavy sandy clay.			

20		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:5 (A)
2				Total Number of Dominant Species Across All Strata: 5 (B)
4				Openies / toross / tir otrata.
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	0			OBL species 43 x 1 = 43
50% of total cover:		= Total Cov	<u> </u>	FACW species 18 x 2 = 36
30 /0 OI total cover.	20% of	total cover:		FAC species 158 x 3 = 474
Sapling/Shrub Stratum (Plot size:)  1. Pinus taeda	40	Yes	FAC	FACU species 0 x 4 = 0
2. Quercus phellos	10	No	FACW	UPL species X 5 =
3. Liquidambar styraciflua	10	No	FAC	Column Totals: (A) (B)
4. Baccharis halimifolia	4	No	FAC	Prevalence Index = B/A = 2.52
5. Acer rubrum	4	No	FAC	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	68	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 34	20% of	total cover:	13.6	Troblematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size:5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Andropogon virginicus	40	Yes	FAC	be present, unless disturbed or problematic.
2. Scirpus cyperinus	20	Yes	OBL	Definitions of Four Vegetation Strata:
3. Carex comosa	8	No	OBL	
4. Dichanthelium scoparium	8	No	FACW	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Dulichium arundinaceum	5	No	OBL	height.
6. Juncus effusus	5	No	OBL	Sapling/Shrub – Woody plants, excluding vines, less
7. Rhynchospora cephalantha	5	No	OBL	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				
9.				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
12	91	= Total Cov		
50% of total cover: 45.5		total cover:	400	
Woody Vine Stratum (Plot size: 30 )	2070 01	total cover.		
1 Smilax rotundifolia	20	Yes	FAC	
2. Rubus argutus	20	Yes	FAC	
3 Vitis rotundifolia	10	No	FAC	
4. Gelsemium sempervirens	10	No	FAC	
5.				
5	60	= Total Cov		Hydrophytic Vegetation
50% of total cover: 30		total cover:	40	Present? Yes No
30 /0 of total cover.		total cover.		
Remarks: (If observed, list morphological adaptations below	N).			

SOIL Sampling Point: wjoa021s\_w

Profile Des	cription: (Describe	to the dept	h needed to docum	nent the in	ndicator	or confirm	the absence of	of indicators.)
Depth	Matrix			K Features		. 2	<b>-</b> .	
(inches) 0-3	Color (moist) 10YR 4/2	100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SCL	Remarks
		<del></del>						
3-8	10YR 4/1	80	7.5YR 4/6	20	C	PL/M	SCL	
8-23	10YR 5/1	75	10YR 5/8	25	С	M	SC	
		·						
	-							
								_
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless other	wise note	ed.)		Indicators f	or Problematic Hydric Soils <sup>3</sup> :
Histoso	• •		Polyvalue Bel					uck (A9) <b>(LRR O)</b>
	pipedon (A2)		Thin Dark Su					uck (A10) (LRR S)
	istic (A3) en Sulfide (A4)		Loamy Mucky Loamy Gleye			( 0)		d Vertic (F18) <b>(outside MLRA 150A,B)</b> nt Floodplain Soils (F19) <b>(LRR P, S, T)</b>
	d Layers (A5)		<u>✓</u> Depleted Mat		2)			ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U)	Redox Dark S	. ,	6)			A 153B)
_	ucky Mineral (A7) <b>(Li</b>		Depleted Dar	k Surface	(F7)			rent Material (TF2)
	resence (A8) (LRR U	)	Redox Depre		3)			allow Dark Surface (TF12)
	uck (A9) (LRR P, T)	(* 4 4)	Marl (F10) <b>(L</b> l				Other (E	Explain in Remarks)
-	d Below Dark Surfac	e (A11)	Depleted Och Iron-Mangane				T) <sup>3</sup> Indiaa	tors of hydrophytic vegetation and
	ark Surface (A12) rairie Redox (A16) <b>(I</b>	MI RA 150A	-					and hydrology must be present,
	Mucky Mineral (S1) (I		Delta Ochric (			, -,		ss disturbed or problematic.
-	Gleyed Matrix (S4)		Reduced Veri			0A, 150B)		·
-	Redox (S5)		Piedmont Flo					
	d Matrix (S6)		Anomalous B	right Loan	ny Soils (	F20) <b>(MLR</b>	A 149A, 153C,	153D)
	rface (S7) (LRR P, S						1	
Type: he	avy sandy clay	•						
Depth (in	Ω						Hydric Soil F	Present? Yes No
Remarks:	Ciles)						Hydric 30ii F	rieseiit: resNo
Remarks.								



Photo 1 Wetland data point wsoa021s\_w facing south



Photo 2
Wetland data point wsoa021s\_w facing north

Project/Site: Atlantic Coast Pipeline	City/Co	ounty: Johnston	S	Sampling Date: 4/9/2015		
Applicant/Owner: Dominion			Sampling Point: wjoa021_u			
	PLSS in this area	<u> </u>				
Landform (hillslope, terrace, etc.): gentle slope				Slone (%): 2		
Subregion (LRR or MLRA): P						
Soil Map Unit Name: Leaf silt loam, 0 to 2 percentage	Long					
Are climatic / hydrologic conditions on the site ty						
Are Vegetation, Soil, or Hydrolo						
Are Vegetation, Soil, or Hydrolo	gy naturally problema	tic? (If needed, e	explain any answers	in Remarks.)		
SUMMARY OF FINDINGS - Attach	site map showing sam	pling point location	ons, transects,	important features, etc.		
Hydrophytic Vogotation Procent?	✓ No					
	✓ No	Is the Sampled Area				
Wetland Hydrology Present? Yes	No	within a Wetland?	Yes	No		
Remarks:						
Upland data point taken on a gentle slope for a	seasonally surface saturated	PSS/PFO complex local	ited on a disturbed f	lat.		
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)		
Primary Indicators (minimum of one is require	d: check all that apply)		Surface Soil C	· · · · · · · · · · · · · · · · · · ·		
	Aquatic Fauna (B13)	-	Sparsely Vegetated Concave Surface (B8)			
	Marl Deposits (B15) (LRR	: U)	Drainage Patte			
	Hydrogen Sulfide Odor (C		Moss Trim Line			
Water Marks (B1)	Oxidized Rhizospheres al			ater Table (C2)		
· ·	Presence of Reduced Iror		Crayfish Burro			
	Recent Iron Reduction in		-	ble on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic Po	osition (D2)		
Iron Deposits (B5)	Other (Explain in Remarks	s)	Shallow Aquita	ırd (D3)		
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral T	est (D5)		
Water-Stained Leaves (B9)			Sphagnum mo	ss (D8) <b>(LRR T, U)</b>		
Field Observations:						
	Depth (inches):					
	Depth (inches):					
	Depth (inches):	Wetland F	lydrology Present?	? Yes No		
(includes capillary fringe)  Describe Recorded Data (stream gauge, moni	toring well, aerial photos, prev	/ious inspections), if ava	ilable:			
		, ,				
Remarks:						
no hydrology indicators present						

00	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Quercus phellos	20	Yes	FACW	That Are OBL, FACW, or FAC:8 (A)
2. Pinus taeda		Yes	FAC	Total Number of Dominant
3. Quercus falcata	<u>16</u>	Yes	FACU	Species Across All Strata: 9 (B)
4. Quercus rubra	4	No	FACU	Percent of Dominant Species
5. Liquidambar styraciflua		No	FAC	That Are OBL, FACW, or FAC: 88.88888888 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 = 0
500/ of total account 32		= Total Cov	12.0	FACW species x 1 48
50% of total cover:	20% of	total cover:	12.0	FAC species 66 x 3 = 198
Sapling/Shrub Stratum (Plot size:)	_		E40	FACU species 20 x 4 = 80
1. Acer rubrum	5	Yes	FAC	UPL species 0 x 5 = 0
2. Liquidambar styraciflua	4	Yes	FAC	Column Totals: 110 (A) 326 (B)
3. Quercus phellos	4	Yes	FACW	Column Totals (A) (B)
4. Euonymus americanus	3	No	FAC	Prevalence Index = B/A =
5. Ilex opaca	3	No No	FAC	Hydrophytic Vegetation Indicators:
6. Carpinus caroliniana	2	No	FAC	1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 10.5	20% of	total cover:	4.2	
Herb Stratum (Plot size: 5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Carex blanda	5	Yes	FAC	be present, unless disturbed or problematic.
2	-			Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Harb All berbasses (non woods) plants regardless
9				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
11.				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
12.				g
	5	= Total Cov	er	
50% of total cover: 2.5		total cover:		
Woody Vine Stratum (Plot size:30)	2070 01	total cover.		
1 Smilax rotundifolia	10	Yes	FAC	
2. Vitis rotundifolia	10	Yes	FAC	
3				
4	-			
5	20			Hydrophytic
50% of total cover 10		= Total Cov		Vegetation Present? Yes No
30 % Of total cover		total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wjoa021\_u

Profile Desc	cription: (Describe	to the dept	h needed to docum	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix			k Features		. 2	<b>-</b> .	
(inches) 0-4	Color (moist) 10YR 2/2	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SL	Remarks
4-10	10YR 5/2	75	10YR 4/6	25	C	M	SCL	
10-25	10YR 5/1	60	10YR 4/6	40	С	M	SC	light sandy clay
		·						
		· <del></del> ·						
	-							
1							2	<del></del>
	oncentration, D=Dep Indicators: (Applic					ains.		PL=Pore Lining, M=Matrix.  s for Problematic Hydric Soils <sup>3</sup> :
Histosol		able to all t	Polyvalue Be		•	DD C T II		Muck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					Muck (A9) (LRR S)
	istic (A3)		Loamy Mucky					ced Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			ŕ		nont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat					alous Bright Loamy Soils (F20)
-	Bodies (A6) (LRR P		Redox Dark S	`	,			RA 153B)
	ucky Mineral (A7) <b>(LF</b> resence (A8) <b>(LRR U</b>		Depleted Dar		. ,			Parent Material (TF2) Shallow Dark Surface (TF12)
·	uck (A9) (LRR P, T)	)	Redox Depre Marl (F10) <b>(L</b>		))			(Explain in Remarks)
I .——	d Below Dark Surfac	e (A11)	Depleted Och		(MLRA 1	51)	••.	(2.p.a)
Thick D	ark Surface (A12)		Iron-Mangane	ese Masse	es (F12) <b>(</b>	LRR O, P,		cators of hydrophytic vegetation and
	rairie Redox (A16) (M					, U)		tland hydrology must be present,
-	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric (			0A 1EOD)	un	less disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Veri Piedmont Flo				9Δ)	
-	Matrix (S6)		Anomalous B					C, 153D)
	rface (S7) (LRR P, S							•
Restrictive	Layer (if observed):							
Type: sa	ndy clay							.4
Depth (in	ches): <u>10</u>						Hydric Soi	I Present? Yes No No
Remarks:								



Photo 1 Upland data point wjoa021\_u facing southeast



Photo 2
Upland data point wjoa021\_u facing northwest

Project/Site: Atlantic Coast Pipeline	City/County: Johnston	Sampling Date	te: 4/9/2015
Applicant/Owner: Dominion		State: NC Sampling Poi	
• •	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Flat			Slope (%). 1
Subregion (LRR or MLRA): P L			
Soil Map Unit Name: Leaf silt loam, 0 to 2 percent slopes		NWI classification: None	Datum.
Are climatic / hydrologic conditions on the site typical for this			<b>.</b>
Are Vegetation, Soil, or Hydrologys			
Are Vegetation, Soil, or Hydrology r	aturally problematic? (If needed	, explain any answers in Remarks.	.)
SUMMARY OF FINDINGS - Attach site map	showing sampling point locat	ions, transects, important	t features, etc.
Hydrophytic Vegetation Present? Yes <u>✓</u> N	0		
Hydric Soil Present? Yes V N	o lis the cumpled Area		
Wetland Hydrology Present? Yes V		Yes No	
Remarks:			
Wetland data point for the PFO portion of a seasonally surf	ace saturated wetland complex located	on a disturbed flat; water table is p	perched above a
heavy sandy clay.			
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)	<u>. oo .oquou,</u>
	Fauna (B13)	Sparsely Vegetated Conca	ve Surface (B8)
<u> </u>	posits (B15) (LRR U)	Drainage Patterns (B10)	ve canace (Bo)
	en Sulfide Odor (C1)	Moss Trim Lines (B16)	
	d Rhizospheres along Living Roots (C3)		C2)
	ce of Reduced Iron (C4)	Crayfish Burrows (C8)	<i>-</i> ,
	Iron Reduction in Tilled Soils (C6)	Saturation Visible on Aerial	I Imagery (C9)
	ick Surface (C7)	Geomorphic Position (D2)	3 <i>,</i> , ,
	Explain in Remarks)	✓ Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)	,	FAC-Neutral Test (D5)	
✓ Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRF	R T, U)
Field Observations:			
Surface Water Present? Yes No De	oth (inches):		
Water Table Present? Yes No De	oth (inches):		
Saturation Present? Yes No De	oth (inches): 0 Wetland	Hydrology Present? Yes 🗸	No
(includes capillary fringe)		railable.	
Describe Recorded Data (stream gauge, monitoring well,	aeriai priotos, previous irispections), ii a	valiable.	
Remarks:			
Water is perched above a heavy sandy clay layer; soil is sa	aturated from 0"-8"		
Tracer to peromote above a mounty same stay that the sec	narated from 5° 5		

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	20	Yes	FAC	That Are OBL, FACW, or FAC: 9 (A)
2. Quercus phellos	20	Yes	FACW	Total Number of Dominant
3. Liquidambar styraciflua	10	No	FAC	Species Across All Strata:10 (B)
4. Acer rubrum	10	No	FAC	Descent of Deminent Species
5. Quercus michauxii	10	No	FACW	Percent of Dominant Species That Are OBL, FACW, or FAC:  90 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	70	= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:	14	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $\frac{97}{2}$ x 3 = $\frac{291}{8}$
1. Ilex opaca	8	Yes	FAC	FACU species x 4 =
2. Quercus phellos	7	Yes	FACW	UPL species $0 \times 5 = 0$
3. Liquidambar styraciflua	6	Yes	FAC	Column Totals:136 (A)373 (B)
4 Acer rubrum	5	No	FAC	Prevalence Index = R/A = 2.74
5 Carpinus caroliniana	4	No	FAC	Trevalence index B//
•				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	30	= Total Cov		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% of total answer. 15			_	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 15	20% 01	total cover:		
Herb Stratum (Plot size:)  1. Athyrium asplenioides	2	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Mitchella repens		Yes	FACU	
3 Carex blanda		Yes	FAC	Definitions of Four Vegetation Strata:
3. Carex bianda		165	TAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
		= Total Cov		
50% of total cover:3	20% of	total cover:	1.2	
Woody Vine Stratum (Plot size:)				
1 Smilax rotundifolia	20	Yes	FAC	
2. Vitis rotundifolia	10	Yes	FAC	
3				
4				
5				Hydrophytic
	30	= Total Cov	er	Vegetation
50% of total cover:15	20% of	total cover:	6	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wjoa021f\_w

	cription: (Describe t	o the depti				or confirm	the absence	e of indicators.)
Depth (inches)	Matrix Color (moist)	<del></del> _	Color (moist)	x Feature %	S Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 4/2	100	Color (moist)		<u> </u>		SCL	Nemano
3-8	10YR 5/2		10YR 5/8	15	C	PL/M	SCL	
8-24	10YR 5/1		10YR 5/8	25		M	SC	heavy sandy clay
Hydric Soil  Histoso Histic E Black H Hydrogo Stratifie Organic 5 cm Mo Muck P 1 cm Mo Deplete Thick D Coast F Sandy N Sandy N Stripped Dark St	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, Lucky Mineral (A7) (LR resence (A8) (LRR U) Luck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rrairie Redox (A16) (M Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Inface (S7) (LRR P, S) Layer (if observed): ndy clay	T, U) R P, T, U) (A11) LRA 150A) RR O, S)	.RRs, unless other	wise not low Surfa rface (S9 y Mineral d Matrix (F3) Surface (F k Surface ssions (F RR U) nric (F11) ese Mass ce (F13) (F17) (ML tic (F18) (odplain S	ed.) ice (S8) (L ) (LRR S, (F1) (LRR (F2)  6 (F7) 8)  (MLRA 15 es (F12) ( (LRR P, T LRA 151) (MLRA 15 Goils (F19)	RR S, T, U T, U) O) LRR O, P, U) OA, 150B) (MLRA 14	Indicators	



Photo 1
Wetland data pint wjoa012f\_w facing northwest



Photo 2
Wetland data pint wjoa012f\_w facing southeast

Project/Site: Atlantic Coast Pipeline	City/County: Johnston		Sampling Date: 4/9/2015		
Applicant/Owner: Dominion		State: NC	Sampling Point: wjoa021s_w		
	Section, Township, Rang				
Landform (hillslope, terrace, etc.): flat					
	_at: 35.41849293 Lc				
Soil Map Unit Name: Leaf silt loam, 0 to 2 percent slopes		NWI classification			
Are climatic / hydrologic conditions on the site typical for thi					
	·				
Are Vegetation, Soil, or Hydrology					
Are Vegetation, Soil, or Hydrology	aturally problematic? (If nee	eded, explain any answer	rs in Remarks.)		
SUMMARY OF FINDINGS – Attach site map	showing sampling point lo	cations, transects	, important features, etc.		
Hydrophytic Vegetation Present? Yes <u>✓</u> N	0	_			
Hydric Soil Present? Yes V	lo the Gampieu A				
Wetland Hydrology Present? Yes N	i wililli a wellalik	1? Yes	No		
Remarks:					
Wetland data point for the PSS portion of a PSS/PFO wetl	and complex located on a disturbed	flat; PSS portion is a thre	ee-year-old pine plantation;		
water is perched above a heavy sandy clay layer.					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indica	tors (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 Veg	<ul><li>Sparsely Vegetated Concave Surface (B8)</li><li>Drainage Patterns (B10)</li></ul>		
<u> </u>	posits (B15) (LRR U)				
	en Sulfide Odor (C1)	Moss Trim Li			
	d Rhizospheres along Living Roots (		Vater Table (C2)		
Sediment Deposits (B2) Present	ce of Reduced Iron (C4)	Crayfish Burr	ows (C8)		
Drift Deposits (B3) Recent	Iron Reduction in Tilled Soils (C6)	Saturation Vi	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Mu	ick Surface (C7)	Geomorphic	Position (D2)		
Iron Deposits (B5) Other (I	Explain in Remarks)	✓ Shallow Aquir	tard (D3)		
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral	Test (D5)		
Water-Stained Leaves (B9)		Sphagnum m	oss (D8) <b>(LRR T, U)</b>		
Field Observations:					
Surface Water Present? Yes No De					
Water Table Present? Yes No De	pth (inches):				
Saturation Present? Yes No De	pth (inches): 0 Wetl	land Hydrology Presen	t? Yes <u>'</u> No		
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections).	if available:			
_ common recorded a community many	,				
Remarks:					
Soil is saturated from 0'-8" due to heavy sandy clay.					

20		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:5 (A)
2				Total Number of Dominant Species Across All Strata: 5 (B)
4				Openies / Noross / III ottata.
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	0			OBL species 43 x 1 = 43
50% of total cover:		= Total Cov	^	FACW species 18 x 2 = 36
30 /0 OI total cover.	20% of	total cover:		FAC species 158 x 3 = 474
Sapling/Shrub Stratum (Plot size:)  1. Pinus taeda	40	Yes	FAC	FACU species 0 x 4 = 0
2. Quercus phellos	10	No	FACW	UPL species X 5 =
3. Liquidambar styraciflua	10	No	FAC	Column Totals: (A) (B)
4. Baccharis halimifolia	4	No	FAC	Prevalence Index = B/A = 2.52
5. Acer rubrum	4	No	FAC	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
	68	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 34	20% of	total cover:	13.6	1 residing try drophytic vegetation (Explain)
Herb Stratum (Plot size:5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Andropogon virginicus	40	Yes	FAC	be present, unless disturbed or problematic.
2. Scirpus cyperinus	20	Yes	OBL	Definitions of Four Vegetation Strata:
3. Carex comosa	8	No	OBL	- W
4. Dichanthelium scoparium	8	No	FACW	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Dulichium arundinaceum	5	No	OBL	height.
6. Juncus effusus	5	No	OBL	Sapling/Shrub – Woody plants, excluding vines, less
7. Rhynchospora cephalantha	5	No	OBL	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				
9.				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
11.				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
12.				noight.
12.	91	= Total Cov		
50% of total cover: 45.5		total cover:	400	
Woody Vine Stratum (Plot size: 30 )	20 /0 0.	total covor.		
1 Smilax rotundifolia	20	Yes	FAC	
2. Rubus argutus	20	Yes	FAC	
3 Vitis rotundifolia	10	No	FAC	
4. Gelsemium sempervirens	10	No	FAC	
5	60	- Total Cav		Hydrophytic Vegetation
50% of total cover: 30		= Total Cov	40	Present? Yes No
30 % of total cover.		total cover:		
Remarks: (If observed, list morphological adaptations below	W).			

SOIL Sampling Point: wjoa021s\_w

Profile Des	cription: (Describe	to the dept	h needed to docum	nent the i	ndicator	or confirm	the absence of	of indicators.)
Depth	Matrix			K Features		. 2		
(inches) 0-3	Color (moist) 10YR 4/2	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SCL	Remarks
3-8	10YR 4/1	80	7.5YR 4/6	20	C	PL/M	SCL	
8-23	10YR 5/1	75	10YR 5/8	25	С	M	SC	
		<u> </u>						
	-	· —— ·						
		<del></del> -						
		- <del></del> -						
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applic	able to all I	RRs, unless other	wise note	ed.)		Indicators f	or Problematic Hydric Soils <sup>3</sup> :
Histoso	• •		Polyvalue Bel					uck (A9) (LRR O)
	pipedon (A2)		Thin Dark Sui					uck (A10) (LRR S)
	istic (A3)		Loamy Mucky			(0)		d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4) d Layers (A5)		Loamy Gleye ✓ Depleted Mat		F2)			nt Floodplain Soils (F19) <b>(LRR P, S, T)</b> ous Bright Loamy Soils (F20)
	: Bodies (A6) <b>(LRR P</b>	. T. U)	Redox Dark S		6)			A 153B)
_	ucky Mineral (A7) <b>(Li</b>		Depleted Dark	`	,			rent Material (TF2)
	resence (A8) (LRR L		Redox Depre		. ,			allow Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, T)		Marl (F10) <b>(L</b> l	RR U)			Other (E	Explain in Remarks)
-	d Below Dark Surfac	e (A11)	Depleted Och				3	
	ark Surface (A12)	MI DA 450A	Iron-Mangane					tors of hydrophytic vegetation and
	rairie Redox (A16) <b>(I</b> Jucky Mineral (S1) <b>(</b> I		) Umbric Surface Delta Ochric (			, 0)		and hydrology must be present, ss disturbed or problematic.
-	Gleyed Matrix (S4)	LIKIK (J., 3)	Reduced Veri			0A. 150B)	unies	ss disturbed of problematic.
	Redox (S5)		Piedmont Flo				9A)	
-	Matrix (S6)						A 149A, 153C,	153D)
	ırface (S7) (LRR P, S							
Restrictive	Layer (if observed)	:						
Type:	avy sandy clay							.1
Depth (in	ches): 8						Hydric Soil F	Present? Yes No
Remarks:								



Photo 1 Wetland data point wsoa021s\_w facing south



Photo 2
Wetland data point wsoa021s\_w facing north

Project/Site: Atlantic Coast Pipeline	City/C	County: Johnston	S	Sampling Date: 4/9/2015		
Applicant/Owner: Dominion				Sampling Point: wjoa021_u		
	Section			<u> </u>		
Landform (hillslope, terrace, etc.): gentle slo				Slone (%)· 2		
Subregion (LRR or MLRA): P						
Soil Map Unit Name: Leaf silt loam, 0 to 2 pe	ercent slopes	Long				
Are climatic / hydrologic conditions on the sit						
Are Vegetation, Soil, or Hydr						
Are Vegetation, Soil, or Hydr	ology naturally problema	atic? (If needed, e	explain any answers	in Remarks.)		
SUMMARY OF FINDINGS - Attac	h site map showing san	npling point location	ons, transects, i	important features, etc.		
Hydraphytic Vegetation Present?	es <u> </u>					
	es	Is the Sampled Area				
Wetland Hydrology Present?	es No	within a Wetland?	Yes	No		
Remarks:						
Upland data point taken on a gentle slope for	or a seasonally surface saturated	d PSS/PFO complex loca	ited on a disturbed fl	lat.		
HYDROLOGY						
Wetland Hydrology Indicators:			Secondary Indicato	ors (minimum of two required)		
Primary Indicators (minimum of one is regu	ired: check all that apply)		Surface Soil Ci	· · · · · · · · · · · · · · · · · · ·		
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Marl Deposits (B15) (LRI	R U)	Drainage Patterns (B10)			
Saturation (A3)	Hydrogen Sulfide Odor (6		Moss Trim Line			
Water Marks (B1)	Oxidized Rhizospheres a			ater Table (C2)		
Sediment Deposits (B2)	Presence of Reduced Iro		Crayfish Burrov			
Drift Deposits (B3)	Recent Iron Reduction in	Tilled Soils (C6)	Saturation Visi	ble on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic Po	osition (D2)		
Iron Deposits (B5)	Other (Explain in Remark	(S)	Shallow Aquita	ırd (D3)		
Inundation Visible on Aerial Imagery (E	37)		FAC-Neutral To			
Water-Stained Leaves (B9)			Sphagnum mo	ss (D8) <b>(LRR T, U)</b>		
Field Observations:						
	No Depth (inches):					
	No Depth (inches):			,		
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	Wetland H	lydrology Present?	? Yes No		
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, pre	vious inspections), if ava	ilable:			
Remarks:						
no hydrology indicators present						

00	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Quercus phellos	20	Yes	FACW	That Are OBL, FACW, or FAC:8 (A)
2. Pinus taeda		Yes	FAC	Total Number of Dominant
3. Quercus falcata	<u>16</u>	Yes	FACU	Species Across All Strata: 9 (B)
4. Quercus rubra	4	No	FACU	Percent of Dominant Species
5. Liquidambar styraciflua		No	FAC	That Are OBL, FACW, or FAC: 88.88888888 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 = 0
500/ of total account 32		= Total Cov	12.0	FACW species x 1 48
50% of total cover:	20% of	total cover:	12.0	FAC species 66 x 3 = 198
Sapling/Shrub Stratum (Plot size:)	_		E40	FACU species 20 x 4 = 80
1. Acer rubrum	5	Yes	FAC	UPL species 0 x 5 = 0
2. Liquidambar styraciflua	4	Yes	FAC	Column Totals: 110 (A) 326 (B)
3. Quercus phellos	4	Yes	FACW	Column Totals (A) (B)
4. Euonymus americanus	3	No	FAC	Prevalence Index = B/A =
5. Ilex opaca	3	No No	FAC	Hydrophytic Vegetation Indicators:
6. Carpinus caroliniana	2	No	FAC	1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cov		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 10.5	20% of	total cover:	4.2	
Herb Stratum (Plot size: 5				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Carex blanda	5	Yes	FAC	be present, unless disturbed or problematic.
2	-			Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Harb All berbasses (non woods) plants regardless
9				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
11.				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
12.				g
	5	= Total Cov	er	
50% of total cover: 2.5		total cover:		
Woody Vine Stratum (Plot size:30)	2070 01	total cover.		
1 Smilax rotundifolia	10	Yes	FAC	
2. Vitis rotundifolia	10	Yes	FAC	
3				
4	-			
5	20			Hydrophytic
50% of total cover 10		= Total Cov		Vegetation Present? Yes No
30 % Of total cover		total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wjoa021\_u

Profile Desc	cription: (Describe	to the dept	h needed to docum	nent the in	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix			k Features		. 2	<b>-</b> .	
(inches) 0-4	Color (moist) 10YR 2/2	<u>%</u> 100	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture SL	Remarks
4-10	10YR 5/2	75	10YR 4/6	25	C	M	SCL	
10-25	10YR 5/1	60	10YR 4/6	40	С	M	SC	light sandy clay
		·						
		· <del></del> ·						
	-							
1							2	
	oncentration, D=Dep Indicators: (Applic					ains.		PL=Pore Lining, M=Matrix.  S for Problematic Hydric Soils <sup>3</sup> :
Histosol		able to all t	Polyvalue Be		•	DD C T II		Muck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					Muck (A9) (LRR S)
	istic (A3)		Loamy Mucky					ced Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye			ŕ		nont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat	. ,				alous Bright Loamy Soils (F20)
-	Bodies (A6) (LRR P		Redox Dark S	`	,			RA 153B)
	ucky Mineral (A7) <b>(LF</b> resence (A8) <b>(LRR U</b>		Depleted Dar		. ,			Parent Material (TF2) Shallow Dark Surface (TF12)
·	uck (A9) (LRR P, T)	)	Redox Depre Marl (F10) <b>(L</b>		))			(Explain in Remarks)
I .——	d Below Dark Surfac	e (A11)	Depleted Och		(MLRA 1	51)	••.	(2.000)
Thick D	ark Surface (A12)		Iron-Mangane	ese Masse	es (F12) <b>(</b>	LRR O, P,		cators of hydrophytic vegetation and
	rairie Redox (A16) (N					, U)		tland hydrology must be present,
-	Mucky Mineral (S1) <b>(L</b>	RR O, S)	Delta Ochric (			0A 1EOD)	un	less disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Veri Piedmont Flo				9Δ)	
-	Matrix (S6)		Anomalous B					C, 153D)
	rface (S7) (LRR P, S							•
Restrictive	Layer (if observed):							
Type: sa	nuy ciay							
Depth (in	ches): 10						Hydric Soi	I Present? Yes No No
Remarks:								



Photo 1 Upland data point wjoa021\_u facing southeast



Photo 2
Upland data point wjoa021\_u facing northwest

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pip	eline	City/C	county: Johnston		Sampling Date: 2/13/2015				
Applicant/Owner: Dominion				State: NC	Sampling Point: wjob113f_w				
Investigator(s): TP, RH		Section Section							
Landform (hillslope, terrace, etc									
					Datum: WGS 1984				
Soil Map Unit Name: Leaf silt le	oam, 0 to 2 percen	t slopes		NWI classific	cation: None				
Are climatic / hydrologic conditi	ons on the site typ	ical for this time of year? Y	res No	(If no, explain in R	Remarks.)				
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	l Circumstances" ¡	present? Yes <u>'</u> No				
Are Vegetation, Soil									
					s, important features, etc.				
Hydrophytic Vegetation Prese	ent? Yes	✓ No							
Hydric Soil Present?	Yes	No	Is the Sampled Area	Vac V	No				
Wetland Hydrology Present?		✓ No	within a Wetland?	res	NO				
Remarks:									
HYDROLOGY									
Wetland Hydrology Indicato	ors:			Secondary Indica	ators (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 Od		Drainage Patterns (B10)					
✓ Saturation (A3)		✓ Oxidized Rhizosphere	es on Living Roots (C3)	Moss Trim L	ines (B16)				
Water Marks (B1)		Presence of Reduced	d Iron (C4)	(C4) Dry-Season Water Table (C2)					
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	ls (C6) Crayfish Burrows (C8)					
Drift Deposits (B3)		Thin Muck Surface (C		Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)		Stressed Plants (D1)				
Iron Deposits (B5)	(57)			Geomorphic Position (D2)					
Inundation Visible on Aer				Shallow Aquitard (D3)					
<ul><li>Water-Stained Leaves (B</li><li>Aquatic Fauna (B13)</li></ul>	9)			<ul><li>Microtopographic Relief (D4)</li><li>FAC-Neutral Test (D5)</li></ul>					
Field Observations:				TAC-Neutral	1 1631 (D0)				
Surface Water Present?	Yes V No	Depth (inches):	0						
Water Table Present?			0						
Saturation Present?		Depth (inches):	0 Wetland H	Hydrology Preser	nt? Yes 🗸 No				
(includes capillary fringe)									
Describe Recorded Data (stre	am gauge, monito	ring well, aerial photos, pre	vious inspections), if ava	ilable:					
Remarks:									

Sampling Po	int·wjob113f_	W
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•	Absolute	Dominant Ir	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)			Status	Number of Dominant Species
1. Pinus taeda	35	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2. Quercus pagoda	20	Yes	FACW	Total Number of Deminent
3. Quercus michauxii	15	Yes	FACW	Total Number of Dominant Species Across All Strata: 7 (B)
4				(B)
				Percent of Dominant Species That Are ORL FACW or FAC: 85.71428571 (A/R)
5				That Are OBL, FACW, or FAC:
6				Prevalence Index worksheet:
7	70			Total % Cover of: Multiply by:
25	:	= Total Cover	14	OBL species x 1 = 0
50% of total cover: 35	20% of	total cover:		45
Sapling/Shrub Stratum (Plot size:)				FACVV species
1. Ilex opaca	15	Yes	FACU	FAC species x 3 =
2. Cyrilla racemiflora	10	Yes	FACW	FACU species x 4 =
3. Acer rubrum	10	Yes	FAC	UPL species x 5 =
4				Column Totals:115 (A)315 (B)
5.				0.70
				Prevalence Index = B/A =2.73
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
		= Total Cover		4 - Morphological Adaptations¹ (Provide supporting
50% of total cover:17.5	20% of	total cover:	7	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5				. ,
1. Acer rubrum	10	Yes	FAC	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2.				
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4	-			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				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.				Harb All harbassaya (non woody) planta regardless
	10	= Total Cover		<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
50% of total cover: 5		total cover:	_	
Woody Vine Stratum (Plot size: 30 )				Woody vine – All woody vines greater than 3.28 ft in
				height.
1				
2				
3				
4				Hydrophytic
5				Vegetation
	0 :	= Total Cover		Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
	,			
				I

Depth	<u>Matrix</u>			<u> Features</u>	S1	. 2	<b>-</b> .	
inches) 0-12	Color (moist) 10YR 4/2	<u>%</u> 95	Color (moist) 10YR 5/3	<u>%</u> 5	Type <sup>1</sup> C	Loc <sup>2</sup>	Texture SCL	Remarks
0-12	10114/2	95	1011 3/3					
					-			
	-				-			
	_				-			
	-				-			
	oncontration D_Dan	lation PM	— Poducod Motrix, MS		Sand Cr	oine	<sup>2</sup> Location: D	N - Poro Lining M-Matrix
	Indicators:	ietion, Rivi	=Reduced Matrix, MS	=iviaskeu	Sand Gr	ams.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
_ Histosol			Dark Surface	(97)				2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be		n (SR) <b>(N</b>	NI DA 1/17		Coast Prairie Redox (A16)
	istic (A3)		Tolyvalde Be		. , .		(	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			147, 140)	P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mat		-/		<u> </u>	(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark S		6)		V	/ery Shallow Dark Surface (TF12)
	d Below Dark Surfac	e (A11)	Depleted Dar	•				Other (Explain in Remarks)
	ark Surface (A12)	` ,	Redox Depre					,
_ Sandy N	Mucky Mineral (S1) (L	RR N,	Iron-Mangane	ese Masse	es (F12) (	LRR N,		
	A 147, 148)		MLRA 136					
_ Sandy G	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (	MLRA 13	6, 122)	<sup>3</sup> Ind	dicators of hydrophytic vegetation and
_ Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	<b>8)</b> we	etland hydrology must be present,
_ Stripped	Matrix (S6)		Red Parent M	1aterial (F	21) <b>(MLR</b>	A 127, 147	) un	less disturbed or problematic.
estrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	l Present? Yes No
emarks:								



Photo 1 Wetland data point wjob113f\_w facing east



Photo 2
Wetland data point wjob113f\_w facing west