WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region city/County: Cumberland Project/Site: ACP Applicant/Owner: Dominion Investigator(s): ESI-5, Horbour, K. Muvenvey Section, Township, Range: NA Landform (hillslope, terrace, etc.): £10.+ Local relief (concave, convex, none): COncave Subregion (LRR or MLRA): LRR P Lat: 35.[55 44 Long: -78.7 582] Soil Map Unit Name: ROMOIKE & Warne Soils, 0-29. Slopes, Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? (If needed, explain any answers in Remarks.) Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? NCWAM: Hardwood Flat HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: ___ Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Sparsely Vegetated Concave Surface (B8) ___ Aquatic Fauna (B13) Surface Water (A1) ___ Marl Deposits (B15) (LRR U) __ Drainage Patterns (B10) High Water Table (A2) Saturation (A3) ___ Moss Trim Lines (B16) ___ Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (C3) ___ Dry-Season Water Table (C2) ___ Water Marks (B1) __ Crayfish Burrows (C8) Presence of Reduced Iron (C4) Sediment Deposits (B2) Saturation Visible on Aerial Imagery (C9) Recent Iron Reduction in Tilled Soils (C6) Drift Deposits (B3) Geomorphic Position (D2) ___ Thin Muck Surface (C7) Algal Mat or Crust (B4) Shallow Aquitard (D3) Other (Explain in Remarks) Iron Deposits (B5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) __ Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Depth (inches): 12" Wetland Hydrology Present? Yes Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

2-1-42-61	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 5+×305+)		Species?	and the second second second	Number of Dominant Species 5
	20	<u> </u>	FAC	That Are OBL, FACW, or FAC:(A)
2. Plunus septino	10	4	FACU	Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: 23% (A/B)
6.				
7.				Prevalence Index worksheet:
B				Total % Cover of: Multiply by:
8.	30	= Total Co	VOF	OBL species x 1 =
50% of total cover: (S				FACW species x 2 =
	_ 20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 305+ X305-1)	40	Y	FAC	FACU species x 4 =
1. Aced rubrum		-1		UPL species x 5 =
2. Primus section	10	N	FACU	Column Totals: (A) (B)
3. Liquidanbar Styracistua	10	N	FAC	Column rotals: (*)
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
	60	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 30				Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 4 X3CH)	20% 01	total cover		
Herb Stratum (Plot size:	30	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Arundinatio gigontea	20		TICVO	Dissort Laterale soft- or resignating site respectively states of a resignation of the control o
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.				III I All back and consumed to plants regardless
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				
10	THE PROPERTY OF			Woody vine – All woody vines greater than 3.28 ft in
11.				height.
12.	-			
		= Total Co		
	_ 20% of	total cover	6	
Woody Vine Stratum (Plot size: 308+1X305+1)		.,		
1. Smilax rotundisolia	15	7	FAC	
2. Vitis ruturdifolia	50	4	FAC	
3.		1		
Secretaria Chiange Control Con				
5	C- C	T.110		Hydrophytic Vegetation
22	S. A. D. White Landson words and I	= Total Co	a parties	Present? Yes No
50% of total cover: 32.	20% of	total cover	.12	
Remarks: (If observed, list morphological adaptations below	w).			

Depth	cription: (Describe Matrix	to the dept		ox Feature		or commi	the absence	o, maioato o,	
(inches)	Color (moist)	_ %	Color (moist)			Loc²	Texture	When her of months to the succession	Remarks
0-3	101R3/1	100					SL	mucky	
5-20	104R3/1	100					SL		
Histoso Histoso Histoso Histoso Histoso Histoso Histoso Histoso Organio Stratifie Organio S cm M Muck P 1 cm M Deplete Thick D Coast F Sandy Sandy Strippe Dark So Restrictive	ipipedon (A2) listic (A3) en Sulfide (A4) ed Layers (A5) e Bodies (A6) (LRR F ucky Mineral (A7) (Li resence (A8) (LRR P, T) ed Below Dark Surface Prairie Redox (A16) (Mucky Mineral (S1) (Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S Layer (if observed)	2, T, U) RR P, T, U) Se (A11) MLRA 150A LRR O, S) S, T, U)	LRRs, unless other Polyvalue B Thin Dark S Loamy Mucl Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (Depleted Oc	erwise note elow Surface (S9) ky Mineral ed Matrix (F3) Surface (Fark Surface (F11) chric (F11) nese Massiace (F13) (F17) (ML ertic (F18) (oodplain S	ed.) ce (S8) (L) (LRR S, (F1) (LRR F2) 6) (F7) 8) (MLRA 15 es (F12) (I LRR P, T, RA 151) MLRA 15 oils (F19)	RR S, T, U) T, U) O) S1) LRR O, P, 1 U) OA, 150B) (MLRA 145	Indicators 1 cm l 2 cm l Reduc Piedm Anom (ML Red P Very S Other (SA) A 149A, 1530	nont Floodplain S alous Bright Loar RA 153B) Parent Material (T Shallow Dark Sur (Explain in Remanders of hydroph tland hydrology r less disturbed or	c Hydric Soils ³ : O) R S) Outside MLRA 150A, oils (F19) (LRR P, S, my Soils (F20) F2) face (TF12) arks) nytic vegetation and nust be present, problematic.
Restrictive Type:		:					Hydric Soi	I Present? Ye	s No



Wetland data point wcmo009f_w2 facing north.



Wetland data point wcmo009f_w2 facing west.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: 3ERPCity/County: CLMberland Sampling Date: 8/27/ Applicant/Owner: DOM (17) _ Sampling Point: Wmo 009 Investigator(s): FST-J. GOY, K, MWPKY Section, Township, Range: _ Local relief (concave, convex, none): CONVEX Landform (hillslope, terrace, etc.): N 11510PE Long:-78,7*58*32 Subregion (LRR or MLRA): LRRC Soil Map Unit Name: Roanoke NWI classification: Non e Are climatic I hydrologic conditions on the site typical for this time of year? Yes ____t (If no, explain in Remarks.) __, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FÍNDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? 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) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) ___ Aquatic Fauna (B13) ___ Drainage Patterns (B10) High Water Table (A2) ___ Marl Deposits (B15) (LRR U) ___ Moss Trim Lines (B16) Saturation (A3) __ Hydrogen Sulfide Odor (C1) ___ Oxidized Rhizospheres along Living Roots (C3) Water Marks (B1) ___ Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) __ Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aguitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Water Table Present? Wetland Hydrology Present? Yes _ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

マルレンル	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30'X30')		Species?		Number of Dominant Species
1. Liquidambar Staraci Flora			FAC	That Are OBL, FACW, or FAC:(A)
2. ACEV rubrum		<u></u>	EAC_	Total Number of Dominant
3				Species Across All Strata:
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence index worksheet:
8.		•		Total % Cover of: Multiply by:
- / Management 19 11 12 12 12 12 12 12 12 12 12 12 12 12	25	= Total Co	ver	OBL species x 1 =
50% of total cover: 17~				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X 30)			·	FAC species x 3 =
1. ACEV PUBLUM	10	V	FAC	FACU species x 4 =
2 Sassafras albidum	- 	72	FACU	UPL species x 5 =
3. Atalia Spindson		- 1	FAC	Column Totals: (A) (B)
		<u> </u>	<u> </u>	,,,,,
				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
9		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 8.5	2 0% o	f total cove	ռ <u>Յ.Գ</u>	
Herb Stratum (Plot size: 30 X 30)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinoiria gigantea	<u> 15</u>	<u>y</u>	FAC W	be present, unless disturbed or problematic.
2.		·		Definitions of Four Vegetation Strata:
3.				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				and one borrain ground that one in (1 my 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.	15			
	, ,	= Total C	over	
50% of total cover: 4.5	 20% (of total cove	er: <u>⊅</u>	
Woody Vine Stratum (Plot size: _3O Y CO _)				
1. Vitis rotundifolia	<u> 5 </u>	<u> </u>	<u>FAC</u>	
2 Smilax rotundifolia	5	Ų	FA	
3.				
4				
5				Hudaahuda
J	10	= Total C	over	Hydrophytic Vegetation
500/ 451-1-1	· -	_ = Total C of total cov		Present? Yes No No
50% of total cover:		OI LOUAL COV	CI	-
Remarks: (If observed, list morphological adaptations be	elow).			
}				

Profile Desc	ription: (Describ	e to the depti	h needed to do	cument the In	dicator or confirm	n the absence of In	dicators.)
Depth	Matrix		R	edox Features			
(inches)	Color (molst)	%	Color (moist)		Type ¹ Loc ²	<u>Texture</u>	Remarks
0-3	104R3/1	100				L	
	10484/4						
3-16-	101K 1/4	100				SL	
						·	
,	•						
				<u> </u>		· 	···
<u>,</u>						·	
¹ Type: C=C	oncentration, D=D	epletion, RM=	Reduced Matrix	. MS=Masked	Sand Grains.	² Location: PL=I	Pore Lining, M=Matrix.
	Indicators: (Appl						Problematic Hydric Solis ³ :
Histosol			ŕ		e (S8) (LRR S, T,		•
	oipedon (A2)					· —	
				k Surface (S9) ((A10) (LRR S)
	istic (A3)	-		lucky Mineral (F			ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)			Sleyed Matrix (F	2)		loodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)			i Matrix (F3)			Bright Loamy Soils (F20)
	Bodies (A6) (LRR		_	ark Surface (F6	•	(MLRA 1	· .
	ucky Mineral (A7) (d Dark Surface (Material (TF2)
	esence (A8) (LRR	•		epressions (F8)		w Dark Surface (TF12)
	ick (A9) (LRR P, T	•		0) (LRR U)		Other (Expl	ain in Remarks)
Deplete	d Below Dark Surf	ace (A11)	Depleted	d Ochric (F11) (i	VILRA 151)		
Thick D	ark Surface (A12)		Iron-Mar	nganese Masse	s (F12) (LRR O, P	P, T) ³ Indicators	of hydrophytic vegetation and
Coast P	rairie Redox (A16)	(MLRA 150A	i) Umbric (Surface (F13) (L	.RR P, T, U)	wetland	hydrology must be present,
Sandy N	Mucky Mineral (S1)	(LRR O, S)	Delta Od	hric (F17) (MLF	RA 151)	unless d	isturbed or problematic.
Sandy 0	Sleyed Matrix (S4)		Reduced	d Vertic (F18) (N	ILRA 150A, 150E	3)	•
Sandy F	Redox (S5)		Piedmor	it Floodplain Sc	ils (F19) (MLRA 1	(49A)	
1 —	1 Matrix (S6)					RA 149A, 153C, 153	(D)
1 —	ırface (S7) (LRR P	. S. T. U)		ŭ		, ,	
	Layer (If observe						
	Layor (11 absorte	ш,.					
Туре:							
Depth (in	ches):					Hydric Soil Pres	sent? Yes No
Remarks:							
	(2)	nable	to ret	rieve	past 10	e inches	
	0.	MADIE	.0 181	11206	Par. 1 -	11101113	
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Upland data point wcmo009_u facing northeast.

Project/Site: ACP City	County: Cumberland Sampling Date: 3/28/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmo 009_0
Investigator(s): ESI-J, Horbaul, K, Mulphrey Sec	dian Taunahia Bangai NA
Investigator(s): [532-3], Holl Coll. M. Mat Pyres Sec	al relief (concave, convex, none): (CONVEX Slope (%): 2-5
Landform (hillslope, terrace, etc.): Better Loc	538 Long: <u>-78.75804</u> Datum: <u>W658</u>
Subregion (LRR or MLRA): Lat: 35,19=	Long: Datum: Datum: Datum:
Soil Map Unit Name: RODNOKE + WALDE Soils, 0-290,0	ccasionally Flouded 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 dist	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	impling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? 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 (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (L	
Saturation (A3) Hydrogen Sulfide Odor	
Water Marks (B1) Oxidized Rhizospheres	
Sediment Deposits (B2) Presence of Reduced	
Drift Deposits (B3) Recent Iron Reduction	1888 NOON BEELE BEEL
Algal Mat or Crust (B4) Thin Muck Surface (C7 Iron Deposits (B5) Other (Explain in Rema	. 프로그램 : 18 18 18 18 18 18 18 18 18 18 18 18 18
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, p	revious inspections), if available:
Remarks:	
Trainer.	

Tree Stratum (Plot size: 305+ X 305+)	Life of the control of the standards of		t Indicator ? Status	Dominance Test worksheet:
1. Quercus rubra	10	7	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2				Total Number of Dominant Species Across All Strata:
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6.				
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	10	= Total Co	over	OBL species x 1 =
50% of total cover:	20% 0	f total cove	r. 2	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3054 X 3054)		V		FAC species x 3 = FACU species x 4 =
1. Prunus serotina	10	7	FACU	UPL species x 5 =
2. ACEC rubrum	15	7	FAC	
3.				Column Totals: (A) (B)
4.				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6.				Rapid Test for Hydrophytic Vegetation
7.		to make the		2 - Dominance Test is >50%
8.	01	100		3 - Prevalence Index is ≤3.0¹
	15	= Total Co	over	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 12, 5	20% of	total cove	r:	
Herb Stratum (Plot size: 308+X 30 54	20	V	FACH	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	00		FILM	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 5				more in diameter at breast height (DBH), regardless of height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.	7.15			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				
10				Woody vine – All woody vines greater than 3.28 ft in
11.	Total Control Trail			height.
12.	20	= Total Co	wor	
50% of total cover: 10	To all techniques of the toy	total cove	11	
Woody Vine Stratum (Plot size: 28+X308+)	20 /0 0	total cove		
1. Smilax votandifulio	15	Y	FAC	
2.				
3				
4				
5.	15	T-1-1 C-		Hydrophytic Vegetation
-00/ (111 7 6	The state of the s	= Total Co		Present? Yes No
50% of total cover: 7.5		total cove	·	
Remarks: (If observed, list morphological adaptations belo	w).			

Depth	Matrix		Redox Features		
(inches)	Color (moist)	%	Color (moist) % Type	Loc ² Texture	Remarks
0-7	104R3/2	100			
2-4	104R3/3	100		LS	
4-20	104R5/3	100		5	
			educed Matrix, MS=Masked Sand (Pore Lining, M=Matrix.
			Rs, unless otherwise noted.)		Problematic Hydric Soils ³ :
Histosol	5. - 1. - 1 1 1 1 1 1 1.		Polyvalue Below Surface (S8)		
	pipedon (A2)		Thin Dark Surface (S9) (LRR :		(A10) (LRR S) ertic (F18) (outside MLRA 150A,B)
	istic (A3)		Loamy Mucky Mineral (F1) (Li Loamy Gleyed Matrix (F2)		Floodplain Soils (F19) (LRR P, S, T)
	en Sulfide (A4) d Layers (A5)		Depleted Matrix (F3)		Bright Loamy Soils (F20)
 An anti-cycle/point strick depth in 	Bodies (A6) (LRR F	P. T. U)	Redox Dark Surface (F6)	(MLRA 1	
	ucky Mineral (A7) (LI		Depleted Dark Surface (F7)	C 47 190 190 2 190 2 190 2 19 2 2 2 3 10 10 10 10 10 10 10 10 10 10 10 10 10	t Material (TF2)
50.0 SERVED BOTTON SAFER	esence (A8) (LRR L		Redox Depressions (F8)	[8] [7] [1] [1] [2] [3] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4	w Dark Surface (TF12)
	ick (A9) (LRR P, T)		Marl (F10) (LRR U)	Other (Exp	lain in Remarks)
Depleted	d Below Dark Surfac	ce (A11)	Depleted Ochric (F11) (MLRA	[1] [1] 등 생기 [1] 그 [1] 다른 전투 시간 그는 사람들이 되었다. 그는 사람들이 보고 있는 것이다. 그런 사람들이 모르는 것이다. 그런 사람들이 모르는 것이다. 그런 사람들이 되었다.	
	ark Surface (A12)		Iron-Manganese Masses (F12	\$2.00 markets from \$1.00 mm, \$1.00 m	s of hydrophytic vegetation and
		A the control of the second linear Laborator with	Umbric Surface (F13) (LRR P,		hydrology must be present,
	Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151		listurbed or problematic.
A STORY HERE SALES	Gleyed Matrix (S4)		Reduced Vertic (F18) (MLRA Piedmont Floodplain Soils (F1		
	Redox (S5) I Matrix (S6)			(F20) (MLRA 149A, 153C, 153	3D)
A 100 March 1995 Carl Co.	rface (S7) (LRR P,	s. T. U)	Alonialous Blight Louiny Cont	(1 25) (martin 1 4011) 1000) 100	
the state of the s	Layer (if observed)				
Type:					
	ches):			Hydric Soil Pre	sent? Yes No
Remarks:					



Upland data point wcmo009_u2 facing east.



Upland data point wcmo009_u2 facing south.

Project/Site: ACP	City/County: CIAN	iberland sai	mpling Date: 3/29/16
Applicant/Owner: Dominion	only county :	State: NC Sar	mpling Point: Nemp 039e-
Investigator(s): ESI-J, Harlour, K, Murph	TOG Section Township	Banga NA	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Investigator(s): 201 3, 114 2047, K. Mar PT	Section, Township,	e, convex, none): £1a+	Slana (9/): 0-2
Landform (hillslope, terrace, etc.): Flort	Local relief (concav	e, convex, none):	Slope (%) Datum: V65 7
	1.33.11713	_ Long: <u>-78,752</u> 97	Datum: VVOS
Soil Map Unit Name: Leon Sand		NWI classification	
Are climatic / hydrologic conditions on the site typical for this t			
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed?	re "Normal Circumstances" prese	ent? Yes No
Are Vegetation, Soil, or Hydrology na	turally problematic? (f needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map s	nowing sampling poir	nt locations, transects, in	portant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No	within a We		No
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:	NEW TOTAL PROPERTY.	Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required; check all that	at apply)	Surface Soil Cra	cks (B6)
Surface Water (A1) Aquatic F	auna (B13)	Sparsely Vegeta	ted Concave Surface (B8)
	osits (B15) (LRR U)	Drainage Pattern	is (B10)
Saturation (A3) Hydrogen	Sulfide Odor (C1)	Moss Trim Lines	ACCURACY OF THE PROPERTY OF TH
Water Marks (B1) Oxidized	Rhizospheres along Living Re		
The contract of the contract o	of Reduced Iron (C4)	Crayfish Burrows	
The state of the s	on Reduction in Tilled Soils (0		e on Aerial Imagery (C9)
	k Surface (C7)	Geomorphic Pos	
	plain in Remarks)	Shallow Aquitard	a Landa de la companya de la company
Inundation Visible on Aerial Imagery (B7)		Sphagnum moss	
Water-Stained Leaves (B9) Field Observations:		Spriagrium moss	(Do) (Little 1, D)
	h (inches): NA		
	h (inches): 3		/
Water Table Present? Yes No Depti Saturation Present? Yes No Depti	h (inches): Sulf Foce	Wetland Hydrology Present?	Yes No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, as	rial photos, previous inspecti	ons), if available:	
Remarks:			
*			

2-5141066	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 3084 X 1084) 1. Nove Present	% 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.		Descript of Deminent Species
5.		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6		
7		Prevalence Index worksheet:
8.		Total % Cover of: Multiply by:
	O = Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3054×106+)	- Color Michael Color	FAC species x 3 =
		FACU species x 4 =
2.		UPL species x 5 =
3.		Column Totals: (A) (B)
		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1_Rapid Test for Hydrophytic Vegetation
7.		2 - Dominance Test is >50%
3.		3 - Prevalence Index is ≤3.0¹
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 308+X108+)	25 Y FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Dichanthelium Scofarium	10 Y FACW	Definitions of Four Vegetation Strata:
3. Pluchea odorata	2 N FACW	
Nuttallanthus canadensis	5 N UPL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Canoiden 213		more in diameter at breast height (DBH), regardless of height.
6		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
B		Herb – 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.		
	42 = Total Cover	
50% of total cover: 21		
Woody Vine Stratum (Plot size OF X (USF))		
1. NONE Present		
2		
3,		
4		
5		Hydrophytic
		The state of the s
50% of total cover:	20% of total cover:	
5 50% of total cover: Remarks: (If observed, list morphological adaptations below	The second secon	Vegetation

Profile Description: (Describe to the dept		
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type Loc²	Texture Remarks
0-5 104R2/1 100		Mucky sand
10-1		15
1100		2
12-20 104R3/1 100)
		2. St. D. D. Lieles McMatrix
Type: C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all I		² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2)	Polyvalue Below Surface (S8) (LRR S, T, U) 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) Depleted Below Dark Surface (A11)	Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Thick Dark Surface (A11)	Iron-Manganese Masses (F12) (LRR O, P, 1	Indicators of hydrophytic vegetation and
) Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149)	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	149A, 153C, 153D)
V Dark Surface (S7) (LRR P, S, T, U)		
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 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 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 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 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 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 No
Restrictive Layer (if observed): Type: Depth (inches):		Hydric Soil Present? Yes No No



Wetland data point wcmp039e_w facing southwest.



Wetland data point wcmp039e_w facing southeast.

Project/Site: ACP City/	County: Cumberland Sampling Date: 3/29/16
Applicant/Owner: Dominion	State: NC Sampling Point: WCmp039F1
Applicant/Owner: Voltation IV advant@locate	
	ion, rownship, realige.
	I relief (concave, convex, none): COn Cave Slope (%): C-2
Subregion (LRR or MLRA): LRR P Lat: 35, 144	-83 Long: -78,75334 Datum: W65 8
Soil Map Unit Name: Leon Sond	NWI classification: PFO
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	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
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:	
NCWAM: Hardwood Flat	
HYDROLOGY	Control of the territory of two societies of
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 Recent Iron Reduction in	
Drift Deposits (B3) Recent Iron Reduction is 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):	MA
Water Table Present? Yes No Depth (inches):	2
Saturation Present? Yes No Depth (inches): Saturation Present?	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	
	,
F	

Sampling Point: Wemp 039 F. w

2/1/2-6	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 305+ X 305+)	-	Species?	-	Number of Dominant Species
1. Quercus alba	10	-	FACU	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	15	7	FAC	Total Number of Dominant
3. Quercus nigra	20	7	FAC	Species Across All Strata: (B)
4. Liquidamber Styreet &Ina	5	N	FAC	Percent of Dominant Species & Col
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 86% (A/B)
6.				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
0.	50	= Total Cov	er	OBL species x 1 =
50% of total cover: 2				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3064 X3044)	2070 01	total cover		FAC species x 3 =
	10	V	FACH	FACU species x 4 =
1. Magnotia vivainiana		-	FAC	UPL species x 5 =
2. Liquidamoar Styracifina				Column Totals: (A) (B)
3. Pinus talka		14	FAC	
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
-	32	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 16				Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30 H X 30 H)	20 /0 01	total cover		
Herb Stratum (Plot size: 2007 (2007)	50	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Arundinavia gigantea				Local Control (Control Control
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.			100000	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: 25	20% of	total cover	:_10	
Woody Vine Stratum (Plot size: 3064 X 3044)				
1. Smilax votandisolia	10	<u>Y</u>	FAC	
2				
3				
4.				
5,	10	Tatal Ca		Hydrophytic Vegetation
-		= Total Co	-	Present? Yes No No
50% of total cover:	20% of	total cover		
Remarks: (If observed, list morphological adaptations beli	ow).			

Depth (inches) — (0 – 6 – (0 – 20 (Matrix		Redo	x Feature	S				
20 1	Color (moist)	%	Color (moist)	_%_	_Type ¹	Loc2	Texture	Remarks	
0-20 (104R2/1	98	10yR4/6	2	-	PL	SL		
-	04R3/1	100					5_		
CONTROL TO C									
						-			
Type: C=Con	centration, D=Dep	letion RM=R	Reduced Matrix M	S=Masked	Sand Gra	ins.	²Location: PL=	Pore Lining, M=Matrix.	
	dicators: (Applic							Problematic Hydric Soils ³ :	
Histosol (A	(1)		Polyvalue Be	elow Surfa	ce (S8) (L	RR S, T, U)	1 cm Muck	(A9) (LRR O)	
_ Histic Epip	edon (A2)		Thin Dark St					(A10) (LRR S)	
_ Black Histi			Loamy Muck			0)		ertic (F18) (outside MLRA 150A,B	
/VOULE / VOULE / VOUL / VOULE / VOUL /	Sulfide (A4)		Loamy Gleye	saron i habita i sa kacin. T	F2)		— Piedmont Floodplain Soils (F19) (LRR P, S, T) — Anomalous Bright Loamy Soils (F20)		
_ Stratified L		T 10	Depleted Ma Redox Dark		(6)		Anomalous		
	odies (A6) (LRR P sy Mineral (A7) (LF		Redox Dark Depleted Da	Minter Notes Burning A. P.			A	t Material (TF2)	
	ence (A8) (LRR U		Redox Depre				Very Shallow Dark Surface (TF12)		
The state of the s	(A9) (LRR P, T)		Marl (F10) (L					lain in Remarks)	
	Below Dark Surface	e (A11)	Depleted Oc						
THE RESERVE AND THE PROPERTY OF	Surface (A12)		Iron-Mangan					s of hydrophytic vegetation and	
Committee of the Commit	rie Redox (A16) (M	Management of State Law Tolking To.				U)		hydrology must be present,	
The second secon	cky Mineral (S1) (L	RR O, S)	Delta Ochric			A 45081	uniess	disturbed or problematic.	
Sandy Gle	yed Matrix (S4)		Reduced Ve				A		
Stripped M							149A, 153C, 153	3D)	
	ce (S7) (LRR P, S	, T, U)		July Loui	, (.	, ,,			
	yer (if observed):			The same			- Internet no		
Туре:			4					./	
Depth (inche	es):				111 111	4	Hydric Soil Pre	sent? Yes No No	
Remarks:									



Wetland data point wcmp039f_w facing west.



Wetland data point wcmp039f_w facing east.

Project/Site: ACP	City/County: Camberland Sampling Date: 3/29/16
Applicant/Owner: Dominion	State: NC Sampling Point: wcmp 039-4
Investigator(s): ESIJ Harbour, K. MurPhrey	Section, Township, Range: NA
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): CONVEX Slope (%): 2-4
Subregion (LRR or MLRA): LRR P Lat: 35	5.14604 Long: -78.75304 Datum: W658
Soil Map Unit Name: Leon Sond	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significa	
Are Vegetation, Soil, or Hydrology naturally	
	ring sampling 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
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap-	
Surface Water (A1) Aquatic Fauna	
High Water Table (A2) Marl Deposits	
Saturation (A3) Hydrogen Sulfi	
	ospheres along Living Roots (C3) Dry-Season Water Table (C2) educed Iron (C4) Crayfish Burrows (C8)
The same block and a broad a state of the control o	eduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Sur	
Iron Deposits (B5) Other (Explain	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
	thes): NA
Water Table Present? Yes No Depth (inc	thes): >20
Saturation Present? Yes No Depth (includes capillary fringe)	ches): 16(1 Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if available:
Remarks:	
*	
XX	
the same of the sa	

Tree Stratum (Plot size: 3064 X3064)	% Cover	Dominant Species?	Status	Dominance Test worksheet: Number of Dominant Species
1. Pinus taeda	30	4	FAC	That Are OBL, FACW, or FAC:(A)
2. Liquidamber Stylacifica			FAC	Total Number of Dominant 5
3. Acer rubium	5	N	FAC	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:
-	45	= Total Cov	er -	OBL species x 1 =
50% of total cover: 22	5 20% of	total cover	9	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 305+ X305+)	20 /0 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 2001 A 504-)	25	Y	FAC	FACU species x 4 =
1. Li auidambor Styroci Flux		-1	-	UPL species x 5 =
2. ACEV MOVEM	10	N	FAC	Column Totals: (A) (B)
3. Quercus nigra	10	N	FAC	Column rotals (1)
4. Vaccinium colymbosum	10	N	FACH	Prevalence Index = B/A =
5. Pinus taeca	2	N	FAC	Hydrophytic Vegetation Indicators:
6				
7.				2 - Dominance Test is >50%
8.				The state of the s
0,	57	= Total Cov	105	3 - Prevalence Index is ≤3.0¹
78	5 000	- 10tal Co	11.4	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 28 Herb Stratum (Plot size: 3054 × 30 H)			FACO	¹ Indicators of hydric soil and wetland hydrology must
1. Ptelidiam aquilinum	10		FILL	be present, unless disturbed or problematic.
2.				Definitions of Four Vegetation Strata:
3.				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
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 of size, and woody plants less than 3.28 ft tall.
9				
10		en en en	-	Woody vine - All woody vines greater than 3.28 ft in
11.				height.
12				
	_(0	= Total Cov	er	
50% of total cover:	5_ 20% of	total cover		
Woody Vine Stratum (Plot size: 2084 X3084)		1.		
1. Smilax rotundisorio	5	4	FAC	
2.				
3.		The same		
			1000	
4				
5				Hydrophytic
	_	= Total Co		Vegetation Present? Yes No
50% of total cover: 2	5 20% of	total cover		Flesenti les No
Remarks: (If observed, list morphological adaptations be	low).			
Remarks. (If observed, list morphological adaptations be	ow).			

	h needed to document the indicator or confirm	
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type Loc²	Texture Remarks
0-10 104R3/3 100		1.5
10-20 104R 5/3 100		LS
100 100 100		
		
T	Sadarad Makir MS-Maskad Sand Carina	² Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, RM=F Hydric Soil Indicators: (Applicable to all L		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)	
Histosof (A1) Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T	ndicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)		wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	A)
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
emarks:		
Remarks:		
Remarks:		
Remarks:		
emarks:		
Remarks:		
lemarks:		



Upland data point wcmp039_u facing west.



Upland data point wcmp039_u facing east.

Project/Site: ACP	City/County: CIAN	iberland sai	mpling Date: 3/29/16
Applicant/Owner: Dominion	only county :	State: NC Sar	mpling Point: Nemp 039e-
Investigator(s): ESI-J, Harlour, K, Murph	TOG Section Township	Banga NA	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Investigator(s): 201 3, 114 2047, K. Mar PT	Section, Township,	e, convex, none): £1a+	Slana (9/): 0-2
Landform (hillslope, terrace, etc.): Flort	Local relief (concav	e, convex, none):	Slope (%) Datum: V65 7
	1.33.11713	_ Long: <u>-78,752</u> 97	Datum: VVOS
Soil Map Unit Name: Leon Sand		NWI classification	
Are climatic / hydrologic conditions on the site typical for this t			
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed?	re "Normal Circumstances" prese	ent? Yes No
Are Vegetation, Soil, or Hydrology na	turally problematic? (f needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map s	nowing sampling poir	nt locations, transects, in	portant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No	within a We		No
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:	NEW TOTAL PROPERTY.	Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required; check all that	at apply)	Surface Soil Cra	cks (B6)
Surface Water (A1) Aquatic F	auna (B13)	Sparsely Vegeta	ted Concave Surface (B8)
	osits (B15) (LRR U)	Drainage Pattern	is (B10)
Saturation (A3) Hydrogen	Sulfide Odor (C1)	Moss Trim Lines	ACCURACY OF THE PROPERTY OF TH
Water Marks (B1) Oxidized	Rhizospheres along Living Re		
The contract of the contract o	of Reduced Iron (C4)	Crayfish Burrows	
The state of the s	on Reduction in Tilled Soils (0		e on Aerial Imagery (C9)
	k Surface (C7)	Geomorphic Pos	
	plain in Remarks)	Shallow Aquitard	a Landa de la companya de la company
Inundation Visible on Aerial Imagery (B7)		Sphagnum moss	
Water-Stained Leaves (B9) Field Observations:		Spriagrium moss	(Do) (Little 1, D)
	h (inches): NA		
	h (inches): 3		/
Water Table Present? Yes No Depti Saturation Present? Yes No Depti	h (inches): Sulf Foce	Wetland Hydrology Present?	Yes No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, as	rial photos, previous inspecti	ons), if available:	
Remarks:			
*			

2-5141066	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 3084 X 1084) 1. Nove Present	% 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.		Descript of Deminent Species
5.		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6		
7		Prevalence Index worksheet:
8.		Total % Cover of: Multiply by:
	O = Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3054×106+)	- Color Michael Color	FAC species x 3 =
		FACU species x 4 =
2.		UPL species x 5 =
3.		Column Totals: (A) (B)
		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1_Rapid Test for Hydrophytic Vegetation
7.		2 - Dominance Test is >50%
3.		3 - Prevalence Index is ≤3.0¹
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 308+X108+)	25 Y FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Dichanthelium Scofarium	10 Y FACW	Definitions of Four Vegetation Strata:
3. Pluchea odorata	2 N FACW	
Nuttallanthus canadensis	5 N UPL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5. Canoiden 213		more in diameter at breast height (DBH), regardless of height.
6		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
B		Herb – 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.		
	42 = Total Cover	
50% of total cover: 21		
Woody Vine Stratum (Plot size OF X (USF))		
1. NONE Present		
2		
3,		
4		
5		Hydrophytic
		The state of the s
50% of total cover:	20% of total cover:	
5 50% of total cover: Remarks: (If observed, list morphological adaptations below	The second secon	Vegetation

Profile Description: (Describe to the dept		
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type Loc²	Texture Remarks
0-5 104R2/1 100		Mucky sand
10-1		15
1100		2
12-20 104R3/1 100)
		2. St. D. D. Lieles McMatrix
Type: C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all I		² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Histic Epipedon (A2)	Polyvalue Below Surface (S8) (LRR S, T, U) 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) Depleted Below Dark Surface (A11)	Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Thick Dark Surface (A11)	Iron-Manganese Masses (F12) (LRR O, P, 1	Indicators of hydrophytic vegetation and
) Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149)	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	149A, 153C, 153D)
V Dark Surface (S7) (LRR P, S, T, U)		
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 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 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 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 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 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 No
Restrictive Layer (if observed): Type: Depth (inches):		Hydric Soil Present? Yes No No



Wetland data point wcmp039e_w facing southwest.



Wetland data point wcmp039e_w facing southeast.

Project/Site: ACP City/	County: Cumberland Sampling Date: 3/29/16
Applicant/Owner: Dominion	State: NC Sampling Point: WCmp039F1
Applicant/Owner: Voltation IV advant@locate	
	ion, rownship, realige.
	I relief (concave, convex, none): COn Cave Slope (%): C-2
Subregion (LRR or MLRA): LRR P Lat: 35, 144	-83 Long: -78,75334 Datum: W65 8
Soil Map Unit Name: Leon Sond	NWI classification: PFO
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	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
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:	
NCWAM: Hardwood Flat	
HYDROLOGY	Control of the territory of two societies of
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 Recent Iron Reduction in	
Drift Deposits (B3) Recent Iron Reduction is 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):	MA
Water Table Present? Yes No Depth (inches):	2
Saturation Present? Yes No Depth (inches): Saturation Present?	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
Remarks:	
	,
F	

Sampling Point: Wemp 039 F. w

2/1/2-6	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 305+ X 305+)	-	Species?	-	Number of Dominant Species
1. Quercus alba	10	-	FACU	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	15	7	FAC	Total Number of Dominant
3. Quercus nigra	20	1	FAC	Species Across All Strata: (B)
4. Liquidamber Styreet &Ina	5	N	FAC	Percent of Dominant Species & Col
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 86% (A/B)
6.				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
0.	50	= Total Cov	er	OBL species x 1 =
50% of total cover: 2				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3064 X3044)	2070 01	total cover		FAC species x 3 =
	10	V	FACH	FACU species x 4 =
1. Magnotia vivainiana		-	FAC	UPL species x 5 =
2. Liquidamoar Styracifina				Column Totals: (A) (B)
3. Pinus talka		14	FAC	
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
-	32	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 16				Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30 H X 30 H)	20 /0 01	total cover		
Herb Stratum (Plot size: 2007 (2007)	50	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Arundinavia gigantea				Local Control (Control Control
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.			100000	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: 25	20% of	total cover	:_10	
Woody Vine Stratum (Plot size: 3064 X 3044)				
1. Smilax votandisolia	10	<u>Y</u>	FAC	
2				
3				
4.				
5,	10	Tatal Ca		Hydrophytic Vegetation
-		= Total Co	-	Present? Yes No No
50% of total cover:	20% of	total cover		
Remarks: (If observed, list morphological adaptations beli	ow).			

Depth (inches) — (0 – 6 – (0 – 20 (Matrix		Redo	x Feature	S				
20 1	Color (moist)	%	Color (moist)	_%_	_Type ¹	Loc2	Texture	Remarks	
0-20 (104R2/1	98	10yR4/6	2	-	PL	SL		
-	04R3/1	100					5_		
CONTROL TO C									
						-			
Type: C=Con	centration, D=Dep	letion RM=R	Reduced Matrix M	S=Masked	Sand Gra	ins.	²Location: PL=	Pore Lining, M=Matrix.	
	dicators: (Applic							Problematic Hydric Soils ³ :	
Histosol (A	(1)		Polyvalue Be	elow Surfa	ce (S8) (L	RR S, T, U)	1 cm Muck	(A9) (LRR O)	
_ Histic Epip	edon (A2)		Thin Dark St					(A10) (LRR S)	
_ Black Histi			Loamy Muck			0)		ertic (F18) (outside MLRA 150A,B	
/VOULE / VOULE / VOUL / VOULE / VOUL /	Sulfide (A4)		Loamy Gleye	saron i habita i a lancillo. T	F2)		— Piedmont Floodplain Soils (F19) (LRR P, S, T) — Anomalous Bright Loamy Soils (F20)		
_ Stratified L		T 10	Depleted Ma Redox Dark		(6)		Anomalous		
	odies (A6) (LRR P sy Mineral (A7) (LF		Redox Dark Depleted Da	Minter Notes Burning A. P.			A	t Material (TF2)	
	ence (A8) (LRR U		Redox Depre				Very Shallow Dark Surface (TF12)		
The state of the s	(A9) (LRR P, T)		Marl (F10) (L					lain in Remarks)	
	Below Dark Surface	e (A11)	Depleted Oc						
THE RESERVE AND THE PROPERTY OF	Surface (A12)		Iron-Mangan					s of hydrophytic vegetation and	
Committee of the Commit	rie Redox (A16) (M	Management of State Law Tolking To.				U)		hydrology must be present,	
The second secon	cky Mineral (S1) (L	RR O, S)	Delta Ochric			A 45081	uniess	disturbed or problematic.	
Sandy Gle	yed Matrix (S4)		Reduced Ve				A		
Stripped M							149A, 153C, 153	3D)	
	ce (S7) (LRR P, S	, T, U)		July Loui	, (.	, ,,			
	yer (if observed):			The same			- Internet no		
Туре:			4					./	
Depth (inche	es):				111 111	4	Hydric Soil Pre	sent? Yes No No	
Remarks:									



Wetland data point wcmp039f_w facing west.



Wetland data point wcmp039f_w facing east.

Project/Site: ACP	City/County: Camberland Sampling Date: 3/29/16
Applicant/Owner: Dominion	State: NC Sampling Point: wcmp 039-4
Investigator(s): ESIJ Harbour, K. MurPhrey	Section, Township, Range: NA
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): CONVEX Slope (%): 2-4
Subregion (LRR or MLRA): LRR P Lat: 35	5.14604 Long: -78.75304 Datum: W658
Soil Map Unit Name: Leon Sond	NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significa	
Are Vegetation, Soil, or Hydrology naturally	
	ring sampling 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
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that ap-	
Surface Water (A1) Aquatic Fauna	
High Water Table (A2) Marl Deposits	
Saturation (A3) Hydrogen Sulfi	
	ospheres along Living Roots (C3) Dry-Season Water Table (C2) educed Iron (C4) Crayfish Burrows (C8)
The same block and a broad a state of the control o	eduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Sur	
Iron Deposits (B5) Other (Explain	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
	thes): NA
Water Table Present? Yes No Depth (inc	thes): >20
Saturation Present? Yes No Depth (includes capillary fringe)	ches): 16(1 Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if available:
Remarks:	
*	
XX	
the same of the sa	

Tree Stratum (Plot size: 3064 X3064)	% Cover	Dominant Species?	Status	Dominance Test worksheet: Number of Dominant Species
1. Pinus taeda	30	4	FAC	That Are OBL, FACW, or FAC:(A)
2. Liquidamber Stylacifica			FAC	Total Number of Dominant 5
3. Acer rubium	5	N	FAC	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:
-	45	= Total Cov	er -	OBL species x 1 =
50% of total cover: 22	5 20% of	total cover	9	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 305+ X305+)	20 /0 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 2001 A 504-)	25	Y	FAC	FACU species x 4 =
1. Li auidambor Styroci Flux		-1	-	UPL species x 5 =
2. ACEV MOVEM	10	N	FAC	Column Totals: (A) (B)
3. Quercus nigra	10	N	FAC	Column rotals (1)
4. Vaccinium colymbosum	10	N	FACH	Prevalence Index = B/A =
5. Pinus taeca	2	N	FAC	Hydrophytic Vegetation Indicators:
6				
7.				2 - Dominance Test is >50%
8.				The state of the s
0,	57	= Total Cov	105	3 - Prevalence Index is ≤3.0¹
78	5 000	- 10tal Co	11.4	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 28 Herb Stratum (Plot size: 3054 × 30 H)			FACO	¹ Indicators of hydric soil and wetland hydrology must
1. Ptelidiam aquilinum	10		FILL	be present, unless disturbed or problematic.
2.				Definitions of Four Vegetation Strata:
3.				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
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 of size, and woody plants less than 3.28 ft tall.
9				
10		en en en	-	Woody vine - All woody vines greater than 3.28 ft in
11.				height.
12				
	_(0	= Total Cov	er	
50% of total cover:	5_ 20% of	total cover		
Woody Vine Stratum (Plot size: 2084 X3084)		1.		
1. Smilax rotundisorio	5	4	FAC	
2.				
3.		The same		
			1000	
4				
5				Hydrophytic
	_	= Total Co		Vegetation Present? Yes No
50% of total cover: 2	5 20% of	total cover		Flesenti les No
Remarks: (If observed, list morphological adaptations be	low).			
Remarks. (If observed, list morphological adaptations be	ow).			

	h needed to document the indicator or confirm	
Depth Matrix (inches) Color (moist) %	Redox Features Color (moist) % Type Loc²	Texture Remarks
0-10 104R3/3 100		1.5
10-20 104R 5/3 100		LS
100 100 100		
		
T	Sadarad Makir MS-Maskad Sand Carina	² Location: PL=Pore Lining, M=Matrix.
Type: C=Concentration, D=Depletion, RM=F Hydric Soil Indicators: (Applicable to all L		Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)	
Histosof (A1) Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T	ndicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)		wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	A)
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Type:		
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
lemarks:		
Remarks:		
Remarks:		
Remarks:		
emarks:		
Remarks:		
lemarks:		



Upland data point wcmp039_u facing west.



Upland data point wcmp039_u facing east.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: ACP City/County: Cumberland Sampling Date: 8/3/16

State: NC Sampling Point: Wcmq001f-w Investigator(s): ESI (M. Smith K. Talavera) Section, Township, Range: None Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Subregion (LRR or MLRA): LRR P Lat: 35 11206 Long: 78. 72818
Soil Map Unit Name: Torhunta and Lynn Haven Soils NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: NCWAM: Pine flat **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Sparsely Vegetated Concave Surface (B8) Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) High Water Table (A2) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Saturation (A3) Oxidized Rhizospheres along Living Roots (C3) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Geomorphic Position (D2) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Shallow Aquitard (D3) Iron Deposits (B5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Water Table Present? No ____ Depth (inches): _______ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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

Table 11 to the control of the contr		-		
Tree Stratum (Plot size: 30'x30')			t Indicator	Dominance Test worksheet:
			Status	Number of Dominant Species
1. Pinus taeda	00		FAC	That Are OBL, FACW, or FAC:(A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
				Openies Autos Air Ottata (b)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: (A/B)
6				
7.				Prevalence Index worksheet:
THE CONTRACTOR OF THE CONTRACT		A STATE OF THE		Total % Cover of: Multiply by:
8	-00	and a series of the first of the series of		OBL species x 1 =
· · · · · · · · · · · · · · · · · · ·	80	= Total Co	ver	FACW species x 2 =
50% of total cover: 40	20% of	total cove	r:	BECOMES 40 CARCALA ACADA AND AND AND AND AND AND AND AND AND
Sapling/Shrub Stratum (Plot size: 30' x 30')				FAC species x 3 =
1. Lyonia lucida	10	N	FACW	FACU species x 4 =
	10	N	FACW	UPL species x 5 =
2. Clethra alnifolia				
3. Ilex coriacea	20	7	FACW	Column Totals: (A) (B)
4. Acer rubrum	30	1	FAC	Providence Index = D/A =
5. Persea palustris	15	N	FACW	Prevalence Index = B/A =
A STATE OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY AND THE PROPERTY OF TH	National Assessment of the	Company of the control	FILL	Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
B				
	05	= Total Co		3 - Prevalence Index is ≤3.0¹
115				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 42.	20% of	total cove	r: <u>17</u>	
Herb Stratum (Plot size: 30'x30')				¹ Indicators of hydric soil and wetland hydrology must
1. Woodwardia virginica	10	N	OBL	be present, unless disturbed or problematic.
	1.	- 1		Control of the state of the control
2. Persea palustris	15		FACW	Definitions of Four Vegetation Strata:
3. Lyonia lucida	5	N	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Acer rubrum	10	N	FAC	more in diameter at breast height (DBH), regardless of
5. Ilex coriacea	20	V	FACW	height.
		/_	Programma Marchael	
6.		and the tab		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.	CONTRACTOR OF			
	60	1.700/dipp. 153	Property Control	
		= Total Co	MINISTRA - 4000 CONTRACTOR	
50% of total cover: 3 C	20% of	total cove	r: 1 4	
Woody Vine Stratum (Plot size: 30' x 30')				
1. Gelsemium sempervirens	15	Y	EAC	
	-	- 1	1-10	
2. Toxicodendron radicans	ے	N	FAC	
3. Vitis rotunditalia	20	_ Y	FAC	
1				
5.	-			Hydrophytic
		= Total Co	ver _	Vegetation
		total cove	. 8	Present? Yes No
50% of total cover: 2	20% of			
50% of total cover: 20		total cove		Fright DVD Performance of the control of the contro
50% of total cover: 2 C		total cove		The state of the s
		total cove		

Profile Description: (Describe to the depth need	ed to document the indi	cator or confirm t	he absence of	f indicators.)
Depth Matrix	Redox Features	1 1 2	-	D
The service is a final control of the description of the service o	or (moist) % T	ype ¹ Loc ²	ML_	Remarks
0-15 104R2/1 100				mucky
15-20- 104R 6/2 100			FSL	
¹ Type: C=Concentration, D=Depletion, RM=Reduct				L=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs,	unless otherwise noted.)			or Problematic Hydric Soils ³ :
	Polyvalue Below Surface (SALES TO SERVICE THE SERVICE SHARE S	ck (A9) (LRR O)
	Thin Dark Surface (S9) (LI			ck (A10) (LRR S)
	Loamy Mucky Mineral (F1)			Vertic (F18) (outside MLRA 150A,B)
	Loamy Gleyed Matrix (F2) Depleted Matrix (F3)			nt Floodplain Soils (F19) (LRR P, S, T) bus Bright Loamy Soils (F20)
Thought than to here he will thank to Auto Preside Walnut and Thought 1995 (1995) (199	Redox Dark Surface (F6)			A 153B)
	Depleted Dark Surface (F7	")	DC11 III III TACSOLE accessorment a	ent Material (TF2)
The control of the co	Redox Depressions (F8)		Addition to the second state of the control of the	allow Dark Surface (TF12)
	Marl (F10) (LRR U)			xplain in Remarks)
The state of the s	Depleted Ochric (F11) (ML			
	ron-Manganese Masses (ors of hydrophytic vegetation and
	Jmbric Surface (F13) (LRI			nd hydrology must be present, s disturbed or problematic.
The analysis of the state of th	Delta Ochric (F17) (MLRA Reduced Vertic (F18) (ML	레이지 아이들이 그 소리를 하는데 하는데 하는데 아니다 하는데 되었다.	unies	s disturbed of problematic.
	Piedmont Floodplain Soils		A)	
	Anomalous Bright Loamy			153D)
Dark Surface (S7) (LRR P, S, T, U)				
Restrictive Layer (if observed):				
Туре:				
Depth (inches):			Hydric Soil P	resent? Yes No
Remarks:				



Wetland data point wcmq001f_w facing north.



Wetland data point wcmq001f_w facing south.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP City/Cou	unty: Cumberland Sampling Date: 8/3/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmq 001e-W
Investigator(s): ESI (M. Smith K. Talavera) Section	, Township, Range: None
Landform (hillslope, terrace, etc.): Flat Local re	flief (concave, convex, none): None Slope (%):
Subregion (LRR or MLRA): LRRP Lat: 35 11	1808 Long: -78.728935 Datum: WGS 85
Soil Map Unit Name: Torhunta and Lynn Haven Soil	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	S No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbe	d? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic	c? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing samp	ling point locations, transects, important features, etc.
Hydric Soil Present?	s the Sampled Area within a Wetland? Yes No
Powerline easement	
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) Saturation (A3) Hydrogen Sulfide Odor (C1)	
Water Marks (B1) Oxidized Rhizospheres alor	
Sediment Deposits (B2)	
Drift Deposits (B3)	illed Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in Remarks)	[전경기자 타고 마스아이트 : 2014년 12 전 12
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:	opragnammees (es) (erm v) ey
Surface Water Present? Yes No _X Depth (inches):	4
Water Table Present? Yes X No Depth (inches): 12 Saturation Present? Yes No Depth (inches): 12	7
Saturation Present? Yes X No Depth (inches): / 2	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous)	ous inspections), if available:
Pomerke:	
Remarks:	

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

20' 70'			t Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30'x30') 1. None	% Cover			Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
2				Total Number of Dominant Species Across All Strata:	3	(B)
4. 5.				Percent of Dominant Species That Are OBL, FACW, or FAC:	00	(A/B)
6						
7.				Prevalence Index worksheet:		
8.					ultiply by:	
		= Total Co	Carry or Con-	OBL species x 1 = _		_
	The state of the s		The state of the s	FACW species x 2 = _	114	
50% of total cover:	20% of	total cove	r:	FAC species x 3 =		- 1
Sapling/Shrub Stratum (Plot size: 30' x 30')						
1. None				FACU species x 4 = _		
2.				UPL species x 5 = _		-
3.				Column Totals: (A)		_ (B)
4	Tract Change Control Section	WASTINETED A CHIMICIOLIS		Prevalence Index = B/A =	Charles and Company of the Company	
5				Hydrophytic Vegetation Indicators:		
6.				1 - Rapid Test for Hydrophytic Ve	egetation	
7.				2 - Dominance Test is >50%		
8.				3 - Prevalence Index is ≤3.01		
	0	= Total Co	ver	Problematic Hydrophytic Vegetat	tion ¹ (Evolui	n)
50% of total cover:	PROCESS AND ADDRESS.	total cove		Problematic Hydrophytic Vegetat	uon (Explai	""
Herb Stratum (Plot size: 30' x 30')				1		
1. Saccharum siganteum	2	N	FACW	¹ Indicators of hydric soil and wetland be present, unless disturbed or proble	nyarology r ematic.	nust
2. Rhexia virginica	20	V.	FACW	Definitions of Four Vegetation Stra		
		N	FAC	Definitions of Four Vegetation Stra	ııa.	
3. Eupatorium rotundifolium	5		-	Tree - Woody plants, excluding vines	s, 3 in. (7.6	cm) or
4. Eleocharis sp.	5	N	FACWLOBL	more in diameter at breast height (DB	BH), regardl	ess of
5. Carex plancescens	10	N	OBL	height.		
6. Rhunchospora macrostachya	20	Y	OBL	Sapling/Shrub - Woody plants, exclu	uding vines	less
7. Rhynchospora microcephala	15	N	FACW	than 3 in. DBH and greater than 3.28	ft (1 m) tall	
8. Rhinchospora inexpansa	20	y	FACW			
8. Khi A Ch O) P or oc Interpreta	5		OBL	Herb - All herbaceous (non-woody) p	plants, rega	rdless
9. Rhynchospora glomerata		N		of size, and woody plants less than 3	1.28 ft tall.	
10. Panicum Sp.	2	_ N	UNK	Woody vine - All woody vines greate	er than 3.28	ft in
11.				height.		
12.						
	104	= Total Co	ver			
50% of total cover: _ 52	200/ 04	total covo	. 20.8	等于, 2015年,2015年,第二年,第二年		
30' v 30'	2070 01	total cove				
Woody Vine Stratum (Plot size: 30' x 30')						
1. none						
2.						
3						
4.						
5				11		
	0	= Total Co	wor	Hydrophytic Vegetation		
50% of total cover:	decimal amount of the con-	total cove		Present? Yes No	o	
THE PROPERTY OF THE PROPERTY O	THE PROPERTY OF STREET	total cove				
Remarks: (If observed, list morphological adaptations belo	w).					

epth Matrix Color (moist) % -20 104R 2/1 100 0 - 25 104R 5/2 100	Color (moist)	%		White British and the Control		
			Type ¹	Loc ²	Texture	Remarks
0-25 104R5/2 100					ML	mucky
				-	FSL	
ype: C=Concentration, D=Depletion, RM=dric Soil Indicators: (Applicable to all I Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	RRs, unless other Polyvalue Be Thin Dark St. Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Dar Redox Depre Marl (F10) (L Depleted Oct	rwise noted flow Surface urface (S9) (y Mineral (F ed Matrix (F3) Surface (F6 rk Surface (essions (F8) .RR U) hric (F11) (N ese Masses ace (F13) (L (F17) (MLR rtic (F18) (N podplain Soi	MLRA 15 (RF P, T, RA 151) (ILRR S, T) (LRR S) (F1) (LRR S) (F7) (MLRA 15 (F12) (IRR P, T, RA 151) (ILRA 15)	RR S, T, U) T, U) O) i1) LRR O, P, T U) OA, 150B) (MLRA 149	2Location: Indicators 1 cm N 2 cm N Reduc Piedm Anoma (MLF Red Pa Very S Other () 3Indic wet unle	PL=Pore Lining, M=Matrix. for Problematic Hydric Soils³: Muck (A9) (LRR O) Muck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A, Boot Floodplain Soils (F19) (LRR P, S, Talous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) challow Dark Surface (TF12) (Explain in Remarks) cators of hydrophytic vegetation and cland hydrology must be present, less disturbed or problematic.
Depth (inches):emarks:					Hydric Soll	Present? Yes X No



Wetland data point wcmq001e_w facing east.



Wetland data point wcmq001e_w facing north.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region City/County: Cumberland Sampling Date: 8/3/16 State: NC Sampling Point: Wcmg 001-4 Project/Site: ___ ACP Applicant/Owner: Dominion Investigator(s): ESI (A. Smith K. Talavera) Section, Township, Range: None Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): 100 Slope (%): Subregion (LRR or MLRA): LRR P Lat: 35 105841 Long: 78 779555 Datum: WG584 Soil Map Unit Name: Torhunta and Lynn Haven Soils NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: Powerline easement upland road fill HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) High Water Table (A2) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Saturation (A3) Oxidized Rhizospheres along Living Roots (C3) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Thin Muck Surface (C7) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aguitard (D3) Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Yes ____ No X Depth (inches): NA Surface Water Present? Yes ____ No X Depth (inches): __ Water Table Present? Wetland Hydrology Present? Yes ____ No _X Yes No > Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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

7-1 721	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'x 30')	% Cover	Species?		Number of Dominant Species 5
1. Pinur taeda	20	4	FAC	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	10	Y	FAC	Total Number of Dominant
3				Species Across All Strata: (B)
4.				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				markie obc, raov, orrao (vo)
7.				Prevalence Index worksheet:
0				Total % Cover of: Multiply by:
8	30	= Total Cov		OBL species x 1 =
50% of total cover:/ 5				FACW species x 2 =
50% of total cover:	20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30' x30')	25	V	UPL	FACU species x 4 =
1. Rhus copallinum	30		Charles of the Country	UPL species x 5 =
2. Magnolia Virginiana	5	<u>N</u>	FACW	Column Totals: (A) (B)
3. Acer rubrum	10	_N_	FAC	Coldinii Totals (A) (B)
4. Persea palustris	1.0	N	FACW	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
	55	= Total Cov	/er	
50% of total cover: 27.3				Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30' x 30')	_ 20 /0 01	total cover		
1. Arundinaria gigantea	20	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
11.	10	-,1	FACU	THE MANUAL PROPERTY AND A PROPERTY OF THE PROP
2. Lactuca canadensis		<u>N</u>		Definitions of Four Vegetation Strata:
3. Helenium amarum	10	<u>N</u>	FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Lerpedeza cuneata	20		FACU	more in diameter at breast height (DBH), regardless of
5. Eupatorium rotunditolium	20		FAC	height.
6. Kummerowia striata	10	N	FACU	Sapling/Shrub - Woody plants, excluding vines, less
7. Panicum sp.	10	N	MNK	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				M. J. J. J. All All J.
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12				1105
12.	100	= Total Cov	·or	
50% of total cover: _50		total cover		
Woody Vine Stratum (Plot size: 30' × 30')	20% 01	total cover		
Woody Vine Stratum (Plot size:	10	Y	FAC	
1. Smilax glavica	-10	-/-	1110	
2.				
3				
4				
5.				Hydrophytic
	10	= Total Cov	ver _	Vegetation V
50% of total cover:	20% of	total cover	:	Present? Yes No
Remarks: (If observed, list morphological adaptations below	w).			

Profile Des	cription: (Describe	to the depth	needed to docu	nent the i	ndicator	or confirm	the absence o	of indicators.)
Depth	Matrix	0/		x Features		Loc ²	Tautura	Remarks
(inches)	Color (moist)	90	Color (moist)	10	Type¹	M	Texture .	Remarks
			10415 3/0	10				
15-20	104R2/1	100		-			FSL	
¹Type: C=C	oncentration, D=Dep	letion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: F	PL=Pore Lining, M=Matrix.
	Indicators: (Applica						Indicators f	for Problematic Hydric Soils ³ :
☐ Histosol	(A1)		Polyvalue Be					uck (A9) (LRR O)
The Property of the Control of the C	pipedon (A2)		Thin Dark St					uck (A10) (LRR S)
10 mm	istic (A3) en Sulfide (A4)		Loamy Muck			.0)		d Vertic (F18) (outside MLRA 150A,B) nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma		,			ous Bright Loamy Soils (F20)
A STATE OF THE PARTY OF THE PAR	Bodies (A6) (LRR P,	T, U)	Redox Dark		6)		(MLR	A 153B)
the second secon	ucky Mineral (A7) (LF		Depleted Da					rent Material (TF2)
 III. Sept. 100 (100 for the control of the control of	resence (A8) (LRR U)	Redox Depre		B)			nallow Dark Surface (TF12) Explain in Remarks)
60 Part of the second s	uck (A9) (LRR P, T) d Below Dark Surface	e (A11)	Marl (F10) (L		(MLRA 1	51)	Utilei (E	Explain in Remarks)
The Carbon A. of the State of the	ark Surface (A12)	5 (/ 11 1)	Iron-Mangan				T) ³ Indica	ators of hydrophytic vegetation and
3. 3 (1 miles 12)	rairie Redox (A16) (M			이 하시 하실 중 신입하실 하나 수 있다.		, U)		and hydrology must be present,
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric			04 4505)	unle	ss disturbed or problematic.
15. St. St. (5.15) (15.15) (15.15)	Gleyed Matrix (S4) Redox (S5)		Reduced Ve				94)	
TO PROMISE STREET, STR	Matrix (S6)						A 149A, 153C,	153D)
St. Annual St. Co. Co. Co. Co. Co. Co. Co. Co. Co. Co	rface (S7) (LRR P, S	, T, U)						
Restrictive	Layer (if observed):							
Type:								V
Depth (in	ches):						Hydric Soil F	Present? Yes No No
Remarks:	1 1	C						
fill	material	tor	road					



Upland data point wcmq001_u facing south.



Upland data point wcmq001_u facing east.



Upland data point wcmq001_u facing northwest.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: ACP City/County: Cumberland Sampling Date: 8/3/16

State: NC Sampling Point: Wcmq001f-w Investigator(s): ESI (M. Smith K. Talavera) Section, Township, Range: None Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Subregion (LRR or MLRA): LRR P Lat: 35 11206 Long: 78. 72818
Soil Map Unit Name: Torhunta and Lynn Haven Soils NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: NCWAM: Pine flat **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Sparsely Vegetated Concave Surface (B8) Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) High Water Table (A2) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Saturation (A3) Oxidized Rhizospheres along Living Roots (C3) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Geomorphic Position (D2) Thin Muck Surface (C7) Algal Mat or Crust (B4) Other (Explain in Remarks) Shallow Aquitard (D3) Iron Deposits (B5) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Water Table Present? No ____ Depth (inches): _______ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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

Table 11 to the control of the contr		-		
Tree Stratum (Plot size: 30'x30')			t Indicator	Dominance Test worksheet:
			Status	Number of Dominant Species
1. Pinus taeda	00		FAC	That Are OBL, FACW, or FAC:(A)
2.				Total Number of Dominant
3.				Species Across All Strata: (B)
				Openies Autos Air Ottata (b)
4				Percent of Dominant Species
5.				That Are OBL, FACW, or FAC: (A/B)
6				
7.				Prevalence Index worksheet:
THE CONTRACTOR OF THE CONTRACT		A STATE OF THE		Total % Cover of: Multiply by:
8	-00	and a series of the first of the series of		OBL species x 1 =
· · · · · · · · · · · · · · · · · · ·	80	= Total Co	ver	FACW species x 2 =
50% of total cover: 40	20% of	total cove	r:	BECOMES 40 CARCALA ACADA AND AND AND AND AND AND AND AND AND
Sapling/Shrub Stratum (Plot size: 30' x 30')				FAC species x 3 =
1. Lyonia lucida	10	N	FACW	FACU species x 4 =
	10	N	FACW	UPL species x 5 =
2. Clethra alnifolia				
3. Ilex coriacea	20	7	FACW	Column Totals: (A) (B)
4. Acer rubrum	30	1	FAC	Providence Index = D/A =
5. Persea palustris	15	N	FACW	Prevalence Index = B/A =
A STATE OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY AND THE PROPERTY OF TH	National Assessment of the	Company of the control	FILL	Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
B				
	05	= Total Co		3 - Prevalence Index is ≤3.0¹
115				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 42.	20% of	total cove	r: <u>17</u>	
Herb Stratum (Plot size: 30'x30')				¹ Indicators of hydric soil and wetland hydrology must
1. Woodwardia virginica	10	N	OBL	be present, unless disturbed or problematic.
	1.	- 1		Control of the state of the control
2. Persea palustris	15		FACW	Definitions of Four Vegetation Strata:
3. Lyonia lucida	5	N	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Acer rubrum	10	N	FAC	more in diameter at breast height (DBH), regardless of
5. Ilex coriacea	20	V	FACW	height.
		/_	Programma Marchael	
6.		and the tab		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.	CONTRACTOR OF			
	60	1.700/dipp. 153	Property Control	
		= Total Co	MINISTRA - 4000 CONTRACTOR	
50% of total cover: 3 C	20% of	total cove	r: 1 4	
Woody Vine Stratum (Plot size: 30' x 30')				
1. Gelsemium sempervirens	15	Y	EAC	
	-	- 1	1-10	
2. Toxicodendron radicans	ے	N	FAC	
3. Vitis rotunditalia	20	_ Y	FAC	
1				
5.	-			Hydrophytic
		= Total Co	ver _	Vegetation
		total cove	. 8	Present? Yes No
50% of total cover: 2	20% of			
50% of total cover: 20		total cove		Fright DVD Performance of the control of the contro
50% of total cover: 2 C		total cove		The state of the s
		total cove		

Depth	cription: (Describe Matrix	to the dept		ox Feature		O1 001111111	the abonice			
(inches)	Color (moist)	%	Color (moist)	%		_Loc ²	Texture		Remarks	
0-15	10 YR 2/1	100					ML	muck	7	
15-20-	104R6/2	100					FSL		1	
Hydric Soil Histosol Histic E Black H Hydroge Stratified Organic Tom Muck Pi 1 cm Mu Deplete Thick Di Sandy M Sandy F	oncentration, D=Dep Indicators: (Applic (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P Jucky Mineral (A7) (LR U Juck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (Nucky Mineral (S1) (LS) Seleyed Matrix (S4) Redox (S5)	able to all I , T, U) RR P, T, U) I) e (A11) MLRA 150A	RRs, unless other Polyvalue Be Thin Dark Se Loamy Muck Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (I Depleted Oc Iron-Mangar Delta Ochric Reduced Ve Piedmont FI	erwise not elow Surfa urface (S9 ky Mineral ed Matrix (F3) Surface (F ark Surface essions (F LRR U) chric (F11) nese Mass ace (F13) c (F17) (MI ertic (F18) (oodplain S	ed.) ce (S8) (L) (LRR S, (F1) (LRR (F2)	RR S, T, U T, U) (O) (D) (D) (D) (D) (M) (M)	Indicators 1) 1 cm N 2 cm N Reduct Piedm Anoma (MLi Very S Other T) 3Indic	for Probler fluck (A9) (L fluck (A10) (ed Vertic (F ont Floodpla alous Bright RA 153B) arent Materi challow Dark (Explain in F cators of hyd ess disturbe	LRR S) 18) (outside Mi in Soils (F19) (Loamy Soils (F: al (TF2) Surface (TF12	cils ³ : LRA 150A,B) LRR P, S, T) 20) tion and sent,
	rface (S7) (LRR P, S						_			
	Layer (if observed):									
Type:							Undela Call	D42	Yes	No
Depth (in Remarks:	ches):	A STORMAN SOUTH					Hydric Soil	Present?	res	МО



Wetland data point wcmq001f_w facing north.



Wetland data point wcmq001f_w facing south.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP City/	County: Cumberland Sampling Date: 8/3/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmq001e-W
Investigator(s): ESI (M. Smith K. Talavera) Sec	tion, Township, Range: None
Landform (hillslope, terrace, etc.): Flat Local	al relief (concave, convex, none): None Slope (%):
Subregion (LRR or MLRA): LRRP Lat: 35.	111508 Long: -78 728935 Datum: WGS 89
Soil Map Unit Name: Torhunta and Lynn Haven So	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distu	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Powerline easement	
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) (LF	. 이번 물통이다. 이번 사이를 살아보는 것이 없는 그는 사람들이 얼마나 나는 그는 사람들이 없었다. 그는 사람들이 사용되었다면서 사람들이 되었다. 그는 사람들이 없는 사람들이 없는 사람들이 없는 사람들이 없다.
Saturation (A3) Hydrogen Sulfide Odor	18일을 성수 1차는 사용 원인을 보고 있는데 1차를 보고 있는데 1차를 보고 있다
를 하는 그는 사람들이 있다면 있다면 하는 것들이 가입니다. 그는 사람들이 되었다면 하는 사람들이 되었다면 하는데	along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
Drift Deposits (B3)	등 하시면 하시면 사용하게 되었다면 보다 하게 되었다. 그는 사용 등 보다 사용을 보고 있다면 보다 하게 되었다면 하시면 하시면 되었다면 하시면 하시면 하시면 되었다면 하시면 하시면 하시면 하시면 하시면 하시면 하시면 하시면 하시면 하시
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7) ☐ Iron Deposits (B5) ☐ Other (Explain in Remai	님이 없는데, 얼마면 보면 가는 것이 되는 것이 있는데 그는데 없어요. 그래요. 그래요. 그래요. 그래요. 그래요. 그래요. 그래요. 그래
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):	NA
Water Table Present? Yes No Depth (inches):	14
Saturation Present? Yes X No Depth (inches): (includes capillary fringe)	/ Z Wetland Hydrology Present? Yes _ No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	

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

20' 70'			t Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size: 30'x30') 1. None	% Cover			Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A)
2				Total Number of Dominant Species Across All Strata:	3	(B)
4. 5.				Percent of Dominant Species That Are OBL, FACW, or FAC:	00	(A/B)
6						
7.				Prevalence Index worksheet:		
8.					ultiply by:	
		= Total Co	Carry or Con-	OBL species x 1 = _		_
	The state of the s		The state of the s	FACW species x 2 = _	114	
50% of total cover:	20% of	total cove	r:	FAC species x 3 =		- 1
Sapling/Shrub Stratum (Plot size: 30' x 30')						
1. None				FACU species x 4 = _		
2.				UPL species x 5 = _		-
3.				Column Totals: (A)		_ (B)
4	Tract Change Control Section	WASTINETED A CHIMICIOLIS		Prevalence Index = B/A =	Charles and Company of the Company	
5				Hydrophytic Vegetation Indicators:		
6.				1 - Rapid Test for Hydrophytic Ve	egetation	
7.				2 - Dominance Test is >50%		
8.				3 - Prevalence Index is ≤3.01		
	0	= Total Co	ver	Problematic Hydrophytic Vegetat	tion ¹ (Evolui	n)
50% of total cover:	PROCESS AND ADDRESS.	total cove		Problematic Hydrophytic Vegetat	uon (Explai	""
Herb Stratum (Plot size: 30' x 30')				1		
1. Saccharum siganteum	2	N	FACW	¹ Indicators of hydric soil and wetland be present, unless disturbed or proble	nyarology r ematic.	nust
2. Rhexia virginica	20	V.	FACW	Definitions of Four Vegetation Stra		
		N	FAC	Definitions of Four Vegetation Stra	ııa.	
3. Eupatorium rotundifolium	5		-	Tree - Woody plants, excluding vines	s, 3 in. (7.6	cm) or
4. Eleocharis sp.	5	N	FACWLOBL	more in diameter at breast height (DB	BH), regardl	ess of
5. Carex plancescens	10	N	OBL	height.		
6. Rhunchospora macrostachya	20	Y	OBL	Sapling/Shrub - Woody plants, exclu	uding vines	less
7. Rhynchospora microcephala	15	N	FACW	than 3 in. DBH and greater than 3.28	ft (1 m) tall	
8. Rhinchospora inexpansa	20	y	FACW			
8. Khi A Ch O) P or oc Interpreta	5		OBL	Herb - All herbaceous (non-woody) p	plants, rega	rdless
9. Rhynchospora glomerata		N		of size, and woody plants less than 3	1.28 ft tall.	
10. Panicum Sp.	2	_ N	UNK	Woody vine - All woody vines greate	er than 3.28	ft in
11.				height.		
12.						
	104	= Total Co	ver			
50% of total cover: _ 52	200/ 04	total covo	. 20.8			
30' v 30'	2070 01	total cove				
Woody Vine Stratum (Plot size: 30' x 30')						
1. none						
2.						
3						
4.						
5				11		
	0	= Total Co	wor	Hydrophytic Vegetation		
50% of total cover:	decimal amount of the con-	total cove		Present? Yes No	o	
THE PROPERTY OF THE PROPERTY O	THE PROPERTY OF STREET	total cove				
Remarks: (If observed, list morphological adaptations belo	w).					

epth Matrix Color (moist) % -20 104R 2/1 100 0 - 25 104R 5/2 100	Color (moist)	%		White British and the Control		
			Type ¹	Loc ²	Texture	Remarks
0-25 104R5/2 100					ML	mucky
				-	FSL	
ype: C=Concentration, D=Depletion, RM=dric Soil Indicators: (Applicable to all I Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	RRs, unless other Polyvalue Be Thin Dark St. Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Dar Redox Depre Marl (F10) (L Depleted Oct	rwise noted flow Surface urface (S9) (y Mineral (F ed Matrix (F3) Surface (F6 rk Surface (essions (F8) .RR U) hric (F11) (N ese Masses ace (F13) (L (F17) (MLR rtic (F18) (N podplain Soi	MLRA 15 (RF P, T, RA 151) (ILRR S, T) (LRR S) (F1) (LRR S) (F7) (MLRA 15 (F12) (IRR P, T, RA 151) (ILRA 15)	RR S, T, U) T, U) O) i1) LRR O, P, T U) OA, 150B) (MLRA 149	2Location: Indicators 1 cm N 2 cm N Reduc Piedm Anoma (MLF Red Pa Very S Other () 3Indic wet unle	PL=Pore Lining, M=Matrix. for Problematic Hydric Soils³: Muck (A9) (LRR O) Muck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A, Boot Floodplain Soils (F19) (LRR P, S, Talous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) challow Dark Surface (TF12) (Explain in Remarks) cators of hydrophytic vegetation and cland hydrology must be present, less disturbed or problematic.
Depth (inches):emarks:					Hydric Soll	Present? Yes X No



Wetland data point wcmq001e_w facing east.



Wetland data point wcmq001e_w facing north.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region City/County: Cumberland Sampling Date: 8/3/16 State: NC Sampling Point: Wcmg 001-4 Project/Site: ___ ACP Applicant/Owner: Dominion Investigator(s): ESI (A. Smith K. Talavera) Section, Township, Range: None Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): 100 Slope (%): Subregion (LRR or MLRA): LRR P Lat: 35 105841 Long: 78 779555 Datum: WG584 Soil Map Unit Name: Torhunta and Lynn Haven Soils NWI classification: NA Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes X No 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? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: Powerline easement upland road fill HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) High Water Table (A2) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Saturation (A3) Oxidized Rhizospheres along Living Roots (C3) Water Marks (B1) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Drift Deposits (B3) Thin Muck Surface (C7) Geomorphic Position (D2) Algal Mat or Crust (B4) Shallow Aguitard (D3) Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Yes ____ No X Depth (inches): NA Surface Water Present? Yes ____ No X Depth (inches): __ Water Table Present? Wetland Hydrology Present? Yes ____ No _X Yes No > Depth (inches): Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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

7-1 721	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'x 30')	% Cover	Species?		Number of Dominant Species 5
1. Pinus taeda	20	4	FAC	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	10	Y	FAC	Total Number of Dominant
3				Species Across All Strata: (B)
4.				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				matric obe, i novi, oi i no (vo)
7.				Prevalence Index worksheet:
0				Total % Cover of: Multiply by:
8	30	= Total Cov		OBL species x 1 =
50% of total cover:/ 5				FACW species x 2 =
50% of total cover:	20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30' x30')	25	V	UPL	FACU species x 4 =
1. Rhus copallinum	30		Charles C. A. A. Carlotte	UPL species x 5 =
2. Magnolia Virginiana	5	<u>N</u>	FACW	Column Totals: (A) (B)
3. Acer rubrum	10	_N_	FAC	Coldilli Totals (A) (B)
4. Persea palustris	1.0	N	FACW	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
	55	= Total Cov	er	
50% of total cover: 27.3				Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30' x 30')	_ 20 /0 01	total cover		
1. Arundinaria gigantea	20	Y	FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
11.	10	-,1	FACU	The second production of the second control of the second production of the second control of the second contr
2. Lactuca canadensis		<u>N</u>	The second division in	Definitions of Four Vegetation Strata:
3. Helenium amarum	10	<u>N</u>	FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Lerpedeza cuneata	20		FACU	more in diameter at breast height (DBH), regardless of
5. Eupatorium rotunditolium	20		FAC	height.
6. Kummerowia striata	10	N	FACU	Sapling/Shrub - Woody plants, excluding vines, less
7. Panicum Sp.	10	N	MNK	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				Mary desired Allers desired and a 200 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12				110-15-11
12.	100	= Total Cov	· ·	
50% of total cover: _50		total cover		
50% of total cover:	20% 01	total cover		
Woody Vine Stratum (Plot size: 30' x 30')	10	Y	FAC	
1. Smilax glavica	-10	-/-	1110	
2.				
3				
4				
5				Hydrophytic
	10	= Total Cov	ver _	Vegetation 🗸
50% of total cover:	20% of	total cover		Present? Yes No
Remarks: (If observed, list morphological adaptations below	w).			TOTAL OR BURNES OF THE STORY OF

(inches)	Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-15	10YR 6/2	90	104R 5/6	10	<u>C</u>	M	CL	
15-20	104R2/1	100					FSL	
Tomoreus III								
Tune: C=C	oncentration, D=Dep	lation DM=	Reduced Matrix M	S-Maskad		ins -	² l ocation: Pl =	Pore Lining, M=Matrix.
	Indicators: (Applic					1115.		Problematic Hydric Soils ³ :
Histosol			☐ Polyvalue Be			RR S, T, U)	1 cm Muck	(A9) (LRR O)
	oipedon (A2)		Thin Dark St		PERSONAL PROPERTY AND ASSESSED.		2 cm Muck	(A10) (LRR S)
Black Hi	54.465.445.747.748.7488.000.000.000.000.000.000.000.000.000.		Loamy Muck			0)		ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye	Priorit Poziela Antheliera (Esta Substitution (Esta Substitution (Esta Substitution (Esta Substitution (Esta S	F2)		CONTRACTOR SERVICE AND ASSESSMENT OF THE SERVICE AND ASSESSMENT OF	loodplain Soils (F19) (LRR P, S, T)
MAKES TO STORY OF STREET	d Layers (A5) Bodies (A6) (LRR P	T 10	Depleted Ma Redox Dark		(E)		(MLRA 1	Bright Loamy Soils (F20)
\$274.50mls, T., abd5(8.75%)	icky Mineral (A7) (LF	(요) 회사 이 경우 (요) 시작 (요) 시작 (요) 시작 (요)	Depleted Da	printed av Elleric Inflictable. Addi			 Children and Collaboration Colleges and Coll	Material (TF2)
	esence (A8) (LRR U		Redox Depre					w Dark Surface (TF12)
1 cm Mu	ick (A9) (LRR P, T)		☐ Marl (F10) (L				Other (Expl	ain in Remarks)
\$50.00 (about \$2.20 (5 to \$1.20)	d Below Dark Surfac	e (A11)	Depleted Oc					
	ark Surface (A12)	# DA 450A	Iron-Mangan					of hydrophytic vegetation and hydrology must be present,
	rairie Redox (A16) (M Nucky Mineral (S1) (I		Umbric Surfa	(2014년) 등 (2017년) 1월 1일 시스트		U)		isturbed or problematic.
	Bleyed Matrix (S4)	- KIK O, O,	Reduced Ve			A. 150B)	driicoo d	istarbod of problematic
	Redox (S5)		Piedmont Flo				(A)	
Stripped	Matrix (S6)		Anomalous E	Bright Loar	my Soils (F	20) (MLRA	149A, 153C, 153	D)
	rface (S7) (LRR P, S Layer (if observed):							
Type:	Layer (ii observed).							
Depth (inc	ches):						Hydric Soil Pres	sent? Yes X No
1 10 17 10 Late 14 Late								
fill	material	for	road					



Upland data point wcmq001_u facing south.



Upland data point wcmq001_u facing east.



Upland data point wcmq001_u facing northwest.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP City/County: Cumberland Sampling Date: 5-17-16
Applicant/Owner: Dominison State: NC Sampling Point: Wcmp.046+-
Investigator(s): ESI(R. Turnball, W. Vaughan) Section, Township, Range: None
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0-3
Subregion (LRR or MLRA): LRRP Lat: 35.095937 Long: 78.73061 Datum: WGS84
Soil Map Unit Name: 6 rantham loam NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes V No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?
Are 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 Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No No
Remarks: Clear cut within past 3 years
NCWAM: Hardwood Flat
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Mari Deposits (B15) (LRR U) Drainage Patterns (B10)
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) 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)
Water-Stained Leaves (B9)
Field Observations:
Surface Water Present? Yes No Depth (inches): /A
Water Table Present? Yes No Depth (inches): 2 raches Saturation Present? Yes No Depth (inches): Surface Wetland Hydrology Present? Yes No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
[2008년 전 1982년
[경기 : 18] [18] [18] [18] [18] [18] [18] [18]
[18] [18] [18] [18] [18] [18] [18] [18]
[전상] 한 바다 하는 그 경험이 함께 가는 하는 것이 되었다. 그는 사람들은 사람들이 되었다면 하는 것이 되었다면 하는 것이 되었다면 하는데 되었다.

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

VEGETATION (Four Charle)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft)	% Cover	Species?		Number of Dominant Species
1. Liquidambar Styraciflua	30	yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	10	yes	FAC	Total Number of Dominant
3. Nyssa sylvatica		yes	FAC	Species Across All Strata: (B)
4.				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6.				That Are OBE, TAGVI, OF TAG.
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
8. <u></u>	50	= Total Co	105	OBL species x 1 =
50% of total cover: 25		total cover		FACW species x 2 =
50% of total cover.	20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)	40		EAC	FACU species x 4 =
1. Liquidambar Styraeiflus	10	ves	FACW	UPL species x 5 =
2. Magnolia Virginiana	-	no		Column Totals: (A) (B)
3. Ilex coriacea	20	yes	FACW	
4. Acer rubrum	20	yes	FAC	Prevalence Index = B/A =
5. Clethra alnifolia	_5_	no	FACW	Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
B				☐ 3 - Prevalence Index is ≤3.01
	95	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: _47.5	20% of	total cover	: 19	A Troblematic Type op Type vogetanes (party
Herb Stratum (Plot size: 30 FL x 30PL)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	50	ves:	FACW	be present, unless disturbed or problematic.
2. Pteridium aquilinum	10	no	FACU	Definitions of Four Vegetation Strata:
	10	no	FACW.	
			STATISTICS AND APPLIE	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4,				more in diameter at breast height (DBH), regardless of height.
5.				
6.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7.			Called the second	than 3 m. DBH and greater than 3.20 m (1 m) tail.
8.			1 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	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.		120000000		height.
12				
	70	= Total Co	ver	
50% of total cover: 35	20% of	total cover	: 14	
Woody Vine Stratum (Plot size: 30f4 x30f4)				
1. Sm. lax glauca	10	ves	FAC	
2. Vitis rotundifolia	10	ves	FAC	
3.				
STR BANKER AND RESERVED AND RESERVED AND RESERVED AND AND AND AND AND AND AND AND AND AN				
4.		- agregation to	and the same	
	20			Hydrophytic Vegetation
10	The second contract of the second	= Total Co	1.	Present? Yes No
50% of total cover: 10	A STATE OF THE SECOND SECOND	f total cove	-7_	
Remarks: (If observed, list morphological adaptations belo	w).			

	cription: (Describe	to the dep				r confirm	n the absence of	indicator	5.)	
Depth (inches)	Color (moist)	%	Color (moist)	ox Features	Type	Loc²	Texture		Remarks	
O-Z	10 yr 2/1		11.70101/				SL			
SECURIO DE PRESENTA	2.5, 5/1	80	10yr 5/8	20	-	M	-			
2-20	2.34 -11		10yr 5/8							
Andreas Angel					1000					
				1 12 10 1	<u>ellenner.</u>	16125.54	<u> </u>			
T: C-0	Concentration, D=De	nletion RM	=Reduced Matrix M	AS=Masked	Sand Gra	ins.	² Location: P	L=Pore Lin	ning, M=Matrix	•
Hydric Soi	Indicators: (Appli	cable to all	LRRs, unless oth	erwise not	ed.)		Indicators fo	r Problen	natic Hydric S	oils³:
Histose			☐ Polyvalue B			RR S, T,	U) 🔲 1 cm Mu			
	Epipedon (A2)		Thin Dark S					ck (A10) (. DA 450A B\
THE RESERVE THE PARTY OF THE PA	Histic (A3)		Loamy Muc			0)	Reduced	Vertic (F	(8) (outside M	LRA 150A,B)
	gen Sulfide (A4)		Loamy Gle		(F2)				in Soils (F19) Loamy Soils (F	
	ed Layers (A5)		Depleted M		F6\			4 153B)	Loanly Cons (i	20,
	ic Bodies (A6) (LRR		Redox Dark Depleted D					ent Materi	al (TF2)	
	Mucky Mineral (A7) (L		Redox Dep						Surface (TF1:	2)
	Presence (A8) (LRR Muck (A9) (LRR P, T)		Marl (F10)					xplain in F		
	ed Below Dark Surfa		Depleted C		(MLRA 1	51)				
	Dark Surface (A12)		☐ Iron-Manga	nese Mass	ses (F12) (LRR O, F	P, T) Indica	tors of hyd	rophytic veget	ation and
Coast	Prairie Redox (A16)			70 and 6 tub their C 6-80 1 00 100 100.		, U)			gy must be pr	
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochr					ss disturbe	d or problema	IIC.
STATE STATE OF THE PARTY OF THE	Gleyed Matrix (S4)		Reduced V	ertic (F18)	(MLRA 15	OA, 150E	3) (40A)			
	Redox (S5)		Piedmont F	- Iooopiain s	50lls (F 19)	ESU) (MI	RA 149A, 153C,	153D)		
	ed Matrix (S6) Surface (S7) (LRR P,	e T III	Anomalous	bright Loa	arriy Cons (1 20, (1112	,			
	e Layer (if observed					000000000000000000000000000000000000000	是 化对应 电影影响			
Type: _									/	
	(inches):						Hydric Soil F	Present?	Yes V	No
Remarks:	mones).	er respectively.					A CONTROL OF SERVICE CO.	TO STATE OF THE STATE OF		
Kemarks.										
The second								M. Garaston		THE THE POST



Wetland data point wcmp048f_w facing southwest.



Wetland data point wcmp048f_w facing southeast.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Cumberland Sampling Date: 5-17-16
Applicant/Owner: Dominion	State: NC Sampling Point: Wcm P 048 e
Investigator(s): EST (W. Vaughan, R. Turnbuli)	Section, Township, Range: Nonc
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): none Slope (%): 0-2
	5.096074 Long: 78.736797 Datum: WGS 8
Soil Map Unit Name: Grantham Loam	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significant	197 - C - 188 / C - 120 - C - C - C - C - C - C - C - C - C -
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	ng sampling 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
Remarks: maintained powerline	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	The second secon
Surface Water (A1) Aquatic Fauna (I	
High Water Table (A2) Marl Deposits (B	
✓ Saturation (A3) Hydrogen Sulfide	
	spheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Red	[2] [2] [2] [2] [2] [2] [2] [2] [2] [2]
[He was a Harate of State and State	duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfa	
Iron Deposits (B5) Other (Explain in	n 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 (inche	
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes No Depth (inche (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks: parts inundated	
The simulated	AN TOWARD SECTION THAN STAND AND AS TO SECTION SECTION AS A SECTION OF THE SECTION AS A SECTION OF THE SECTION
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#4.7 Virtigation 7	
Andrew Commence of the Commenc	Sand Carlot Country
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VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: Wemp 048e.w

Absolute	Dominant	Indicator	Dominance Test worksheet:	
% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
			Total Number of Dominant Species Across All Strata:	(B)
			Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
			Prevalence Index worksheet:	
- 150	240		[10] [14] [14] [15] [16] [16] [17] [18] [18] [18] [18] [18] [18] [18] [18	
a . A .	-		The state of the s	- T
_ C_ :	= Total Co	/er		
20% of	total cover	:		
			The state of the s	
an made of				
	47%		Column Totals: (A)	_ (B)
			Prevalence Index = B/A =	
		-		
0	= Total Co	ver		in)
			Problematic Hydrophytic Vegetation (Expla)
_ 20 /0 01	total cove	-	Laboration Capacitic (ACC)	
70	VIES	EN	he present unless disturbed or problematic.	must
		The What bearing to the	THE REPORT OF THE PROPERTY OF	-100
	THE REPORT OF THE PARTY.			
	T. engagement		Tree - Woody plants, excluding vines, 3 in. (7.6	cm) o
-20	And the second second			lless o
5	no	PAC	Sapling/Shrub – Woody plants, excluding vines than 3 in. DBH and greater than 3.28 ft (1 m) tal	s, less II.
		Electronics	Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	ardless
			Woody vine - All woody vines greater than 3.2	8 ft in
			height.	
T. Williams	- special of services	and the state of	AT STATE OF THE ST	
170	= Total Co	ver	4 (ACC)	-
			gramma to the state of the stat	
			A STATE OF THE STA	
			No.	
- lower	Welling Street			
-				
_			Hydrophytic Vegetation	
O	= Total Co		Present? Yes No	
20% o		peri		
	20% of 70 /6 so 30 5 5	C = Total Cover 20% of total cover 20% of total cover 70	C = Total Cover 20% of total cover: O = Total Cover 20% of total cover: TO YES FAC IB NO FACW SO YES FACW 30 NO FACW 5 NO FAC 5 NO FAC	That Are OBL, FACW, or FAC: Total Number of Dominant Species That Are OBL, FACW, or FAC: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species

Depth	Matrix			ox Feature				Barranto
inches)	Color (moist)	%	Color (moist)	%_	Type	Loc²	SL	Remarks
D-C	2.5 4 6/2	80	104-5/6	20	C		32	
5-20	25y 5/1	70	10yr5/6	20		M	CL	
	Accessed to the Contract of	- 29	10xr 4/6	10	C	PI	CL	
	1000			_				
ydric Soil Histoso Histic E Black F Hydrog Stratifie Organic 5 cm M Muck F 1 cm M Deplete Thick D Coast F Sandy Sandy Strippe Dark So	Concentration, D=Do Indicators: (Appl Indicators: (Appl Indicators: (Appl Indicators: (Appl Indicators: (Appl Indicators: (Appl Indicators: (AS) Indicators: (A	P, T, U) LRR P, T, U) U)) ace (A11) (MLRA 150) (LRR O, S)	LRRs, unless oth Polyvalue B Thin Dark S Loamy Muc Loamy Gle Depleted M Redox Darl Depleted D Redox Dep Marl (F10) Depleted O Iron-Manga Umbric Sur Delta Ochri Reduced V Piedmont F	erwise not Below Surface (S9 Surface (S9 Surface (S9 Surface (F3) K Surface (F3) K Surface (F1) Surface (F11) Surface (F11) Surface (F13)	ed.) (ce (S8) (L) (LRR S, (F1) (LRF (F2) F6) ((F7) (MLRA 1) (S8) (MLRA 1) (LRR P, T LRA 151) (MLRA 156)	RR S, T, (T, U) (O) (MLRA 1-10 (MLRA 1-10 (MLRA 1-10 (MLRA 1-10	Indicators for Indicators for Indicators for Indicators for Indicators for Indicators for Indicators Indica	(A10) (LRR S) Vertic (F18) (outside MLRA 150A, Floodplain Soils (F19) (LRR P, S, T is Bright Loamy Soils (F20) 153B) It Material (TF2) ow Dark Surface (TF12) Islain in Remarks) The off hydrophytic vegetation and thydrology must be present, disturbed or problematic.
Туре:	nches):				Type Barrier		Hydric Soll Pre	esent? Yes No No
							1	



Wetland data point wcmp048e_w facing southwest.



Wetland data point wcmp048e_w facing west.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP City/County: Cumberland Sampling Date: 5-17-16
State: NE Sampling Point: Wcmp0+8-4
Investigator(s): EST (W. Vaughan, R. Turnbull) Section, Township, Range: None
Landform (hillslone terrace etc.): Flat Local relief (concave, convex, none): Pone Slope (%): 1-3
Subregion (LRR or MLRA): LRRP Lat: 35.096001 Long: 78.730564 Datum: WGS84 Soil Map Unit Name: Grantham loam NWI classification: NA
Soil Map Unit Name: Grantham loam 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 "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? Hydric Soil Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Yes No
Clear cut within part 3 years
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) Augustic Fauna (B15) (LRR U) Drainage Patterns (B10)
Harmonia (AZ)
Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) 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)
Galactical Visible of Action integers (CP) (LBB T II)
Water-Stained Leaves (B9) Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches): >20 i-
Saturation Present? Yes No Depth (inches): Vetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
게 많은 사용 전기 되었는데 가입을 다른 사람들이 하면 보다 되었다. 그 사람들은 그 사람들은 그 사람들이 되었다. 그 것은 이 사람들이 되었다. 그렇다 그렇다 그렇다 그렇다 그렇다. 그렇다 그렇다는 그 살아 없는데 그렇다는 그렇다는 그렇다는 그렇다는 그렇다는 그렇다는 그렇다는 그렇다는
에 들어 있었다. 이 생물에는 사람이 되었다. 그는 사람들은 사람들은 사람들이 되었다. 그리고 그 나는 사람들은 사람들이 되었다. 그 나를 하는 것이다고 있다.
이 마른 마음이 마음이 마음이 되었다. 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들이 되었다.
게 많은 그리고 있다면 하면 하는 것이 하면 하는데 그렇게 되었다. 그렇게 되었다는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하
게 하면 하다면 가게 가게 되었다. 그는 사람들은 사람들은 사람들이 되었다면 되었다. 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은
역 경영을 하는 사람들이 없는 것이 되었다면 살아보고 있는 것이 없는 것이 되었다면 하는 것이 되었다면 하는 것이 없는 것이 없습니 없는 것이 없습니 없는 것이 없습니 없는 것이 없습니 없습니 없는 것이 없습니 없습니 없습니 없습니 없습니 없습니 없습니 없습니 없습니 없었다면 없습니

THE STATE OF THE PARTY OF THE P	Absolute	Dominant	Indicator	Dominance Test worksheet:	10000
Tree Stratum (Plot size: 30Ft + 30FL)	% Cover 26	Species?	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:	A)
2. Acer rubrum	20	yes	FAC	Total Number of Dominant	
3					B)
4				Percent of Dominant Species That Are OBL FACW or FAC: 70 (//	A/B)
56.					-VD)
7.	TO SHOURS TO THE			Prevalence Index worksheet:	
8.				Total % Cover of: Multiply by: OBL species x 1 =	
	A STATE OF THE PARTY OF THE PAR	= Total Co		FACW species x 2 =	
50% of total cover: 2 Sapling/Shrub Stratum (Plot size: 30P4 × 30P4)	20% of	total cover		FAC species x 3 =	
1. Ilex Coriacea	90	ves	FACL	FACU species x 4 =	
2. Acer rubrum	10	no	FAC	UPL species x 5 =	(D)
3. Liquidamber styracifla	10	no	FAC	Column Totals: (A)	(B)
4.				Prevalence Index = B/A =	
5.	THE PROPERTY WAS	Authorities and the second	100 CT 200 CT 100 CT 10	Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%	
B.				3 - Prevalence Index is ≤3.0¹	
A Committee of the Comm	110	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)	
50% of total cover: 55	20% of	total cover	: 22		
Herb Stratum (Plot size: 30ft × 30ft)	,	ves	FACU	¹ Indicators of hydric soil and wetland hydrology mu be present, unless disturbed or problematic.	st
1. Pteridium aquilinum 2. Liquidamber Styraciffia		ves	FAC	Definitions of Four Vegetation Strata:	
3. Arundinaria gigantee		yes	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm	n) or
4. Ilex Coriacea	5	yes	FACW	more in diameter at breast height (DBH), regardles	s of
5			Laborator and	height.	
6.				Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.	ess
7. S.					loce
9.				Herb — All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	1633
10.				Woody vine – All woody vines greater than 3.28 ft	in
11.	1.4.5.5.4.6.5			height.	
12.	- 75	= Total Co			
50% of total cover: 12					
Woody Vine Stratum (Plot size: 30ft x 30ft)					
1. Smilar, glauca	15	yes	FAC		
2. Vitis rotundifolia		yes	FAC		
3. Lonicera japonica	_ 5	ves	FACU		
5.					
	25	= Total Co	ver	Hydrophytic Vegetation	
50% of total cover: <u>/Z</u>	YOU CHANGE WARRING A JUST OF	f total cove		Present? Yes No	
Remarks: (If observed, list morphological adaptations be	elow).	me to Parket			
					4000

Depth	Matrix		Redo	x Features			the absence of inc	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	<u>Texture</u>	Remarks
9-6	2.5,3/2	100					SL	
6-15	25, 4/3	100					CL_	
15-20	2.54 7/3	95	10yr 5/6	5%	C	M	CL_	
Type: C=C Index of the content of t	concentration, D=De	pletion, RM= cable to all L P, T, U) LRR P, T, U) U) (MLRA 150A (LRR O, S) S, T, U)	Reduced Matrix, M. RRs, unless othe Polyvalue Be Thin Dark Se Loamy Muck Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (I Depleted Oc Iron-Mangar Umbric Surf Delta Ochric Reduced Ve Piedmont Fi Anomalous	S=Masked S rwise noted. elow Surface urface (S9) (I xy Mineral (F- ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F6) ark Surface (F11) (M nese Masses ace (F13) (LF c: (F17) (MLR ertic (F18) (M noodplain Soil	and Gra (S8) (L RR S, 1) (LRR (F12) (F12) (F12) (RR P, T A 151) LRA 15 s (F19)	ins. RR S, T, U T, U) O) OA, 150B (MLRA 1	2Location: PL=F Indicators for P J)	Material (TF2) w Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and hydrology must be present, sturbed or problematic.
Depth (ii	nches):				30 1000 50 11000 50 1			ent? Yes No



Upland data point wcmp048_u facing northeast.



Upland data point wcmp048_u facing northwest.

Project/Site: ACP City/County: Cumberland Sampling Date: 5-17-16
Applicant/Owner: Domini 90 State: NC Sampling Point: Wcmp 048+-
Investigator(s): ESI(R. Turn bull, W. Vaughan) Section, Township, Range: Nonc
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): Concave Slope (%): 0-3
Subregion (LRR or MLRA): LRRP Lat: 35.095957 Long: 78.73061 Datum: WGS84
Soil Map Unit Name: Cranthan loan NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes V No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?
Are 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? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Yes No
Remarks: Clear cut within past 3 years
NCWAM: Hardwood Flat
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) Presence of Reduced Iron (C4) Oxidized Rhizospheres along Living Roots (C3) 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)
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): NA
Water Table Present? Yes No Depth (inches): 2 faches
Saturation Present? Yes No Depth (inches): Surface Wetland Hydrology Present? Yes No No Depth (inches): Surface No Depth (inches)
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
remains.
[2] : [2] : [2] : [2] : [2] : [3] : [3] : [3] : [3] : [3] : [3] : [3] : [4] :
맞는 그는 사람들은 사람들은 그림 그리고 있다면 사람들은 가는 사람들이 되었다면 그렇게 되었다면 그렇게 되었다.
[[[[[[[[[[[[[[[[[[[
[발표] 김병사 선생님은 아이들의 아이들의 사람들이 되었다면서 사람들이 되었다면 하는 사람들이 되었다면서 하는 것이 되었다면서 하는데 되었다면서
45 Control of the Con

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

VEGETATION (Four Charle)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft)	% Cover	Species?	Status	Number of Dominant Species
1. Liquidambar Styraciflua	30	yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	10	yes	FAC	Total Number of Dominant
3. Nyssa sylvatica		yes	FAC	Species Across All Strata: (B)
4.			200	
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6.				
7.				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	50	= Total Co	/er	OBL species x 1 =
50% of total cover: 25		total cover		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30f1 x 30f1)				FAC species x 3 =
1. Liquidambar Styraeiflus	40	ves	FAC	FACU species x 4 =
2. Magnolia virginians	10	no	FACW	UPL species x 5 =
3. Flex Coriacea	20	ves	FACW	Column Totals: (A) (B)
4. Acer rubrum	20	ves	FAC	Prevelence Index = P/A =
5. Clethra alnifolia	5	ho	FACW	Prevalence Index = B/A =
The contract of the contract o		PROPERTY OF STREET		Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8,	95	= Total Co		☐ 3 - Prevalence Index is ≤3.0'
- CON (1.1.) 47 F				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 47.5	20% 01	total cover	:	
Herb Stratum (Plot size: 30CL x 30CL)	50		TACL 1	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria giganta	10	contributed visiting and	FACW	be present, unless disturbed or problematic.
2. Pteridium aguilinum	10	no	FACU	Definitions of Four Vegetation Strata:
3. Andropogon glomeratus	10	no	FACW-	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.			The state of the s	Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10			12. A. S.	Woody vine – All woody vines greater than 3.28 ft in
11.		1200000000		height.
12.				
	70	= Total Co	ver	
50% of total cover: 35	20% of	total cover	: 14	
Woody Vine Stratum (Plot size: 30f4 ×30f4)			Ke Water Til	
1. Sm. lax glauca	10	yes	FAC	
2. Vitis rotundifolia	10	ves	FAC	
3.				
4.				
F				11. 1
	20	= Total Co	uor.	Hydrophytic Vegetation
50% of total cover: 10	Color of the contract of the color	f total cove	1.	Present? Yes No No
THE THE REAL PROPERTY CONTRACTOR AND ADDRESS OF THE PROPERTY O	A SOLD OF STREET STREET, STREET	i total cove	1	
Remarks: (If observed, list morphological adaptations belo	w).			
	zacij zbiobili	Editor No. 7		

	cription: (Describe	to the dep				or confirm	n the absence of	indicator	5.)	
Depth (inches)	Matrix Color (moist)	%	Color (moist)	ox Feature:	Type	Loc²	Texture		Remarks	
O-Z	10 vr 2/1		11.70101/				SL			
SECURIOR DE LA PRESIDENTA	2.5, 5/1	80	10yr 5/8	20	-	M	<u></u>			
2-20	2.34 -11		10yr 5/8				CONTRACTOR OF STREET			
Andreas Angel										
	A SECTION AND ADDRESS.									
				7 1500		10.25.34	<u> </u>			
114										
T C=C	Concentration, D=De	nletion RM:	=Reduced Matrix M	AS=Masked	Sand Gra	ains.	² Location: P	L=Pore Lin	ning, M=Matrix	
Hydric Soil	Indicators: (Appli	cable to all	LRRs, unless oth	erwise not	ed.)		Indicators fo	r Problen	natic Hydric S	oils³:
☐ Histoso			☐ Polyvalue B			RR S, T,	U) I cm Mu			
	pipedon (A2)		Thin Dark S					ck (A10) (. DA 450A B\
THE RESERVE THE PROPERTY OF THE PERSON NAMED IN	Histic (A3)		Loamy Muc			(0)	Reduced	Vertic (F	8) (outside M	LRA 15UA,B)
	en Sulfide (A4)		Loamy Gle		(F2)				in Soils (F19) (Loamy Soils (F	
	ed Layers (A5)		Depleted M		-c)			153B)	Loanly Cons (20,
	c Bodies (A6) (LRR		Redox Dark Depleted D					ent Materi	al (TF2)	
	lucky Mineral (A7) (L		Redox Dep						Surface (TF12	2)
	Presence (A8) (LRR luck (A9) (LRR P, T)		Marl (F10)		J,			xplain in F		
	ed Below Dark Surfa		Depleted C		(MLRA 1	51)				
	Dark Surface (A12)		☐ Iron-Manga	nese Mass	ses (F12) (LRR O, F	P, T) Indicat	tors of hyd	rophytic veget	ation and
Coast	Prairie Redox (A16)								gy must be pr	
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochr					s disturbe	d or problemat	lic.
30000000000000000000000000000000000000	Gleyed Matrix (S4)		Reduced V	ertic (F18)	(MLRA 1	50A, 150E	3) 140A)			
	Redox (S5)		Piedmont F	- Iooopiain :	Solis (F 19)	(F20) (MI	RA 149A, 153C,	153D)		
	ed Matrix (S6) Surface (S7) (LRR P,	e T III	Anomalous	bright Loc	arriy Oons	(1 20) (1112	,			
	Layer (if observed					56774-7780				
Type: _									/	
	inches):	reserve and					Hydric Soil F	resent?	Yes V	No
Remarks:	mones).	er i gran er en var val vage					A CONTRACTOR OF SECURITY SECURITY	713 145 136		
Kemarks.										
7.2										
										*2500 *Chis* (5) A*5



Wetland data point wcmp048f_w facing southwest.



Wetland data point wcmp048f_w facing southeast.

Project/Site: ACP	_ City/County: <u>Cumberland</u> Sampling Date: <u>5</u>	
Applicant/Owner: Dominion	State: NC Sampling Point: WCY	np0486
Investigator(s): ESI(W. Vaughan, R. Turnbuli)	Section, Township, Range: Nonc	
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): Slope (%	10-2
	.096074 Lcng: 78.730792 Datum:	
Soil Map Unit Name: Grantham Loam	NWI classification: PEM	
Are climatic / hydrologic conditions on the site typical for this time of		
Are Vegetation, Soil, or Hydrology significant		No
Are Vegetation, Soil, or Hydrology naturally p	problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showing	ng sampling point locations, transects, important featur	res, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No	and the second
Remarks: maintained powerline	By HARMANIA DESCRIPTION OF THE PROPERTY OF THE	And State of the S
HYDROLOGY	en mangri kapatan menandak kemandak kemandak dan pendagai kemandak dan pendagai kemandak dan pendagai kemandak Berkandak pendagai kemandak berkandak dan pendagai kemandak dan pendagai kemandak dan pendagai kemandak dan be Mangri Kanada Kanada dan pendagai kemandak dan pendagai kemandak dan pendagai kemandak dan berkandak d	Statem South Statement
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two r	required)
Primary Indicators (minimum of one is required; check all that apply	y) Surface Soil Cracks (B6)	
Surface Water (A1) Aquatic Fauna (B		ce (B8)
High Water Table (A2) Marl Deposits (B		
✓ Saturation (A3) Hydrogen Sulfide		
	pheres along Living Roots (C3) Dry-Season Water Table (C2)	
Sediment Deposits (B2) Presence of Red	5세계계계계계계계 1세계계계계계계계계계계계계계계계계계계계계 1 전	
Drift Deposits (B3) Recent Iron Redu	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery	y (C9)
Algal Mat or Crust (B4) Thin Muck Surface	ce (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 (inche		
Water Table Present? Yes No Depth (inches		34770130 30
Saturation Present? Yes No Depth (inche (includes capillary fringe)	MAN COLD SECTION OF THE SECTION OF T	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:	
Remarks: parts inundated		
To Than Career		
24/4/02/2016		
46.00%		
		1.077.48
		13/12/12/04/87
		7

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

Sampling Point: Wemp 048e.w

Absolute	Dominant	Indicator	Dominance Test worksheet:	
% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
			Total Number of Dominant Species Across All Strata:	(B)
			Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
			Prevalence Index worksheet:	
- 100	240		The Table Table 19 of the State of the Control of t	by:
<u> </u>	-			
_ C	= Total Co	ver		
20% of	total cover	:		
			The state of the s	
ner residence				
	47%		Column Totals: (A)	(B)
			Prevalence Index = B/A =	
				tion
0	= Total Co	ver		(Evolain)
			Problematic Hydrophytic Vegetation ((Explain)
20 /0 01	total cove	-	Lander to the control of the control	
70	VIES	EN	'Indicators of hydric soil and wetland hydric	c.
		A William to a return to	The state of the s	The second
	THE REPORT OF THE PARTY.			
	T. engagement		Tree - Woody plants, excluding vines, 3 in	1. (7.6 cm) o
-20	And the second second			egardiess o
-			A STATE OF THE STA	
5	no	PAC	Sapling/Shrub – Woody plants, excluding than 3 in. DBH and greater than 3.28 ft (1	y vines, less m) tall.
		e Teachtanach	Herb – All herbaceous (non-woody) plants of size, and woody plants less than 3.28 ft	s, regardless tall.
			Woody vine - All woody vines greater tha	n 3.28 ft in
			height.	West of the second
To be a seed	- special of services	and the second	AT The state of th	
170	= Total Co	ver	6 ACC	and the second
			2.3	
			1 Maria	
			3345	
		-		
-	7.0			
	= Total Co		Hydrophytic Vegetation	
		ver	Present? Yes No	
	f total cove		Liazetiri ing A 140	
	20% of 70 16 50 30 5 5 5	C = Total Cover 20% of total cover 70	C = Total Cover 20% of total cover: O = Total Cover 20% of total cover: TO YES FAC IB NO FACW SO YES FACW 30 NO FACW 5 NO FAC 5 NO FAC 170 = Total Cover 20% of total cover: 34	That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply OBL species

Depth	Matrix	diservative con	Red	ox Feature	S	3.120.00		
inches)	Color (moist)	%	Color (moist)	%	Type	_Loc²	Texture	Remarks
D-G	2.5 4 6/2	80	10 yr 5/6	20	C	M	SL	
5-20	25y 5/1	70	10yr5/6	20		M	CL_	
	Secretary of the second of		10xr 4/6	10	C	PI	CL	
ydric Soll Histoso Histic E Black H	Indicators: (Appl	epletion, RM icable to all	=Reduced Matrix, M LRRs, unless othe — Polyvalue B — Thin Dark S — Loamy Muc Loamy Gley	erwise not lelow Surfa Surface (S9 ky Mineral	ed.) ce (S8) (L) (LRR S, (F1) (LRF	ains. .RR S, T, L	Indicators for J) 1 cm Muc 2 cm Muc Reduced	_=Pore Lining, M=Matrix. r Problematic Hydric Solis ³ : ck (A9) (LRR O) ck (A10) (LRR S) Vertic (F18) (outside MLRA 150A,B
5 cm M Muck F 1 cm M Deplete Thick E Coast I Sandy	c Bodies (A6) (LRR lucky Mineral (A7) (I Presence (A8) (LRR luck (A9) (LRR P, T ed Below Dark Surfa Dark Surface (A12) Prairie Redox (A16) Mucky Mineral (S1)	LRR P, T, U) U)) ace (A11) (MLRA 150)	Redox Depr Marl (F10) (Depleted Or Iron-Manga Umbric Surl Delta Ochric	ark Surface ressions (F LRR U) chric (F11) nese Mass face (F13) c (F17) (ML	(F7) 8) (MLRA 1 es (F12) ((LRR P, T	LRR O, P, , U)	Very Sha Other (Ex T) 3Indicate wetlar unless	153B) Int Material (TF2) Illow Dark Surface (TF12) Eplain in Remarks) Ors of hydrophytic vegetation and and hydrology must be present, and instrubed or problematic.
Sandy Strippe Dark S	Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P,		Reduced Vo	loodplain S	oils (F19)	(MLRA 14		53D)
Sandy Strippe Dark S Sestrictive Type:	Redox (S5) d Matrix (S6) urface (S7) (LRR P, Layer (If observed		Piedmont F	loodplain S	oils (F19)	(MLRA 14	19A) RA 149A, 153C, 1	
Sandy Strippe Dark S Sestrictive Type:	Redox (S5) d Matrix (S6) urface (S7) (LRR P,		Piedmont F	loodplain S	oils (F19)	(MLRA 14	19A) RA 149A, 153C, 1	esent? Yes No
Sandy Strippe Dark S estrictive Type: Depth (in	Redox (S5) d Matrix (S6) urface (S7) (LRR P, Layer (If observed	1):	— Piedmont F — Anomalous	loodplain S	oils (F19)	(MLRA 14	19A) RA 149A, 153C, 1	



Wetland data point wcmp048e_w facing southwest.



Wetland data point wcmp048e_w facing west.

Project/Site: ACP City/	County: Cumberland Sampling Date: 5-17-16
A-Barrion Description	State: NE Sampling Point: Wcmp048-4
Investigator(s): ESI (W. Vaughan, R. Turnbull) Sect	ion, Township, Range: None
Landform (hillslone terrace etc.): Flat Loca	I relief (concave, convex, none): none Slope (%): 1-3
Subsection (I BB of MI BA): 1 R P P Lat: 35,09600	Long: 78.730564 Datum: WGS84
Soil Map Unit Name: Grantham loam	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of year?	Vos. / No. (If no. explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed are Vegetation, Soil, or Hydrology naturally problem	
	mpling 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
Clear cut within part 3 years	
HYDROLOGY	The property of the second
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LF	용진 공연하면 하나는 에 (~) 전 2017년 12 12 12 12 12 12 12 12 12 12 12 12 12
를 보고 있다면 하는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은	
	along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced In	ron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4)	[:: : : : : : : : : : : : : : : : : : :
☐ Iron Deposits (B5) ☐ Other (Explain in Rema	srks) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches): _/	VA
Water Table Present? Yes No Depth (inches):	>20:-
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, p	revious inspections), if available:
Parada:	
Remarks:	
an 🛮 marrow part : Company and the properties of Company and properties (Company and Company and Com	

THE RESIDENCE OF THE PROPERTY	Absolute	Dominant	Indicator	Dominance Test worksheet:	10000
Tree Stratum (Plot size: 30ft + 30ft)	% Cover 26	Species?	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:	A)
2. Acer rubrum	20	yes	FAC	Total Number of Dominant	
3.					B)
4				Percent of Dominant Species That Are OBL FACW or FAC: 70 (//	A/B)
6.					-۷6)
7.	TO SHOURS TO THE			Prevalence Index worksheet:	
8				Total % Cover of: Multiply by: OBL species x 1 =	
	A STATE OF THE PARTY OF THE PAR	= Total Co		FACW species x 2 =	
50% of total cover: 2 Sapling/Shrub Stratum (Plot size: 30P4 × 30P4)	20% of	total cover	:	FAC species x 3 =	
1. Ilex Coriacea	90	ves	FACL	FACU species x 4 =	
2. Acer rubrum	10	no	FAC	UPL species x 5 =	(D)
3. Liquidamber styracifla	10	no	FAC	Column Totals: (A)	(B)
4.				Prevalence Index = B/A =	
5.	THE PROPERTY WAS	Authorities and the second	100 CT 10	Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%	
B.				3 - Prevalence Index is ≤3.0¹	
	110	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)	
50% of total cover: 55	20% of	total cover	: 22		
Herb Stratum (Plot size: 30F+ × 30F+)	,	ves	FACU	¹ Indicators of hydric soil and wetland hydrology mu be present, unless disturbed or problematic.	st
1. Pteridium aquilinum 2. Liquidamber Styraciffica		ves	FAC	Definitions of Four Vegetation Strata:	
3. Arundinaria gigantee		yes	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm	n) or
4. Ilex Coriacea	5	yes	FACW	more in diameter at breast height (DBH), regardles	s of
5			Laborator to	height.	
6.				Sapling/Shrub – Woody plants, excluding vines, lethan 3 in. DBH and greater than 3.28 ft (1 m) tall.	ess
7. S.					loce
9.				Herb — All herbaceous (non-woody) plants, regard of size, and woody plants less than 3.28 ft tall.	1633
10.				Woody vine – All woody vines greater than 3.28 ft	in
11.	1.4.5.5.4.6.5			height.	
12.	- 75	= Total Co			
50% of total cover: 12					
Woody Vine Stratum (Plot size: 30ft x 30ft)					
1. Smilar, glauca	15	yes	FAC		
2. Vitis rotundifolia		yes	FAC		
3. Lonicera japonica	_ 5	ves	FACU		
5.					
	25	= Total Co	ver	Hydrophytic Vegetation	
50% of total cover: <u>/2.</u>	YOU CHANGE WARRING A JUST OF	f total cove		Present? Yes No	
Remarks: (If observed, list morphological adaptations be	elow).	me to Park			
					4000

Depth	Matrix		Redo	x Features			the absence of inc	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc²	<u>Texture</u>	Remarks
9-6	2.5,3/2	100					SL	
6-15	25, 4/3	100					CL_	
15-20	2.54 7/3	95	10yr 5/6	5%	C	M	CL_	
Type: C=C Index of the content of t	concentration, D=De	pletion, RM= cable to all L P, T, U) LRR P, T, U) U) (MLRA 150A (LRR O, S) S, T, U)	Reduced Matrix, M. RRs, unless othe Polyvalue Be Thin Dark Se Loamy Muck Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (I Depleted Oc Iron-Mangar Umbric Surf Delta Ochric Reduced Ve Piedmont Fi Anomalous	S=Masked S rwise noted. elow Surface urface (S9) (I xy Mineral (F- ed Matrix (F2) atrix (F3) Surface (F6) ark Surface (F6) ark Surface (F11) (M nese Masses ace (F13) (LF c: (F17) (MLR ertic (F18) (M noodplain Soil	and Gra (S8) (L RR S, 1) (LRR (F12) (F12) (F12) (RR P, T A 151) LRA 15 s (F19)	ins. RR S, T, U T, U) O) OA, 150B (MLRA 1	2Location: PL=F Indicators for P J)	Material (TF2) w Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and hydrology must be present, sturbed or problematic.
Depth (ii	nches):				30 1000 50 11000 50 1			ent? Yes No



Upland data point wcmp048_u facing northeast.



Upland data point wcmp048_u facing northwest.

Project/Site: ACP City/C	Sounty: Comberland Sampling Date: 7/28/16 State: NL Sampling Point: Wamp 05/16.
Applicant/Owner: Dominion	State: NL Sampling Point: Wamp 051f.
Investigator(s): ESI- Poper, Turn bull Section	on, Township, Range: NDNC
Landform (hillslope, terrace, etc.): flot Local	relief (concave, convex, none); None Slope (%): 0 -31
Subregion (LRR or MLRA): LRR P Lat: 35.08	588 Long: -78,73270 Datum: W 6584
Soil Map Unit Name: Coxville loam	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Y	NWI classification: PFO
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks.	
NCWAM: Pine Flat	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRI	
Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C) Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Iro	[18] [18] [18] [18] [18] [18] [18] [18]
☐ Drift Deposits (B3) ☐ Recent Iron Reduction in	사용 등에 주는 이 이번 사용하는 이 이 이 없는데 그는데 하는데 나를 하는데 되었다. 그리고 하는데 되었다면 하는데
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
☐ 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:	AIA
Surface Water Present? Yes No Depth (inches):	16
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:	
Tremund.	
	발생 500 - 200 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120
■ 1998 ** ** ** ** ** ** ** ** ** ** ** ** **	

701 701		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Pinus taeda	20	-1	FAC	That Are OBL, FACW, or FAC:(A)
2. Liguidambar styraciflua	15		FAC	Total Number of Dominant
3. Alex rubrum	10		FAC	Species Across All Strata: \(\sigma \sqrt{2}\) (B)
4				D
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				maraic obe, raovi, or rao.
7				Prevalence Index worksheet:
8.	34/57			Total % Cover of: Multiply by:
	45	= Total Co	-	OBL species x 1 =
50% of total cover: 22.5				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft × 30ft)	20% of	total cover	-	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 3077 X 3077)	ID	1	cn1	FACU species x 4 =
1. Liquidambar styraciflya			FAL	UPL species x 5 =
2. Symplocas tinitoria		_/_	FAL	
3. Acer cubrum	5	<u>y</u>	FAL	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				[1]
7.				1 Rapid Test for Hydrophytic Vegetation
8	Trent in			2 - Dominance Test is >50%
0.	25	T-1-10-		3 - Prevalence Index is ≤3.01
17.5		= Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 12.5	_ 20% of	total cover	-	
Herb Stratum (Plot size: 30ft x 30ft)				¹ Indicators of hydric soil and wetland hydrology must
1. Symplocos tinctoria			FAL	be present, unless disturbed or problematic.
2. Leucothoe axillaris	15	Y	FACW	Definitions of Four Vegetation Strata:
3. Hrundinaria gigantea	10		FACW	Tree Meady plants evaluding vines 3 in (7.6 cm) as
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.		All the second s		height.
6.			MENT OF THE PARTY OF THE	Saulia (Sharb Marahada a a shadian da a la
7.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
[8] [6] [4] [6] [6] [6] [6] [6] [6] [6] [6] [6] [6				
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		E		
	35	= Total Co	ver	
50% of total cover: 17.5	_ 20% of	total cover	:_7_	
Woody Vine Stratum (Plot size: 30ft x 30ft)				
1. Smilax rotundifolia	ID	Y	FAL	
2. Vitis rotundifolia	10	У	FAC	
3. Toxicodendron radicans	ID	y	EAL	
4	-10		1110	
5				Hydrophytic
	The second secon	= Total Co		Vegetation Present? Yes No
50% of total cover: 15	_ 20% of	total cover	:_6_	riesentr ies v No
Remarks: (If observed, list morphological adaptations below	v).	Mary Page	1980	

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators Depth Matrix Redox Features (Inches) Color (moist) % Type Loc² Texture $O-I_0$ I_0	Remarks
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture 0 - 6 10 Y R ²-1 100 5L high c	organic content
0-6 10 YR2/1 100 SL high c	organic conter
	1 4
6-20 2.5 y 31, 60 2.5 y 31, 40 D M 3 strew	King
	U
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lin	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problem	
☐ Histosol (A1) ☐ Polyvalue Below Surface (S8) (LRR S, T, U) ☐ 1 cm Muck (A9) (LF	
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (L	
	8) (outside MLRA 150A,B
	n Soils (F19) (LRR P, S, T)
☐ Stratified Layers (A5) ☐ Depleted Matrix (F3) ☐ Anomalous Bright L☐ Organic Bodies (A6) (LRR P, T, U) ☐ Redox Dark Surface (F6) ☐ (MLRA 153B)	oamy Solls (F2U)
	L/TEO)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Redox Depressions (F8) Red Parent Materia	
	emarks)
	ophytic vegetation and
	gy must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed	or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (SS)	
☐ Stripped Matrix (S6) ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) ☐ Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Type:	
	Yes No
	163
Remarks:	



Wetland data point wcmp051f_w facing northeast.



Wetland data point wcmp051f_w facing northwest.

	County: Comberland Sampling Date: 7/28/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wryn p051e-
Investigator(s): ESI LPOPER, Turnbull) Section	ion, Township, Range: NDNC
Landform (hillslope, terrace, etc.): Flat Loca	I relief (concave, convex, none): none Slope (%): 0-3
Subregion (LRR or MLRA): LRR P Lat: 35.08	529 Long: -78,73230 Datum: W6584
Soil Map Unit Name: Pains sandy lown, 0-21.	
Soil Map Unit Name: Parks Sarray 100 11, 00 07	(15 no eveloin in Romarks)
Are climatic / hydrologic conditions on the site typical for this time of year?	(1) 20 NG 10 NG
Are Vegetation, Soil, or Hydrology significantly disturbly disturbly Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sar	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	THE PROPERTY OF THE PROPERTY O
Powerline easement 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) (LR	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]
Saturation (A3) Hydrogen Sulfide Odor (:
Water Marks (B1) Oxidized Rhizospheres	
Sediment Deposits (B2)	on (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5) Uther (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:	NA
Surface Water Present? Yes No/ Depth (inches):	100 CONTRACTOR OF THE PROPERTY
Water Table Present? Yes No Depth (inches):	ANN MARKET MARK
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
AND THE RESERVE OF THE PROPERTY OF THE PROPERT	
Remarks:	
FOR THE STATE OF A SECOND CONTROL OF THE STATE OF THE STA	

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

Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species FACW species FAC species FAC species FACU species VA = UPL species Column Totals: Column Totals: Hydrophytic Vegetation Indicators: FACH Apid Test for Hydrophytic Vegetation Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ Problematic Hydrophytic Vegetation¹ Indicators of hydric soil and wetland hydrology must 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
That Are OBL, FACW, or FAC:
Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: OBL species x 1 = BACW species x 2 = FACW species x 3 = FACU species x 4 = 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% 1 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation 1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: OBL species FACW species FACW species FACU species Column Totals: Column Totals: Hydrophytic Vegetation Indicators: Tean Hydrophytic Vegetation Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 =
That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by:
Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species
Total % Cover of: Multiply by: OBL species
Total % Cover of: Multiply by: OBL species
OBL species x 1 =
FACW species x 2 =
FAC species x 3 =
FAC species
UPL species x 5 =
UPL species x 5 =
Column Totals:
Prevalence Index = B/A =
Hydrophytic Vegetation Indicators:
Hydrophytic Vegetation Indicators:
1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain)
2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Column
be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Tree - Woody plants, excluding vines, 5 iii. (7.6 cm) or
more in diameter at breast neight (DBH), regardless of
Sapling/Shrub - Woody plants, excluding vines, less
than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Wb 6L 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.
13
76.
MANAGERY CONTROL OF THE PROPERTY OF THE PROPER
— Hydrophytic
Vegetation
Present? Yes No No

		to the dept	h needed to docum			or confirm	the absence of	indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Features %	Type ¹	Loc²	Texture	* Remarks
0-4	104R3/1	100					_ 5	
4-10	2.54 41,	95	104R 5/6	5	C	PL	5	
10-20	2.5 44/	85	104R5/6	5	L	PL	SC	The state of the s
Providence of the control of the con			7,548 5/6	ID	C	M		
						No. of the last of	Activities and the second	
				777				Constant of the Perfect of the Constant of the
	The state of the s							
Tues C-Co	seestation D-Des	lation PM-	Reduced Matrix, MS	=Masked	Sand Gr	ains	² Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil Ir	dicators: (Applic	able to all I	LRRs, unless other	wise not	ed.)		Indicators fo	or Problematic Hydric Soils ³ :
Histosol (Polyvalue Be	low Surfa	ce (S8) (L			ick (A9) (LRR O)
	pedon (A2)		Thin Dark Su				2 cm Mu	ick (A10) (LRR S) d Vertic (F18) (outside MLRA 150A,B)
Black His			Loamy Mucky Loamy Gleye		A SERVICE LOCATION OF LAND	(0)	Piedmor	nt Floodplain Soils (F19) (LRR P, S, T)
	Sulfide (A4) Layers (A5)		Depleted Mat		-)			ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U)	Redox Dark S	Surface (F				A 153B)
	ky Mineral (A7) (LI		Depleted Dar					rent Material (TF2) allow Dark Surface (TF12)
	sence (A8) (LRR L k (A9) (LRR P, T)	1)	Redox Depre		8)			Explain in Remarks)
	Below Dark Surface	e (A11)	Depleted Och		(MLRA 1	51)		
Thick Da	k Surface (A12)		Iron-Mangano				T) ³ Indica	tors of hydrophytic vegetation and
	airie Redox (A16) (Umbric Surfa			, U)		and hydrology must be present, as disturbed or problematic.
	ucky Mineral (S1) (eyed Matrix (S4)	LRR O, S)	Delta Ochric Reduced Ver			OA. 150B)		and distanced of problems.
Sandy Re			Piedmont Flo	odplain S	oils (F19)	(MLRA 14	49A)	
Stripped	Matrix (S6)		Anomalous B	Bright Loa	my Soils (F20) (MLF	RA 149A, 153C,	153D)
	face (S7) (LRR P,				arte es 1970.			
Type:	ayer (if observed)	•						
Depth (inc	hes):						Hydric Soil F	Present? Yes No
Remarks:		en in vivalent					THE STATE OF THE STATE OF	and the state of t



Wetland data point wcmp051e_w facing east.



Wetland data point wcmp051e_w facing south.

Project/Site: ACP	_ City/County: <u>Cumberland</u> _ sampling Date: 7/28/16
Applicant/Owner: Dominion	State: NC Sampling Point: WCMP051-4
Investigator(s): ESI LR. Turnbull, L. Roper)	Section Township Range: NONE
investigator(s).	Local relief (concave, convex, none): None Slope (%): 0 -3/.
Landform (hillslope, terrace, etc.): flat	- 68536 Long: -78.7323 7 Datum: W G-584
Subregion (LRR or MLRA): LR P Lat: 33	.08536 Long: -18.13231 Datum. W 6301
Soil Map Unit Name: Rains sundy loam, to	-Z*/. 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 significan	tly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally	
SUMMARY OF FINDINGS - Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Yes No	within a Wetland? Yes No
Remarks:	
Powerline Eusement	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	y) Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (C. F. CON
High Water Table (A2) Marl Deposits (E	에서 마른데 마른데 나는 사람들은 다른데 되었다. 이 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은
Saturation (A3) Hydrogen Sulfid	
☐ Water Marks (B1) ☐ Oxidized Rhizos	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)	(2015년 - 1915년 -
Iron Deposits (B5) Uther (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (B9)	Spriagrium moss (bb) (Entr 1, 5)
Field Observations: Surface Water Present? Yes No Depth (inch	20): NA
	es): 520
	es): \ Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	SENTENDE CONTROL AND TO COMMENT AND ADMINISTRATION OF THE ADMINIST
Nemara.	
	하는 집에 되지 않는 이번 그 경우를 가는 경우를 하고 있다.
THE PARTY OF THE P	the second secon

the species of the Management and the Control of th		CONTROL OF THE PROPERTY OF THE
Tree Stratum (Plot size: 30ft x 30ft) 1. none	Absolute Dominant Indicator % Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 3/4 (A)
2	August Communication (Communication Communication Communic	Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6.		Prevalence Index worksheet:
7	The second secon	Total % Cover of: Multiply by:
8,		OBL species x1 =
	= Total Cover	FACW species x 2 =
그게 되었다. 이 집에 있는 그 경이다. 이 인터를 하는 이 집에 되었다면 하는 것이 하는 사람이 아니는 아니는 이 집에 가는 그를 하고 있다는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다.	20% of total cover:	FAC species x3 =
Sapling/Shrub Stratum (Plot size: 30f+ x 30f+)		FACU species x 4 =
1. none	Marine Marine - marine	FACU species X4 =
2.		UPL species x 5 =
3.		Column Totals: (A) (B)
4.		Prevalence Index = B/A =
5.		Hydrophytic Vegetation Indicators:
6.		Hydrophytic Vegetation Indicators. 1 Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
是我们是100mm 100.00mm (100.00mm 100.00mm) (100.00mm) (100.00mm) (100.00mm) (100.00mm) (100.00mm) (100.00mm) (100.00mm)		[1] [20 <u>-20-20]</u> [20-20] [20
8.	O = Total Cover	3 - Prevalence Index is ≤3.0¹
-00 (1.1.)		Problematic Hydrophytic Vegetation ¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 30ff x 30ff)	20 Y FAL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Andro pogon virginius		A STATE OF THE CASE OF THE CAS
2 Eupatorium compositifolium	10 N FAC	Definitions of Four Vegetation Strata:
3. Juneus effusus	20 Y OBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Liquidambar styraciflua	10 N FAC	more in diameter at breast height (DBH), regardless of
5. Unknown grass	50 Y UPL/OBL	height.
6	CANADA CA	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 of size, and woody plants less than 3.28 ft tall.
9.		
10.		Woody vine – All woody vines greater than 3.28 ft in height.
11.		Heigit.
12.	TID TITLE	
50	IID = Total Cover	MATTER CONTROL OF THE
50% of total cover:	20% of total cover: 22	
Woody Vine Stratum (Plot size: 30ft x30ft)	V 514	
1. Smilax rotundifolia	ID Y FAC	
2.	a security and a second of the	
3.		
4.		
5.		Hydrophytic
	lo = Total Cover	Vegetation
50% of total cover: 5	20% of total cover: 2	Present? Yes No
Remarks: (If observed, list morphological adaptations bel	Annual Control of the	AND THE STREET OF THE STREET S
Nemarka. (ii observed, list morphological adaptations ber	Gir).	
mowed grass in pastu	re lunknown	FASS)
grassin pasio	Correntouring	(~25)

Profile Description: (Desc							Sampling Point:
A STATE OF THE PARTY OF THE PAR				dicator	or confirm t	the absence of i	ndicators.)
Depth Mat (inches) Color (mois		Color (moist)	x Features %	Type ¹	Loc²	Texture	Remarks
D-5 LOYK2	100	Solor (Illoist)	79	1106		5	TOTAL STATE OF THE
5-8 2.5 14/1	and Mingray Andrews service and the				go ny rope o	<u> </u>	
CALL ANTER SELECTION AND AN ADDRESS OF A TAXABLE PARTY.	100					C01	
8-16 2.5 44	3 100		100000000000000000000000000000000000000		Error F	SCL_	
16-20 2,5 Y5/	4 100					SCL_	
CONTRACTOR OF STREET			and and				
Type: C=Concentration, D=	Depletion, RM=F	Reduced Matrix, MS	S=Masked S	Sand Gra	ins.	² Location: PL=	=Pore Lining, M=Matrix.
lydric Soil Indicators: (Ap	plicable to all L	RRs, unless other	wise noted	1.)		Indicators for	Problematic Hydric Soils ³ :
Histosol (A1)		Polyvalue Be					(A9) (LRR O)
Histic Epipedon (A2)		Thin Dark Su					(A10) (LRR S)
Black Histic (A3) Hydrogen Sulfide (A4)		Loamy Muck			0)		/ertic (F18) (outside MLRA 150A,B Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)		Depleted Ma		-,			s Bright Loamy Soils (F20)
Organic Bodies (A6) (LR		Redox Dark	Surface (F6)			(MLRA 1	153B)
5 cm Mucky Mineral (A7		Depleted Dar					t Material (TF2)
Muck Presence (A8) (LR 1 cm Muck (A9) (LRR P,		Redox Depre					ow Dark Surface (TF12) plain in Remarks)
Depleted Below Dark Su		Depleted Oct		ILRA 15	(1)	D Other (CX)	Main in Nemarks)
Thick Dark Surface (A12		Iron-Mangan) ³ Indicator	rs of hydrophytic vegetation and
Coast Prairie Redox (A1					U)		hydrology must be present,
Sandy Mucky Mineral (S		Delta Ochric			. 4505)	unless	disturbed or problematic.
Sandy Gleyed Matrix (S4 Sandy Redox (S5)	+)	Reduced Ver				Á	
Stripped Matrix (S6)						149A, 153C, 15	3D)
Dark Surface (S7) (LRR							
lestrictive Layer (if observ	ed):						
Type:	region of the second	_					
Depth (inches):						Hydric Soil Pre	sent? Yes No
Remarks:							



Upland data point wcmp051_u facing north.



Upland data point wcmp051_u facing west.

Project/Site: ACP City/C	Sounty: Comberland Sampling Date: 7/28/16 State: NL Sampling Point: Wamp 05/16.
Applicant/Owner: Dominion	State: NL Sampling Point: Wamp 051f.
Investigator(s): ESI- Poper, Turn bull Section	on, Township, Range: NDNC
Landform (hillslope, terrace, etc.): flot Local	relief (concave, convex, none); None Slope (%): 0 -31
Subregion (LRR or MLRA): LRR P Lat: 35.08	588 Long: -78,73270 Datum: W 6584
Soil Map Unit Name: Coxville loam	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Y	NWI classification: PFO
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks.	
NCWAM: Pine Flat	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRI	
Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C) Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Iro	[18] [18] [18] [18] [18] [18] [18] [18]
☐ Drift Deposits (B3) ☐ Recent Iron Reduction in	사용 등에 주는 이 이번 사용하는 이 이 이 없는데 그는데 하는데 나를 하는데 되었다. 그리고 하는데 되었다면 하는데
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
☐ 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:	AIA
Surface Water Present? Yes No Depth (inches):	16
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:	
Tremund.	
	발생 500 - 200 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120 - 120
■ 1998 ** ** ** ** ** ** ** ** ** ** ** ** **	

701 701		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Pinus taeda	20	-1	FAC	That Are OBL, FACW, or FAC:(A)
2. Liguidambar styraciflua	15		FAC	Total Number of Dominant
3. Alex rubrum	10		FAC	Species Across All Strata: \(\sigma \sqrt{2}\) (B)
4				D
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				maraic obe, raovi, or rao.
7				Prevalence Index worksheet:
8.	34/57			Total % Cover of: Multiply by:
	45	= Total Co		OBL species x 1 =
50% of total cover: 22.5				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft × 30ft)	20% of	total cover	-	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 3077 X 3077)	ID	1	cn1	FACU species x 4 =
1. Liquidambar styraciflya			FAL	UPL species x 5 =
2. Symplocas tinitoria		_/_	FAL	
3. Acer cubrum	5	<u>y</u>	FAL	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				[1]
7.				1 Rapid Test for Hydrophytic Vegetation
8	TYPE IS			2 - Dominance Test is >50%
0.	25	T-1-10-		3 - Prevalence Index is ≤3.01
17.5		= Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 12.5	_ 20% of	total cover		
Herb Stratum (Plot size: 30ft x 30ft)				¹ Indicators of hydric soil and wetland hydrology must
1. Symplocos tinctoria			FAL	be present, unless disturbed or problematic.
2. Leucothoe axillaris	15	Y	FACW	Definitions of Four Vegetation Strata:
3. Hrundinaria gigantea	10		FACW	Trac Monda plants evaluding vines 3 in (7.6 cm) as
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.		All the second s		height.
6.			MENT OF THE PARTY OF THE	Saulia (Sharb Marahada a a shadian da a la
7.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
[8] [6] [4] [6] [6] [6] [6] [6] [6] [6] [6] [6] [6				
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		E		
	35	= Total Co	ver	
50% of total cover: 17.5	_ 20% of	total cover	:_7_	
Woody Vine Stratum (Plot size: 30ft x 30ft)				
1. Smilax rotundifolia	ID	Y	FAL	
2. Vitis rotundifolia	10	У	FAC	
3. Toxicodendron radicans	ID	y	EAL	
4	-10		1110	
5				Hydrophytic
	The second secon	= Total Co		Vegetation Present? Yes No
50% of total cover: 15	_ 20% of	total cover	:_6_	riesentr ies v No
Remarks: (If observed, list morphological adaptations below	v).	Mary Page	1980	

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators Depth Matrix Redox Features (Inches) Color (moist) % Type Loc² Texture $O-I_0$ I_0	Remarks
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture 0 - 6 10 Y R ²-1 100 5L high c	organic content
0-6 10 YR2/1 100 SL high c	organic conter
	1 4
6-20 2.5 y 31, 60 2.5 y 31, 40 D M 3 strew	King
	U
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lin	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problem	
☐ Histosol (A1) ☐ Polyvalue Below Surface (S8) (LRR S, T, U) ☐ 1 cm Muck (A9) (LF	
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (L	
	8) (outside MLRA 150A,B
	n Soils (F19) (LRR P, S, T)
☐ Stratified Layers (A5) ☐ Depleted Matrix (F3) ☐ Anomalous Bright L☐ Organic Bodies (A6) (LRR P, T, U) ☐ Redox Dark Surface (F6) ☐ (MLRA 153B)	oamy Solls (F2U)
	L/TEO)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Redox Depressions (F8) Red Parent Materia	
	emarks)
	ophytic vegetation and
	gy must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed	or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (SS)	
☐ Stripped Matrix (S6) ☐ Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) ☐ Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Type:	
	Yes No
	163
Remarks:	



Wetland data point wcmp051f_w facing northeast.



Wetland data point wcmp051f_w facing northwest.

	County: Comberland Sampling Date: 7/28/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wryn p051e-
Investigator(s): ESI LPOPER, Turnbull) Section	ion, Township, Range: NDNC
Landform (hillslope, terrace, etc.): Flat Loca	I relief (concave, convex, none): none Slope (%): 0-3
Subregion (LRR or MLRA): LRR P Lat: 35.08	529 Long: -78,73230 Datum: W6584
Soil Map Unit Name: Pains sandy lown, 0-21.	
Soil Map Unit Name: Parks Sarray 100 11, 00 07	(15 no eveloin in Romarks)
Are climatic / hydrologic conditions on the site typical for this time of year?	(1) 20 NG 10 NG
Are Vegetation, Soil, or Hydrology significantly disturbly disturbly Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sar	
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	THE PROPERTY OF THE PROPERTY O
Powerline easement 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) (LR	[1] [1] [1] [1] [1] [1] [1] [1] [1] [1]
Saturation (A3) Hydrogen Sulfide Odor (:
Water Marks (B1) Oxidized Rhizospheres	
Sediment Deposits (B2)	on (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5) Uther (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:	NA
Surface Water Present? Yes No/ Depth (inches):	100 CONTRACTOR OF THE PROPERTY
Water Table Present? Yes No Depth (inches):	ANN MARKET MARK
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
AND THE RESERVE OF THE PROPERTY OF THE PROPERT	
Remarks:	
FOR THE STATE OF A SECOND CONTROL OF THE STATE OF THE STA	

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

Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species FACW species FAC species FAC species FACU species VA = UPL species Column Totals: Column Totals: Hydrophytic Vegetation Indicators: FACH Apid Test for Hydrophytic Vegetation Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ Problematic Hydrophytic Vegetation¹ Indicators of hydric soil and wetland hydrology must 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
That Are OBL, FACW, or FAC:
Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: OBL species x 1 = BACW species x 2 = FACW species x 3 = FACU species x 4 = 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% 1 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation 1 (Explain) 1 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: OBL species FACW species FACW species FACU species Column Totals: Column Totals: Hydrophytic Vegetation Indicators: Tean Hydrophytic Vegetation Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Percent of Dominant Species That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 =
That Are OBL, FACW, or FAC: Prevalence Index worksheet: Total % Cover of: Multiply by:
Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species
Total % Cover of: Multiply by: OBL species
Total % Cover of: Multiply by: OBL species
OBL species x 1 =
FACW species x 2 =
FAC species x 3 =
FAC species
UPL species x 5 =
UPL species x 5 =
Column Totals:
Prevalence Index = B/A =
Hydrophytic Vegetation Indicators:
Hydrophytic Vegetation Indicators:
1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain)
2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Column
be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Tree - Woody plants, excluding vines, 5 iii. (7.6 cm) or
more in diameter at breast neight (DBH), regardless of
Sapling/Shrub - Woody plants, excluding vines, less
than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Wb 6L 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.
13
76.
MANAGERY CONTROL OF THE PROPERTY OF THE PROPER
— Hydrophytic
Vegetation
Present? Yes No No

		to the dept	h needed to docum			or confirm	the absence of	indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Features %	Type ¹	Loc²	Texture	* Remarks
0-4	104R3/1	100			Andreas		_ 5	
4-10	2,5441	95	104R 5/6	5	C	PL	5	
10-20	2.5 44/	85	104R5/6	5	L	PL	SC	The state of the s
Production The St			7,548 5/6	ID	C	M		
						No. of the last of	Activities and the second	
Name of the second								CONTRACTOR OF THE CONTRACTOR O
	The state of the s							
Tues C-Co	seestration D=Des	lotion PM=	Reduced Matrix, MS	=Masked	Sand Gr	ains	² Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil In	dicators: (Applic	able to all I	LRRs, unless other	wise not	ed.)		Indicators fo	or Problematic Hydric Soils ³ :
☐ Histosol (A1) ☐ Polyvalue Below Surface (S8) (LRR S, T, U)								ick (A9) (LRR O)
	pedon (A2)		Thin Dark Su				2 cm Mu	ick (A10) (LRR S) d Vertic (F18) (outside MLRA 150A,B)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)						Piedmont Floodplain Soils (F19) (LRR P, S, T)		
Hydrogen Sulfide (A4) Stratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Matrix (F3)						Anomalous Bright Loamy Soils (F20)		
	Bodies (A6) (LRR P	, T, U)	Redox Dark S	Surface (F				A 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)						Red Parent Material (TF2) Very Shallow Dark Surface (TF12)		
Muck Presence (A8) (LRR U) ☐ Redox Depressions (F8) ☐ 1 cm Muck (A9) (LRR P, T) ☐ Marl (F10) (LRR U)							Explain in Remarks)	
	Below Dark Surface	e (A11)	Depleted Och		(MLRA 1	51)		
Thick Dar	k Surface (A12)		Iron-Mangano				T) ³ Indica	tors of hydrophytic vegetation and
	irie Redox (A16) (Umbric Surfa			, U)		and hydrology must be present, as disturbed or problematic.
	ucky Mineral (S1) (eyed Matrix (S4)	LRR O, S)	Delta Ochric Reduced Ver			OA. 150B)		and distanced of problems.
Sandy Re			Piedmont Flo	odplain S	oils (F19)	(MLRA 14	49A)	
Stripped	Matrix (S6)		Anomalous B	Bright Loa	my Soils (F20) (MLF	RA 149A, 153C,	153D)
	ace (S7) (LRRP,				arte es 1970.			
Type:	ayer (if observed)	•						
Depth (inc	hes):						Hydric Soil F	Present? Yes No
Remarks:		in in the second					THE THE PARTY OF T	and the same of the same and the



Wetland data point wcmp051e_w facing east.



Wetland data point wcmp051e_w facing south.

Project/Site: ACP	City/County: Comberland Sampling Date: 7/28/16					
Applicant/Owner: Dominion	State: NC Sampling Point: WCMP051-4					
Investigator(s): ESI LR. Turnbull, L. Roper	Section Township Range: NONE					
investigator(s).	Local relief (concave, convex, none): None Slope (%): 0 -3/.					
Landform (hillslope, terrace, etc.): flat	5.08536 Long: -78.7323 7 Datum: W (-584)					
Subregion (LRR or MLRA): LR Lat: 3	5.08536 Long: -18.13231 Datum. W 6301					
Soil Map Unit Name: Rains sundy loam,	0-21 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 signific	antly disturbed? Are "Normal Circumstances" present? Yes No					
Are Vegetation, Soil, or Hydrology natura						
SUMMARY OF FINDINGS - Attach site map show	ving sampling point locations, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes No						
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No					
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Yes No	within a Wetland? Yes No					
Remarks:						
7 (m) 12 (1) (m) (m) (m) (m) (m) (m) (m) (m) (m) (m						
Powerline Easement						
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that as	Surface Soil Cracks (B6)					
Surface Water (A1) Aquatic Fauna	The state of the s					
	(B15) (LRR U) Drainage Patterns (B10)					
Saturation (A3) Hydrogen Sul	fide Odor (C1) Moss Trim Lines (B16)					
☐ Water Marks (B1) ☐ Oxidized Rhiz	ospheres along Living Roots (C3) Dry-Season Water Table (C2)					
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Reduced Iron (C4) Crayfish Burrows (C8)					
	eduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)	경영 회의 전쟁 등 전쟁					
Iron Deposits (B5) Uher (Explain						
Inundation Visible on Aerial Imagery (B7)						
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)					
Field Observations: Surface Water Present? Yes No Depth (in	chee): NA					
Surface Water Present? Yes No Depth (in Water Table Present? Yes No Depth (in the present)	chee): >20					
Saturation Present? Yes No Depth (in	ches): \(\sigma 20\) Wetland Hydrology Present? Yes \(\sigma \) No \(\sigma \)					
(includes capillary fringe)						
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if available:					
Remarks:						
	phone the second					
warman and the Medical And						

the species of the Management and the Control of th		CONTROL OF THE PROPERTY OF THE
Tree Stratum (Plot size: 30ft x 30ft) 1. none	Absolute Dominant Indicator % Cover Species? Status	Number of Dominant Species That Are OBL, FACW, or FAC: 3/4 (A)
2	Authorities (Charles and Charles and Charl	Total Number of Dominant Species Across All Strata: (B)
4		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6.		Prevalence Index worksheet:
7	PARTIES ENGINEER FRANCISCO	Total % Cover of: Multiply by:
8,		OBL species x1 =
	= Total Cover	FACW species x 2 =
그게 되었다. 그렇게 있는 그렇게 있다면 가장 하는 이 없다면 하는데 하는데 하는데 하는데 하는데 하는데 그렇게 하는데 되는데 되는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하	20% of total cover:	FAC species x3 =
Sapling/Shrub Stratum (Plot size: 30f+ x 30f+)		FACU species x 4 =
1. none	Marine Marine - marine	FACU species X4 =
2.		UPL species x 5 =
3.		Column Totals: (A) (B)
4.		Prevalence Index = B/A =
5.		Hydrophytic Vegetation Indicators:
6.		Hydrophytic Vegetation Indicators. 1 Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
是我们是100mm 100.00mm (100.00mm 100.00mm) (100.00mm) (100.00mm) (100.00mm) (100.00mm) (100.00mm) (100.00mm) (100.00mm)		[1] [20 <u>-20-20]</u> [20-20] [20
8.	O = Total Cover	3 - Prevalence Index is ≤3.0¹
-00 (1.1.)		Problematic Hydrophytic Vegetation¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 30ff x 30ff)	20 Y FAL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Andro pogon virginius		A STATE OF THE CASE OF THE CAS
2 Eupatorium compositifolium	10 N FAC	Definitions of Four Vegetation Strata:
3. Juneus effusus	20 Y OBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Liquidambar styraciflua	ID N FAC	more in diameter at breast height (DBH), regardless of
5. Unknown grass	50 Y UPL/OBL	height.
6		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9.		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.		Woody vine - All woody vines greater than 3.28 ft in
		height.
12.	TID TIME	
50	IID = Total Cover	MATTER CONTROL OF THE
50% of total cover:	20% of total cover: 22	
Woody Vine Stratum (Plot size: 30ft x30ft)	V 514	
1. Smilax rotundifolia	ID Y FAC	
2.	a security and a second of the	
3.		
4.		
5.		Hydrophytic
The state of the s	= Total Cover	Vegetation
50% of total cover: 5	20% of total cover: 2	Present? Yes V No No
Remarks: (If observed, list morphological adaptations bel	Annual Control of the	And the Strong Michael Control of the Control of th
Remarks. (II observed, list morphological adaptations bei	ow).	
mowed grass in pastu	re lunknown	FASS)
grassin pasio	Correntioning	(~25)

Profile Desc	cription: (Describe	to the dept	h needed to docur	nent the i	indicator	or confirm	the absence o	f indicate	ors.)
Depth (inches)	Matrix Color (moist)	%	Redo Color (moist)	x Feature %		Loc²	Texture		Remarks
D-5	(DV/(2/	100	Color ((floist)	70	Type	Loc	Texture		Remarks
5-8	2 = 441.	of the feature of the second second				go ny for			ACCUMULATION OF THE CONTROL OF THE C
D 11-	25 441-	100			************		- (1)		
0-10	2.5 4 4/3	100				Electric Control	501		
16-20	2.5 15/4	100			-		SCL_		
The section of the se	Table	TOTAL CONT			-	The same	-		
	AND THE PROPERTY OF THE PROPER								PARTITION OF THE PROPERTY OF THE PARTY OF TH
1Type: C=C	oncentration, D=Dep	lotion DM-	Badwaad Matrix MS				21 acation: D	Ol =Doro I	ining, M=Matrix.
	Indicators: (Applic					ins.			matic Hydric Soils ³ :
☐ Histosol			Polyvalue Be			RR S. T. U		ick (A9) (L	
	oipedon (A2)		Thin Dark Su					ick (A10)	
Black Hi			Loamy Mucky						18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		F2)				ain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mai						Loamy Soils (F20)
	Bodies (A6) (LRR P icky Mineral (A7) (LF		Redox Dark S					A 153B) rent Mater	ial (TF2)
	esence (A8) (LRR U		Redox Depre						k Surface (TF12)
1 cm Mu	ick (A9) (LRR P, T)		☐ Marl (F10) (L					xplain in I	
	d Below Dark Surface	e (A11)	Depleted Och						
	ark Surface (A12)	# DA 450A	Iron-Mangane						drophytic vegetation and
	rairie Redox (A16) (M lucky Mineral (S1) (L		Umbric Surfa Delta Ochric			U)			ogy must be present, ed or problematic.
	Bleyed Matrix (S4)	0, 0,	Reduced Ver			OA, 150B)		o diotalet	Sa of Problemate
Sandy R	ledox (S5)		Piedmont Flo				9A)		
	Matrix (S6)		Anomalous B	right Loar	ny Soils (F	20) (MLR	A 149A, 153C,	153D)	
	rface (S7) (LRR P, S Layer (if observed):						The second of the		
Type:	Layer (il observed).								
TO SERVICE SHARE THE RESIDENCE OF THE PARTY	ches):						Hydric Soil F	Procent?	Yes No
Remarks:	State of the state						Tiyane con I	resent.	Light and Report Committee of the Asset of the Committee
(Comando									
									Control of the Contro



Upland data point wcmp051_u facing north.



Upland data point wcmp051_u facing west.

Subregion (LRR or MLRA): LPP Lat: 35. Soil Map Unit Name: Pains Sandy Dam, D to Are climatic / hydrologic conditions on the site typical for this time of years. Are Vegetation, Soil, or Hydrology significantly. Are Vegetation, Soil, or Hydrology naturally present the state of years.	ar? Yes No (If no, explain in Rem disturbed? Are "Normal Circumstances" pres blematic? (If needed, explain any answers in	on: PFO arks.) ent? Yes No No No Remarks.)
Hydrophytic Vegetation Present? Hydroc Soil Present? Wetland Hydrology Present? Remarks: Hydroc Soil Present? Yes No	Is the Sampled Area	No
Heavy rain within 48hrs. NCWAM: Hardwood Flat		
Sediment Deposits (B2)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Peres along Living Roots (C3) Ed Iron (C4) Ion in Tilled Soils (C6) Ion Geomorphic Pote Emarks) Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wa Crayfish Burrow Saturation Visib Geomorphic Pote Spallow Aquitan FAC-Neutral Te	ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) s (C8) le on Aerial Imagery (C9) sition (D2) d (D3)
Surface Water Present? Yes No Depth (inches Water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)) Describe Recorded Data (stream gauge, monitoring well, aerial phot	: 15 : Surface Wetland Hydrology Present?	Yes No
Remarks:		

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

	wem	OG	3	6f_	w
ampling					

300 7.01	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30ft x 30ft)		Species?		Number of Dominant Species	
1. Liquidambar styraciflua	20	<u> </u>	FAC	That Are OBL, FACW, or FAC:	(A)
2. Aver rubrum	15	<u> </u>	FAL	Total Number of Dominant	
3. Cyrilla racemiflora	10	_ \	FACW		(B)
4. Pinus taeda	5	N	FAL	Research of Reminent Species 90	
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
6.					
7.				Prevalence Index worksheet:	
B				Total % Cover of: Multiply by:	
		= Total Cov	er	OBL species x 1 =	
50% of total cover: 25	20% of	total cover:		FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30# x30#)	20 % 01	total cover.		FAC species x 3 =	
1. Liquidambar stractiflua	10	V	FAC	FACU species x 4 =	
1. CIROTBANDAY STYTACITION	11)	-1	FAC	UPL species x 5 =	10.25
2. Aver Norm	10	-1		Column Totals: (A)	The second
3. Cyrilla raumiflora	10	arrages Surveyor and	FACW	Column Fotals: (F)	(0)
4.				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	11-11-11-11
6				☐ 1 Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8.				☐ 3 - Prevalence Index is ≤3.0¹	
	30	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain	,
50% of total cover: 15				Problematic hydrophytic vegetation (Explain	'
Herb Stratum (Plot size: 30 Ff x 30ff)	2070 01	total cover.			
DESCRIPTION OF THE PROPERTY OF				¹ Indicators of hydric soil and wetland hydrology may be present, unless disturbed or problematic.	ust
A STATE OF THE PROPERTY OF THE				Definitions of Four Vegetation Strata:	SALES
2				Definitions of Four Vegetation Strata.	
3.				Tree - Woody plants, excluding vines, 3 in. (7.6 ca	
4	The second second			more in diameter at breast height (DBH), regardle	ss of
5,				height.	
6.				Sapling/Shrub - Woody plants, excluding vines,	ess
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8.				Herb – All herbaceous (non-woody) plants, regard	lless
9.				of size, and woody plants less than 3.28 ft tall.	1033
10					
				Woody vine – All woody vines greater than 3.28 t	t in
11.			W. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	height.	
12	0	=			
	Coreces of the sales and	= Total Cov			
50% of total cover:	20% of	total cover			
Woody Vine Stratum (Plot size: 30ff x 30ff)	_	V	- 11		
1. Smilax rotundifolia	15	<u> </u>	FHL		
2. Lonicera japonica	15	_ \	FACU		
3. Vitis rotundifolia	10	<u> </u>	FAC		
4.					
5.				Underwhite	
	40	= Total Cov	er	Hydrophytic Vegetation	
50% of total cover: 20		total cover		Present? Yes No	
AND THE RESIDENCE WORLD AND A STATE OF THE PROPERTY OF THE PRO	- Andrew Control of the Control of t	total cover			
Remarks: (If observed, list morphological adaptations belo	w).				

Profile Desc	ription: (Describe	to the depth	needed to docum	ent the	Indicator	or confirm	n the absence of ir	ndicators.)
Depth (inches)	Color (moist)	%	Redox Color (moist)	Feature %	s Type ¹	Loc ²	Texture	Remarks
(inches)	10 48 2/1	100	Color (moist)		Type	LOC		Kemarks
5-15	101211		10 VD 41.	- C		M		
	1018112	95	104846	2		1.1		
15-20	10 yray,	95	10/R4/6			<u>M</u> _	<u>SL</u> _	
¹Type: C=C	oncentration, D=Der	oletion, RM=F	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	ndicators: (Applic	able to all L	RRs, unless other	wise not	ed.)		Indicators for	Problematic Hydric Solls ³ :
☐ Histosol			Polyvalue Bel					(A9) (LRR O)
	pipedon (A2)		Thin Dark Sur					(A10) (LRR S)
Black Hi			Loamy Mucky			0)		'ertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T)
	n Sulfide (A4) I Layers (A5)		Loamy Gleyed Depleted Matr		(F2)		19 1 C. 10 7 S. The Company of the C	Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	P. T. U)	Redox Dark S		-6)		(MLRA 1	
A STATE OF THE PARTY OF THE PAR	cky Mineral (A7) (LI		Depleted Dark	a reprise the witchings to A. A.				t Material (TF2)
The second secon	esence (A8) (LRR L	J)	Redox Depres		8)		CONTRACTOR AND ADMINISTRAL PROPERTY.	ow Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (LF				Other (Exp	lain in Remarks)
5	Below Dark Surface	e (A11)	Depleted Och Iron-Mangane				T) 3Indicator	s of hydrophytic vegetation and
	ark Surface (A12) rairie Redox (A16) (I	MI RA 150A)						hydrology must be present,
10. Telephone (10.000 to 10.000 to 1	lucky Mineral (S1) (Delta Ochric (disturbed or problematic.
	Sleyed Matrix (S4)		Reduced Vert			0A, 150B))	
In the state of th	edox (S5)		Piedmont Floo					
S. Prince St. College St. Co. College St.	Matrix (S6)		Anomalous Br	ight Loa	my Soils (F20) (MLF	RA 149A, 153C, 153	3D)
	face (S7) (LRR P, S ayer (if observed)							
Type:	-ayer (ii observeu)	•						
	ches):						Hydric Soil Pre	sent? Yes / No
Remarks:	J103).						Tryanto con tro	
rtemarts.								



Wetland data point wcmo036f_w facing west.



Wetland data point wcmo036f_w facing south.

Project/Site: ALP City	y/County: Comberland Sampling Date: 9/30/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmo 036e.
Investigator(s): E5I - Roper, Johnson Se	
Calculation (Innisippe, terrace, etc.).	cal relief (concave, convex, none):
Subregion (LRR or MLRA): Lat: 53.0	Datum: V6361
Soil Map Unit Name: Kains sandy loam, D-2	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly dis	turbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally proble	ematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sa	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? YesNo YesNo	Is the Sampled Area within a Wetland? Yes No
Heavy rain within 48hrs. Powerline ROW	
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	
Saturation (A3)	
다 하는	s along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Presence of Reduced	HERRING STANDERS HERRING HER HER HERRING HER HERRING
☐ Drift Deposits (B3) ☐ Recent Iron Reduction ☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7)	[2] [2] [2] [2] [2] [2] [2] [2] [2] [2]
☐ Iron Deposits (B5) ☐ Other (Explain in Rem	14. 성의회사 전 회사 전 전 전 전 보고 보고 보고 있는 것이 보고 있다. 그는 그 - 프로바닷컴에서 15. 스웨티트 15. 15. 15. 15. 15. 15. 15. 15. 15. 15.
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	N N
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): _	
Saturation Present? Yes No Depth (inches): _	Surface Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if available:
Remarks:	
	<u></u>

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

VEGETATION (Four Grata) Coc scientino har	dela untilizza del 1 sila			Cumping Forms	
Tree Stratum (Plot size: 30f4 x 30f4)	Absolute % Cover	Dominar	nt Indicator	Dominance Test worksheet:	
				Number of Dominant Species That Are OBL, FACW, or FAC:	
1. none				That Are OBL, FACW, or FAC: (A	()
2				Total Number of Dominant	
3				Total Number of Dominant Species Across All Strata: (B	3)
4					
				Percent of Dominant Species 100	
5				That Are OBL, FACW, or FAC: (A	VB)
6.				Prevalence Index worksheet:	
7					
8.				Total % Cover of: Multiply by:	
	0 :	Total Co	over	OBL species x 1 =	
50% of total cover:	VINE STREET STREET STEELS			FACW species x 2 =	
	20% 01	total cove	31.	FAC species x 3 =	
Sapling/Shrub Stratum (Plot size: 30f4 x30f4)	-	V	F10.5	FACU species x 4 =	
1. Liquidambar styraciflua	_ ح	1	THL	THE STATE OF THE S	
2				UPL species x 5 =	
3.				Column Totals: (A) ((B)
				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	
6				Rapid Test for Hydrophytic Vegetation	
7.				2 - Dominance Test is >50%	
				[1]	
8	THE PARTY OF THE P			☐ 3 - Prevalence Index is ≤3.01	
1.5		Total Co		Problematic Hydrophytic Vegetation¹ (Explain)	
50% of total cover:	20% of	total cove	er: 0,6		
Herb Stratum (Plot size: 30 ff x 30ff)				¹ Indicators of hydric soil and wetland hydrology mus	t I
1. Sacharum giganteum	15	N	FACW	be present, unless disturbed or problematic.	
2. Junus effusion	45	Y	OBL	Definitions of Four Vegetation Strata:	V5-450-050
2. 3011003 0110303		-		Definitions of Four Vegetation Strata.	
3. Dicharthelium acuminatum		1	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm)	or
4. Andropogon virginius	20	N	FAC	more in diameter at breast height (DBH), regardless	
5				height.	
1200 De terranistica de la compansa de maria de maria de compansa de la compansa del la compansa de la compansa del la compansa de la compansa del la compansa de la compansa del la compansa de la compansa de la compansa del la compansa del la com				S 11 18t t 14/- d - l - t	
6.				Sapling/Shrub - Woody plants, excluding vines, les than 3 in. DBH and greater than 3.28 ft (1 m) tall.	SS
7				than 3 m. DBH and greater than 3.25 it (1 m) tail.	
8.				Herb - All herbaceous (non-woody) plants, regardle	ess
9.				of size, and woody plants less than 3.28 ft tall.	
10					
				Woody vine – All woody vines greater than 3.28 ft i	in
11				height.	
12	Transfer Market				
	110 :	Total Co	over		
50% of total cover: 55	20% of	total cove	er: 22		
Woody Vine Stratum (Plot size: 30ff x30ff)					
The Control of the Co					
1. hone					
2.					
3.					
4.					
TWO become the body and the property of the contract of the property of the contract of the property of the contract of the co	LayServenesses		201110000000000000000000000000000000000		
5.	Contraction of States of the Contract of the			Hydrophytic	
	-	Total C	over	Vegetation No.	
50% of total cover:	20% of	total cove	er:	Present? Yes No	
Remarks: (If observed, list morphological adaptations below	w).				0.03.28
ricinance. (in observed, not marphologistal despitations belo	.,,				

	ription: (Describe	to the depth				or confirm	the absence of	of Indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Features %	Type ¹	Loc ²	Texture	Remarks
0-12	104R4/1	95	10 YR 5/4	5	C	M	L	
		S. October 1994			remain land			
¹Type: C=C	oncentration, D=De	nletion RM=F	Reduced Matrix M	S=Masked	Sand Gra	ains	²l ocation:	PL=Pore Lining, M=Matrix.
	ndicators: (Appli					J. 110.		for Problematic Hydric Soils ³ :
☐ Histosol			☐ Polyvalue Be			RR S, T, U	1 cm M	uck (A9) (LRR O)
	pipedon (A2)		Thin Dark St				2 cm M	uck (A10) (LRR S)
Black Hi	stic (A3)		Loamy Muck			0)		ed Vertic (F18) (outside MLRA 150A,B)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	n Sulfide (A4)		Loamy Gley		-2)			ont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	D T III	Depleted Ma		2)			lous Bright Loamy Soils (F20)
10 March 10	Bodies (A6) (LRR I cky Mineral (A7) (L		Redox Dark Depleted Da				1.51751 Fac. 1 CHSD4_309600000000	rent Material (TF2)
The second of th	esence (A8) (LRR I		Redox Depre					hallow Dark Surface (TF12)
10 Table 100 (100 (100 (100 (100 (100 (100 (100	ick (A9) (LRR P, T)		Marl (F10) (I				Other (Explain in Remarks)
School State of Business Control of State of Sta	Below Dark Surfa	ce (A11)	Depleted Oc					
(C)	ark Surface (A12)		Iron-Mangar					ators of hydrophytic vegetation and
The second secon	rairie Redox (A16) (, U)		and hydrology must be present, ess disturbed or problematic.
C. Committee of the Com	lucky Mineral (S1) (Bleyed Matrix (S4)	(LKK U, S)	Delta Ochric			0Δ 150B)	une	ess disturbed of problematic.
	ledox (S5)		Piedmont Flo				9A)	
	Matrix (S6)		The state of the s	r tutrak. Tutkir orridi (barz d			4 149A, 153C,	153D)
	rface (S7) (LRR P,	S, T, U)						
Restrictive	ayer (if observed):						
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								
1006	not a	waer 1	relow	12"	1,00	o to	Inmi	partion
000.0		J			000	,,,,	۵. ۱۲	-36.7017



Wetland data point wcmo036e_w facing west.



Wetland data point wcmo036e_w facing south.

Project/Site: ALP City/	County: Comberland Sampling Date: 9/30/11
Applicant/Owner: Dominion	State: N Sampling Point: Line 036 - u
Investigator(s): ESI- Roper, Johnson Section	
Landform (hillslope, terrace, etc.): Flat Local	al relief (concave, convex, none): None Slope (%): D - 2
Subregion (LRR or MLRA): LRR P Lat: 35.08	3129 Long: -78,73290 Datum: W6589
Soil Map Unit Name: Pains sandy loam, 0-7	7. Slopes NWI classification: NA
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 significantly distr	Ale Normal Circumstances present: Tes No
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Heavy rain within 48 hrs.	
Power line ROW	
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) (LF	[17] [18] [18] [18] [18] [18] [18] [18] [18
☐ Saturation (A3) ☐ Hydrogen Sulfide Odor	####################################
24 1	along Living Roots (C3)
Sediment Deposits (B2)	on (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	n Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5) Under (Explain in Remains	18일상 (그리트) 보고 보고 있는데 이번에 대한 경험에 되었다면서 없는데 사람들이 되었다면서 되었다면 되었다면서
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
☐ Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	410
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	710
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
Remarks.	

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

2001 2001	Absolute	Dominan	t Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30# x 30++)	% Cover	Species	? Status	Number of Dominant Species	
1. hone				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:	(A/B)
6					
7				Prevalence Index worksheet:	
8				Total % Cover of: Multiply by:	
		= Total Co	over	OBL species x 1 =	_
50% of total cover;	NAME AND ADDRESS OF THE OWNER,			FACW species x 2 =	_
Sapling/Shrub Stratum (Plot size: 30ff x 30ff)	2070 01	total cove		FAC species x 3 =	
1. Liquidam bur styracifla	5	Y	FAL	FACU species x 4 =	
			11,0	UPL species x 5 =	
CONTROL OF A CONTROL OF THE REPORT OF THE PROPERTY OF THE PROP				Column Totals: (A)	
3.					
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	
	5	= Total Co	over	Problematic Hydrophytic Vegetation¹ (Expl	ain)
50% of total cover: 2.5				Problematic Hydrophytic Vegetation (Expi	anny
Herb Stratum (Plot size: 30 ft v 30 ft)		10101 0010		<u> </u>	
1. Arundinaria gigantea	20	V	FACW	Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic.	must
2. Evpatorium capillisolium		N	FACU	The Late Early State of Utbook Claim of Manager William Court Country States Court Country Court And Court C	
	20	19	-	Definitions of Four Vegetation Strata:	
3. Agalinis fasciculata	Will be and because it is	-1	FACW	Tree - Woody plants, excluding vines, 3 in. (7.9)	6 cm) or
4. Dicharthelium acuminatum	30	У-	FAL	more in diameter at breast height (DBH), regar	dless of
5. Solidago rugosa	20	7	FAC	height.	
6. Pychian themum flexuosum	10	N	FACW	Sapling/Shrub - Woody plants, excluding vine	s, less
7. Estramia caroliniana	10	N	FAC	than 3 in. DBH and greater than 3.28 ft (1 m) to	all.
8.				Harb All bashage and (non-unady) plants reg	ordloon
9.				Herb – All herbaceous (non-woody) plants, reg of size, and woody plants less than 3.28 ft tall.	aruless
TO CONTINUE TO A TURNOUS CONTINUES AND PRODUCT ON A PER OFFICIAL PRODUCT OF THE CONTINUES AND A CONTINUE TO A CONT					
10	-			Woody vine - All woody vines greater than 3.2	28 ft in
11.	THE STATE OF THE S			height.	
12	125	The second second			
		= Total Co			
50% of total cover: 62	5 20% of	total cove	er: 25		
Woody Vine Stratum (Plot size: 30 ft x 30 ft)				prosent to the season of the season of the	
1. none					
2.					
3.					
4	700 Emplo				
5				Hydrophytic	
	An accommendation	= Total Co		Vegetation Present? Yes No	
50% of total cover:	20% of	total cove	er:		
Remarks: (If observed, list morphological adaptations belo	w).				

Daniel		to the depth			ator or commi	the absence of inc	ilicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features % Tv	pe¹ Loc²	Texture	Remarks
0-6	104R3/2	100	Color (molety		200	SL	
TO ALMERONIA CONTRACT CONTRACT	10404/2	IDD				SL	
6-13	10 10 11/1	- 100 -	10 V O 41.		- M		
13-20	10/K9/2	75_	10 y 12 74	5 (<u> </u>	
1Type: C=C	oncentration, D=Dep	lation PM-E	Peduced Matrix M	S-Masked Sar	nd Grains	² Location: PL =F	Pore Lining, M=Matrix.
	Indicators: (Applic				iu Grams.		roblematic Hydric Soils ³ :
☐ Histosol					88) (LRR S, T, U		A9) (LRR O)
The state of the s	pipedon (A2)			ırface (S9) (LR			A10) (LRR S)
	istic (A3)			y Mineral (F1)			rtic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)			ed Matrix (F2)		The Control of the Co	oodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma				Bright Loamy Soils (F20)
District Co., and St. Co., or	Bodies (A6) (LRR P		Redox Dark			(MLRA 15	26-pail 7, 171 (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (19
	ucky Mineral (A7) (LI		Redox Depre	rk Surface (F7)			Material (TF2) v Dark Surface (TF12)
	resence (A8) (LRR Luck (A9) (LRR P, T)	"	Marl (F10) (L			17.1 La 17.0 L	in in Remarks)
	d Below Dark Surface	e (A11)		hric (F11) (MLI	RA 151)	Cirici (Expire	
2001 WHELL CO. STATE OF	ark Surface (A12)				12) (LRR O, P,	T) ³ Indicators	of hydrophytic vegetation and
	rairie Redox (A16) (I	MLRA 150A)	☐ Umbric Surfa	ice (F13) (LRR	P, T, U)		ydrology must be present,
	Mucky Mineral (S1) (LRR O, S)		(F17) (MLRA		unless di	sturbed or problematic.
200 (0.05) (0.05) (0.05)	Sleyed Matrix (S4)		The second secon		RA 150A, 150B)		
Division Colonia California	Redox (S5)				(F19) (MLRA 149		,
	l Matrix (S6) Irface (S7) (LRR P, \$	2 T III	Anomalous E	sright Loamy S	oils (F2U) (MLRA	A 149A, 153C, 153I	')
	Layer (if observed)						
Type:	Layer (ii ebservea)						
Depth (in	ches):		_			Hydric Soil Pres	ent? Yes No
Remarks:	cnes)	Martine College Street				Tiyanio com Tree	
Remarks.							



Upland data point wcmo036_u facing north.



Upland data point wcmo036_u facing east.

Subregion (LRR or MLRA): LPP Lat: 35. Soil Map Unit Name: Pains Sandy Dam, D to Are climatic / hydrologic conditions on the site typical for this time of years. Are Vegetation, Soil, or Hydrology significantly. Are Vegetation, Soil, or Hydrology naturally present the state of years.	ar? Yes No (If no, explain in Rem disturbed? Are "Normal Circumstances" pres blematic? (If needed, explain any answers in	on: PFO arks.) ent? Yes No No No Remarks.)
Hydrophytic Vegetation Present? Hydroc Soil Present? Wetland Hydrology Present? Remarks: Hydroc Soil Present? Yes No	Is the Sampled Area	No
Heavy rain within 48hrs. NCWAM: Hardwood Flat		
Sediment Deposits (B2)	Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Peres along Living Roots (C3) Ed Iron (C4) Ion in Tilled Soils (C6) Ion Geomorphic Pote Emarks) Surface Soil Cra Sparsely Vegeta Drainage Pattern Moss Trim Lines Dry-Season Wa Crayfish Burrow Saturation Visib Geomorphic Pote Spallow Aquitan FAC-Neutral Te	ated Concave Surface (B8) ns (B10) s (B16) ter Table (C2) s (C8) le on Aerial Imagery (C9) sition (D2) d (D3)
Surface Water Present? Yes No Depth (inches Water Table Present? Yes No Depth (inches Saturation Present? Yes No Depth (inches (includes capillary fringe)) Describe Recorded Data (stream gauge, monitoring well, aerial phot	: 15 : Surface Wetland Hydrology Present?	Yes No
Remarks:		

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

	wem	OG	3	6f_	w
ampling					

300 7.01	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30ft x 30ft)		Species?		Number of Dominant Species	
1. Liquidambar styraciflua	20	<u> </u>	FAC	That Are OBL, FACW, or FAC:	(A)
2. Aver rubrum	15	<u> </u>	FAL	Total Number of Dominant	
3. Cyrilla racemiflora	10	_ \	FACW		(B)
4. Pinus taeda	5	N	FAL	Research of Reminent Species 90	
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
6.					
7.				Prevalence Index worksheet:	
B				Total % Cover of: Multiply by:	
		= Total Cov	er	OBL species x 1 =	
50% of total cover: 25	20% of	total cover:		FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30# x30#)	20 % 01	total cover.		FAC species x 3 =	
1. Liquidambar stractiflua	10	V	FAC	FACU species x 4 =	
1. CIROTBANDAY STYTACITION	11)	-1	FAC	UPL species x 5 =	10.25
2. Aver Norm	10	-1		Column Totals: (A)	The second
3. Cyrilla raumiflora	10	arrages Surveyor and	FACW	Column Fotals: (F)	(0)
4.				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	11-11-11-11
6				☐ 1 Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8.				☐ 3 - Prevalence Index is ≤3.0¹	
	30	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain	,
50% of total cover: 15				Problematic hydrophytic vegetation (Explain	'
Herb Stratum (Plot size: 30 Ff x 30ff)	2070 01	total cover.			
DESCRIPTION OF THE PROPERTY OF				¹ Indicators of hydric soil and wetland hydrology may be present, unless disturbed or problematic.	ust
A STATE OF THE PROPERTY OF THE				Definitions of Four Vegetation Strata:	SALES
2				Definitions of Four Vegetation Strata.	
3.				Tree - Woody plants, excluding vines, 3 in. (7.6 ca	
4	The second second			more in diameter at breast height (DBH), regardle	ss of
5,				height.	
6.				Sapling/Shrub - Woody plants, excluding vines,	ess
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8.				Herb – All herbaceous (non-woody) plants, regard	lless
9.				of size, and woody plants less than 3.28 ft tall.	1033
10					
				Woody vine – All woody vines greater than 3.28 t	t in
11.			W. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10	height.	
12	0	=			
	Coreces of the sales and	= Total Cov			
50% of total cover:	20% of	total cover			
Woody Vine Stratum (Plot size: 30ff x 30ff)	_	V	- 11		
1. Smilax rotundifolia	15	<u> </u>	FHL		
2. Lonicera japonica	15	_ \	FACU		
3. Vitis rotundifolia	10	<u> </u>	FAC		
4.					
5.				Underwhite	
	40	= Total Cov	er	Hydrophytic Vegetation	
50% of total cover: 20		total cover		Present? Yes No	
AND THE RESIDENCE WORLD AND A STATE OF THE PROPERTY OF THE PRO	- Andrew Control of the Control of t	total cover			
Remarks: (If observed, list morphological adaptations belo	w).				

Profile Desc	ription: (Describe	to the depth	needed to docum	ent the	Indicator	or confirm	n the absence of ir	ndicators.)
Depth (inches)	Color (moist)	%	Redox Color (moist)	Feature %	s Type ¹	Loc ²	Texture	Remarks
(inches)	10 48 2/1	100	Color (moist)		Type	LOC		Kemarks
5-15	101211		10 VD 41.	- C		M		
	1018112	95	104846	2		1.1		
15-20	10 yray,	95	10/R4/6			<u>M</u> _	<u>SL</u> _	
¹Type: C=C	oncentration, D=Der	oletion, RM=F	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	ndicators: (Applic	able to all L	RRs, unless other	wise not	ed.)		Indicators for	Problematic Hydric Solls ³ :
☐ Histosol			Polyvalue Bel					(A9) (LRR O)
	pipedon (A2)		Thin Dark Sur					(A10) (LRR S)
Black Hi			Loamy Mucky			0)		'ertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T)
	n Sulfide (A4) I Layers (A5)		Loamy Gleyed Depleted Matr		(F2)		19 1 C. 19 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	P. T. U)	Redox Dark S		-6)		(MLRA 1	
A STATE OF THE PARTY OF THE PAR	cky Mineral (A7) (LI		Depleted Dark	a reprise the witchings to A. A.				t Material (TF2)
The second secon	esence (A8) (LRR L	J)	Redox Depres		8)		CONTRACTOR AND ADMINISTRAL PROPERTY.	ow Dark Surface (TF12)
	ck (A9) (LRR P, T)		Marl (F10) (LF				Other (Exp	lain in Remarks)
5	Below Dark Surface	e (A11)	Depleted Och Iron-Mangane				T) 3Indicator	s of hydrophytic vegetation and
	ark Surface (A12) rairie Redox (A16) (I	MI RA 150A)						hydrology must be present,
10. Telephone (10.000 to 10.000 to 1	lucky Mineral (S1) (Delta Ochric (disturbed or problematic.
	Sleyed Matrix (S4)		Reduced Vert			0A, 150B))	
In the state of th	edox (S5)		Piedmont Floo					
S. Prince St. College St. Co. College St.	Matrix (S6)		Anomalous Br	ight Loa	my Soils (F20) (MLF	RA 149A, 153C, 153	3D)
	face (S7) (LRR P, S ayer (if observed)							
Type:	-ayer (ii observeu)	•						
	ches):						Hydric Soil Pre	sent? Yes / No
Remarks:	J103).						Tryanto con tro	
rtemarts.								



Wetland data point wcmo036f_w facing west.



Wetland data point wcmo036f_w facing south.

Project/Site: ALP Cit	y/County: Comberland Sampling Date: 9/30/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmo 036e.
Investigator(s): E5I - Roper, Johnson Se	
Landform (hillslope, terrace, etc.): Flat Loc	cal relief (concave, convex, none): None Slope (%): D-Z 08127 Long: -78, 73297 Datum: W6589
Subregion (LRR or MLRA): LRR P Lat: 35. 0	18127 Long: -78, 73297 Datum: W6584
	1. Slopes NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year?	: TRENDER TO BE NOT THE STORY OF THE STREET
	sturbed? Are "Normal Circumstances" present? YesNo
Are Vegetation, Soil, or Hydrology naturally proble	
	ampling 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
Heavy rain within 48hrs. Powerline ROW	
Powerline KOW	
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) Augustic Fauna (B15)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Saturation (A3) Hydrogen Sulfide Odo	
	s along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced	(2) 선생 (Capital)
☐ Drift Deposits (B3) ☐ Recent Iron Reduction	n in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C:	에 사용하다 있는 것이 되었습니다. 이 전 보고 있는 보고 있는 것이 되었다. 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전 전
☐ Iron Deposits (B5) ☐ Other (Explain in Rem	14에 열리는 15~ () 그는
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches): _	1 11
Water Table Present? Yes No Depth (inches): _	surface
Saturation Present? Yes No Depth (inches):	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, j	previous inspections), il available.
Remarks:	
	Limited

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

VEGETATION (Four Grata) Coc scientino har	dela untilizza del 1 sila			Company Cont.	
Tree Stratum (Plot size: 30f4 x 30f4)	Absolute % Cover	Dominar	nt Indicator	Dominance Test worksheet:	
				Number of Dominant Species That Are OBL, FACW, or FAC:	
1. none				That Are OBL, FACW, or FAC: (A	()
2				Total Number of Dominant	
3				Total Number of Dominant Species Across All Strata: (B	3)
4					
				Percent of Dominant Species 100	
5				That Are OBL, FACW, or FAC: (A	VB)
6.				Prevalence Index worksheet:	
7					
8.				Total % Cover of: Multiply by:	
	0 :	Total Co	over	OBL species x 1 =	
50% of total cover:	VINE STREET STREET STEELS			FACW species x 2 =	
	20% 01	total cove	31.	FAC species x 3 =	
Sapling/Shrub Stratum (Plot size: 30f4 x30f4)	-	V	F10.5	FACU species x 4 =	
1. Liquidambar styraciflua	_ ح	1	THL	THE STATE OF THE S	
2				UPL species x 5 =	
3.				Column Totals: (A) ((B)
				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	
6				Rapid Test for Hydrophytic Vegetation	
7.				2 - Dominance Test is >50%	
				[1]	
8	THE PARTY OF THE P			☐ 3 - Prevalence Index is ≤3.01	
1.5		Total Co		Problematic Hydrophytic Vegetation¹ (Explain)	
50% of total cover:	20% of	total cove	er: 0,6		
Herb Stratum (Plot size: 30 ff x 30ff)				¹ Indicators of hydric soil and wetland hydrology mus	t I
1. Sacharum giganteum	15	N	FACW	be present, unless disturbed or problematic.	
2. Junus effusion	45	Y	OBL	Definitions of Four Vegetation Strata:	V5-450-050
2. 3011003 0110303		-		Definitions of Four Vegetation Strata.	
3. Dicharthelium acuminatum		1	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm)	or
4. Andropogon virginius	20	N	FAC	more in diameter at breast height (DBH), regardless	
5				height.	
1200 De terranistica de la compansa de maria de maria de compansa de la compansa del la compansa de la compansa del la compansa de la compansa del la compansa de la compansa del la compansa de la compansa de la compansa del la compansa del la com				S 11 18t t 14/- d - l - t	
6.				Sapling/Shrub - Woody plants, excluding vines, les than 3 in. DBH and greater than 3.28 ft (1 m) tall.	SS
7				than 3 m. DBH and greater than 3.25 it (1 m) tail.	
8.				Herb - All herbaceous (non-woody) plants, regardle	ess
9.				of size, and woody plants less than 3.28 ft tall.	
10					
				Woody vine – All woody vines greater than 3.28 ft i	in
11				height.	
12	Transfer Market				
	110 :	Total Co	over		
50% of total cover: 55	20% of	total cove	er: 22		
Woody Vine Stratum (Plot size: 30ff x30ff)					
The Control of the Co					
1. hone					
2.					
3.					
4.					
TWO become the body and the property of the contract of the property of the contract of the property of the contract of the co	LayServenesses		201110000000000000000000000000000000000		
5.	Contraction of States of the Contract of the			Hydrophytic	
	-	Total C	over	Vegetation No.	
50% of total cover:	20% of	total cove	er:	Present? Yes No	
Remarks: (If observed, list morphological adaptations below	w).				0.03.28
ricinance. (in observed, not marphologistal despitations belo	.,,				

	ription: (Describe	to the depth				or confirm	the absence of	of Indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Features %	Type ¹	Loc ²	Texture	Remarks
0-12	104R4/1	95	10 YR 5/4	5	C	M	L	
		S. October 1994			remain land			
¹Type: C=C	oncentration, D=De	nletion RM=F	Reduced Matrix M	S=Masked	Sand Gra	ains	²l ocation:	PL=Pore Lining, M=Matrix.
	ndicators: (Appli					J. 110.		for Problematic Hydric Soils ³ :
☐ Histosol			☐ Polyvalue Be			RR S, T, U	1 cm M	uck (A9) (LRR O)
	pipedon (A2)		Thin Dark St				2 cm M	uck (A10) (LRR S)
Black Hi	stic (A3)		Loamy Muck			0)		ed Vertic (F18) (outside MLRA 150A,B)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	n Sulfide (A4)		Loamy Gley		-2)			ont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	D T III	Depleted Ma		2)			lous Bright Loamy Soils (F20)
10 March 10	Bodies (A6) (LRR I cky Mineral (A7) (L		Redox Dark Depleted Da				1.51751 Fac. 1 CHSD4_309600000000	rent Material (TF2)
The second state of the se	esence (A8) (LRR I		Redox Depre					hallow Dark Surface (TF12)
10 Table 100 (100 (100 (100 (100 (100 (100 (100	ick (A9) (LRR P, T)		Marl (F10) (I				Other (Explain in Remarks)
School State of Business Control of State of Sta	Below Dark Surfa	ce (A11)	Depleted Oc					
(C)	ark Surface (A12)		Iron-Mangar					ators of hydrophytic vegetation and
The second secon	rairie Redox (A16) (, U)		and hydrology must be present, ess disturbed or problematic.
C. Committee of the Com	lucky Mineral (S1) (Bleyed Matrix (S4)	(LKK U, S)	Delta Ochric			0Δ 150B)	une	ess disturbed of problematic.
	ledox (S5)		Piedmont Flo				9A)	
	Matrix (S6)		The state of the s	r tutrak. Tutkir orridi (barz d			4 149A, 153C,	153D)
	rface (S7) (LRR P,	S, T, U)						
Restrictive	ayer (if observed):						
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								
1006	not a	waer 1	relow	12"	1,00	o to	Inmi	partion
000.0		J			000	,,,,	٠, ١٢	-36.7017



Wetland data point wcmo036e_w facing west.



Wetland data point wcmo036e_w facing south.

Project/Site: ALP City/	County: Comberland Sampling Date: 9/30/11
Applicant/Owner: Dominion	State: N Sampling Point: Line 036 - u
Investigator(s): ESI- Roper, Johnson Section	
Landform (hillslope, terrace, etc.): Flat Local	al relief (concave, convex, none): None Slope (%): D - 2
Subregion (LRR or MLRA): LRR P Lat: 35.08	3129 Long: -78,73290 Datum: W6589
Soil Map Unit Name: Pains sandy loam, 0-7	1. Slopes NWI classification: NA
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 significantly distr	Ale Normal Circumstances present: Tes No
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
Heavy rain within 48 hrs.	
Power line ROW	
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) (LF	[17] [18] [18] [18] [18] [18] [18] [18] [18
☐ Saturation (A3) ☐ Hydrogen Sulfide Odor	####################################
24 1	along Living Roots (C3)
Sediment Deposits (B2)	on (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	n Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5) Under (Explain in Remains	18일상 (그리트) 보고 보고 있는데 이번에 대한 경험에 되었다면서 없는데 사람들이 되었다면서 되었다면 되었다면서
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
☐ Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	410
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	710
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
Remarks.	

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

2001 2001	Absolute	Dominan	t Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30# x 30++)	% Cover	Species	? Status	Number of Dominant Species	
1. hone				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:	(A/B)
6					
7				Prevalence Index worksheet:	
8				Total % Cover of: Multiply by:	
		= Total Co	over	OBL species x 1 =	_
50% of total cover;	NAME AND ADDRESS OF THE OWNER,			FACW species x 2 =	_
Sapling/Shrub Stratum (Plot size: 30ff x 30ff)	2070 01	total cove		FAC species x 3 =	
1. Liquidam bur styracifla	5	Y	FAL	FACU species x 4 =	
			11,0	UPL species x 5 =	
CONTROL OF A CONTROL OF THE REPORT OF THE PROPERTY OF THE PROP				Column Totals: (A)	
3.					
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	
	5	= Total Co	over	Problematic Hydrophytic Vegetation¹ (Expl	ain)
50% of total cover: 2.5				Problematic Hydrophytic Vegetation (Expi	anny
Herb Stratum (Plot size: 30 ft v 30 ft)		10101 0010		1	
1. Arundinaria gigantea	20	V	FACW	Indicators of hydric soil and wetland hydrology be present, unless disturbed or problematic.	must
2. Evpatorium capillisolium		N	FACU	The Late Early State of Utbook Claim of Manager William Court Country States Court Country Court And Court C	
	20	19	-	Definitions of Four Vegetation Strata:	
3. Agalinis fasciculata	Will be and because it is	-1	FACW	Tree - Woody plants, excluding vines, 3 in. (7.9)	6 cm) or
4. Dicharthelium acuminatum	30	У-	FAL	more in diameter at breast height (DBH), regar	dless of
5. Solidago rugosa	20	7	FAC	height.	
6. Pychian themum flexuosum	10	N	FACW	Sapling/Shrub - Woody plants, excluding vine	s, less
7. Estramia caroliniana	10	N	FAC	than 3 in. DBH and greater than 3.28 ft (1 m) to	all.
8.				Harb All bashage and (non-woody) plants read	ordloon
9.				Herb – All herbaceous (non-woody) plants, reg of size, and woody plants less than 3.28 ft tall.	aruless
TO CONTINUE TO A TURNOUS CONTINUES AND PRODUCT ON A PER OFFICIAL PRODUCT OF THE CONTINUES AND A CONTINUE TO A CONT					
10	-			Woody vine - All woody vines greater than 3.2	28 ft in
11.	THE STATE OF THE S			height.	
12	125	The second second			
		= Total Co			
50% of total cover: 62	5 20% of	total cove	er: 25		
Woody Vine Stratum (Plot size: 30 ft x 30 ft)				prosent to the season of the season of the	
1. none					
2.					
3.					
4	7.00 Employ				
5				Hydrophytic	
	An accommendation	= Total Co		Vegetation Present? Yes No	
50% of total cover:	20% of	total cove	er:		
Remarks: (If observed, list morphological adaptations belo	w).				

Daniel		to the depth			ator or commi	the absence of inc	ilicators.)
Depth (inches)	Color (moist)	%	Color (moist)	x Features % Tv	pe¹ Loc²	Texture	Remarks
0-6	104R3/2	100	Color (molety		200	SL	
TO ALMERONIA CONTRACT CONTRACT	10404/2	IDD				SL	
6-13	10 10 11/1	- 100 -	10 V O 41.		- M		
13-20	10/K9/2	75_	10 y 12 74	5 (_ 11_	<u> </u>	
1Type: C=C	oncentration, D=Dep	lation PM-E	Peduced Matrix M	S-Masked Sar	nd Grains	² Location: PL =F	Pore Lining, M=Matrix.
	Indicators: (Applic				iu Grams.		roblematic Hydric Soils ³ :
☐ Histosol					88) (LRR S, T, U		A9) (LRR O)
The state of the s	pipedon (A2)			ırface (S9) (LR			A10) (LRR S)
	istic (A3)			y Mineral (F1)			rtic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)			ed Matrix (F2)		The Control of the Co	oodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma				Bright Loamy Soils (F20)
District Co., and St. Co., or	Bodies (A6) (LRR P		Redox Dark			(MLRA 15	26-pail 7, 171 (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (1916) (19
	ucky Mineral (A7) (LI		Redox Depre	rk Surface (F7)			Material (TF2) v Dark Surface (TF12)
	resence (A8) (LRR Luck (A9) (LRR P, T)	"	Marl (F10) (L			17.1 La 17.0 L	in in Remarks)
	d Below Dark Surface	e (A11)		hric (F11) (MLI	RA 151)	Cirici (Expire	
2001 WHELL CO. STATE OF	ark Surface (A12)				12) (LRR O, P,	T) ³ Indicators	of hydrophytic vegetation and
	rairie Redox (A16) (I	MLRA 150A)	Umbric Surfa	ice (F13) (LRR	P, T, U)		ydrology must be present,
	Mucky Mineral (S1) (LRR O, S)		(F17) (MLRA		unless di	sturbed or problematic.
200 (0.05) (0.05) (0.05)	Sleyed Matrix (S4)		The second secon		RA 150A, 150B)		
Division Colonia California	Redox (S5)				(F19) (MLRA 149		,
	l Matrix (S6) Irface (S7) (LRR P, \$	2 T III	Anomalous E	sright Loamy S	oils (F2U) (MLRA	A 149A, 153C, 153I	')
	Layer (if observed)						
Type:	Layer (ii ebservea)						
Depth (in	ches):		_			Hydric Soil Pres	ent? Yes No
Remarks:	cnes)	Martine College Street				Tiyanio com Tree	
Remarks.							



Upland data point wcmo036_u facing north.



Upland data point wcmo036_u facing east.

Project/Site: Atlantic Coast Pipeline	City/Cou	nty: Cumberland Cou	nty	Sampling Date: 4/13/2016
Applicant/Owner: Dominion	•			Sampling Point: wcmf002f_w
	Section,			. •
Landform (hillslope, terrace, etc.): Flat				
				Slope (70): Datum: WGS 1984
Soil Map Unit Name: Nahunta loam		.,,		
Are climatic / hydrologic conditions on the site typica				
Are Vegetation, Soil, or Hydrology	significantly disturbed	d? Are "Normal	Circumstances" p	resent? Yes No
Are Vegetation, Soil, or Hydrology	naturally problematic	? (If needed, e	xplain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site	map showing sampl	ling point locatio	ns, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes	, No ls			
	, No	the Sampled Area	/	
	, No w	vithin a Wetland?	Yes	No
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:				tors (minimum of two required)
Primary Indicators (minimum of one is required; che			Surface Soil	· ·
	Aquatic Fauna (B13)	n.		getated Concave Surface (B8)
	Marl Deposits (B15) (LRR U		Drainage Pat	
· ·	Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alon		Moss Trim Li	Water Table (C2)
	Presence of Reduced Iron (Crayfish Burr	
	Recent Iron Reduction in Til			sible on Aerial Imagery (C9)
	hin Muck Surface (C7)	, ,		Position (D2)
Iron Deposits (B5)	Other (Explain in Remarks)		Shallow Aqui	tard (D3)
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)			Sphagnum m	noss (D8) (LRR T, U)
Field Observations:				
Surface Water Present? Yes No				
Water Table Present? Yes V No Saturation Present? Yes No No Saturation Present?	Depth (inches):			
Saturation Present? Yes No	Depth (inches):	Wetland H	lydrology Presen	t? Yes <u> </u>
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previo	us inspections), if ava	ilable:	
Remarks:				

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Acer rubrum	50	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Pinus taeda	40	Yes	FAC	Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				Descrit of Descinant Charies
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3333333 (A/B)
6				(VIII)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
0	90	= Total Cov		OBL species0 x 1 =0
50% -64-4-1 45			10	FACW species 40 x 2 = 80
50% of total cover:	20% 01	total cover:		FAC species155
Sapling/Shrub Stratum (Plot size: 0)	40	Vaa	EAC	FACU species 0 x 4 = 0
1. Acer rubrum	40	Yes	FAC	UPL species
2. Pinus taeda	5	No	FAC	105 545
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =2.79
5				Hydrophytic Vegetation Indicators:
6.				
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	45			3 - Prevalence Index is ≤3.0¹
22.5		= Total Cov	^	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 22.5	20% of	total cover:		
Herb Stratum (Plot size: 0)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	40	Yes	FACW	be present, unless disturbed or problematic.
2. Toxicodendron radicans	20	Yes	FAC	Definitions of Four Vegetation Strata:
3				The Mandagan substitution in a 2 in (7.0 pm) and
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 3 in. Don and greater than 3.20 it (1 in) 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.				
	60	= Total Cov	er	
50% of total cover: 30		total cover:	40	
Woody Vine Stratum (Plot size:0)				
1. Vitis sp.	10	Yes		
2				
3				
4				
5				Hydrophytic
	0 :	= Total Cov	er	Vegetation
50% of total cover: 5	20% of	total cover:	2	Present? Yes No
Remarks: (If observed, list morphological adaptations below				
Tromana. (Il appartata, list marphalogical dauptations pole	,.			

SOIL Sampling Point: wcmf002f_w

Depth	cription: (Describe Matrix	<u> </u>		x Features				•	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	
0-18	10YR 4/2	95	7.5YR 4/4	3	C	PL	C		
			10YR 5/6	2	С	M			
					'				
		· —— ·							
	-	· —— ·			-				
	-						·		
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL:	Pore Lining, M=Matrix	
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless othe	rwise note	ed.)		Indicators for	Problematic Hydric S	oils³:
Histoso			Polyvalue Be						
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)	
	listic (A3)		Loamy Muck			R O)		/ertic (F18) (outside M	
	en Sulfide (A4)		Loamy Gleye	,	F2)			Floodplain Soils (F19) (
	d Layers (A5) Bodies (A6) (LRR P	T 11\	✓ Depleted Ma Redox Dark	, ,	:6)		Anomalous	s Bright Loamy Soils (F	20)
-	ucky Mineral (A7) (LF		Depleted Da	•	,			t Material (TF2)	
	resence (A8) (LRR U		Redox Depre					ow Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) (L		-,			olain in Remarks)	,
	ed Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)	_ ` '	,	
Thick D	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) (LRR O, P,		s of hydrophytic vegeta	
	Prairie Redox (A16) (N					', U)		I hydrology must be pre	
-	Mucky Mineral (S1) (I	RR O, S)	Delta Ochric				unless	disturbed or problemation	C.
	Gleyed Matrix (S4)		Reduced Ve				••		
-	Redox (S5)		Piedmont Flo					3D)	
	d Matrix (S6) urface (S7) (LRR P, S	: T II)	Anomaious i	Srigrit Loar	riy Solis (rzu) (WLK	A 149A, 153C, 15	טט.	
	Layer (if observed):								
Type:									
	nches):						Hydric Soil Pre	sent? Yes	No
Remarks:							Trydric doi:11e	3CIIC: 1C3	
Nemarks.									



Photo 1
Wetland data point wcmf002f_w facing north



Photo 2
Wetland data point wcmf002f_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	county: Cumberland Co	ounty	Sampling Date: 4/13/2016		
Applicant/Owner: Dominion				Sampling Point: wcmf002e_w			
		Section	on, Township, Range:		- · · -		
Landform (hillslope, terrace, etc.): Flat							
Subregion (LRR or MLRA): P							
		_ Lai	Long.	NIMI -IIE	Datum. None		
Soil Map Unit Name: Nahunta loam					cation: None		
Are climatic / hydrologic conditions on the							
Are Vegetation, Soil, or H	ydrology	significantly distur	bed? Are "Norm	nal Circumstances"	present? Yes No		
Are Vegetation, Soil, or H	ydrology	naturally problema	atic? (If needed	, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS - Att	ach site ma	ap showing sam	pling point locat	ions, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No					
Hydric Soil Present?		No	Is the Sampled Area		/ Na		
Wetland Hydrology Present?		No	within a Wetland?	Yes	No		
Remarks:		•					
·							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one is re	equired; check	all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	Aqua	atic Fauna (B13)			getated Concave Surface (B8)		
✓ High Water Table (A2)	Marl Deposits (B15) (LRR U)				atterns (B10)		
Saturation (A3)	Hydr	Moss Trim L	ines (B16)				
Water Marks (B1)	Dry-Season	Water Table (C2)					
Sediment Deposits (B2)	n (C4)	Crayfish Bu					
Drift Deposits (B3)		Tilled Soils (C6)		/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Iron Deposits (B5)	Thin Othe	re)		Position (D2)			
Inundation Visible on Aerial Imagery		(3)	Shallow Aquitard (D3) ✓ FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)	, (=.)		Sphagnum moss (D8) (LRR T, U)				
Field Observations:					, ,,		
Surface Water Present? Yes	No	Depth (inches):					
Water Table Present? Yes	No	Depth (inches): 12					
	No	Depth (inches): 0	Wetland	Wetland Hydrology Present? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge	monitoring we	ell aerial photos pre	vious inspections) if a	vailable [.]			
gauge	,	,, -	, , , , , , , , , , , , , , , , , , ,				
Remarks:							

0		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant Species Across All Strata: 3 (B)
4				Species Across All Strata:3 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	 _ 0			OBL species $0 x 1 = 0$
0		= Total Cov	^	FACW species 50 x 2 = 100
	20% of	total cover:		FAC species 15 x 3 = 45
Sapling/Shrub Stratum (Plot size:) 1. Acer rubrum	5	Yes	FAC	FACU species 50 x 4 = 200
			170	UPL species
2.				Column Totals: 115 (A) 345 (B)
3				(1)
4				Prevalence Index = B/A =3
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	 5			3 - Prevalence Index is ≤3.0 ¹
2.5		= Total Cov	4	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2.5	20% of	total cover:		
Herb Stratum (Plot size: 0) 1. Eupatorium capillifolium	50	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundinaria gigantea	30	Yes	FACW	Definitions of Four Vegetation Strata:
3. Dichanthelium clandestinum	20	No	FACW	Tree Meady plants evaluding vines 2 in (7.6 cm) or
4. Rubus arvensis	10	No No	FAC	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. bbit and greater than 5.20 ft (1 m) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	110			
50% of total cover: 55		= Total Cov		
30 /0 OI total cover.	20% of	total cover:		
Woody Vine Stratum (Plot size: 0)				
1				
2				
3				
4				
5				Hydrophytic
_	0 :	= Total Cov	_	Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	v).			

SOIL Sampling Point: wcmf002e_w

Depth	cription: (Describe to Matrix			x Feature				•	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-6	10YR 2/1	100					CL		
6-18	10YR 5/2	90	7.5YR 4/4	10	С	PL/M	С		
				-					
-			-	-					
	· -								
	·								
¹Type: C=C	Concentration, D=Depl	etion. RM=	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Matrix.	
	Indicators: (Applica					-		Problematic Hydric Soils ³ :	
Histoso	l (A1)		Polyvalue Be	elow Surfa	ice (S8) (L	.RR S, T, U) 1 cm Muck	k (A9) (LRR O)	
	pipedon (A2)		Thin Dark Su					k (A10) (LRR S)	
	Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)					(O)	Reduced Vertic (F18) (outside MLRA 150A,B)		
	en Sulfide (A4)		Loamy Gleye		(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	d Layers (A5)		<u>✓</u> Depleted Ma					s Bright Loamy Soils (F20)	
-	Bodies (A6) (LRR P,		Redox Dark	•	,		(MLRA 1		
	ucky Mineral (A7) (LR							nt Material (TF2)	
	resence (A8) (LRR U) uck (A9) (LRR P, T)	,	Redox Depre Marl (F10) (L		0)			ow Dark Surface (TF12) plain in Remarks)	
	ed Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)	Other (Exp	Jan III Nemarks)	
	ark Surface (A12)	(/	Iron-Mangan				T) ³ Indicator	rs of hydrophytic vegetation and	
	Prairie Redox (A16) (N	ILRA 150 <i>A</i>	_					d hydrology must be present,	
Sandy	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (MI	RA 151)		unless	disturbed or problematic.	
Sandy	Gleyed Matrix (S4)		Reduced Ver						
	Redox (S5)		Piedmont Flo						
	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 15	3D)	
	urface (S7) (LRR P, S	, T, U)					T		
	Layer (if observed):								
Type:									
• •	nches):						Hydric Soil Pre	esent? Yes No	
Remarks:									



Photo 1
Wetland data point wcmf002e_w facing east



Photo 2
Wetland data point wcmf002e_w facing northwest

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland Co	unty	Sampling Date: 4/13/2016		
Applicant/Owner: Dominion					Sampling Point: wcmf002_u		
Investigator(s): SH, SA		Section	on, Township, Range:				
Landform (hillslope, terrace, etc.): Fl							
					Olope (70) Datum: WGS 1984		
		_ Lat:					
Soil Map Unit Name: Grantham loam					cation: None		
Are climatic / hydrologic conditions or							
Are Vegetation, Soil,	or Hydrology	_ significantly distur	bed? Are "Norm	al Circumstances"	oresent? Yes No		
Are Vegetation, Soil,	or Hydrology	_ naturally problema	atic? (If needed,	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS -	Attach site ma	p showing san	npling point locati	ons, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes	No					
Hydric Soil Present?	Yes		Is the Sampled Area				
Wetland Hydrology Present?		No V	within a Wetland?	Yes	No		
Remarks:							
Pine plantation							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one	is required; check a	all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	Aqua	tic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)		
High Water Table (A2)		Deposits (B15) (LR	R U)	Drainage Patterns (B10)			
Saturation (A3)					ines (B16)		
Water Marks (B1)	Oxidi	long Living Roots (C3)	Dry-Season	Water Table (C2)			
Sediment Deposits (B2)	Prese	n (C4)	Crayfish Burrows (C8)				
Drift Deposits (B3)		Tilled Soils (C6)					
Algal Mat or Crust (B4)	Thin		Geomorphic Position (D2)				
Iron Deposits (B5)	Other	(S)	Shallow Aquitard (D3) FAC-Neutral Test (D5)				
Inundation Visible on Aerial Ima	agery (B7)						
Water-Stained Leaves (B9) Field Observations:				Spriagnum	moss (D8) (LRR T, U)		
	s No <u>✔</u> I	Denth (inches):					
	No 🗸 I						
	No 🔽 I			Wetland Hydrology Present? Yes No ✔			
(includes capillary fringe)					it: 163 NO		
Describe Recorded Data (stream ga	auge, monitoring we	ell, aerial photos, pre	evious inspections), if av	ailable:			
Remarks:							

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
		Species?		Number of Dominant Species	
1. Pinus taeda	85	Yes	FAC	That Are OBL, FACW, or FAC: 4	(A)
2				Total Number of Dominant	
3					(B)
4					` ,
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 57.14285714	(A/B)
6.				That Are OBL, FACW, or FAC.	(A/D)
				Prevalence Index worksheet:	
7		-	·	Total % Cover of: Multiply by:	_
8	85		-	OBL species0 x 1 =0	
42.5		= Total Cov	17	FACW species 7 x 2 = 14	•
50% of total cover: 42.5	_ 20% of	total cover:	·	FAC species 113 x 3 = 339	•
Sapling/Shrub Stratum (Plot size:)		.,		FACU species $\frac{10}{x^4} = \frac{40}{x^4}$	•
1. Liquidambar styraciflua	20	Yes	FAC	0	•
2. Vaccinium corymbosum	5	No	FACW	UPL species	
3. Acer rubrum	5	No	FAC	Column Totals: (A)	(B)
4				Prevalence Index = B/A =3.02	
5				Trevalence index Birt	-
				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8	30			3 - Prevalence Index is ≤3.0 ¹	
45		= Total Cov	^	Problematic Hydrophytic Vegetation ¹ (Explain)
<u></u>	_ 20% of	total cover	6		
Herb Stratum (Plot size:0				¹ Indicators of hydric soil and wetland hydrology mu	ust
1. Parthenocissus quinquefolia	5	Yes	FACU	be present, unless disturbed or problematic.	
2. Acer rubrum	3	Yes	FAC	Definitions of Four Vegetation Strata:	
3. Arundinaria gigantea	2	Yes	FACW		
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cr more in diameter at breast height (DBH), regardles	
				height.	35 UI
5					
6				Sapling/Shrub – Woody plants, excluding vines, I than 3 in. DBH and greater than 3.28 ft (1 m) tall.	less
7				than 3 iii. DBH and greater than 3.20 it (1 iii) tail.	
8				Herb - All herbaceous (non-woody) plants, regard	lless
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine – All woody vines greater than 3.28 f	t in
11				height.	•
12.					
	10	= Total Cov	er		
50% of total cover: 5		total cover	_		
Woody Vine Stratum (Plot size:0)					
1. Vitis sp.	10	Yes			
2 Parthenocissus quinquefolia	5	Yes	FACU		
3					
4					
5				Hydrophytic	
<u>.</u>	15	= Total Cov	er	Vegetation	
50% of total cover: 7.5	_ 20% of	total cover:	3	Present? Yes No No	
Remarks: (If observed, list morphological adaptations below	/).				

SOIL Sampling Point: wcmf002_u

Profile Des	cription: (Describe	to the dept	h needed to docu	ment the i	ndicator	or confirm	the absence of i	ndicators.)	
Depth (in a land)	Matrix		ox Features		12	Tautura			
(inches) 0-6	Color (moist) 10YR 3/2	100	Color (moist)	%	Type ¹	Loc ²	Texture SCL	Rema	IKS
-	· 	 .							
6-18	10YR 4/4	95	5YR 4/6	5	C	PL	SCL		
¹Type: C=C	Concentration, D=Dep	oletion RM=	Reduced Matrix M	S=Masked	Sand Gr	ains	² Location: PL	=Pore Lining, M=I	Matrix
	Indicators: (Applic					unio.		Problematic Hyd	
Histoso			Polyvalue Be		•	RR S. T. U		k (A9) (LRR O)	
	pipedon (A2)		Thin Dark S					k (A10) (LRR S)	
	listic (A3)		Loamy Muck						ide MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gley						F19) (LRR P, S, T)
Stratifie	ed Layers (A5)		Depleted Ma				Anomalou	s Bright Loamy S	oils (F20)
_	Bodies (A6) (LRR P		Redox Dark				(MLRA		
	ucky Mineral (A7) (L l		Depleted Da					nt Material (TF2)	
	resence (A8) (LRR L	J)	Redox Depr		8)		-	ow Dark Surface	
l '	uck (A9) (LRR P, T)	o (A11)	Marl (F10) (I		/MLDA4	E4)	Other (Exp	olain in Remarks)	
-	ed Below Dark Surfac Park Surface (A12)	e (ATT)	Depleted Oc Iron-Mangar				T) ³ Indicato	rs of hydrophytic v	vegetation and
	Prairie Redox (A16) (I	MI RA 150A					•	d hydrology must	
	Mucky Mineral (S1) (Delta Ochric			, •,		disturbed or probl	
-	Gleyed Matrix (S4)	,,	Reduced Ve			0A, 150B)			
	Redox (S5)		Piedmont Fl				9A)		
Strippe	d Matrix (S6)		Anomalous I	Bright Loar	my Soils (F20) (MLR	A 149A, 153C, 15	3D)	
Dark Su	urface (S7) (LRR P, S	S, T, U)							
Restrictive	Layer (if observed)	:							
Type:									
Depth (ir	nches):						Hydric Soil Pre	esent? Yes	No
Remarks:							L		



Photo 1 Upland data point wcmf002_u facing west



Photo 2
Upland data point wcmf002_u facing east

Project/Site: Atlantic Coast Pipeline	City/Cou	nty: Cumberland Cou	nty	Sampling Date: 4/13/2016			
Applicant/Owner: Dominion	•		State: NC Sampling Point: wcmf002f_w				
	Section,			. •			
Landform (hillslope, terrace, etc.): Flat							
				Slope (70): Datum: WGS 1984			
Soil Map Unit Name: Nahunta loam							
Are climatic / hydrologic conditions on the site typica							
Are Vegetation, Soil, or Hydrology	significantly disturbed	d? Are "Normal	Circumstances" p	resent? Yes No			
Are Vegetation, Soil, or Hydrology	naturally problematic	? (If needed, e	xplain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS - Attach site	map showing sampl	ling point locatio	ns, transects	, important features, etc.			
Hydrophytic Vegetation Present? Yes	, No ls						
	, No	the Sampled Area	/				
	, No w	vithin a Wetland?	Yes	No			
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; che			Surface Soil	· ·			
	Aquatic Fauna (B13)	n.		getated Concave Surface (B8)			
	Marl Deposits (B15) (LRR U		Drainage Pat				
· ·	Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres alon		Moss Trim Li				
	Presence of Reduced Iron (Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8)				
	Recent Iron Reduction in Til		- · · · · · · · · · · · · · · · · · · ·				
	hin Muck Surface (C7)	, ,		Position (D2)			
Iron Deposits (B5)	Other (Explain in Remarks)		Shallow Aqui	tard (D3)			
Inundation Visible on Aerial Imagery (B7)			FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)			Sphagnum m	noss (D8) (LRR T, U)			
Field Observations:							
Surface Water Present? Yes No							
Water Table Present? Yes V No Saturation Present? Yes No No Saturation Present?	Depth (inches):						
Saturation Present? Yes No	Depth (inches):	Wetland H	lydrology Presen	t? Yes <u> </u>			
Describe Recorded Data (stream gauge, monitoring	g well, aerial photos, previo	us inspections), if ava	ilable:				
Remarks:							

0	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:)		Species?		Number of Dominant Species	
1. Acer rubrum	50	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)	
2. Pinus taeda	40	Yes	FAC	Total Number of Dominant	
3				Species Across All Strata: 6 (B)	
4				Descrit of Descinant Charies	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3333333 (A/B)	
6				(VIII)	
7				Prevalence Index worksheet:	
8				Total % Cover of: Multiply by:	
0	90	= Total Cov		OBL species0 x 1 =0	
500/ -64-4-1 45			10	FACW species 40 x 2 = 80	
50% of total cover:	20% 01	total cover:		FAC species155	
Sapling/Shrub Stratum (Plot size: 0)	40	Vaa	EAC	FACU species 0 x 4 = 0	
1. Acer rubrum	40	Yes	FAC	UPL species	
2. Pinus taeda	5	No	FAC	105 545	
3				Column Totals: (A) (B)	
4				Prevalence Index = B/A =2.79	
5				Hydrophytic Vegetation Indicators:	
6.					
				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8	45			3 - Prevalence Index is ≤3.0¹	
22.5		= Total Cov	^	Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover: 22.5	20% of	total cover:			
Herb Stratum (Plot size: 0)				¹ Indicators of hydric soil and wetland hydrology must	
1. Arundinaria gigantea	40	Yes	FACW	be present, unless disturbed or problematic.	
2. Toxicodendron radicans	20	Yes	FAC	Definitions of Four Vegetation Strata:	
3				The Mandagan substitution in a 2 in (7.0 pm) and	
4.				 Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless 	
				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 3 in. Don and greater than 3.20 it (1 in) 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.					
	60	= Total Cov	er		
50% of total cover: 30		total cover:	40		
Woody Vine Stratum (Plot size:0)					
1. Vitis sp.	10	Yes			
2					
3					
4					
5				Hydrophytic	
	0 :	= Total Cov	er	Vegetation	
50% of total cover: 5	20% of	total cover:	2	Present? Yes No	
Remarks: (If observed, list morphological adaptations below					
Tromana. (Il appartata, list marphalogical dauptatione pole	,.				

SOIL Sampling Point: wcmf002f_w

Depth	cription: (Describe Matrix	<u> </u>		x Features				•	
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks	
0-18	10YR 4/2	95	7.5YR 4/4	3	C	PL	C		
			10YR 5/6	2	С	M			
					'				
		· —— ·							
	-	· —— ·			-				
	-						·		
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL:	Pore Lining, M=Matrix	
Hydric Soil	Indicators: (Applic	able to all L	RRs, unless othe	rwise note	ed.)		Indicators for	Problematic Hydric S	oils³:
Histoso			Polyvalue Be						
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)	
	listic (A3)		Loamy Muck			R O)		/ertic (F18) (outside M	
	en Sulfide (A4)		Loamy Gleye	,	F2)			Floodplain Soils (F19) (
	d Layers (A5) Bodies (A6) (LRR P	T 11\	✓ Depleted Ma Redox Dark	, ,	:6)		Anomalous	s Bright Loamy Soils (F	20)
-	ucky Mineral (A7) (LF		Depleted Da	•	,			t Material (TF2)	
	resence (A8) (LRR U		Redox Depre					ow Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) (L		-,			olain in Remarks)	,
	ed Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)	_ ` '	,	
Thick D	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) (LRR O, P,		s of hydrophytic vegeta	
	Prairie Redox (A16) (N					', U)		I hydrology must be pre	
-	Mucky Mineral (S1) (I	RR O, S)	Delta Ochric				unless	disturbed or problemation	C.
	Gleyed Matrix (S4)		Reduced Ve				••		
-	Redox (S5)		Piedmont Flo					3D)	
	d Matrix (S6) urface (S7) (LRR P, S	: T II)	Anomaious i	Srigrit Loar	riy Solis (rzu) (WLK	A 149A, 153C, 15	טט.	
	Layer (if observed):								
Type:									
	nches):						Hydric Soil Pre	sent? Yes	No
Remarks:							Trydric doi:11e	3CIIC: 1C3	
Nemarks.									



Photo 1
Wetland data point wcmf002f_w facing north



Photo 2
Wetland data point wcmf002f_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	county: Cumberland Co	ounty	Sampling Date: 4/13/2016		
Applicant/Owner: Dominion				State: NC Sampling Point: wcmf002e_w			
• • • • • • • • • • • • • • • • • • • •		Section	on, Township, Range:		- · · -		
Landform (hillslope, terrace, etc.): Flat							
Subregion (LRR or MLRA): P							
		_ Lai	Long.	NA/I -I:6	Datum. None		
Soil Map Unit Name: Nahunta loam					cation: None		
Are climatic / hydrologic conditions on the							
Are Vegetation, Soil, or H	ydrology	significantly distur	bed? Are "Norm	nal Circumstances"	present? Yes No		
Are Vegetation, Soil, or H	ydrology	naturally problema	atic? (If needed	, explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS - Att	ach site ma	ap showing sam	pling point locat	ions, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No					
Hydric Soil Present?		No	Is the Sampled Area		/ Na		
Wetland Hydrology Present?		No	within a Wetland?	Yes	No		
Remarks:		•					
·							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is re	equired; check	all that apply)		Surface Soil	Cracks (B6)		
Surface Water (A1)	Aqua	atic Fauna (B13)			getated Concave Surface (B8)		
✓ High Water Table (A2)		Deposits (B15) (LRF	R U)		atterns (B10)		
Saturation (A3)	Hydr	rogen Sulfide Odor (0	C1)	Moss Trim L	ines (B16)		
Water Marks (B1)			long Living Roots (C3)	· · ·			
Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Burrows (C8)			
Drift Deposits (B3)		ent Iron Reduction in	Tilled Soils (C6)		/isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Iron Deposits (B5)		Muck Surface (C7) er (Explain in Remark	re)		Position (D2)		
Inundation Visible on Aerial Imagery		i (Explain in Noman	(3)	Shallow Aquitard (D3) ✓ FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)	, (=.)			Sphagnum moss (D8) (LRR T, U)			
Field Observations:					, ,,		
Surface Water Present? Yes	No	Depth (inches):					
Water Table Present? Yes	No	Depth (inches): 12					
	No	Depth (inches): 0	Wetland	l Hydrology Prese	nt? Yes 🔽 No		
(includes capillary fringe) Describe Recorded Data (stream gauge	monitoring we	ell aerial photos pre	vious inspections) if a	vailable [.]			
gauge	,	,, -	, , , , , , , , , , , , , , , , , , ,				
Remarks:							

0		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant Species Across All Strata: 3 (B)
4				Species Across All Strata:3 (B)
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	 _ 0			OBL species $0 x 1 = 0$
0		= Total Cov	^	FACW species 50 x 2 = 100
	20% of	total cover:		FAC species 15 x 3 = 45
Sapling/Shrub Stratum (Plot size:) 1. Acer rubrum	5	Yes	FAC	FACU species 50 x 4 = 200
· ·			170	UPL species
2.				Column Totals: 115 (A) 345 (B)
3				(1)
4				Prevalence Index = B/A =3
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	 5			3 - Prevalence Index is ≤3.0 ¹
2.5		= Total Cov	4	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2.5	20% of	total cover:		
Herb Stratum (Plot size: 0) 1. Eupatorium capillifolium	50	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundinaria gigantea	30	Yes	FACW	Definitions of Four Vegetation Strata:
3. Dichanthelium clandestinum	20	No	FACW	Tree Meady plants evaluding vines 2 in (7.6 cm) or
4. Rubus arvensis	10	No	FAC	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. bbit and greater than 5.20 ft (1 m) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	110			
50% of total cover: 55		= Total Cov		
30 /0 OI total cover.	20% of	total cover:		
Woody Vine Stratum (Plot size: 0)				
1				
2				
3				
4				
5				Hydrophytic
	0:	= Total Cov	er	Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	v).			

SOIL Sampling Point: wcmf002e_w

Profile Des	cription: (Describe	to the depth	needed to docur	nent the	indicator	or confirm	the absence of	of indicators.)
Depth	Matrix			x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc ²	Texture	Remarks
0-6	10YR 2/1	100					CL	
6-18	10YR 5/2	90 7	.5YR 4/4	10	С	PL/M		
								-
				-				_
				-	· 			
1- 0.0							2, ,,	DI D. 1111 MANA
	oncentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.
•	Indicators: (Application	able to all LF			•			or Problematic Hydric Soils ³ :
Histoso			Polyvalue Be					uck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					uck (A10) (LRR S)
	istic (A3)		Loamy Muck			₹ 0)		d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)			nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					ous Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P		Redox Dark					A 153B)
	ucky Mineral (A7) (LF		Depleted Da					rent Material (TF2)
	resence (A8) (LRR U)	Redox Depre		(8)		-	nallow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (L				Other (E	Explain in Remarks)
-	d Below Dark Surface	e (A11)	Depleted Oc				2	
	ark Surface (A12)		Iron-Mangan					tors of hydrophytic vegetation and
	rairie Redox (A16) (N		Umbric Surfa			⁻ , U)		and hydrology must be present,
-	/lucky Mineral (S1) (L	.RR O, S)	Delta Ochric				unle	ss disturbed or problematic.
_	Gleyed Matrix (S4)		Reduced Ver					
	Redox (S5)		Piedmont Flo					
	l Matrix (S6)		Anomalous E	Bright Loa	my Soils (F20) (MLR	A 149A, 153C,	153D)
	rface (S7) (LRR P, S							
Restrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil I	Present? Yes No
Remarks:							l	



Photo 1
Wetland data point wcmf002e_w facing east



Photo 2
Wetland data point wcmf002e_w facing northwest

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland Co	unty	Sampling Date: 4/13/2016		
Applicant/Owner: Dominion				State: NC Sampling Point: wcmf002_u			
Investigator(s): SH, SA		Section	on, Township, Range:				
Landform (hillslope, terrace, etc.): Fl							
					Olope (70) Datum: WGS 1984		
		_ Lat:					
Soil Map Unit Name: Grantham loam					cation: None		
Are climatic / hydrologic conditions or							
Are Vegetation, Soil,	or Hydrology	_ significantly distur	bed? Are "Norm	al Circumstances"	present? Yes No		
Are Vegetation, Soil,	or Hydrology	_ naturally problema	atic? (If needed,	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS -	Attach site ma	p showing san	npling point locati	ons, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes	No					
Hydric Soil Present?	Yes		Is the Sampled Area				
Wetland Hydrology Present?		No V	within a Wetland?	Yes	No		
Remarks:							
Pine plantation							
HYDROLOGY							
Wetland Hydrology Indicators:				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)	Aqua	tic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)		
High Water Table (A2)		Deposits (B15) (LR	R U)	Drainage Pa			
Saturation (A3)	Hydr	ogen Sulfide Odor (C1)	Moss Trim L	ines (B16)		
Water Marks (B1)	Oxidi	zed Rhizospheres a	long Living Roots (C3)	Roots (C3) Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Prese	ence of Reduced Iro	n (C4)	Crayfish Burrows (C8)			
Drift Deposits (B3)		nt Iron Reduction in	Tilled Soils (C6)				
Algal Mat or Crust (B4)		Muck Surface (C7)		Geomorphic Position (D2)			
Iron Deposits (B5)		r (Explain in Remarl	(S)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Ima	agery (B7)			FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)			
Water-Stained Leaves (B9) Field Observations:				Spriagnum	11055 (D0) (ERR 1, 0)		
	No 🔽 I	Denth (inches):					
	No V						
	No 🔽			Hydrology Prese	nt? Yes No ✔		
(includes capillary fringe)					it: 163 140		
Describe Recorded Data (stream ga	auge, monitoring we	ell, aerial photos, pre	evious inspections), if av	ailable:			
Remarks:							

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
		Species?		Number of Dominant Species	
1. Pinus taeda	85	Yes	FAC	That Are OBL, FACW, or FAC: 4	(A)
2				Total Number of Dominant	
3					(B)
4					` ,
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 57.14285714	(A/B)
6.				That Are OBL, FACW, or FAC.	(A/D)
				Prevalence Index worksheet:	
7		-		Total % Cover of: Multiply by:	_
8	85			OBL species0 x 1 =0	
42.5		= Total Cov	17	FACW species 7 x 2 = 14	-
50% of total cover: 42.5	_ 20% of	total cover:	:	FAC species 113 x 3 = 339	-
Sapling/Shrub Stratum (Plot size:)		.,	=	FACU species 10 x 4 = 40	-
1. Liquidambar styraciflua	20	Yes	FAC	0	•
2. Vaccinium corymbosum	5	No	FACW	UPL species x 5 =	
3. Acer rubrum	5	No	FAC	Column Totals: (A)	(B)
4				Prevalence Index = B/A =3.02	
5				Trevalence index Birt	=-
				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8	30			3 - Prevalence Index is ≤3.0 ¹	
45		= Total Cov	•	Problematic Hydrophytic Vegetation ¹ (Explain	1)
<u></u>	_ 20% of	total cover	. 6		
Herb Stratum (Plot size:0				¹ Indicators of hydric soil and wetland hydrology m	ust
1. Parthenocissus quinquefolia	5	Yes	FACU	be present, unless disturbed or problematic.	
2. Acer rubrum	3	Yes	FAC	Definitions of Four Vegetation Strata:	
3. Arundinaria gigantea	2	Yes	FACW		
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cmore in diameter at breast height (DBH), regardle	
				height.	55 UI
5					
6				Sapling/Shrub – Woody plants, excluding vines, than 3 in. DBH and greater than 3.28 ft (1 m) tall.	less
7				than 3 iii. DBH and greater than 3.26 it (1 iii) tali.	
8				Herb - All herbaceous (non-woody) plants, regard	dless
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine – All woody vines greater than 3.28 f	ft in
11				height.	
12.					
	10	= Total Cov	er		
50% of total cover: 5		total cover	_		
Woody Vine Stratum (Plot size:0)					
1. Vitis sp.	10	Yes			
2 Parthenocissus quinquefolia	5	Yes	FACU		
3					
4					
5				Hydrophytic	
<u>.</u>	15	= Total Cov	er er	Vegetation	
50% of total cover: 7.5	_ 20% of	total cover:	:3	Present? Yes No No	
Remarks: (If observed, list morphological adaptations below	/).				

SOIL Sampling Point: wcmf002_u

Profile Des	cription: (Describe	to the dept	h needed to docu	ment the i	ndicator	or confirm	the absence of i	ndicators.)	
Depth (in a land)	Matrix		ox Features		12	Tautura			
(inches) 0-6	Color (moist) 10YR 3/2	100	Color (moist)	%	Type ¹	Loc ²	Texture SCL	Rema	IKS
-	· 	 .							
6-18	10YR 4/4	95	5YR 4/6	5	C	PL	SCL		
¹Type: C=C	Concentration, D=Dep	oletion RM=	Reduced Matrix M	S=Masked	Sand Gr	ains	² Location: PL	=Pore Lining, M=I	Matrix
	Indicators: (Applic					unio.		Problematic Hyd	
Histoso			Polyvalue Be		•	RR S. T. U		k (A9) (LRR O)	
	pipedon (A2)		Thin Dark S					k (A10) (LRR S)	
	listic (A3)		Loamy Muck						ide MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gley						F19) (LRR P, S, T)
Stratifie	ed Layers (A5)		Depleted Ma				Anomalou	s Bright Loamy S	oils (F20)
_	Bodies (A6) (LRR P		Redox Dark				(MLRA		
	ucky Mineral (A7) (L l		Depleted Da					nt Material (TF2)	
	resence (A8) (LRR L	J)	Redox Depr		8)		-	ow Dark Surface	
l '	uck (A9) (LRR P, T)	o (A11)	Marl (F10) (I		/MLDA4	E4)	Other (Exp	olain in Remarks)	
-	ed Below Dark Surfac Park Surface (A12)	e (ATT)	Depleted Oc Iron-Mangar				T) ³ Indicato	rs of hydrophytic v	vegetation and
	Prairie Redox (A16) (I	MI RA 150A					•	d hydrology must	
	Mucky Mineral (S1) (Delta Ochric			, •,		disturbed or probl	
-	Gleyed Matrix (S4)	,,	Reduced Ve			0A, 150B)			
	Redox (S5)		Piedmont Fl				9A)		
Strippe	d Matrix (S6)		Anomalous I	Bright Loar	my Soils (F20) (MLR	A 149A, 153C, 15	3D)	
Dark Su	urface (S7) (LRR P, S	S, T, U)							
Restrictive	Layer (if observed)	:							
Type:									
Depth (ir	nches):						Hydric Soil Pre	esent? Yes	No
Remarks:							L		



Photo 1 Upland data point wcmf002_u facing west



Photo 2
Upland data point wcmf002_u facing east

Project/Site: Atlantic Coast Pipeline		City/C	ounty: Cumberland Cou	inty	Sampling Date: 4/13/2016		
Applicant/Owner: Dominion				State: NC Sampling Point: wcmf003f_w			
		Section	on, Township, Range: N				
Landform (hillslope, terrace, etc.): Flat							
					Datum: WGS 1984		
Soil Map Unit Name: Nahunta loam		Lat	Long	NIM/L plannific	ootion: PFO4B		
Are climatic / hydrologic conditions on the		. Hala than a few and M	. No V	INVVI CIASSIII	Dation.		
Are Vegetation, Soil, or							
Are Vegetation, Soil, or	Hydrology	naturally problema	atic? (If needed, e	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS – A	ttach site ma	ap showing sam	pling point location	ons, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No	le the Commissi Area				
Hydric Soil Present?		No	Is the Sampled Area within a Wetland?	Vac V	, No		
Wetland Hydrology Present?	Yes 🔽	No	within a wettand:	163	NO		
Remarks: NC WAM - Hardwood Flat							
NC WAW - Hardwood Hat							
HYDROLOGY							
Wetland Hydrology Indicators:				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)	Aqu	atic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)		
✓ High Water Table (A2)	Marl	Deposits (B15) (LRF	R U)	Drainage Pa	tterns (B10)		
✓ Saturation (A3)	Hyd	rogen Sulfide Odor (0	C1)	Moss Trim L	ines (B16)		
Water Marks (B1)			long Living Roots (C3)	Dry-Season	Water Table (C2)		
Sediment Deposits (B2)		sence of Reduced Iro		Crayfish Burrows (C8)			
Drift Deposits (B3)		ent Iron Reduction in	Tilled Soils (C6)		isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Muck Surface (C7)	,		Position (D2)		
Iron Deposits (B5)		er (Explain in Remark	S)	Shallow Aquitard (D3)			
Inundation Visible on Aerial ImageWater-Stained Leaves (B9)	эгу (В7)			✓ FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)			
Field Observations:				Spriagrium	11055 (D6) (ERR 1, 0)		
	No 🗸	Depth (inches):					
	No						
Saturation Present? Yes	No	Depth (inches): 0	Wetland H	Hydrology Presei	nt? Yes ✔ No		
(includes capillary fringe)				-	100 1.0		
Describe Recorded Data (stream gaug	je, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ailable:			
Remarks:							
Remarks.							

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer rubrum	70	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2. Pinus taeda	10	No	FAC	Total Number of Dominant
3. Liquidambar styraciflua	10	No	FAC	Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				(VB)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	90	= Total Cov	er	OBL species x 1 = 15
50% of total cover:45		total cover:	10	FACW species 80
Sapling/Shrub Stratum (Plot size: 0)	20 /0 01	total cover.		FAC species125
1 Lyonia lucida	40	Yes	FACW	FACU species0 x 4 =0
A	30	Yes	FAC	UPL species $0 \times 5 = 0$
L	10	No	FACW	Column Totals: 220 (A) 550 (B)
3. Ilex coriacea	 5	No	FACW	(-)
4. Vaccinium corymbosum				Prevalence Index = B/A =
5. Viburnum dentatum		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 ¹
	90	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 45	20% of	total cover:	18	
Herb Stratum (Plot size: 0)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	15	Yes	FACW	be present, unless disturbed or problematic.
2. Lyonia lucida	10	Yes	FACW	Definitions of Four Vegetation Strata:
3. Woodwardia areolata	10	Yes	OBL	
4 Woodwardia virginica	5	No	OBL	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 3 iii. DBH and greater than 3.20 it (1 iii) taii.
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				
	40	= Total Cov	er	
50% of total cover: 20	20% of	total cover:	8	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
5				Hydrophytic
0		= Total Cov		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:		105 NO
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wcmf003f_w

Color (molst)	Depth	cription: (Describe to Matrix	•		x Features				-
1	•		%			1	Loc ²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Location: PL=Pore Lining, M=Matrix.	0-6	10YR 3/1	98 7.	5YR 4/4	2	C	M	CL	
10YR 5/1 45 7.5YR 6/8 20 C M SIC 1Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1Type: C=Concentration, D=Depletion, RM=Reduced Matrix. 1 Concentration Matrix. 1 cm Muck (A9) (LRR O)	6-18	10YR 6/2	35					SIC	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Tydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A) Stratified Layers (A5) Piedmont Floodplain Soils (F19) (LRR P, S, T, U) Peleted Matrix (F2) Piedmont Floodplain Soils (F10) (LRR P, S, T, U) Muck Presence (A8) (LRR P, T, U) Pepleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T, U) Pepleted Ochric (F11) (MLRA 151) Poleted Below Dark Surface (A12) Poleted Ochric (F11) (MLRA P, T, U) Poleted Ochric (F11) (MLRA 151) Poleted Ochric (F17) (MLRA 151) Poleted Ochric (F18) (MLRA 150A, 150B) Poleted Oc				EVD 6/9	20				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils		1018 5/1	45 7.	318 0/0			IVI		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils	-		· 	-			-		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)			· 						
Histosol (A1)							ains.		•
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) How Presence (A8) (LRR P, T, U) Depleted Matrix (F2) How Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150/2 Piedmont Floodplain Soils (F19) (LRR P, S) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Presence (A8) (LRR P, T, U) How Presence (A8) (LRR P, T, U) Depleted Dark Surface (F6) How Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	Hydric Soil	Indicators: (Applica	able to all LR	Rs, unless other	wise note	ed.)		Indicators fo	r Problematic Hydric Soils ³ :
Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Redox Depressions (F8) Nuck Presence (A8) (LRR U) Redox Depressions (F8) Pepleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Depth dinches): Loamy Mucky Mineral (F1) (LRR O) Piedmont Floodplain Soils (F19) (LRR O) Piedmont Floodplain Soils (F19) (MLRA 149A) Piedmont Floodplain Soils (F19) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A)									
Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Bedox Dark Surface (F6) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Dark Surface (F1) (LRR U) Depleted Dark Surface (F1) Marl (F10) (LRR U) Depleted Deric (F11) (MLRA 151) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (LRR P, S) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Iron-Manganese Masses (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 150A) Nomalous Bright Loamy Soils (F20) (MLRA 149A) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No									
Stratified Layers (A5)					-		. O)		
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A) unless disturbed or problematic. Sandy Redox (S5) Reduced Vertic (F18) (MLRA 150A, 150B) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No		, ,				F2)			
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)			T. U)			6)			
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Reduced Vertic (F18) (MLRA 150A, 150B) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	_				•	,			
1 cm Muck (A9) (LRR P, T)									` ,
Thick Dark Surface (A12)			,			,			, ,
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	Deplete	d Below Dark Surface	e (A11)	Depleted Och	nric (F11)	(MLRA 1	51)		
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed):	Thick D	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) (LRR O, P,		
Sandy Gleyed Matrix (S4)							, U)		
Sandy Redox (S5)								unless	s disturbed or problematic.
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No								- 4 \	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No									E3D)
Restrictive Layer (if observed): Type: Depth (inches):			T 11)	Anomaious B	origini Loar	riy Solis (-20) (IVILK)	A 149A, 153C, 1	530)
Type:								1	
Depth (inches): No									
				_				Unadaia Cail Da	
Remarks:		icnes):						Hydric Soli Pr	esent? Yes No
	Remarks:								



Photo 1
Wetland data point wcmf003f_w facing north



Photo 2
Wetland data point wcmf003f_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	county: Cumberla	and Coun	ty	Sampling Date: 4/13/2016
Applicant/Owner: Dominion						Sampling Point: wcmf003e_w
• • • • • • • • • • • • • • • • • • • •		Section				
Landform (hillslope, terrace, etc.): Flat						
Subregion (LRR or MLRA): P		1 at: 35.06367451	Tomor (corroavo, c	Long: -78	3.73491032	0.0pb (70)
Soil Map Unit Name: Nahunta loam		Lai		Long.	NIMI eleccific	Datum
Are climatic / hydrologic conditions on the site	h	the in time and the second of	/ NI-	v "		Cation.
Are Vegetation, Soil, or Hydro						
Are Vegetation, Soil, or Hydro					plain any answe	
SUMMARY OF FINDINGS – Attach	site ma	ap showing sam	npling point l	location	ns, transects	s, important features, et
Hydrophytic Vegetation Present? Ye	s <u> </u>	No	Is the Sampled	d Area		
		No	within a Wetlar		Yes 🗸	, No
Wetland Hydrology Present? Ye	s <u> </u>	No				
NWI Polygon Disturbed utility ROW						
HYDROLOGY						
Wetland Hydrology Indicators:				3	Secondary Indica	ators (minimum of two required
Primary Indicators (minimum of one is require	ed; check	all that apply)			Surface Soil	Cracks (B6)
Surface Water (A1)		atic Fauna (B13)		-		getated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LRF		-	Drainage Pa	
Saturation (A3)	-	rogen Sulfide Odor (0		-	Moss Trim L	
Water Marks (B1)		lized Rhizospheres a			-	Water Table (C2)
Sediment Deposits (B2) Drift Deposits (B3)		sence of Reduced Iro ent Iron Reduction in			✓ Crayfish Bur Saturation V	rows (C8) isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)	Tilled Solls (Co)	, -		Position (D2)
Iron Deposits (B5)		er (Explain in Remark	(s)	-	Shallow Aqu	` '
Inundation Visible on Aerial Imagery (B)		` '	,	_	FAC-Neutral	
Water-Stained Leaves (B9)				-	Sphagnum n	noss (D8) (LRR T, U)
Field Observations:						
		Depth (inches):				
Water Table Present? Yes I	lo	Depth (inches): $\frac{10}{0}$				
	lo	Depth (inches): 0	We	etland Hy	drology Preser	nt? Yes 🗸 No
(includes capillary fringe) Describe Recorded Data (stream gauge, mo	nitoring w	ell, aerial photos, pre	vious inspections	s), if avail	able:	
Remarks:						

Tree Stratum (Plot size: 0) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: 4 2.	(A) (B)
2	(B)
4	
5	(5)
6	(A/B)
Frevalence index worksheer	
7 Total % Cover of: Multiply by:	
8 OBL species 0 x 1 = 0	_
= Total Cover 20	-
FAC appeign 85 v.2 = 255	-
A Pinus taeda 10 Yes FAC FACU species 0 x 4 = 0	_
2 Liquidambar styraciflua 5 Yes FAC UPL species v 5 = 0	=
3 Column Totals: (A) 295	_ (B)
4 Prevalence Index = B/A =2.8	_
5 Hydrophytic Vegetation Indicators:	
6 1 - Rapid Test for Hydrophytic Vegetation	
7	
8	
——— = Total Cover Problematic Hydrophytic Vegetation (Explain	1)
50% of total cover: 7.5 20% of total cover: 3	
Herb Stratum (Plot size: 0) 1. Andropogon virginicus 50 Yes FAC 1 Indicators of hydric soil and wetland hydrology material be present, unless disturbed or problematic.	ust
2. Arundinaria gigantea 20 Yes FACW Definitions of Four Vegetation Strata:	
3. Rubus arvensis 10 No FAC Tree Woody plants, evaluating vines, 3 in 77.6 c	m) or
4. Pinus taeda 5 No FAC Tree – Woody plants, excluding vines, 3 in. (7.6 of more in diameter at breast height (DBH), regardless	
5. Acer rubrum 5 No FAC 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, regar	dless
9 of size, and woody plants less than 3.28 ft tall.	aiooo
10 Woody vine – All woody vines greater than 3.28	ft in
11 height.	
12	
90 = Total Cover	
50% of total cover: 45 20% of total cover: 18	
Woody Vine Stratum (Plot size:)	
1	
2	
3	
4	
_	
5 Hydrophytic	
0 = Total Cover Vegetation	
0 = Total Cover Vegetation Present? Ves No.	
0 = Total Cover Vegetation Present? Yes No	
0 = Total Cover Vegetation Present? Yes No	
0 = Total Cover Vegetation Present? Yes No	
0 = Total Cover Vegetation Present? Yes No	
0 = Total Cover Vegetation Present? Yes No	

SOIL Sampling Point: wcmf003e_w

	cription: (Describe t	o the depti				or confirm	the absence of ir	ndicators.)
Depth (inches)	Matrix Color (moist)	%	Redox Color (moist)	x Feature: %	s Type ¹	Loc ²	Texture	Remarks
(inches) 0-4	10YR 3/1	100	Color (moist)	70	туре	LOC	SC	Remarks
4-10	10YR 4/1		10YR 6/1	15	D	М	SCL	
10-18	10YR 6/2	90	7.5YR 5/8	10	C	PL/M	SICL	
Hydric Soil Histoso Histic E Black H Hydroge Stratifie Organic 5 cm Me Muck P 1 cm Me Deplete Thick D Coast F Sandy N Sandy N Strippee Dark St Restrictive	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) (N Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) (LRR P, S Layer (if observed):	T, U) R P, T, U) (A11) (A11) (ILRA 150A) RR O, S)	RRs, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mat Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Och Iron-Mangane Umbric Surfa Delta Ochric Reduced Ver Piedmont Flo Anomalous B	wise note of the complete comp	ed.) ce (S8) (L) (LRR S, (F1) (LRR F2) (6) (F7) 8) (MLRA 15 es (F12) ((LRR P, T LRA 151) (MLRA 15 oils (F19)	RR S, T, U T, U) O) LRR O, P, U) 0A, 150B) (MLRA 149	Indicators for I Indicators I Indicators wetland unless of I Indicators I In	(A10) (LRR S) Yertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T) S Bright Loamy Soils (F20) 53B) t Material (TF2) ow Dark Surface (TF12) clain in Remarks) s of hydrophytic vegetation and hydrology must be present, disturbed or problematic. BD)



Photo 1 Wetland data point wcmf003e_w facing north



Photo 2
Wetland data point wcmf003e_w facing south

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland Co	unty	Sampling Date: 4/13/2016	
Applicant/Owner: Dominion			,	State: NC	Sampling Point: wcmf003_u	
• •		Section	on, Township, Range: N			
					Slope (%): 1	
Subregion (LRR or MLRA): P	Lat					
Soil Map Unit Name: Grantham loam			.,			
Are climatic / hydrologic conditions on the						
Are Vegetation, Soil, or H	lydrologysig	nificantly distur	bed? Are "Norma	al Circumstances"	present? Yes No	
Are Vegetation, Soil, or H	lydrologynat	turally problema	atic? (If needed,	explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS - Att	tach site map sl	howing sam	npling point locati	ons, transects	s, important features, etc.	
Lhidranhitia Vagatatian Procent?	Vec No.	~				
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No No		Is the Sampled Area			
Wetland Hydrology Present?	Yes No		within a Wetland?	Yes	No	
Remarks:	100100_	<u> </u>				
Disturbed utility ROW						
HYDROLOGY						
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)	
Primary Indicators (minimum of one is r	equired: check all th:	at annly)		Surface Soil		
Surface Water (A1)	Aquatic Fa				getated Concave Surface (B8)	
High Water Table (A2)	Aquatic Fa		5 11/	Drainage Patterns (B10)		
Saturation (A3)		Sulfide Odor (Moss Trim L		
Water Marks (B1)			long Living Roots (C3)		Water Table (C2)	
Sediment Deposits (B2)		of Reduced Iro		Crayfish Bur		
Drift Deposits (B3)			Tilled Soils (C6)	-	/isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Thin Muck		,		Position (D2)	
Iron Deposits (B5)		plain in Remark	(s)	Shallow Aqu		
Inundation Visible on Aerial Imager	y (B7)			FAC-Neutra	l Test (D5)	
Water-Stained Leaves (B9)				Sphagnum r	moss (D8) (LRR T, U)	
Field Observations:						
Surface Water Present? Yes	No 🖍 Depth	n (inches):				
	No 🖍 Depth					
	No 🖍 Depth	n (inches):	Wetland	Hydrology Preser	nt? Yes No	
(includes capillary fringe) Describe Recorded Data (stream gauge	monitoring well ae	rial photos, pre	vious inspections) if av	railable		
Booding Noodinga Bata (official) gauge	2, morntoning won, do	riai priotoo, pro	vious inopositorio), ii uv	anabio.		
Remarks:						
Tromano.						

0		Dominant		Dominance Test worksheet:
		Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	0	= Total Cov	er	OBL species x 1 = 0
50% of total cover:0	20% of	total cover:	0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 0)				FAC species 25 x 3 = 75
1				FACU species x 4 = 80
				UPL species0 x 5 =0
2				Column Totals:45 (A)155 (B)
3				
4				Prevalence Index = B/A =3.44
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Eupatorium capillifolium	10	Yes	FACU	be present, unless disturbed or problematic.
2. Potentilla simplex	10	Yes	FACU	Definitions of Four Vegetation Strata:
3. Rubus arvensis	10	Yes	FAC	_
4 Andropogon virginicus	10	Yes	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Liquidambar styraciflua	5	No	FAC	height.
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 6 m. BBT and greater than 6.20 h (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				
		= Total Cov	er	
50% of total cover: 22.5	20% of	total cover:	9	
Woody Vine Stratum (Plot size: 0)				
1				
2				
3.				
4.				
5.				
o	0 :	= Total Cov		Hydrophytic Vegetation
50% of total cover:0		total cover:		Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations below	N).			

SOIL Sampling Point: wcmf003_u

Depth	Matrix		Redo	x Feature	S		the absence of i		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	(S
0-5	2.5Y 2.5/1	100					CL		
5-18	2.5Y 5/4	100					C		
				_					
	oncentration, D=Dep					ains.		Problems 4: New York	
-	Indicators: (Application)	able to all I				DD C T 11		Problematic Hydr	ric Soils":
Histosol			Polyvalue Be Thin Dark Su						
	pipedon (A2) istic (A3)		Loamy Muck					: (A10) (LRR S) /ertic (F18) (outsic	Ιο ΜΙ RΔ 150Δ R
	en Sulfide (A4)		Loamy Gleye			. 0,		Floodplain Soils (F	
	d Layers (A5)		Depleted Ma		· -)			s Bright Loamy Soi	
	Bodies (A6) (LRR P	T, U)	Redox Dark		- 6)		(MLRA 1		(*,
-	ucky Mineral (A7) (LR		Depleted Da					t Material (TF2)	
	resence (A8) (LRR U		Redox Depre	essions (F	8)		Very Shall	ow Dark Surface (ΓF12)
1 cm Mi	uck (A9) (LRR P, T)		Marl (F10) (I	_RR U)			Other (Exp	lain in Remarks)	
	d Below Dark Surface	e (A11)	Depleted Oc	, ,	•	•	•		
	ark Surface (A12)		Iron-Mangan					s of hydrophytic ve	-
	Prairie Redox (A16) (N					, U)		hydrology must be	
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric			0.4 4E0D\	unless	disturbed or proble	matic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Flo				١٨١		
-	d Matrix (S6)						A 149A, 153C, 15	3D)	
	ırface (S7) (LRR P, S	. T. U)	Anomalous I	ongni Loa	illy Colla (20) (MEIX)	1 1 1 2 2 7 , 1 3 3 0 , 1 3	30)	
	Layer (if observed):								
Туре:							Hydric Soil Pre	sent? Yes	No 🗸
Туре:			<u> </u>				Hydric Soil Pre	sent? Yes	No
Type: Depth (in			<u> </u>				Hydric Soil Pre	sent? Yes	No
Type: Depth (in			<u> </u>				Hydric Soil Pre	sent? Yes	No
Type: Depth (in			<u> </u>				Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No <u> </u>
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No_V
Type: Depth (in							Hydric Soil Pre	sent? Yes	No V
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No V
Type: Depth (in							Hydric Soil Pre	sent? Yes	
Type: Depth (in							Hydric Soil Pre	sent? Yes	No V
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No



Photo 1 Upland data point wcmf003_u facing northwest



Photo 2
Upland data point wcmf003_u facing south

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland Cou	unty	Sampling Date: 4/13/2016
Applicant/Owner: Dominion		•		State: NC	Sampling Point: wcmf003f_w
Investigator(s): SH, SA			on, Township, Range: N		
					Slope (%): 0
Subregion (LRR or MLRA): P					
Soil Map Unit Name: Nahunta loam			Long		
Are climatic / hydrologic conditions on the	site typical for	this time of year? Y	es No 🗸	(If no explain in F	Remarks)
Are Vegetation, Soil, or H					
Are Vegetation, Soil, or H					
SUMMARY OF FINDINGS – Att					
- Autorition Photos Autorition				ono, transcott	, important reatures, etc.
Hydrophytic Vegetation Present?		No	Is the Sampled Area		
Hydric Soil Present?		No	within a Wetland?	Yes	No
Wetland Hydrology Present? Remarks:	Yes	No			
NC WAM - Hardwood Flat					
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is r				Surface Soil	
Surface Water (A1)		atic Fauna (B13)			getated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LRI		Drainage Pa	
Saturation (A3)		rogen Sulfide Odor ((U1) long Living Roots (C3)	Moss Trim L	ines (B16) Water Table (C2)
Water Marks (B1) Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Bur	
Drift Deposits (B3)		ent Iron Reduction in		-	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)			Position (D2)
Iron Deposits (B5)		er (Explain in Remark	(s)	Shallow Aqu	
Inundation Visible on Aerial Imager				✓ FAC-Neutral	
Water-Stained Leaves (B9)				Sphagnum r	moss (D8) (LRR T, U)
Field Observations:					
		Depth (inches):			
		Depth (inches): $\frac{4}{0}$			
Saturation Present? Yes Yes	No	Depth (inches): 0	Wetland	Hydrology Presei	nt? Yes V No
Describe Recorded Data (stream gauge	, monitoring we	ell, aerial photos, pre	vious inspections), if av	ailable:	
Remarks:					

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species
1. Acer rubrum	70	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2. Pinus taeda	10	No	FAC	Total Number of Dominant
3. Liquidambar styraciflua	10	No	FAC	Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				(VB)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	90	= Total Cov	er	OBL species x 1 = 15
50% of total cover:45		total cover:	10	FACW species 80
Sapling/Shrub Stratum (Plot size: 0)	20 /0 01	total cover.		FAC species125
1 Lyonia lucida	40	Yes	FACW	FACU species0 x 4 =0
A	30	Yes	FAC	UPL species $0 \times 5 = 0$
L	10	No	FACW	Column Totals: 220 (A) 550 (B)
3. Ilex coriacea	 5	No	FACW	(-)
4. Vaccinium corymbosum				Prevalence Index = B/A = 2.5
5. Viburnum dentatum		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 ¹
	90	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 45	20% of	total cover:	18	
Herb Stratum (Plot size: 0)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	15	Yes	FACW	be present, unless disturbed or problematic.
2. Lyonia lucida	10	Yes	FACW	Definitions of Four Vegetation Strata:
3. Woodwardia areolata	10	Yes	OBL	
4 Woodwardia virginica	5	No	OBL	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 3 iii. DBH and greater than 3.20 it (1 iii) taii.
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				
	40	= Total Cov	er	
50% of total cover: 20	20% of	total cover:	8	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
5				Hydrophytic
0		= Total Cov		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:		105 NO
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wcmf003f_w

Color (molst)	Depth	cription: (Describe to Matrix	•		x Features				-
1	•		%			1	Loc ²	Texture	Remarks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Location: PL=Pore Lining, M=Matrix.	0-6	10YR 3/1	98 7.	5YR 4/4	2	C	M	CL	
10YR 5/1 45 7.5YR 6/8 20 C M SIC 1Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1Type: C=Concentration, D=Depletion, RM=Reduced Matrix. 1 Concentration Matrix. 1 cm Muck (A9) (LRR O)	6-18	10YR 6/2	35					SIC	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Tydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A) Stratified Layers (A5) Piedmont Floodplain Soils (F19) (LRR P, S, T, U) Peleted Matrix (F2) Piedmont Floodplain Soils (F10) (LRR P, S, T, U) Muck Presence (A8) (LRR P, T, U) Pepleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T, U) Pepleted Ochric (F11) (MLRA 151) Poleted Below Dark Surface (A12) Poleted Ochric (F11) (MLRA P, T, U) Poleted Ochric (F11) (MLRA 151) Poleted Ochric (F17) (MLRA 151) Poleted Ochric (F18) (MLRA 150A, 150B) Poleted Oc				EVD 6/9	20				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils		1018 5/1	45 7.	318 0/0			IVI		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils	-		· 	-			-		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histosol (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Houck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Redox (S5) Sandy Redox (S5) Sandy Redox (S5) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F11) (MLRA 1514) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F13) (LRR P, T, U) Depleted Othric (F17) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Redox Depressions (F8) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Umbric Surface (F13) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Value Soils									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)			· 						
Histosol (A1)							ains.		•
Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) How Presence (A8) (LRR P, T, U) Depleted Matrix (F2) How Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150/2 Piedmont Floodplain Soils (F19) (LRR P, S) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Presence (A8) (LRR P, T, U) How Presence (A8) (LRR P, T, U) Depleted Dark Surface (F6) How Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	Hydric Soil	Indicators: (Applica	able to all LR	Rs, unless other	wise note	ed.)		Indicators fo	r Problematic Hydric Soils ³ :
Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Redox Depressions (F8) Nuck Presence (A8) (LRR U) Redox Depressions (F8) Pepleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Depth dinches): Loamy Mucky Mineral (F1) (LRR O) Piedmont Floodplain Soils (F19) (LRR O) Piedmont Floodplain Soils (F19) (MLRA 149A) Piedmont Floodplain Soils (F19) (MLRA 149A) Piedmont Floodplain Soils (F20) (MLRA 149A)									
Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Bedox Dark Surface (F6) Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Dark Surface (F1) (LRR U) Depleted Dark Surface (F1) Marl (F10) (LRR U) Depleted Deric (F11) (MLRA 151) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (LRR P, S) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Iron-Manganese Masses (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 150A) Nomalous Bright Loamy Soils (F20) (MLRA 149A) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No									
Stratified Layers (A5)					-		. O)		
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A) unless disturbed or problematic. Sandy Redox (S5) Reduced Vertic (F18) (MLRA 150A, 150B) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No		, ,				F2)			
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)			T. U)			6)			
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Reduced Vertic (F18) (MLRA 150A, 150B) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	_				•	,			
1 cm Muck (A9) (LRR P, T)									` ,
Thick Dark Surface (A12)			,			,			, ,
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No	Deplete	d Below Dark Surface	e (A11)	Depleted Och	nric (F11)	(MLRA 1	51)		
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed):	Thick D	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) (LRR O, P,		
Sandy Gleyed Matrix (S4)							, U)		
Sandy Redox (S5)								unless	s disturbed or problematic.
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No								- 4 \	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No									E3D)
Restrictive Layer (if observed): Type: Depth (inches):			T 11)	Anomaious B	origini Loar	ily Solis (-20) (IVILK)	A 149A, 153C, 1	530)
Type:								1	
Depth (inches): No									
				_				Unadaia Cail Da	
Remarks:		icnes):						Hydric Soli Pr	esent? Yes No
	Remarks:								



Photo 1
Wetland data point wcmf003f_w facing north



Photo 2
Wetland data point wcmf003f_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	county: Cumberla	and Coun	ty	Sampling Date: 4/13/2016
Applicant/Owner: Dominion						Sampling Point: wcmf003e_w
• • • • • • • • • • • • • • • • • • • •		Section				
Landform (hillslope, terrace, etc.): Flat						
Subregion (LRR or MLRA): P		1 at: 35.06367451	Tomor (corroavo, c	Long: -78	3.73491032	0.0pb (70)
Soil Map Unit Name: Nahunta loam		Lai		Long.	NIMI eleccific	Datum
Are climatic / hydrologic conditions on the site	h	the in time and the second of	/ NI-	v "		Cation.
Are Vegetation, Soil, or Hydro						
Are Vegetation, Soil, or Hydro					plain any answe	
SUMMARY OF FINDINGS – Attach	site ma	ap showing sam	npling point l	location	ns, transects	s, important features, et
Hydrophytic Vegetation Present? Ye	s <u> </u>	No	Is the Sampled	d Area		
		No	within a Wetlar		Yes 🗸	, No
Wetland Hydrology Present? Ye	s <u> </u>	No				
NWI Polygon Disturbed utility ROW						
HYDROLOGY						
Wetland Hydrology Indicators:				3	Secondary Indica	ators (minimum of two required
Primary Indicators (minimum of one is require	ed; check	all that apply)			Surface Soil	Cracks (B6)
Surface Water (A1)		atic Fauna (B13)		-		getated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LRF		-	Drainage Pa	
Saturation (A3)	-	rogen Sulfide Odor (0		-	Moss Trim L	
Water Marks (B1)		lized Rhizospheres a			-	Water Table (C2)
Sediment Deposits (B2) Drift Deposits (B3)		sence of Reduced Iro ent Iron Reduction in			✓ Crayfish Bur Saturation V	rows (C8) isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)	Tilled Solls (Co)	, -		Position (D2)
Iron Deposits (B5)		er (Explain in Remark	(s)	-	Shallow Aqu	` '
Inundation Visible on Aerial Imagery (B)		` '	,	_	FAC-Neutral	
Water-Stained Leaves (B9)				-	Sphagnum n	noss (D8) (LRR T, U)
Field Observations:						
		Depth (inches):				
Water Table Present? Yes I	lo	Depth (inches): $\frac{10}{0}$				
	lo	Depth (inches): 0	We	etland Hy	drology Preser	nt? Yes 🗸 No
(includes capillary fringe) Describe Recorded Data (stream gauge, mo	nitoring w	ell, aerial photos, pre	vious inspections	s), if avail	able:	
Remarks:						

Tree Stratum (Plot size: 0) % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: 4 2.	(A) (B)
2	(B)
4	
5	(5)
6	(A/B)
Frevalence index worksheer	
7 Total % Cover of: Multiply by:	
8 OBL species 0 x 1 = 0	_
= Total Cover 20	-
FAC appeign 85 v.2 = 255	-
A Pinus taeda 10 Yes FAC FACU species 0 x 4 = 0	_
2 Liquidambar styraciflua 5 Yes FAC UPL species v 5 = 0	=
3 Column Totals: (A) 295	_ (B)
4 Prevalence Index = B/A =2.8	_
5 Hydrophytic Vegetation Indicators:	
6 1 - Rapid Test for Hydrophytic Vegetation	
7	
8	
——— = Total Cover Problematic Hydrophytic Vegetation (Explain	1)
50% of total cover: 7.5 20% of total cover: 3	
Herb Stratum (Plot size: 0) 1. Andropogon virginicus 50 Yes FAC 1 Indicators of hydric soil and wetland hydrology material be present, unless disturbed or problematic.	ust
2. Arundinaria gigantea 20 Yes FACW Definitions of Four Vegetation Strata:	
3. Rubus arvensis 10 No FAC Tree Woody plants, evaluating vines, 3 in 77.6 c	m) or
4. Pinus taeda 5 No FAC Tree – Woody plants, excluding vines, 3 in. (7.6 of more in diameter at breast height (DBH), regardless	
5. Acer rubrum 5 No FAC 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, regar	dless
9 of size, and woody plants less than 3.28 ft tall.	aiooo
10 Woody vine – All woody vines greater than 3.28	ft in
11 height.	
12	
90 = Total Cover	
50% of total cover: 45 20% of total cover: 18	
Woody Vine Stratum (Plot size:)	
1	
2	
3	
4	
_	
5 Hydrophytic	
0 = Total Cover Vegetation	
0 = Total Cover Vegetation Present? Ves No.	
0 = Total Cover Vegetation Present? Yes No	
0 = Total Cover Vegetation Present? Yes No	
0 = Total Cover Vegetation Present? Yes No	
0 = Total Cover Vegetation Present? Yes No	
0 = Total Cover Vegetation Present? Yes No	

SOIL Sampling Point: wcmf003e_w

Profile Desc	cription: (Describe	to the dept	needed to docu	ment the i	indicator	or confirm	the absence of	of indicators.)	
Depth	Matrix		Redo	x Feature	S				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks	
0-4	10YR 3/1	100					SC		
4-10	10YR 4/1	85	10YR 6/1	15	D	M	SCL		
10-18	10YR 6/2		7.5YR 5/8	10		PL/M	SICL		
10-16	10111 0/2	90	7.518 5/6			PL/IVI	SICL -		
					· '-				
	-				. ———				
	-			<u> </u>					
¹ Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: F	PL=Pore Lining, M=Matrix.	
	Indicators: (Applic							or Problematic Hydric Soils ³ :	
Histosol	(A1)		Polyvalue Be	elow Surfa	ce (S8) (L	.RR S. T. U) 1 cm Mu	uck (A9) (LRR O)	
	pipedon (A2)		Thin Dark Su					uck (A10) (LRR S)	
	istic (A3)		Loamy Muck				Reduced Vertic (F18) (outside MLRA 150A,B)		
·	en Sulfide (A4)		Loamy Gleye	-		•	Piedmont Floodplain Soils (F19) (LRR P, S, T)		
	d Layers (A5)		✓ Depleted Ma		,		Anomalous Bright Loamy Soils (F20)		
Organic	Bodies (A6) (LRR P	, T, U)	Redox Dark	Surface (F	- 6)		(MLRA 153B)		
5 cm Mu	ucky Mineral (A7) (LF	RR P, T, U)	Depleted Da				Red Parent Material (TF2)		
	resence (A8) (LRR U		Redox Depre					nallow Dark Surface (TF12)	
1 cm Mu	uck (A9) (LRR P, T)		Marl (F10) (L	₋RR U)			Other (Explain in Remarks)		
Deplete	d Below Dark Surfac	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)			
Thick Da	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) (LRR O, P,	T) ³Indica	itors of hydrophytic vegetation and	
	rairie Redox (A16) (I					', U)		and hydrology must be present,	
-	Mucky Mineral (S1) (I	RR O, S)	Delta Ochric				unles	ss disturbed or problematic.	
	Gleyed Matrix (S4)		Reduced Ve						
	Redox (S5)		Piedmont Flo						
	Matrix (S6)		Anomalous E	Bright Loai	my Soils (F20) (MLR	A 149A, 153C,	153D)	
	rface (S7) (LRR P, S						1		
Restrictive	Layer (if observed):								
Type:								,	
Depth (in	ches):						Hydric Soil F	Present? Yes No	
Remarks:							I.		



Photo 1 Wetland data point wcmf003e_w facing north



Photo 2
Wetland data point wcmf003e_w facing south

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland Co	unty	Sampling Date: 4/13/2016			
Applicant/Owner: Dominion		,	State: NC	Sampling Point: wcmf003_u				
• •		Section	on, Township, Range: N					
					Slope (%): 1			
Subregion (LRR or MLRA): P	Lat							
Soil Map Unit Name: Grantham loam								
Are climatic / hydrologic conditions on the								
Are Vegetation, Soil, or H	lydrologysig	nificantly distur	bed? Are "Norma	al Circumstances"	present? Yes No			
Are Vegetation, Soil, or H	lydrologynat	turally problema	atic? (If needed,	explain any answe	ers in Remarks.)			
SUMMARY OF FINDINGS - Att	tach site map sl	howing sam	npling point locati	ons, transects	s, important features, etc.			
Lhidranhitia Vagatatian Procent?	Vec No.	~						
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No Yes No		Is the Sampled Area					
Wetland Hydrology Present?	Yes No		within a Wetland?	Yes	No			
Remarks:	100100	<u> </u>						
Disturbed utility ROW								
,								
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is r	equired: check all th:	at annly)						
Surface Water (A1)	Aquatic Fa			Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)	Aquatic Fa	5 11/	Oparage Patterns (B10)					
Saturation (A3)		Sulfide Odor (
Water Marks (B1)			de Odor (C1) Moss Trim Lines (B16) spheres along Living Roots (C3) Dry-Season Water Table (C2					
Sediment Deposits (B2)		of Reduced Iro		Crayfish Burrows (C8)				
Drift Deposits (B3)			n in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9					
Algal Mat or Crust (B4)	Thin Muck		,	Geomorphic Position (D2)				
Iron Deposits (B5)	plain in Remark							
Inundation Visible on Aerial Imager	y (B7)		FAC-Neutral Test (D5)					
Water-Stained Leaves (B9)				Sphagnum r	moss (D8) (LRR T, U)			
Field Observations:								
Surface Water Present? Yes	No 🔽 Depth	n (inches):						
	No 🔽 Depth							
	No 🔽 Depth	n (inches):	Wetland	and Hydrology Present? Yes No				
(includes capillary fringe) Describe Recorded Data (stream gauge	monitoring well ae	rial photos, pre	vious inspections) if av	railable				
Booding Noodinga Bata (official) gauge	2, morntoring won, do	riai priotoo, pro	vious inopositorio), ii uv	anabio.				
Remarks:								
Tromano.								

0		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species That Are OBL FACW or FAC: 2 (A)
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3				Species Across All Strata:4 (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	= Total Cov	er	OBL species x 1 =
50% of total cover:0	20% of	total cover:	0	FACW species $\frac{0}{25}$ $\times 2 = \frac{0}{75}$
Sapling/Shrub Stratum (Plot size: 0)				FAC species x 3 =
1				FACU species x 4 = 80
				UPL species0 x 5 =0
2				Column Totals:45 (A)155 (B)
3				
4				Prevalence Index = B/A =3.44
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	0	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Eupatorium capillifolium	10	Yes	FACU	be present, unless disturbed or problematic.
2. Potentilla simplex	10	Yes	FACU	Definitions of Four Vegetation Strata:
3. Rubus arvensis	10	Yes	FAC	
4. Andropogon virginicus	10	Yes	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Liquidambar styraciflua	5	No	FAC	height.
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 3 iii. DDi i and greater than 3.20 it (1 iii) taii.
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	er	
50% of total cover: 22.5	20% of	total cover:	9	
Woody Vine Stratum (Plot size:)				
1				
2.				
3.				
4.				
5	0	T-4-1 0		Hydrophytic Vegetation
50% of total cover: 0		= Total Cov	•	Present? Yes No
30 % of total cover.		total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf003_u

Depth Matrix Redox Features							the absence of i		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remark	(S
0-5	2.5Y 2.5/1	100					CL		
5-18	2.5Y 5/4	100					C		
				_					
	oncentration, D=Dep					ains.		Problems	
-	Indicators: (Application)	able to all I				DD C T 11		Problematic Hydr	ric Soils":
Histosol			Polyvalue Be Thin Dark Su						
	pipedon (A2) istic (A3)		Loamy Muck					: (A10) (LRR S) /ertic (F18) (outsic	Ιο ΜΙ RΔ 150Δ R
	en Sulfide (A4)		Loamy Gleye			. 0,		Floodplain Soils (F	
	d Layers (A5)		Depleted Ma		· -)			s Bright Loamy Soi	
	Bodies (A6) (LRR P	T, U)	Redox Dark		- 6)		(MLRA 1		(*,
-	ucky Mineral (A7) (LR		Depleted Da					t Material (TF2)	
	resence (A8) (LRR U		Redox Depre	essions (F	8)		Very Shall	ow Dark Surface (ΓF12)
1 cm Mi	uck (A9) (LRR P, T)		Marl (F10) (I	_RR U)			Other (Exp	lain in Remarks)	
	d Below Dark Surface	e (A11)	Depleted Oc	, ,	•	•	•		
	ark Surface (A12)		Iron-Mangan					s of hydrophytic ve	-
	Prairie Redox (A16) (N					, U)		hydrology must be	
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric			0.4 4E0D\	unless	disturbed or proble	matic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve Piedmont Flo				١٨١		
-	d Matrix (S6)						A 149A, 153C, 15	3D)	
	ırface (S7) (LRR P, S	. T. U)	Anomalous I	ongni Loa	illy Colla (20) (MEIX)	1 1 1 2 2 7 , 1 3 3 0 , 1 3	30)	
	Layer (if observed):								
Туре:							Hydric Soil Pre	sent? Yes	No 🗸
Туре:			<u> </u>				Hydric Soil Pre	sent? Yes	No
Type: Depth (in			<u> </u>				Hydric Soil Pre	sent? Yes	No
Type: Depth (in			<u> </u>				Hydric Soil Pre	sent? Yes	No
Type: Depth (in			<u> </u>				Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No <u> </u>
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No_V
Type: Depth (in							Hydric Soil Pre	sent? Yes	No V
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No V
Type: Depth (in							Hydric Soil Pre	sent? Yes	
Type: Depth (in							Hydric Soil Pre	sent? Yes	No V
Type: Depth (in							Hydric Soil Pre	sent? Yes	No
Type: Depth (in							Hydric Soil Pre	sent? Yes	No



Photo 1 Upland data point wcmf003_u facing northwest



Photo 2
Upland data point wcmf003_u facing south

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipelin	Site: Atlantic Coast Pipeline City/County: Cumberland County Sampling Date: 4/13/2016 nt/Owner: Dominion State: NC Sampling Point: wcmf004e						
Applicant/Owner: Dominion State: NC					Sampling Point: wcmf004e_w		
Investigator(s): SH, SA			on, Township, Range: No				
Landform (hillslope, terrace, etc.):					Slope (%):0		
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Nahunta loa	n		NWI classific	cation: None			
Are climatic / hydrologic conditions	on the site typica	al for this time of year? Y	′es No /	(If no, explain in R	emarks.)		
Are Vegetation, Soil							
Are Vegetation, Soil							
SUMMARY OF FINDINGS							
Hydrophytic Vegetation Present?	Voc. 4	/ No					
Hydric Soil Present?	Yes •	/No	Is the Sampled Area				
Wetland Hydrology Present?		/ No_	within a Wetland?	Yes	No		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				·	ators (minimum of two required)		
Primary Indicators (minimum of c	-			Surface Soil			
Surface Water (A1)		True Aquatic Plants (getated Concave Surface (B8)		
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pa			
Saturation (A3) Water Marks (B1)		Oxidized RhizospherPresence of Reduced		Moss Trim L			
Sediment Deposits (B2)	_	Recent Iron Reduction		Dry-Season Water Table (C2) coils (C6)			
Drift Deposits (B3)	-	Thin Muck Surface (0			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer			tressed Plants (D1)		
Iron Deposits (B5)	_	_ ` ` .	,		Position (D2)		
Inundation Visible on Aerial	magery (B7)			✓ Shallow Aqu	itard (D3)		
Water-Stained Leaves (B9)				Microtopogra	aphic Relief (D4)		
Aquatic Fauna (B13)				✓ FAC-Neutral	Test (D5)		
Field Observations:							
		Depth (inches):					
		Depth (inches):	0				
Saturation Present? Y (includes capillary fringe)	es No	Depth (inches):	Wetland F	Hydrology Preser	nt? Yes V No		
Describe Recorded Data (stream	gauge, monitorir	ng well, aerial photos, pre	evious inspections), if ava	ilable:			
Remarks:							

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

/EGETATION (Four Strata) – Use scient	ific names of	plants.		Sampling Point: wcmf004e_w
	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:0) 1)		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:2 (A)
2				
3				Total Number of Dominant Species Across All Strata: 3 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6				mat Are OBE, I AGW, OFF AG. (A/B)
7.				Prevalence Index worksheet:
· ·	0	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover:		total cover:_	0	OBL species 40 x 1 = 40
Sapling/Shrub Stratum (Plot size: 0	_)			FACW species x 2 =60
1				FAC species x 3 =
2				FACU species x 4 = 80
3. <u> </u>				UPL species x 5 =
4				Column Totals:90
5				5
6				Prevalence Index = B/A =2
7				Hydrophytic Vegetation Indicators:
8				1 - Rapid Test for Hydrophytic Vegetation
9.				2 - Dominance Test is >50%
o	0	= Total Cove		3 - Prevalence Index is ≤3.0 ¹
50% of total cover:		total cover:_	0	4 - Morphological Adaptations ¹ (Provide supporting
Herb Stratum (Plot size:)		_		data in Remarks or on a separate sheet)
1 Carex lupulina	40	Yes	OBL	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Poa palustris	30	Yes	FACW	
3. Andropogon virginicus	20	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must
4				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
				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	90			Herb – All herbaceous (non-woody) plants, regardless
FOO/ of total covers		= Total Cove total cover:_		of size, and woody plants less than 3.28 ft tall.
50% of total cover: Woody Vine Stratum (Plot size: 0)	20% 01	total cover		Woody vine - All woody vines greater than 3.28 ft in
,				height.
1				
2				
3				
4				Hydrophytic
5	•			Vegetation Present? Yes No
FOO/ of total covers		= Total Cove total cover:_	^	11050Hz. 103 NO
50% of total cover:	2070 01	total cover		
Remarks: (Include photo numbers here or on a sepa	arate sneet.)			

	scription: (Describe	to the de				or commi	i tile abseile	ce of malcators.
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	S Type ¹	Loc ²	Texture	Remarks
0-3	10YR 4/2	90	7.5YR 3/4	10	C	PL/M	CL	Kemarks
2.0	10YR 5/2	70	7.5YR 5/6		C		C	- -
3-8	1018 5/2	70	7.518 5/6	30		PL/M		
	<u> </u>							
	<u> </u>							
	-				-			
	<u> </u>							
Type: C-C	Concentration, D=Dep	letion RM	M-Reduced Matrix M	S-Masker		aine	² Location:	PL=Pore Lining, M=Matrix.
	I Indicators:	ieuon, ixiv	i-iteaucea Matrix, Mi	0-Masket	J Sand Gi	airis.		cators for Problematic Hydric Soils ³ :
Histoso			Dark Surface	(97)				2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Be		co (S8) (I	MI DA 147		Coast Prairie Redox (A16)
	Histic (A3)		Tolyvalde Be				140)	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			147, 140)		Piedmont Floodplain Soils (F19)
	ed Layers (A5)		<u>✓</u> Depleted Ma		(1 2)		_	(MLRA 136, 147)
	luck (A10) (LRR N)		Redox Dark		- 6)			Very Shallow Dark Surface (TF12)
	ed Below Dark Surfac	e (A11)	Depleted Da	•				Other (Explain in Remarks)
	Dark Surface (A12)	0 (7111)	Redox Depre				_	Other (Explain in Remarks)
	Mucky Mineral (S1) (L	RR N	Iron-Mangan			I RR N		
	A 147, 148)		MLRA 13		05 (1 12) ((=:::::::::::::::::::::::::::::::::::::		
	Gleyed Matrix (S4)		Umbric Surfa	•	(MIRA 1:	36, 122)	³ lr	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
-	d Matrix (S6)		Red Parent I					unless disturbed or problematic.
	Layer (if observed):	!		riatoriai (i	, (.		, 	and the second s
Type: C	lay							
							Herelaia Ca	SI December 1
	nches): 8						Hyaric Sc	oil Present? Yes No
Remarks:								
estrictive la	ayer at 8" hardpan cla	y						



Photo 1 Wetland data point wcmf004e_w facing west



Photo 2
Wetland data point wcmf004e_w facing east

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland Cou	unty	Sampling Date: 4/13/2016		
Applicant/Owner: Dominion							
		Section	on, Township, Range: N				
Landform (hillslope, terrace, etc.): Flat					Slope (%): 1		
Subregion (LRR or MLRA): P		Lat: delegation	Long:		Datum: Wee lee!		
Soil Map Unit Name: Nahunta loam			.,				
Are climatic / hydrologic conditions on the							
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Norma	l Circumstances"	present? Yes No		
Are Vegetation, Soil, or	Hydrology	naturally problema	atic? (If needed,	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS - A	ttach site map	showing san	npling point location	ons, transects	s, important features, etc.		
Lludranbutia Vagatatian Brasanta	Vee	No. V					
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes		Is the Sampled Area				
Wetland Hydrology Present?	Yes		within a Wetland?	Yes	No		
Remarks:		<u></u>					
Disturbed utility ROW							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one is	required: check al	Il that annly)		Surface Soil Cracks (B6)			
Surface Water (A1)	-	c Fauna (B13)			getated Concave Surface (B8)		
High Water Table (A2)		eposits (B15) (LR I	R U)	Oparsely ve			
Saturation (A3)		gen Sulfide Odor (Moss Trim L			
Water Marks (B1)		-	along Living Roots (C3)		Water Table (C2)		
Sediment Deposits (B2)		nce of Reduced Iro		Crayfish Bur			
Drift Deposits (B3)		t Iron Reduction in		Claylish Burrows (C6) Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		luck Surface (C7)		Geomorphic	Position (D2)		
Iron Deposits (B5)	Other	(Explain in Remark	(s)	✓ Shallow Aqu	uitard (D3)		
Inundation Visible on Aerial Image	ery (B7)			FAC-Neutra	I Test (D5)		
Water-Stained Leaves (B9)				Sphagnum r	moss (D8) (LRR T, U)		
Field Observations:	_						
	No 🗸 D						
	No 🖍 D						
	No 🖍 D	epth (inches):	Wetland I	Hydrology Presei	nt? Yes No		
(includes capillary fringe) Describe Recorded Data (stream gauge	ge, monitoring well	, aerial photos, pre	evious inspections), if ava	ailable:			
			, , ,				
Remarks:							

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 3 (B)
4				
5.				Percent of Dominant Species That Are OBL, FACW, or FAC: 33.33333333 (A/B)
6.				That Are OBL, FACW, OF FAC (A/B)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	0			OBL species0 x 1 =0
0		= Total Cov	0	FACW species 10 x 2 = 20
	20% of	total cover:		FAC species 20 x 3 = 60
Sapling/Shrub Stratum (Plot size: 0)				25 100
1				FACU species 25 x 4 = 100 15 75
2				UPL species x 5 =
3				Column Totals: (A) (B)
4.				Prevalence Index = $B/A = 3.64$
				Trevalence index Birt
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7			-	2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
_	0	= Total Cov	_	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Eupatorium capillifolium	20	Yes	FACU	be present, unless disturbed or problematic.
2. Andropogon virginicus	20	Yes	FAC	Definitions of Four Vegetation Strata:
3. Rubus allegheniensis	15	Yes	UPL	
4. Dichanthelium scoparium	10	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5 Potentilla simplex		No	FACU	more in diameter at breast height (DBH), regardless of height.
•			1700	noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine All woody vines greater than 2.29 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				
	70	= Total Cov		
50% of total cover:35		total cover:		
	20% 01	total cover.		
Woody Vine Stratum (Plot size: 0)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0				Present? Yes No
Remarks: (If observed, list morphological adaptations belo				
remarks. (II observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf004_u

Depth	cription: (Describe to Matrix	o the dept		x Feature		or commi	the absence of i	ndicators.)	
(inches)	Color (moist)	%	Color (moist)	% realure	Type ¹	Loc ²	<u>Texture</u>	Remarks	
0-1	10YR 3/2	100					CL		
1-8	10YR 4/4	97	7.5YR 4/6	3		M	SC		
					-				
				-	· <u> </u>				
				-					
					·				
	oncentration, D=Depl					ains.		Pore Lining, M=Matrix.	
-	Indicators: (Application	able to all						Problematic Hydric Soils ³ :	
Histosol			Polyvalue Be						
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)	504 D\
	istic (A3)		Loamy Muck	-		(0)		′ertic (F18) (outside MLRA 1 Floodplain Soils (F19) (LRR P	
	en Sulfide (A4) d Layers (A5)		Loamy Gleye Depleted Ma		(FZ)			Bright Loamy Soils (F20)	, 3, 1)
	Bodies (A6) (LRR P ,	T. U)	Redox Dark		- 6)		(MLRA 1		
_	ucky Mineral (A7) (LR		Depleted Dai	•	,			t Material (TF2)	
	resence (A8) (LRR U		Redox Depre					ow Dark Surface (TF12)	
	uck (A9) (LRR P, T)	,	Marl (F10) (L		,			lain in Remarks)	
Deplete	d Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)			
Thick Da	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) (LRR O, P,		s of hydrophytic vegetation ar	nd
	rairie Redox (A16) (N					', U)		hydrology must be present,	
	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric				unless	disturbed or problematic.	
	Gleyed Matrix (S4)		Reduced Ver				••		
-	Redox (S5)		Piedmont Flo					2D)	
	l Matrix (S6) Irface (S7) (LRR P, S	T 11)	Anomaious E	sright Loa	my Solls (F20) (WLK	A 149A, 153C, 15	30)	
	Layer (if observed):	, 1, 0)							
Type: Cla	ay (ii 0000i 100) .								
	Q						Hydric Soil Pre	sent? Yes No	~
Depth (in	cnes).						nyuric Soil Pre	sent? Yes No	
Remarks:									
İ									
1									
ı									
ı									
i									
i									
ı									



Photo 1 Upland data point wcmf004_u facing west



Photo 2
Upland data point wcmf004_u facing north

Project/Site: Atlantic Coast Pipeline		City/County	: Cumberland Cou	nty	Sampling Date: 4/11/2016	
Applicant/Owner: Dominion			;	State: NC	Sampling Point: wcmf001f_w	
Investigator(s): SH, SA	nvestigator(s): SH, SA Section, Township, Range: No PLSS in this area					
					Slope (%): 1	
Subregion (LRR or MLRA): P						
Soil Map Unit Name: Nahunta loam				NWI classific	eation: PSS1B	
Are climatic / hydrologic conditions on the	eito typical for this ti					
Are Vegetation, Soil, or Hy						
Are Vegetation, Soil, or Hy						
SUMMARY OF FINDINGS – Atta	ach site map sh	owing samplin	g point locatio	ons, transects	, important features, etc.	
Hydrophytic Vegetation Present?	Yes No _	Is th	ne Sampled Area			
Hydric Soil Present?	Yes V No	with	nin a Wetland?	Yes 🗸	No	
Wetland Hydrology Present? Remarks:	Yes No _					
HYDROLOGY						
Wetland Hydrology Indicators:					ators (minimum of two required)	
Primary Indicators (minimum of one is re				Surface Soil		
Surface Water (A1)	Aquatic Fa				getated Concave Surface (B8)	
High Water Table (A2)		sits (B15) (LRR U)		Drainage Pa		
Saturation (A3) Water Marks (B1)		Sulfide Odor (C1) thizospheres along L	iving Roots (C3)	Moss Trim L	Water Table (C2)	
Sediment Deposits (B2)		of Reduced Iron (C4		Crayfish Bur		
Drift Deposits (B3)		n Reduction in Tilled		-	isible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Thin Muck		, ,		Position (D2)	
Iron Deposits (B5)	Other (Exp	lain in Remarks)		Shallow Aqu	itard (D3)	
Inundation Visible on Aerial Imagery	(B7)			FAC-Neutral	Test (D5)	
Water-Stained Leaves (B9)				Sphagnum n	noss (D8) (LRR T, U)	
Field Observations:						
		(inches):				
		(inches): 2				
Saturation Present? Yes (includes capillary fringe)	_ No Depth	(inches):	Wetland H	lydrology Preser	nt? Yes No	
Describe Recorded Data (stream gauge,	monitoring well, aer	ial photos, previous	inspections), if ava	ilable:		
Remarks:						

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2. Liquidambar styraciflua	10	No	FAC	Total Number of Dominant
3. Acer rubrum	5	No	FAC	Species Across All Strata: 4 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6.				That Are OBL, I AGW, OF I AC.
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8	65			OBL species0 x 1 =0
32.5		= Total Cov	13	FACW species15
50% of total cover:	20% of	total cover:		FAC species 110 x 3 = 330
Sapling/Shrub Stratum (Plot size:)		.,		FACU species 0 x 4 = 0
1. Liquidambar styraciflua	25	Yes	FAC	0
2. Acer rubrum	5	No	FAC	UPL species $\begin{array}{c} 0 \\ 125 \end{array}$ $\begin{array}{c} x \ 5 = \\ 360 \end{array}$
3				Column Totals: (A) (B)
4				Prevalence Index = B/A = 2.88
-				T Tevalcinec index = B/A =
5 6				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	30			3 - Prevalence Index is ≤3.0 ¹
4-		= Total Cov	^	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:15	20% of	total cover:	6	
Herb Stratum (Plot size: 0)				¹ Indicators of hydric soil and wetland hydrology must
1. Toxicodendron radicans	10	Yes	FAC	be present, unless disturbed or problematic.
2. Vaccinium corymbosum	10	Yes	FACW	Definitions of Four Vegetation Strata:
3. Pinus taeda	5	No	FAC	
4 Persea borbonia	5	No	FACW	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				Woody vine – All woody vines greater than 3.28 ft in
11.				height.
12.				
	30	= Total Cov	er	
50% of total cover: 15		total cover:	•	
Woody Vine Stratum (Plot size:)	20 /0 01	total cover.	·	
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:	20% of	total cover:	0	Present? Yes No
Remarks: (If observed, list morphological adaptations belo				
Tremand: (II observed, list morphological adaptations belo	vv).			

SOIL Sampling Point: wcmf001f_w

Depth	Matrix	Redo	x Features	3			
<u>inches)</u> Color 0-4 2.5Y 2.5/		Color (moist)	%	Type ¹	Loc ²	Texture CL	Remarks
4-18 10YR 5/1	85	10YR 5/8	10	С	PL/M		
		5YR 4/6	5	С	PL		
Type: C=Concentration Indicators Histosol (A1) Histic Epipedon (A Black Histic (A3) Hydrogen Sulfide (Stratified Layers (A) Organic Bodies (A) 5 cm Mucky Minera Muck Presence (A) 1 cm Muck (A9) (L) Depleted Below Day Thick Dark Surface	(Applicable to all (A4) (5) (CAR P, T, U) (A7) (LRR P, T, U) (ARR U) (RR P, T) (Irk Surface (A11)	=Reduced Matrix, MS LRRs, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Gleye Depleted Matrix, MS Redox Dark S	S=Masked wise note low Surface rface (S9) y Mineral (d Matrix (I trix (F3) Surface (F- k Surface essions (F8 RR U)	Sand Gradel.) Ce (S8) (L (LRR S, (F1) (LRR F2) 6) (F7) (F7)	ains. RR S, T, U T, U) O)	Indicators for F 1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 19 Red Parent Very Shallo Other (Expl	(A10) (LRR S) ertic (F18) (outside MLRA 150A,B loodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20)
Sandy Mucky Mine Sandy Gleyed Mat Sandy Redox (S5) Stripped Matrix (S6 Dark Surface (S7)	(LRR P, S, T, U)	Delta Ochric Reduced Ver Piedmont Flo	(F17) (ML tic (F18) (l odplain Sc	RA 151) MLRA 15 oils (F19)	0A, 150B) (MLRA 149	unless d	hydrology must be present, listurbed or problematic.
testrictive Layer (if o Type:	oserved):						
Depth (inches):						Hydric Soil Pres	sent? Yes Vo No



Photo 1
Wetland data point wcmf001f_w facing northwest



Photo 2
Wetland data point wcmf001f_w facing northeast

Project/Site: Atlantic Coast Pipeline		City/C	county: Cumberland Co	unty	Sampling Date: 4/13/2016		
Applicant/Owner: Dominion			State: NC Sampling Point: wcmf001				
		Section	on, Township, Range:		<u></u>		
Landform (hillslope, terrace, etc.): Flat							
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Nahunta loam					cation: None		
Are climatic / hydrologic conditions on the							
Are Vegetation, Soil, or Hy	drology	significantly distur	bed? Are "Norma	al Circumstances"	present? Yes No		
Are Vegetation, Soil, or Hy	drology	naturally problema	atic? (If needed,	explain any answe	ers in Remarks.)		
SUMMARY OF FINDINGS - Att	ach site ma	ap showing sam	pling point locati	ons, transects	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No					
Hydric Soil Present?		No	Is the Sampled Area	.	/ Na		
Wetland Hydrology Present?		No	within a Wetland?	Yes	No		
Remarks:							
Disturbed utility ROW							
HYDROLOGY							
Wetland Hydrology Indicators:				-	ators (minimum of two required)		
Primary Indicators (minimum of one is re	quired; check	all that apply)		Surface Soil	· ·		
Surface Water (A1)		atic Fauna (B13)			egetated Concave Surface (B8)		
High Water Table (A2)		Deposits (B15) (LRF			atterns (B10)		
Saturation (A3)	-	ogen Sulfide Odor (C		Moss Trim L			
Water Marks (B1)			long Living Roots (C3)				
Sediment Deposits (B2) Drift Deposits (B3)		ence of Reduced Ironent Iron Reduction in		Crayfish Bur	rrows (C8) /isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Muck Surface (C7)	Tilled Solis (Co)		=		
Iron Deposits (B5)		er (Explain in Remark	(2)	Geomorphic Position (D2)			
Inundation Visible on Aerial Imagery		(=/ p.c	,	Shallow Aquitard (D3) FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)	()				moss (D8) (LRR T, U)		
Field Observations:							
Surface Water Present? Yes	No	Depth (inches):					
Water Table Present? Yes	No	Depth (inches): 14					
		Depth (inches): 0	Wetland	Wetland Hydrology Present? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge)	monitoring we	all aprial photos pro	vious inspections) if av	ailahle:			
Describe Necolded Data (stream gauge	, morntoning we	en, aenai priotos, pre	vious irispections), ii av	allable.			
Remarks:							

0		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:1 (A)
1				That Are OBE, I ACW, OF I AC. (A)
3				Total Number of Dominant Species Across All Strata: 1 (B)
4.				、 ,
5.				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by: ORL species 20 x 1 = 20
		= Total Cov		OBL species X 1 = 20
50% of total cover:0	20% of	total cover	0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1				FACU species x 4 =
2.				UPL species $0 \times 5 = 0$
3.				Column Totals: (A) (B)
4.				Prevalence Index = B/A =1.85
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 ¹
	0	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:0	20% of	total cover	0	1 Toblematic Trydrophytic Vegetation (Explain)
Herb Stratum (Plot size:0				Undicators of budgic call and wattened budgeton would
1. Arundinaria gigantea	70	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Lycopodiella alopecuroides	20	No	OBL	Definitions of Four Vegetation Strata:
3. Lyonia lucida	10	No	FACW	Tree Meady plants avaluation visco 2 in (7.0 am) an
4. Andropogon virginicus	5	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Hart. All back account (a constant of a least a constant of
9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
4.4				Woody vine – All woody vines greater than 3.28 ft in height.
12.				neight.
12.	105	= Total Cov	er	
50% of total cover:52.5		total cover:	- 4	
Woody Vine Stratum (Plot size:0)	20 /0 01	total cover.	· ——	
1				
2				
3				
4				
5	0			Hydrophytic
50% of total cover:		= Total Cov total cover:		Vegetation Present? Yes No
		total cover		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf001e_w

Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Re 0-3 10YR 3/1 100 SCL	marks
3-18 10YR 5/1 80 7.5YR 5/8 20 C PL/M SCL	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, I	M=Matrix
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic	
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O	•
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S	
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (o	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soi	ls (F19) (LRR P, S, T)
Stratified Layers (A5) Anomalous Bright Loam	y 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 (TF	
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surfa	
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remark	KS)
 Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophy 	tic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology mu	_
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or pi	
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Type:	
Depth (inches): Hydric Soil Present? Yes	No
Remarks:	



Photo 1 Wetland data point wcmf001e_w facing north



Photo 2
Wetland data point wcmf001e_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland Co	ounty	_ Sampling Date: 4/11/2016
Applicant/Owner: Dominion					Sampling Point: wcmf001_u
• • • • • • • • • • • • • • • • • • • •		Section	on, Township, Range: _		<u></u>
Landform (hillslope, terrace, etc.): Flat					
					Datum: WGS 1984
		_ Lat			
Soil Map Unit Name: Nahunta loam					
Are climatic / hydrologic conditions on t					
Are Vegetation, Soil, or	Hydrology	_ significantly distur	bed? Are "Norm	al Circumstances"	present? Yes No
Are Vegetation, Soil, or	Hydrology	_ naturally problema	atic? (If needed	, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - A	ttach site ma	p showing san	npling point locat	ions, transects	s, important features, etc.
Hydrophytic Vegetation Present?	Yes 🔽	No			
Hydric Soil Present?	Yes		Is the Sampled Area		
	Yes	No 🔽	within a Wetland?	Yes	No
Remarks:					
Disturbed area - pine plantation adjace	ent to utility ROW				
HADBOLOCA					
HYDROLOGY Wetland Hydrology Indicators:				Socondany India	ators (minimum of two required)
Primary Indicators (minimum of one is	required: check	all that annly)		Surface Soil	
Surface Water (A1)	-	itic Fauna (B13)			getated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LR I	R U)		atterns (B10)
Saturation (A3)		ogen Sulfide Odor (Moss Trim L	
Water Marks (B1)		=	along Living Roots (C3)		Water Table (C2)
Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Bu	
Drift Deposits (B3)	Rece	ent Iron Reduction in	Tilled Soils (C6)	Saturation V	/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin	Muck Surface (C7)		Geomorphic	Position (D2)
Iron Deposits (B5)	Othe	r (Explain in Remarl	(s)	Shallow Aqu	
Inundation Visible on Aerial Imag	ery (B7)			FAC-Neutra	
Water-Stained Leaves (B9)				Sphagnum i	moss (D8) (LRR T, U)
Field Observations:	4/				
		Depth (inches):			
		Depth (inches):			
Saturation Present? Yes _ (includes capillary fringe)	No	Depth (inches):	Wetland	Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gau	ge, monitoring we	ell, aerial photos, pre	evious inspections), if a	vailable:	
Remarks:					

Tree Stratum (Plot size: 0)		Dominant		Dominance Test worksheet:		
Piece to a de		Species?		Number of Dominant Species	0	
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC:	6	(A)
2				Total Number of Deminent		
3				Total Number of Dominant Species Across All Strata:	6	(B)
4.						(5)
				Percent of Dominant Species	100	
5				That Are OBL, FACW, or FAC:	100	(A/B)
6				Prevalence Index worksheet:		
7					A. Himberton	
8					Multiply by: - 0	
	50	= Total Cov	er	OBL species x 1 =		_
50% of total cover: 25	20% of	total cover:	10	FACW species x 2 =		_
Sapling/Shrub Stratum (Plot size: 0)	20 /0 0.	10101 00101	· <u></u> -	FAC species115 x 3 =	345	_
1 Pinus taeda	25	Yes	FAC	FACU species0 x 4 =	_ 0	
•••	15	Yes		UPL species 0 x 5 =	0	
2. Acer rubrum		res	FAC	Column Totals: 125 (A)	365	— (B)
3				Column Totals (A)	-	_ (D)
4				Prevalence Index = B/A =	2.92	
5						_
6.				Hydrophytic Vegetation Indicator		
				1 - Rapid Test for Hydrophytic	Vegetation	
7				2 - Dominance Test is >50%		
8				✓ 3 - Prevalence Index is ≤3.0¹		
	40	= Total Cov		Problematic Hydrophytic Veget	tation¹ (Expla	in)
50% of total cover: 20	20% of	total cover:	8			
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetlan	nd bydrology i	muet
1 Pinus taeda	15	Yes	FAC	be present, unless disturbed or pro		iiust
2 Ilex coriacea	10	Yes	FACW	Definitions of Four Vegetation St		
3. Andropogon virginicus	10	Yes	FAC	Deminions of Four Vegetation St	iata.	
···			170	Tree - Woody plants, excluding vin	es, 3 in. (7.6	cm) or
4				more in diameter at breast height (I	DBH), regard	ess of
5				height.		
6				Sapling/Shrub – Woody plants, ex	cludina vines	. less
7				than 3 in. DBH and greater than 3.2	28 ft (1 m) tall	
8.						
· ·				Herb – All herbaceous (non-woody of size, and woody plants less than		rdless
··-				of size, and woody plants less than	3.20 it tail.	
10				Woody vine – All woody vines grea	ater than 3.28	ft in
11				height.		
12						
	35 :	= Total Cov	er			
50% of total cover:17.5		total cover:				
Woody Vine Stratum (Plot size: 0)						
, , , , , , , , , , , , , , , , , , , ,						
1						
2						
3						
4						
5				Hydrophytic		
	0 :	= Total Cov	er	Vegetation		
50% of total cover:0		total cover:	•		No	
		total cover.	· — —			
Remarks: (If observed, list morphological adaptations below	w).					

SOIL Sampling Point: wcmf001_u

Depth	Matrix		Redo	x Feature	S				
(inches) 0-5	Color (moist) 2.5Y 3/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	Texture LS	Remarks	
		·	40VD 5/0			DI ///			
5-16	2.5Y 5/3	95	10YR 5/6	5	C	PL/M	SCL		
¹Type: C=C	oncentration, D=Dep	letion RM:	=Reduced Matrix M	S=Masked	d Sand Gr	ains	² I ocation: PI =	Pore Lining, M=Mat	rix
	Indicators: (Application							Problematic Hydric	
Histosol	(A1)		Polyvalue Be	elow Surfa	ice (S8) (L	.RR S, T, U) 1 cm Muck	(A9) (LRR O)	
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)	
	istic (A3)		Loamy Muck			? O)		ertic (F18) (outside	
	en Sulfide (A4) d Layers (A5)		Loamy Gleye Depleted Ma		(FZ)			Floodplain Soils (F19 Bright Loamy Soils	
	Bodies (A6) (LRR P	, T, U)	Redox Dark		- 6)		(MLRA 1		(1.20)
-	ucky Mineral (A7) (LF		Depleted Da	rk Surface	(F7)		Red Paren	t Material (TF2)	
	resence (A8) (LRR U)	Redox Depre		8)		-	ow Dark Surface (TF	12)
	uck (A9) (LRR P, T) d Below Dark Surface	o (A11)	Marl (F10) (L Depleted Oc		/MI DA 1	F4\	Other (Exp	lain in Remarks)	
	ark Surface (A12)	= (A11)	Iron-Mangan	. ,	•	•	T) ³ Indicator	s of hydrophytic veg	etation and
	rairie Redox (A16) (N	/ILRA 150	_					hydrology must be	
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric				unless o	disturbed or problem	atic.
	Gleyed Matrix (S4)		Reduced Ve				- 4.		
-	Redox (S5) d Matrix (S6)		Piedmont Flo				9A) A 149A, 153C, 153	SD)	
	irface (S7) (LRR P, S	i, T, U)	Anomalous L	ongrit Loa	illy Solis (1 20) (NILIX)	A 149A, 1990, 190	,,	
	Layer (if observed):								
Type:									
Depth (in	ches):						Hydric Soil Pres	sent? Yes	No
Remarks:									



Photo 1 Upland data point wcmf001_u facing south



Photo 2
Upland data point wcmf001_u facing northwest

Project/Site: Atlantic Coast Pipeline		City/County	: Cumberland Cou	nty	Sampling Date: 4/11/2016
Applicant/Owner: Dominion			;	State: NC	Sampling Point: wcmf001f_w
Investigator(s): SH, SA		Section, To			· -
					Slope (%): 1
Subregion (LRR or MLRA): P					
Soil Map Unit Name: Nahunta loam				NWI classific	eation: PSS1B
Are climatic / hydrologic conditions on the	eito typical for this ti				
Are Vegetation, Soil, or Hy					
Are Vegetation, Soil, or Hy					
SUMMARY OF FINDINGS – Atta	ach site map sh	owing samplin	g point locatio	ons, transects	, important features, etc.
Hydrophytic Vegetation Present?	Yes No _	Is th	ne Sampled Area		
Hydric Soil Present?	Yes V No	with	nin a Wetland?	Yes 🗸	No
Wetland Hydrology Present? Remarks:	Yes No _				
HYDROLOGY					
Wetland Hydrology Indicators:					ators (minimum of two required)
Primary Indicators (minimum of one is re				Surface Soil	
Surface Water (A1)	Aquatic Fa				getated Concave Surface (B8)
High Water Table (A2)		sits (B15) (LRR U)		Drainage Pa	
Saturation (A3) Water Marks (B1)		Sulfide Odor (C1) thizospheres along L	iving Roots (C3)	Moss Trim L	Water Table (C2)
Sediment Deposits (B2)		of Reduced Iron (C4		Crayfish Bur	
Drift Deposits (B3)		n Reduction in Tilled		-	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck		, ,		Position (D2)
Iron Deposits (B5)	Other (Exp	lain in Remarks)		Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery	(B7)			FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)				Sphagnum n	noss (D8) (LRR T, U)
Field Observations:					
		(inches):			
		(inches): 2			
Saturation Present? Yes (includes capillary fringe)	_ No Depth	(inches):	Wetland H	lydrology Preser	nt? Yes No
Describe Recorded Data (stream gauge,	monitoring well, aer	ial photos, previous	inspections), if ava	ilable:	
					_
Remarks:					

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
1 Pinus taeda	50	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
2 Liquidambar styraciflua	10	No	FAC	That Ale OBE, I AOW, OF I AO.
2.		No		Total Number of Dominant
3. Acer rubrum		INO	FAC	Species Across All Strata:4 (B)
4				Descent of Deminant Creation
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6.				That Ale Obl., I AOW, Of I AO (A/b)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				0
	65	= Total Cov	er	45
50% of total cover: $\phantom{00000000000000000000000000000000000$	20% of	total cover:	13	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 0)				FAC species x 3 =
1 Liquidambar styraciflua	25	Yes	FAC	FACU species0 x 4 =0
				UPL species 0 x 5 = 0
2. Acer rubrum		No	FAC	125 360
3				Column Totals:(A)(B)
4				Prevalence Index = B/A = 2.88
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	30	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 15	20% of	total cover:	6	1 Toblematic Trydrophytic Vegetation (Explain)
0				
Herb Stratum (Plot size:) 1 Toxicodendron radicans	10	Voo	FAC	¹ Indicators of hydric soil and wetland hydrology must
1.		Yes		be present, unless disturbed or problematic.
2. Vaccinium corymbosum	10	Yes	FACW	Definitions of Four Vegetation Strata:
3. Pinus taeda	5	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Persea borbonia	5	No	FACW	more in diameter at breast height (DBH), regardless of
5.				height.
-				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10.				
				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	30	= Total Cov	er	
50% of total cover:15	20% of	total cover:	6	
Woody Vine Stratum (Plot size:0)	_			
1				
2				
3				
4				
5.				
J				Hydrophytic
0		= Total Cov	_	Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:		100 100
Remarks: (If observed, list morphological adaptations below	w).			'
, , , , , , , , , , , , , , , , , , , ,	,			

SOIL Sampling Point: wcmf001f_w

Depth	Matrix	Redo	x Features	3			
<u>inches)</u> Color 0-4 2.5Y 2.5/		Color (moist)	%	Type ¹	Loc ²	Texture CL	Remarks
4-18 10YR 5/1	85	10YR 5/8	10	С	PL/M		
		5YR 4/6	5	С	PL		
Type: C=Concentration Indicators Histosol (A1) Histic Epipedon (A Black Histic (A3) Hydrogen Sulfide (Stratified Layers (A) Organic Bodies (A) 5 cm Mucky Minera Muck Presence (A) 1 cm Muck (A9) (L) Depleted Below Day Thick Dark Surface	(Applicable to all (A4) (5) (CAR P, T, U) (A7) (LRR P, T, U) (ARR U) (RR P, T) (Irk Surface (A11)	=Reduced Matrix, MS LRRs, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Gleye Depleted Matrix, MS Redox Dark S	S=Masked wise note low Surface rface (S9) y Mineral (d Matrix (I trix (F3) Surface (F- k Surface essions (F8 RR U)	Sand Gradel.) Ce (S8) (L (LRR S, (F1) (LRR F2) 6) (F7) (F7)	ains. RR S, T, U T, U) O)	Indicators for F 1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 19 Red Parent Very Shallo Other (Expl	(A10) (LRR S) ertic (F18) (outside MLRA 150A,B loodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20)
Sandy Mucky Mine Sandy Gleyed Mat Sandy Redox (S5) Stripped Matrix (S6 Dark Surface (S7)	(LRR P, S, T, U)	Delta Ochric Reduced Ver Piedmont Flo	(F17) (ML tic (F18) (l odplain Sc	RA 151) MLRA 15 oils (F19)	0A, 150B) (MLRA 149	unless d	hydrology must be present, listurbed or problematic.
testrictive Layer (if o Type:	oserved):						
Depth (inches):						Hydric Soil Pres	sent? Yes Vo No



Photo 1
Wetland data point wcmf001f_w facing northwest



Photo 2
Wetland data point wcmf001f_w facing northeast

Project/Site: Atlantic Coast Pipeline		City/C	county: Cumberland Co	unty	Sampling Date: 4/13/2016
Applicant/Owner: Dominion					Sampling Point: wcmf001e_w
		Section	on, Township, Range:		<u></u>
Landform (hillslope, terrace, etc.): Flat					
Subregion (LRR or MLRA): P					
		_ Lai			
Soil Map Unit Name: Nahunta loam					cation: None
Are climatic / hydrologic conditions on the					
Are Vegetation, Soil, or Hy	drology	significantly distur	bed? Are "Norma	al Circumstances"	present? Yes No
Are Vegetation, Soil, or Hy	drology	naturally problema	atic? (If needed,	explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - Att	ach site ma	ap showing sam	pling point locati	ons, transects	s, important features, etc.
Hydrophytic Vegetation Present?	Yes 🗸	No			
Hydric Soil Present?		No	Is the Sampled Area	.	/ Na
Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:					
Disturbed utility ROW					
HYDROLOGY					
Wetland Hydrology Indicators:				-	ators (minimum of two required)
Primary Indicators (minimum of one is re	quired; check	all that apply)		Surface Soil	· ·
Surface Water (A1)		atic Fauna (B13)			egetated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LRF			atterns (B10)
Saturation (A3)	-	ogen Sulfide Odor (C		Moss Trim L	
Water Marks (B1)			long Living Roots (C3)		Water Table (C2)
Sediment Deposits (B2) Drift Deposits (B3)		ence of Reduced Ironent Iron Reduction in		Crayfish Bur	rrows (C8) /isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)	Tilled Solis (Co)		Position (D2)
Iron Deposits (B5)		er (Explain in Remark	(2)	Shallow Aqu	
Inundation Visible on Aerial Imagery		(=/ p.c	,	FAC-Neutra	
Water-Stained Leaves (B9)	()				moss (D8) (LRR T, U)
Field Observations:					
Surface Water Present? Yes	No	Depth (inches):			
Water Table Present? Yes	No	Depth (inches): 14			
		Depth (inches): 0	Wetland	Hydrology Prese	nt? Yes <u> </u>
(includes capillary fringe) Describe Recorded Data (stream gauge)	monitoring we	all aprial photos pro	vious inspections) if av	ailahle:	
Describe Necorded Data (stream gauge	, morntoning we	en, aenai priotos, pre	vious irispections), ii av	allable.	
Remarks:					

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4.				
5.				Percent of Dominant Species That Are OBL EACIN or EAC: 100 (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	-			Total % Cover of: Multiply by:
8				OBL species x 1 = 20
		= Total Cov		00 400
50% of total cover:0	20% of	total cover:	0	FACW species x 2 = 160
Sapling/Shrub Stratum (Plot size: 0)				FAC species x 3 = 0
1				FACU species x 4 =
2.				UPL species x 5 =
3.				Column Totals:(A)(B)
				4.05
4				Prevalence Index = B/A =1.85
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	0	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:0		total cover:	•	Problematic Hydrophytic Vegetation (Explain)
0	20 /0 01	10101 00101.		
Herb Stratum (Plot size:) 1 Arundinaria gigantea	70	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must
··-	20			be present, unless disturbed or problematic.
2. Lycopodiella alopecuroides		No No	OBL	Definitions of Four Vegetation Strata:
3. Lyonia lucida	10	No No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Andropogon virginicus	5	No	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				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				
	105	= Total Cov	er	
50% of total cover:52.5		total cover:		
Woody Vine Stratum (Plot size: 0)	_			
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0				Present? Yes No No
Remarks: (If observed, list morphological adaptations belo				
Tremains. (II observed, list morphological adaptations belo	vv).			

SOIL Sampling Point: wcmf001e_w

Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Re 0-3 10YR 3/1 100 SCL	marks
3-18 10YR 5/1 80 7.5YR 5/8 20 C PL/M SCL	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, I	M=Matrix
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic	
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O	•
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S	
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (o	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soi	ls (F19) (LRR P, S, T)
Stratified Layers (A5) Anomalous Bright Loam	y 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 (TF	
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surfa	
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remark	KS)
 Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophy 	tic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology mu	_
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or pi	
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Type:	
Depth (inches): Hydric Soil Present? Yes	No
Remarks:	



Photo 1 Wetland data point wcmf001e_w facing north



Photo 2
Wetland data point wcmf001e_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland Co	ounty	_ Sampling Date: 4/11/2016
Applicant/Owner: Dominion					Sampling Point: wcmf001_u
• • • • • • • • • • • • • • • • • • • •		Section	on, Township, Range: _		<u></u>
Landform (hillslope, terrace, etc.): Flat					
					Datum: WGS 1984
		_ Lat			
Soil Map Unit Name: Nahunta loam					
Are climatic / hydrologic conditions on t					
Are Vegetation, Soil, or	Hydrology	_ significantly distur	bed? Are "Norm	al Circumstances"	present? Yes No
Are Vegetation, Soil, or	Hydrology	_ naturally problema	atic? (If needed	, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - A	ttach site ma	p showing san	npling point locat	ions, transects	s, important features, etc.
Hydrophytic Vegetation Present?	Yes 🔽	No			
Hydric Soil Present?	Yes		Is the Sampled Area		
	Yes	No 🔽	within a Wetland?	Yes	No
Remarks:					
Disturbed area - pine plantation adjace	ent to utility ROW				
HADBOLOCA					
HYDROLOGY Wetland Hydrology Indicators:				Socondany India	ators (minimum of two required)
Primary Indicators (minimum of one is	required: check	all that annly)		Surface Soil	
Surface Water (A1)	-	itic Fauna (B13)			getated Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LR I	R U)		atterns (B10)
Saturation (A3)		ogen Sulfide Odor (Moss Trim L	
Water Marks (B1)		=	along Living Roots (C3)		Water Table (C2)
Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Bu	
Drift Deposits (B3)	Rece	ent Iron Reduction in	Tilled Soils (C6)	Saturation V	/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin	Muck Surface (C7)		Geomorphic	Position (D2)
Iron Deposits (B5)	Othe	r (Explain in Remarl	(s)	Shallow Aqu	
Inundation Visible on Aerial Imag	ery (B7)			FAC-Neutra	
Water-Stained Leaves (B9)				Sphagnum i	moss (D8) (LRR T, U)
Field Observations:	4/				
		Depth (inches):			
		Depth (inches):			
Saturation Present? Yes _ (includes capillary fringe)	No	Depth (inches):	Wetland	Hydrology Prese	nt? Yes No
Describe Recorded Data (stream gau	ge, monitoring we	ell, aerial photos, pre	evious inspections), if a	vailable:	
Remarks:					

Tree Stratum (Plot size: 0)		Dominant		Dominance Test worksheet:		
Piece to a de		Species?		Number of Dominant Species	0	
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC:	6	(A)
2				Total Number of Deminent		
3				Total Number of Dominant Species Across All Strata:	6	(B)
4.						(5)
				Percent of Dominant Species	100	
5				That Are OBL, FACW, or FAC:	100	(A/B)
6				Prevalence Index worksheet:		
7					A. Himberton	
8					Multiply by: - 0	
	50	= Total Cov	er	OBL species x 1 =		_
50% of total cover: 25	20% of	total cover:	10	FACW species x 2 =		_
Sapling/Shrub Stratum (Plot size: 0)	20 / 0 0.	10101 00101	· <u></u> -	FAC species115 x 3 =	345	_
1 Pinus taeda	25	Yes	FAC	FACU species0 x 4 =	_ 0	
•••	15	Yes		UPL species 0 x 5 =	0	
2. Acer rubrum		res	FAC	Column Totals: 125 (A)	365	— (B)
3				Column Totals (A)	-	_ (D)
4				Prevalence Index = B/A =	2.92	
5						_
6.				Hydrophytic Vegetation Indicator		
				1 - Rapid Test for Hydrophytic	Vegetation	
7				2 - Dominance Test is >50%		
8				✓ 3 - Prevalence Index is ≤3.0¹		
	40	= Total Cov		Problematic Hydrophytic Veget	tation¹ (Expla	in)
50% of total cover: 20	20% of	total cover:	8			
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetlan	nd bydrology i	muet
1 Pinus taeda	15	Yes	FAC	be present, unless disturbed or pro		iiust
2 Ilex coriacea	10	Yes	FACW	Definitions of Four Vegetation St		
3. Andropogon virginicus	10	Yes	FAC	Deminions of Four Vegetation St	iata.	
···			170	Tree - Woody plants, excluding vin	es, 3 in. (7.6	cm) or
4				more in diameter at breast height (I	DBH), regard	ess of
5				height.		
6				Sapling/Shrub – Woody plants, ex	cludina vines	. less
7				than 3 in. DBH and greater than 3.2	28 ft (1 m) tall	
8.						
· ·				Herb – All herbaceous (non-woody of size, and woody plants less than		rdless
··-				of size, and woody plants less than	3.20 it tail.	
10				Woody vine – All woody vines grea	ater than 3.28	ft in
11				height.		
12						
	35 :	= Total Cov	er			
50% of total cover:17.5		total cover:				
Woody Vine Stratum (Plot size: 0)						
, , , , , , , , , , , , , , , , , , , ,						
1						
2						
3						
4						
5				Hydrophytic		
	0 :	= Total Cov	er	Vegetation		
50% of total cover:0		total cover:	•		No	
		total cover.	· — —			
Remarks: (If observed, list morphological adaptations below	w).					

SOIL Sampling Point: wcmf001_u

	Matrix		Redo	x Feature	S				
(inches) 0-5	Color (moist) 2.5Y 3/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	Texture LS	Remarks	
5-16	2.5Y 5/3	95	10YR 5/6	5	C	PL/M	SCL		
				_					
				_					
1 _{Type:} C=C	oncentration, D=Depl	otion DM-		C=Mooko	d Sand Cr		² l continu: DI =	Pore Lining, M=Matrix.	
	Indicators: (Applica					allis.		Problematic Hydric Soils ³ :	
Histosol			Polyvalue Be			.RR S, T, U		· ·	
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)	
	istic (A3)		Loamy Muck			? O)		ertic (F18) (outside MLRA 1	
	en Sulfide (A4)		Loamy Gleye		(F2)			loodplain Soils (F19) (LRR P	, S, T)
	d Layers (A5) : Bodies (A6) (LRR P,	T 11\	Depleted Ma		-6\		Anomalous (MLRA 1	Bright Loamy Soils (F20)	
-	ucky Mineral (A7) (LR		Redox Dark Depleted Da					Material (TF2)	
	resence (A8) (LRR U		Redox Depre				Very Shallow Dark Surface (TF12)		
	uck (A9) (LRR P, T)		Marl (F10) (L		,			ain in Remarks)	
	d Below Dark Surface	e (A11)	Depleted Oc	. ,	•	•	2		
	ark Surface (A12)		Iron-Mangan					of hydrophytic vegetation an	ıd
	Prairie Redox (A16) (N Mucky Mineral (S1) (L		A) Umbric Surfa Delta Ochric			, U)		hydrology must be present, isturbed or problematic.	
	Gleyed Matrix (S4)	.KK 0, 3)	Reduced Ve			0A. 150B)	uniess u	isturbed of problematic.	
	Redox (S5)		Piedmont Flo				9A)		
	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 153	D)	
	ırface (S7) (LRR P, S	, T, U)					1		
	Layer (if observed):								
Type:									/
	ches):						Hydric Soil Pres	sent? Yes No	
Remarks:									



Photo 1 Upland data point wcmf001_u facing south



Photo 2
Upland data point wcmf001_u facing northwest

Project/Site: Atlantic Coast Pipeline	City/Co	ounty: Cumberland Cou	nty	Sampling Date: <u>4/14/2016</u>		
Applicant/Owner: Dominion	•			Sampling Point: wcmf005f1_w		
	Sectio					
Landform (hillslope, terrace, etc.): Flat						
Subregion (LRR or MLRA): P						
Soil Map Unit Name: Grantham loam	Lal	Long	NA// -1:6-	Datum. None		
Are climatic / hydrologic conditions on the site typi						
Are Vegetation, Soil, or Hydrology	significantly disturb	ped? Are "Normal	Circumstances" p	present? Yes No		
Are Vegetation, Soil, or Hydrology	naturally problema	tic? (If needed, e	explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Attach si	te map showing sam	pling point location	ons, transects	, important features, etc.		
Hydrophytic Vegetation Present? Yes	✓ No					
	✓ No	Is the Sampled Area	v	N		
Wetland Hydrology Present? Yes	✓ No	within a Wetland?	res	No		
Remarks:						
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)	Surface Water (A1) Aquatic Fauna (B13)					
<u>✓</u> High Water Table (A2)	? U)	Drainage Pa	tterns (B10)			
	51)	Moss Trim L				
· ·	Oxidized Rhizospheres al			Water Table (C2)		
	Presence of Reduced Iron		Crayfish Burrows (C8)			
	Tilled Soils (C6)	(C6) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)				
Algal Mat or Crust (B4) Iron Deposits (B5)	٥)					
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	5)	Shallow Aqu FAC-Neutral				
Water-Stained Leaves (B9)				noss (D8) (LRR T, U)		
Field Observations:			<u> </u>	(20) (2 1, 0)		
	Depth (inches):					
	Depth (inches): 0					
	Depth (inches): 0	Wetland F	lydrology Preser	nt? Yes 🗸 No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monito		views inspections) if ave	ilabla			
Describe Recorded Data (stream gauge, monito	ring weii, aeriai photos, prev	vious inspections), if ava	iliable:			
Remarks:						
remarks.						

0		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	60	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6.				That Are OBL, I ACW, OF I AC (A/B)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	60 .	T-4-1 O		OBL species30 x 1 =30
50% of total cover: 30		= Total Cov	12	FACW species 20 x 2 = 40
50 % Oi total cover.	20% of	total cover:		FAC species 130 x 3 = 390
Sapling/Shrub Stratum (Plot size:)	00		E40	FACU species 0 x 4 = 0
1. Acer rubrum	20	Yes	FAC	
2. Pinus taeda	15	Yes	FAC	UPL species $\frac{0}{180}$ x 5 = $\frac{0}{460}$
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =2.55
5				Trevalence mack B//
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
8	35 .	T-4-1 O		3 - Prevalence Index is ≤3.0 ¹
17.5		= Total Cov	-	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 17.5	20% of	total cover:		
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Andropogon virginicus	35	Yes	FAC	be present, unless disturbed or problematic.
2. Juncus effusus	20	Yes	OBL	Definitions of Four Vegetation Strata:
3. Dichanthelium scoparium	20	Yes	FACW	Tree Mondy plants evaluding vince 2 in (7.6 cm) or
4. Woodwardia virginica	5	No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Woodwardia areolata	5	No	OBL	height.
6				Continu/Chrush Woody plants evaluding vines less
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				3 ,
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: 42.5	20% of	total cover:	17	
Woody Vine Stratum (Plot size: 0)				
1				
2				
3				
4.				
5				
J	0 :	= Total Cov		Hydrophytic Vegetation
50% of total cover: 0			^	Present? Yes No
30 % of total cover.		total cover:	<u> </u>	
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wcmf005f1_w

	cription: (Describe	to the depth				or confirm	the absence of	indicators.)			
Depth	Matrix Color (moist)	%	Redo Color (moist)	x Feature %	1	Loc ²	Texture Remarks				
(inches) 0-10	10YR 2/1		OYR 4/6	- <u>%</u> - 5	Type' C	PL	SCL	Velliques			
					. ——						
10-18	10YR 2/1	95 1	0YR 4/6	5	C	PL	SC				
								_			
				-	· 			_			
				-				_			
¹ Type: C=C	oncentration, D=Depl	etion, RM=R	teduced Matrix, MS	S=Masked	d Sand Gr	ains.	² Location: Pl	L=Pore Lining, M=Matrix.			
	Indicators: (Applica							r Problematic Hydric Soils³:			
Histoso	I (A1)		Polyvalue Be	low Surfa	ce (S8) (L	.RR S, T, U) 1 cm Muc	ck (A9) (LRR O)			
	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)			
	istic (A3)		Loamy Muck			? O)		Vertic (F18) (outside MLRA 150A,B)			
	en Sulfide (A4)		Loamy Gleye		(F2)			t Floodplain Soils (F19) (LRR P, S, T)			
	d Layers (A5)		Depleted Ma					us Bright Loamy Soils (F20)			
_	Bodies (A6) (LRR P,		Redox Dark	•	,		(MLRA				
	ucky Mineral (A7) (LR		Depleted Date					ent Material (TF2)			
	resence (A8) (LRR U) uck (A9) (LRR P, T))	Redox Depre		8)			llow Dark Surface (TF12) φlain in Remarks)			
	d Below Dark Surface	(A11)	Depleted Ocl		(MIRA1	51)	Other (LX	cpiain in Remarks)			
-	ark Surface (A12)	, (, (, , ,	Iron-Mangan				T) ³ Indicate	ors of hydrophytic vegetation and			
	rairie Redox (A16) (N	ILRA 150A)	_					nd hydrology must be present,			
	Mucky Mineral (S1) (L		Delta Ochric					s disturbed or problematic.			
Sandy (Gleyed Matrix (S4)		Reduced Ver	tic (F18) (MLRA 15	0A, 150B)					
	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	9A)				
	d Matrix (S6)		Anomalous E	Bright Loai	my Soils (F20) (MLR	A 149A, 153C, 1	53D)			
	ırface (S7) (LRR P, S	, T, U)					1				
Restrictive	Layer (if observed):										
Type:											
Depth (in	ches):		<u></u>				Hydric Soil Pr	resent? Yes No			
Remarks:											



Photo 1Wetland data point wcmf005f1_w facing southwest



Photo 2
Wetland data point wcmf005f1_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: Cumberland Cou	unty	Sampling Date: <u>4/14/2016</u>	
Applicant/Owner: Dominion			Sampling Point: wcmf005f2_w	
Investigator(s): SH, SA			·	
Landform (hillslope, terrace, etc.): Flat				
Subregion (LRR or MLRA): P Lat: 35.0 Soil Map Unit Name: Torhunta and Lynn Haven soils	Long:		None	
Are climatic / hydrologic conditions on the site typical for this time of				
Are Vegetation, Soil, or Hydrology significan	ntly disturbed? Are "Norma	al Circumstances" p	resent? Yes No	
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed,	explain any answer	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showi	ng sampling point locati	ons, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes <u>✓</u> No				
Hydric Soil Present? Yes V No	is the Sampled Area			
Wetland Hydrology Present? Yes No		Yes	No	
Remarks:	<u> </u>			
NC WAM - Hardwood Flat: Area is saturated, areas of seasonal inc point loction. See additional photos of inundated areas Area recei			at the surface at wetland data	
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)	
Primary Indicators (minimum of one is required; check all that app	<u>ly)</u>	Surface Soil (Cracks (B6)	
Surface Water (A1) Aquatic Fauna (Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2) Marl Deposits (E		Drainage Patterns (B10)		
Saturation (A3) Hydrogen Sulfid		Moss Trim Lines (B16)		
	spheres along Living Roots (C3)			
Sediment Deposits (B2) Presence of Rec Drift Deposits (B3) Recent Iron Rec	duction in Tilled Soils (C6)	Crayfish Burn	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Thin Muck Surfa	` '	Geomorphic I	= : : :	
Iron Deposits (B5) Other (Explain in	` '	Shallow Aquit		
Inundation Visible on Aerial Imagery (B7)	· · · · · · · · · · · · · · · · · · ·	✓ FAC-Neutral	, ,	
Water-Stained Leaves (B9)		Sphagnum m	oss (D8) (LRR T, U)	
Field Observations:				
Surface Water Present? Yes No Depth (inch				
Water Table Present? Yes No Depth (inch	ies): 4			
Saturation Present? Yes No Depth (inch	nes): Wetland	Hydrology Present	t? Yes <u>/</u> No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if av	ailable:		
	,, , , , , , , , , , , , , , , , , , ,			
Remarks:				

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species _
1. Liriodendron tulipifera	30	Yes	FACU	That Are OBL, FACW, or FAC:7 (A)
2. Acer rubrum	20	Yes	FAC	Total Number of Dominant
3. Magnolia virginiana	15	Yes	FACW	Species Across All Strata: 8 (B)
4. Chamaecyparis thyoides	10	No	OBL	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 87.5 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	75	= Total Cov	er	OBL species x 1 =
50% of total cover: 37.5		total cover:	15	FACW species x 2 = x 2 =
Sapling/Shrub Stratum (Plot size: 0)	2070 01	total cover.		FAC species30
1 llex coriacea	75	Yes	FACW	FACU species40 x 4 =160
Liste de la della	10	No	FACU	UPL species0 x 5 =0
2. Linoaendron tulipitera 3. Magnolia virginiana	5	No	FACW	Column Totals: 197 (A) 494 (B)
		No	FACW	(-)
4. Lyonia lucida			TACVV	Prevalence Index = B/A = 2.5
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	95	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 47.5	20% of	total cover:	. 19	Troblemate tryatephysic vegetation (Explain)
Herb Stratum (Plot size: 0)				¹ Indicators of hydric soil and wetland hydrology must
1 llex coriacea	5	Yes	FACW	be present, unless disturbed or problematic.
2. Ilex opaca	5	Yes	FAC	Definitions of Four Vegetation Strata:
3. Acer rubrum	5	Yes	FAC	Definitions of Four Vegetation offata.
4 Smilax laurifolia	2	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
··-				more in diameter at breast height (DBH), regardless of height.
5				noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
	17	= Total Cov	er	
50% of total cover: 8.5		total cover:		
Woody Vine Stratum (Plot size:0)				
1 Smilax laurifolia	10	Yes	FACW	
···				
2			-	
3				
4				
5				Hydrophytic
<u>_</u>		= Total Cov	_	Vegetation Present? Yes No
50% of total cover:5	20% of	total cover:	2	rieseitt! iesNo
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wcmf005f2_w

Profile Description: (Description: Matrix	_		x Feature						
(inches) Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	
0-12 2.5Y 2.5/1	100						Organic soil m	naterial - mi	ucky peat
12-18 2.5Y 2.5/1	100					S	Mucky sand		
12-18 2.5Y 2.5/1 1Type: C=Concentration, D=D Hydric Soil Indicators: (App Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRF 5 cm Mucky Mineral (A7) Muck Presence (A8) (LRR P, 1 cm Muck (A9) (LRR P, 2 cm Mucky Mineral (A1) Depleted Below Dark Surface (A12) Coast Prairie Redox (A16) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	R P, T, U) (LRR P, T, U) (LRR P, T, U) (O) (I) (O) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	LRRs, unless othe Polyvalue Be Thin Dark St Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L Depleted Oc Iron-Mangan	rwise note elow Surfa urface (S9) sy Mineral ed Matrix (F3) Surface (F18 Surface essions (F11) heric (F11) esse Masse ace (F13) (F17) (ML rtic (F18) (F10)	ed.) ce (S8) (L) (LRR S, (F1) (LRR F2) (6) (F7) 8) (MLRA 15) (LRR P, T LRA 151) (MLRA 15) oils (F19)	RR S, T, U T, U) O) LRR O, P, U) 0A, 150B) (MLRA 149	2Location: Indicators Indicators 1 cm 2 cm Reduction: Red Fiedm Number Other T) 3Indi we un	E PL=Pore Linings for Problemate Muck (A9) (LRR Muck (A10) (LR) ced Vertic (F18) nont Floodplain Stalous Bright Loate RA 153B) Parent Material (Shallow Dark Su (Explain in Remark Cators of hydropotelland hydrology less disturbed on	ic Hydric S O) R S) (outside N Soils (F19) amy Soils (F TF2) urface (TF12 narks) hytic vegeta	Soils ³ : ILRA 150A,B) (LRR P, S, T) =20) ation and esent,
Dark Surface (S7) (LRR F Restrictive Layer (if observe	d):		эпупі соаг	Thy Solis (-20) (WILK)	Hydric Soi		es_ V	No
Remarks:									



Photo 1Wetland data point wcmf005f depicting seasonally flooded area in hardwood flat



Photo 2
Wetland data point wcmf005f2_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberlar	and County		Sampling Date: 4/14/2016	
Applicant/Owner: Dominion						Sampling Point: wcmf005e_w	
Investigator(s): SH, SA Section, Township, Range: No PLSS in this area						. •	
Landform (hillslope, terrace, etc.): Flat							
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Grantham loam		Lat				ation: PFO1/3B, PFO4B,	
Are climatic / hydrologic conditions on the site							
Are Vegetation, Soil, or Hydro							
Are Vegetation, Soil, or Hydro					-	rs in Remarks.)	
SUMMARY OF FINDINGS – Attac	n site ma	ap showing sam	npling point lo	ocations,	transects	, important features, etc.	
Hydrophytic Vegetation Present? Y	es 🗸	No	Is the Sampled	I A			
		No	within a Wetlan		Voc V	No	
Wetland Hydrology Present? Y	es <u>/</u>	No	within a wellan	iu:	163		
Remarks:							
Disturbed utility ROW							
HYDROLOGY							
Wetland Hydrology Indicators:		- II 41 4 h - \				tors (minimum of two required)	
Primary Indicators (minimum of one is requ					Surface Soil (
Surface Water (A1)		atic Fauna (B13)	D 11\			etated Concave Surface (B8)	
✓ High Water Table (A2)		Deposits (B15) (LRI			Drainage Pat Moss Trim Lii		
Saturation (A3) Water Marks (B1)	-	rogen Sulfide Odor (0 dized Rhizospheres a					
Sediment Deposits (B2)		sence of Reduced Iro			B) Dry-Season Water Table (C2) Crayfish Burrows (C8)		
Drift Deposits (B3)		ent Iron Reduction in			Saturation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Muck Surface (C7)			Geomorphic Position (D2)		
Iron Deposits (B5)		er (Explain in Remark	(S)	_	Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B	7)			FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)				<u> </u>	Sphagnum m	oss (D8) (LRR T, U)	
Field Observations:							
		Depth (inches):					
Water Table Present? Yes	No	Depth (inches): $\frac{3}{0}$					
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches): 0	Wet	etland Hydro	d Hydrology Present? Yes No		
Describe Recorded Data (stream gauge, m	onitoring w	ell, aerial photos, pre	vious inspections)	s), if available	:		
Remarks:							

0		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:50 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by: OBL species 10 v.1 = 10
	0	= Total Cov	er	OBL species
50% of total cover:0	20% of	total cover:	0	FACW species $\frac{60}{10}$ x 2 = $\frac{120}{30}$
Sapling/Shrub Stratum (Plot size: 0)	<u></u>			FAC species x 3 =
1				FACU species x 4 =
2.				UPL species x 5 =
				Column Totals:80
3				
4				Prevalence Index = B/A =2
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	0			<u>✓</u> 3 - Prevalence Index is ≤3.0 ¹
0		= Total Cov	•	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 0	20% of	total cover:	0	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Sphagnum sp.	90	Yes		be present, unless disturbed or problematic.
2. Arundinaria gigantea	60	Yes	FACW	Definitions of Four Vegetation Strata:
3. Rubus argutus	10	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Typha angustifolia	10	No	OBL	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 back as a second for a second of a least a second large
9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
4.4				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.	80	= Total Cov		
50% of total cover: 85		total cover:		
50 % Of total cover.	20% 01	total cover:		
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf005e_w

Profile Description: (Describe to t	he depth needed to docume	nt the indicator or confirm	the absence of in	dicators.)
Depth <u>Matrix</u>		eatures		
(inches) Color (moist)	% Color (moist)	% Type ¹ Loc ²	Texture	Remarks
0-12 2.5Y 2.5/1	100		SCL Mud	cky
12-18 2.5Y 2.5/1	100		SC Muc	ckv
				
1T C-Consortantina D-Douletin	- DM-Dadwaad Matrix MC-	Mankad Cand Carina	21 anation: DI -	Dana Limina M-Matrix
¹ Type: C=Concentration, D=Depletion Hydric Soil Indicators: (Applicable)				Problematic Hydric Soils ³ :
1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		•		•
Histosol (A1)		w Surface (S8) (LRR S, T, U)		
Histic Epipedon (A2)		ace (S9) (LRR S, T, U)		(A10) (LRR S)
Black Histic (A3)		Mineral (F1) (LRR O)		ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed			loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T,			(MLRA 15	-
5 cm Mucky Mineral (A7) (LRR I	· · · ·			Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depress		-	w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRI		Other (Expl	ain in Remarks)
Depleted Below Dark Surface (A		c (F11) (MLRA 151)	3, ₁ , ,	
Thick Dark Surface (A12)		e Masses (F12) (LRR O, P, T	•	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLF		(F13) (LRR P, T, U)		hydrology must be present,
Sandy Mucky Mineral (S1) (LRR		17) (MLRA 151)	uniess a	isturbed or problematic.
Sandy Gleyed Matrix (S4)		(F18) (MLRA 150A, 150B)		
Sandy Redox (S5)		dplain Soils (F19) (MLRA 149		D)
Stripped Matrix (S6)		ght Loamy Soils (F20) (MLRA	149A, 153C, 153	ט)
Dark Surface (S7) (LRR P, S, T,	U)			
Restrictive Layer (if observed):				
Type:				
Depth (inches):			Hydric Soil Pres	ent? Yes No
Remarks:				



Photo 1
Wetland data point wcmf005e_w facing south



Photo 2
Wetland data point wcmf005e_w facing north

Project/Site: Atlantic Coast Pipeline		City/0	County: Cumberland Co	unty	_ Sampling Date: 4/14/2016		
Applicant/Owner: Dominion					Sampling Point: wcmf005_u		
	estigator(s): SH Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc.):							
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Nahunta loam		Lat	Long				
Are climatic / hydrologic conditions o		. Halla Himana af a. O. N					
Are Vegetation, Soil,							
Are Vegetation, Soil,	or Hydrology	naturally problem	atic? (If needed,	explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS –	Attach site ma	ap showing sar	npling point locati	ons, transect	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No	la (b 0 la d. A				
Hydric Soil Present?	Yes	No 🔽	Is the Sampled Area within a Wetland?	Vac	No 🗸		
Wetland Hydrology Present?	Yes	No	within a welland?	res	NO		
LIVEROLOGY							
HYDROLOGY Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one	e is required: check	all that annly)		Surface Soi			
Surface Water (A1)	-	atic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)		Deposits (B15) (LR	R U)		atterns (B10)		
Saturation (A3)		rogen Sulfide Odor (Moss Trim I			
Water Marks (B1)		=	along Living Roots (C3)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Pres	ence of Reduced Ire	on (C4)	Crayfish Bu	rrows (C8)		
Drift Deposits (B3)		ent Iron Reduction in	n Tilled Soils (C6)		ation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Muck Surface (C7)			Position (D2)		
Iron Deposits (B5)		er (Explain in Remar	KS)	Shallow Aqu			
Inundation Visible on Aerial Im- Water-Stained Leaves (B9)	agery (B7)			✓ FAC-Neutra	moss (D8) (LRR T, U)		
Field Observations:				Opilagilalii	111033 (DO) (ERRY 1, O)		
	s No 🗸	Depth (inches):					
		Depth (inches):					
		Depth (inches):		Hydrology Prese	nt? Yes No <u> </u>		
(includes capillary fringe) Describe Recorded Data (stream g	augo monitoring w	all parial photos pr	ovious inspections) if av	ailabla:			
Describe Recorded Data (stream g	auge, monitoring we	eli, aeriai priotos, pri	evious inspections), if av	allable:			
Remarks:							

•	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	40	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2				
3.				Total Number of Dominant Species Across All Strata: 5 (B)
				Species Across All Strata:5 (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:80 (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by: ORL procies 0 v.1 = 0
	40	= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:	8	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 0)				FAC species 49
1 Pinus taeda	5	Yes	FAC	FACU species15 x 4 =60
2 Liquidambar styraciflua	2	Yes	FAC	UPL species $0 \times 5 = 0$
			FAC	Column Totals: 94 (A) 267 (B)
3				Goldmin Totals (A) (B)
4				Prevalence Index = B/A = 2.84
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
8	7			3 - Prevalence Index is ≤3.0 ¹
3.5		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 3.5	20% of	total cover:	1.4	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	20	Yes	FACW	be present, unless disturbed or problematic.
2. Pteridium aquilinum	10	Yes	FACU	Definitions of Four Vegetation Strata:
3. Dichanthelium scoparium	5	No	FACW	
4. Lonicera japonica	5	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5 1 1 1	5	No	FACW	more in diameter at breast height (DBH), regardless of height.
5. Persea borbonia Toxicodendron radicans			FAC	noight.
6. Toxicodendron radicans		No	-FAC	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.				
44				Woody vine – All woody vines greater than 3.28 ft in
·				height.
12	47			
22.5		= Total Cov	^ 4	
50% of total cover: 23.5	20% of	total cover:	9.4	
Woody Vine Stratum (Plot size: 0)				
1				
2.				
3.				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	w)			1
Tromano. (ii oboortoa, iiot morphological adaptationo bolo	••).			

SOIL Sampling Point: wcmf005_u

Profile Desc	cription: (Describe	to the depth	needed to docu	ment the i	ndicator	or confirm	the absence o	f indicators	s.)	
Depth	1 2						- .	Demonto		
(inches) 0-12	Color (moist) 10YR 3/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	Texture SCL		Remarks	
12-18	2.5Y 5/4	95 1	0YR 5/6	5	C	PL_	SC			
		·								
	_									
¹ Type: C=C	oncentration, D=Dep	letion, RM=R	educed Matrix, M	S=Masked	Sand Gra	ains.	² Location: F	L=Pore Lini	ing, M=Matr	ix.
Hydric Soil	Indicators: (Applic	able to all Li	RRs, unless othe	rwise note	ed.)		Indicators for	or Problema	atic Hydric	Soils ³ :
Histosol	(A1)		Polyvalue Be	elow Surfac	ce (S8) (L	.RR S, T, U) 1 cm Μι	ick (A9) (LR	R O)	
	pipedon (A2)		Thin Dark S					ıck (A10) (L l		
	istic (A3)		Loamy Muck			(O)				MLRA 150A,E
	en Sulfide (A4)		Loamy Gley		F2)					(LRR P, S, T
	d Layers (A5)	T 11\	Depleted Ma Redox Dark		(C)			_	oamy Soils ((F20)
_	Bodies (A6) (LRR P ucky Mineral (A7) (LF		Depleted Da					\ 153B) ent Material	(TF2)	
	resence (A8) (LRR U		Redox Depre						Surface (TF1	12)
	uck (A9) (LRR P, T)	,	Marl (F10) (I		-,			xplain in Re		/
Deplete	d Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)				
·	ark Surface (A12)		Iron-Mangar				•		phytic vege	
	rairie Redox (A16) (N					, U)			y must be p	
-	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric			0.4 4E0B\	unles	s disturbed	or problema	atic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve				24)			
-	Matrix (S6)		Anomalous I					153D)		
	rface (S7) (LRR P, S	s, T, U)			,		, , , , , , , , , , , , , , , , , , , ,	,		
	Layer (if observed):									
Type:			<u></u>							
Depth (in	ches):						Hydric Soil P	resent?	Yes	No
Remarks:										



Photo 1
Upland data point wcmf005_u facing northwest



Photo 2
Upland data point wcmf005_u facing northeast

Project/Site: Atlantic Coast Pipeline	City/County: Cum	berland County	_ Sampling Date: 4/14/2016			
Applicant/Owner: Dominion State: NC Sampling Point: wcmf00						
Investigator(s): SH ,SA Section, Township, Range: No PLSS in this area						
Landform (hillslope, terrace, etc.): Flat						
Subregion (LRR or MLRA): P						
Soil Map Unit Name: Grantham loam	Lat	Long	Datum. None			
		NWI classif				
Are climatic / hydrologic conditions on the site typical for						
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances"	present? Yes No			
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	ers in Remarks.)			
SUMMARY OF FINDINGS - Attach site m	ap showing sampling po	int locations, transect	s, important features, etc.			
Hydrophytic Vegetation Present? Yes	No Is the San					
	No.	npled Area	/ Na			
Wetland Hydrology Present? Yes <u>✓</u>	within a W	vetiand? res	No			
Remarks:	<u> </u>					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary India	cators (minimum of two required)			
Primary Indicators (minimum of one is required; check	κ all that apply)	Surface So	Surface Soil Cracks (B6)			
Surface Water (A1) Aqu	uatic Fauna (B13)	Sparsely V	Sparsely Vegetated Concave Surface (B8)			
<u>✓</u> High Water Table (A2) Mai	rl Deposits (B15) (LRR U)	Drainage P	atterns (B10)			
	drogen Sulfide Odor (C1)	Moss Trim				
· · ·	dized Rhizospheres along Living					
	esence of Reduced Iron (C4)		Crayfish Burrows (C8)			
	cent Iron Reduction in Tilled Soils n Muck Surface (C7)		Saturation Visible on Aerial Imagery (C9)			
	ner (Explain in Remarks)		Geomorphic Position (D2) Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	er (Explain in Romano)	FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)				
Field Observations:						
Surface Water Present? Yes No						
Water Table Present? Yes No						
Saturation Present? Yes V No	Depth (inches): 0	Wetland Hydrology Prese	etland Hydrology Present? Yes No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous insper	tions), if available:				
		,				
Remarks:						

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	60	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
7		-		Total % Cover of: Multiply by:
8	60			OBL species
20		= Total Cov		FACW species x 2 = 40
50% of total cover:30	20% of	total cover:	12	130 300
Sapling/Shrub Stratum (Plot size: 0)				FAC species x 3 = 0
1. Acer rubrum	20	Yes	FAC	FACU species X 4 =
2. Pinus taeda	15	Yes	FAC	UPL species x 5 =
3.				Column Totals:180 (A)460 (B)
4.				Prevalence Index = R/A = 2.55
Ē				T Tevalcinec index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
		= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:17.5	20% of	total cover:	7	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1 Andropogon virginicus	35	Yes	FAC	be present, unless disturbed or problematic.
2. Juncus effusus	20	Yes	OBL	Definitions of Four Vegetation Strata:
3. Dichanthelium scoparium	20	Yes	FACW	Definitions of Four Vegetation Strata.
4. Woodwardia virginica		No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
14/ / " / /		No	OBL	more in diameter at breast height (DBH), regardless of
5. Woodwardia areolata			— OBL	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.				Was trades Allows to size a sector than 0.00 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
12.	85	= Total Cov		
50% of total cover: 42.5				
	20% of	total cover:		
Woody Vine Stratum (Plot size: 0)				
1				
2				
3				
4				
5.				Hydrophytic
•	0	= Total Cov	er	Vegetation
50% of total cover:		total cover:		Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf005f1_w

	cription: (Describe	to the depth				or confirm	the absence of	indicators.)		
Depth	Matrix Color (moist)	0/_	Redox Features Color (moist)				Texture Remarks			
(inches) 0-10	10YR 2/1		OYR 4/6	- <u>%</u> - 5	<u>rype</u> C	PL	SCL	Velliques		
					. ——					
10-18	10YR 2/1	95 1	0YR 4/6	5	C	PL	SC			
								_		
				-	· 			_		
				-				_		
¹ Type: C=C	oncentration, D=Depl	etion, RM=R	teduced Matrix, MS	S=Masked	d Sand Gr	ains.	² Location: Pl	L=Pore Lining, M=Matrix.		
	Indicators: (Applica							r Problematic Hydric Soils³:		
Histoso	I (A1)		Polyvalue Be	low Surfa	ce (S8) (L	.RR S, T, U) 1 cm Muc	ck (A9) (LRR O)		
	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)		
	istic (A3)		Loamy Muck			? O)		Vertic (F18) (outside MLRA 150A,B)		
	en Sulfide (A4)		Loamy Gleye		(F2)			t Floodplain Soils (F19) (LRR P, S, T)		
	d Layers (A5)		Depleted Ma					us Bright Loamy Soils (F20)		
_	Bodies (A6) (LRR P,		Redox Dark	•	,		(MLRA			
	ucky Mineral (A7) (LR		Depleted Date					ent Material (TF2)		
	resence (A8) (LRR U) uck (A9) (LRR P, T))	Redox Depre		8)			llow Dark Surface (TF12) φlain in Remarks)		
	d Below Dark Surface	(A11)	Depleted Ocl		(MIRA1	51)	Other (LX	cpiain in Remarks)		
-	ark Surface (A12)	, (, (, , ,	Iron-Mangan				T) ³ Indicate	ors of hydrophytic vegetation and		
	rairie Redox (A16) (N	ILRA 150A)	_					nd hydrology must be present,		
	Mucky Mineral (S1) (L		Delta Ochric					s disturbed or problematic.		
Sandy (Gleyed Matrix (S4)		Reduced Ver	tic (F18) ((MLRA 15	0A, 150B)				
	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	9A)			
	d Matrix (S6)		Anomalous E	Bright Loai	my Soils (F20) (MLR	A 149A, 153C, 1	53D)		
	ırface (S7) (LRR P, S	, T, U)					1			
Restrictive	Layer (if observed):									
Type:										
Depth (in	ches):		<u></u>				Hydric Soil Pr	resent? Yes No		
Remarks:										



Photo 1Wetland data point wcmf005f1_w facing southwest



Photo 2
Wetland data point wcmf005f1_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: Cumberland Cou	unty	Sampling Date: <u>4/14/2016</u>	
Applicant/Owner: Dominion			Sampling Point: wcmf005f2_w	
Investigator(s): SH, SA			·	
Landform (hillslope, terrace, etc.): Flat				
Subregion (LRR or MLRA): P Lat: 35.0 Soil Map Unit Name: Torhunta and Lynn Haven soils	Long:		None	
Are climatic / hydrologic conditions on the site typical for this time of				
Are Vegetation, Soil, or Hydrology significan	ntly disturbed? Are "Norma	al Circumstances" p	resent? Yes No	
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed,	explain any answer	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showi	ng sampling point locati	ons, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes <u>✓</u> No				
Hydric Soil Present? Yes V No	is the Sampled Area			
Wetland Hydrology Present? Yes No		Yes	No	
Remarks:	<u> </u>			
NC WAM - Hardwood Flat: Area is saturated, areas of seasonal inc point loction. See additional photos of inundated areas Area recei			at the surface at wetland data	
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)	
Primary Indicators (minimum of one is required; check all that app	<u>ly)</u>	Surface Soil (Cracks (B6)	
Surface Water (A1) Aquatic Fauna (Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2) Marl Deposits (E		Drainage Pat		
Saturation (A3) Hydrogen Sulfid		Moss Trim Lir		
	spheres along Living Roots (C3)			
Sediment Deposits (B2) Presence of Rec Drift Deposits (B3) Recent Iron Rec	duction in Tilled Soils (C6)	Crayfish Burn	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Thin Muck Surfa	` '	Geomorphic I	= : : :	
Iron Deposits (B5) Other (Explain in	` '	Shallow Aquit		
Inundation Visible on Aerial Imagery (B7)	· · · · · · · · · · · · · · · · · · ·	✓ FAC-Neutral	, ,	
Water-Stained Leaves (B9)		Sphagnum m	oss (D8) (LRR T, U)	
Field Observations:				
Surface Water Present? Yes No Depth (inch				
Water Table Present? Yes No Depth (inch	ies): 4			
Saturation Present? Yes No Depth (inch	nes): Wetland	Hydrology Present	t? Yes <u>/</u> No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if av	ailable:		
	,, , , , , , , , , , , , , , , , , , ,			
Remarks:				

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species _
1. Liriodendron tulipifera	30	Yes	FACU	That Are OBL, FACW, or FAC:7 (A)
2. Acer rubrum	20	Yes	FAC	Total Number of Dominant
3. Magnolia virginiana	15	Yes	FACW	Species Across All Strata: 8 (B)
4. Chamaecyparis thyoides	10	No	OBL	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 87.5 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	75	= Total Cov	er	OBL species x 1 =
50% of total cover: 37.5		total cover:	15	FACW species x 2 = 234
Sapling/Shrub Stratum (Plot size: 0)	2070 01	total cover.		FAC species30
1 llex coriacea	75	Yes	FACW	FACU species40 x 4 =160
Liste de la della	10	No	FACU	UPL species0 x 5 =0
2. Linoaendron tulipitera 3. Magnolia virginiana	5	No	FACW	Column Totals: 197 (A) 494 (B)
		No	FACW	(-)
4. Lyonia lucida			TACVV	Prevalence Index = B/A = 2.5
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	95	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 47.5	20% of	total cover:	. 19	Troblemate Tryalophytic Vogetation (Explain)
Herb Stratum (Plot size: 0)				¹ Indicators of hydric soil and wetland hydrology must
1 llex coriacea	5	Yes	FACW	be present, unless disturbed or problematic.
2. Ilex opaca	5	Yes	FAC	Definitions of Four Vegetation Strata:
3. Acer rubrum	5	Yes	FAC	Definitions of Four Vegetation offata.
4 Smilax laurifolia	2	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
··-				more in diameter at breast height (DBH), regardless of height.
5				noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
	17	= Total Cov	er	
50% of total cover: 8.5		total cover:		
Woody Vine Stratum (Plot size:0)				
1 Smilax laurifolia	10	Yes	FACW	
···				
2			-	
3				
4				
5				Hydrophytic
<u>_</u>		= Total Cov	_	Vegetation Present? Yes No
50% of total cover:5	20% of	total cover:	2	rieseitt! iesNo
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wcmf005f2_w

Profile Description: (Description: Matrix	_		x Feature						
(inches) Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	
0-12 2.5Y 2.5/1	100						Organic soil m	naterial - mi	ucky peat
12-18 2.5Y 2.5/1	100					S	Mucky sand		
12-18 2.5Y 2.5/1 1Type: C=Concentration, D=D Hydric Soil Indicators: (App Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRF 5 cm Mucky Mineral (A7) Muck Presence (A8) (LRR P, 1 cm Muck (A9) (LRR P, 2 cm Mucky Mineral (A1) Depleted Below Dark Surface (A12) Coast Prairie Redox (A16) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	R P, T, U) (LRR P, T, U) (LRR P, T, U) (O) (I) (O) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	LRRs, unless othe Polyvalue Be Thin Dark St Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L Depleted Oc Iron-Mangan	rwise note elow Surfa urface (S9) sy Mineral ed Matrix (F3) Surface (F18 Surface essions (F11) heric (F11) esse Masse ace (F13) (F17) (ML rtic (F18) (F10)	ed.) ce (S8) (L) (LRR S, (F1) (LRR F2) (6) (F7) 8) (MLRA 15) (LRR P, T LRA 151) (MLRA 15) oils (F19)	RR S, T, U T, U) O) LRR O, P, U) 0A, 150B) (MLRA 149	2Location: Indicators Indicators 1 cm 2 cm Reduction: Red Fiedm Number Other T) 3Indi we un	E PL=Pore Linings for Problemate Muck (A9) (LRR Muck (A10) (LR) ced Vertic (F18) nont Floodplain Stalous Bright Loate RA 153B) Parent Material (Shallow Dark Su (Explain in Remark Cators of hydropotelland hydrology less disturbed on	ic Hydric S O) R S) (outside N Soils (F19) amy Soils (F TF2) urface (TF12 narks) hytic vegeta	Soils ³ : ILRA 150A,B) (LRR P, S, T) =20) ation and esent,
Dark Surface (S7) (LRR F Restrictive Layer (if observe	d):		эпупі соаг	Thy Solis (-20) (WILK)	Hydric Soi		es_ V	No
Remarks:									



Photo 1Wetland data point wcmf005f depicting seasonally flooded area in hardwood flat



Photo 2
Wetland data point wcmf005f2_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberlar	and County		Sampling Date: 4/14/2016
Applicant/Owner: Dominion			Sampling Point: wcmf005e_w			
Investigator(s): SH, SA			. •			
Landform (hillslope, terrace, etc.): Flat						
Subregion (LRR or MLRA): P						
Soil Map Unit Name: Grantham loam		Lat				ation: PFO1/3B, PFO4B,
Are climatic / hydrologic conditions on the site						
Are Vegetation, Soil, or Hydro						
Are Vegetation, Soil, or Hydro					-	rs in Remarks.)
SUMMARY OF FINDINGS – Attac	n site ma	ap showing sam	npling point lo	ocations,	transects	, important features, etc.
Hydrophytic Vegetation Present? Y	es 🗸	No	Is the Sampled	I A		
		No	within a Wetlan		Voc V	No
Wetland Hydrology Present? Y	es <u>/</u>	No	within a wellan	iu:	163	
Remarks:						
Disturbed utility ROW						
HYDROLOGY						
Wetland Hydrology Indicators:		- II 41 4 1- \				tors (minimum of two required)
Primary Indicators (minimum of one is requ					Surface Soil (
Surface Water (A1)		atic Fauna (B13)	D IIV			etated Concave Surface (B8)
✓ High Water Table (A2)		Deposits (B15) (LRI			Drainage Pat Moss Trim Lii	
Saturation (A3) Water Marks (B1)	-	rogen Sulfide Odor (0 dized Rhizospheres a				Nater Table (C2)
Sediment Deposits (B2)		sence of Reduced Iro			Crayfish Burr	
Drift Deposits (B3)		ent Iron Reduction in			-	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)			Geomorphic	
Iron Deposits (B5)		er (Explain in Remark	(S)	_	Shallow Aqui	tard (D3)
Inundation Visible on Aerial Imagery (B	7)			<u> </u>	FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)				<u> </u>	Sphagnum m	oss (D8) (LRR T, U)
Field Observations:						
		Depth (inches):				
Water Table Present? Yes	No	Depth (inches): $\frac{3}{0}$				
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches): 0	Wet	etland Hydro	logy Presen	t? Yes No
Describe Recorded Data (stream gauge, m	onitoring w	ell, aerial photos, pre	vious inspections)	s), if available	:	
Remarks:						

0		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:50 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by: OBL species 10 v.1 = 10
	0	= Total Cov	er	OBL species
50% of total cover:0	20% of	total cover:	0	FACW species $\frac{60}{10}$ x 2 = $\frac{120}{30}$
Sapling/Shrub Stratum (Plot size: 0)	<u></u>			FAC species x 3 =
1				FACU species x 4 =
2.				UPL species x 5 =
				Column Totals:80
3				
4				Prevalence Index = B/A =2
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	0			<u>✓</u> 3 - Prevalence Index is ≤3.0 ¹
0		= Total Cov	•	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 0	20% of	total cover:	0	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Sphagnum sp.	90	Yes		be present, unless disturbed or problematic.
2. Arundinaria gigantea	60	Yes	FACW	Definitions of Four Vegetation Strata:
3. Rubus argutus	10	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Typha angustifolia	10	No	OBL	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.				Hart. All back account (one was do) alors to account
9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
4.4				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.	80	= Total Cov		
50% of total cover: 85		total cover:		
50 % Of total cover.	20% 01	total cover:		
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf005e_w

Profile Description: (Describe to t	he depth needed to docume	nt the indicator or confirm	the absence of in	dicators.)
Depth <u>Matrix</u>		eatures		
(inches) Color (moist)	% Color (moist)	% Type ¹ Loc ²	Texture	Remarks
0-12 2.5Y 2.5/1	100		SCL Mud	cky
12-18 2.5Y 2.5/1	100		SC Muc	ckv
				
1T C-Consortantina D-Douletin	- DM-Dadwaad Matrix MC-	Mankad Cand Carina	21	Dana Limina M-Matrix
¹ Type: C=Concentration, D=Depletion Hydric Soil Indicators: (Applicable)				Problematic Hydric Soils ³ :
1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		•		•
Histosol (A1)		w Surface (S8) (LRR S, T, U)		
Histic Epipedon (A2)		ace (S9) (LRR S, T, U)		(A10) (LRR S)
Black Histic (A3)		Mineral (F1) (LRR O)		ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed			loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T,			(MLRA 15	-
5 cm Mucky Mineral (A7) (LRR I	· · · ·			Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depress		-	w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRI		Other (Expl	ain in Remarks)
Depleted Below Dark Surface (A		c (F11) (MLRA 151)	3, ₁ , ,	
Thick Dark Surface (A12)		e Masses (F12) (LRR O, P, T	•	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLF		(F13) (LRR P, T, U)		hydrology must be present,
Sandy Mucky Mineral (S1) (LRR		17) (MLRA 151)	uniess a	isturbed or problematic.
Sandy Gleyed Matrix (S4)		(F18) (MLRA 150A, 150B)		
Sandy Redox (S5)		dplain Soils (F19) (MLRA 149		D)
Stripped Matrix (S6)		ght Loamy Soils (F20) (MLRA	149A, 153C, 153	ט)
Dark Surface (S7) (LRR P, S, T,	U)			
Restrictive Layer (if observed):				
Type:				
Depth (inches):			Hydric Soil Pres	ent? Yes No
Remarks:				



Photo 1
Wetland data point wcmf005e_w facing south



Photo 2
Wetland data point wcmf005e_w facing north

Project/Site: Atlantic Coast Pipeline		City/0	County: Cumberland Co	unty	_ Sampling Date: 4/14/2016		
Applicant/Owner: Dominion					Sampling Point: wcmf005_u		
Investigator(s): SH		Secti					
Landform (hillslope, terrace, etc.):							
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Nahunta loam		Lat	Long				
Are climatic / hydrologic conditions o		. Halla Himana af a. O. N					
Are Vegetation, Soil,							
Are Vegetation, Soil,	or Hydrology	naturally problem	atic? (If needed,	explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS –	Attach site ma	ap showing sar	npling point locati	ons, transect	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No	la (b 0 la d. A				
Hydric Soil Present?	Yes	No 🔽	Is the Sampled Area within a Wetland?	Vac	No 🗸		
Wetland Hydrology Present?	Yes	No	within a welland?	res	NO		
LIVEROLOGY							
HYDROLOGY Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)		
Primary Indicators (minimum of one	e is required: check	all that annly)		Surface Soi			
Surface Water (A1)	-	atic Fauna (B13)			egetated Concave Surface (B8)		
High Water Table (A2)		Deposits (B15) (LR	R U)		atterns (B10)		
Saturation (A3)		rogen Sulfide Odor (Moss Trim I			
Water Marks (B1)		=	along Living Roots (C3)		Water Table (C2)		
Sediment Deposits (B2)	Pres	ence of Reduced Ire	on (C4)	Crayfish Burrows (C8)			
Drift Deposits (B3)		ent Iron Reduction in	n Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Muck Surface (C7)			Position (D2)		
Iron Deposits (B5)		er (Explain in Remar	KS)	Shallow Aqu			
Inundation Visible on Aerial Im- Water-Stained Leaves (B9)	agery (B7)			✓ FAC-Neutra	moss (D8) (LRR T, U)		
Field Observations:				Opilagilalii	111033 (DO) (ERRY 1, O)		
	s No 🗸	Depth (inches):					
		Depth (inches):					
		Depth (inches):		Hydrology Prese	nt? Yes No <u> </u>		
(includes capillary fringe) Describe Recorded Data (stream g	augo monitoring w	all parial photos pr	ovious inspections) if av	ailabla:			
Describe Recorded Data (stream g	auge, monitoring we	eli, aeriai priotos, pri	evious inspections), if av	allable:			
Remarks:							

•	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	40	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2				
3.				Total Number of Dominant Species Across All Strata: 5 (B)
				Species Across All Strata:5 (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:80 (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by: ORL procies 0 v.1 = 0
	40	= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:	8	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 0)				FAC species 49
1 Pinus taeda	5	Yes	FAC	FACU species15 x 4 =60
2 Liquidambar styraciflua	2	Yes	FAC	UPL species $0 \times 5 = 0$
			FAC	Column Totals: 94 (A) 267 (B)
3				Goldmin Totals (A) (B)
4				Prevalence Index = B/A = 2.84
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
8	7			3 - Prevalence Index is ≤3.0 ¹
3.5		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 3.5	20% of	total cover:	1.4	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	20	Yes	FACW	be present, unless disturbed or problematic.
2. Pteridium aquilinum	10	Yes	FACU	Definitions of Four Vegetation Strata:
3. Dichanthelium scoparium	5	No	FACW	
4. Lonicera japonica	5	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5 1 1 1	5	No	FACW	more in diameter at breast height (DBH), regardless of height.
5. Persea borbonia Toxicodendron radicans			FAC	noight.
6. Toxicodendron radicans		No	-FAC	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.				
44				Woody vine – All woody vines greater than 3.28 ft in
·				height.
12	47			
22.5		= Total Cov	^ 4	
50% of total cover: 23.5	20% of	total cover:	9.4	
Woody Vine Stratum (Plot size: 0)				
1				
2.				
3.				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	w)			1
Tromano. (ii oboortoa, iiot morphological adaptationo bolo	••).			

SOIL Sampling Point: wcmf005_u

	Profile Description: (Describe to the depth needed to document the indicator or confirm Depth Matrix Redox Features								
(inches)	Color (moist)	%	Color (moist)	<u> %</u>	Type ¹	Loc ²	Texture	Remark	s
0-12	10YR 3/1	100					SCL		
12-18	2.5Y 5/4	95	10YR 5/6	5	С	PL	SC		
-						-			
¹ Type: C=C	oncentration, D=Depl	etion RM=	Reduced Matrix. MS	S=Masked	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Ma	atrix.
	Indicators: (Applica							Problematic Hydr	
Histoso	I (A1)		Polyvalue Be	low Surfa	ice (S8) (L	.RR S, T, U) 1 cm Muck	(A9) (LRR O)	
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)	
Black H	istic (A3)		Loamy Muck	y Mineral	(F1) (LRF	R O)	Reduced \	ertic (F18) (outsid	le MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)			Floodplain Soils (F1	
	d Layers (A5)		Depleted Ma					s Bright Loamy Soil	ls (F20)
_	Bodies (A6) (LRR P,		Redox Dark				(MLRA 1		
	ucky Mineral (A7) (LR		Depleted Da					t Material (TF2)	
	resence (A8) (LRR U))	Redox Depre Marl (F10) (L		8)			ow Dark Surface (T	F12)
	uck (A9) (LRR P, T) d Below Dark Surface	(Δ11)	Nair (F10) (L		(MIRA1	51)	Other (Exp	lain in Remarks)	
	ark Surface (A12)	(((1))	Iron-Mangan	, ,	•	-	T) ³ Indicator	s of hydrophytic ve	getation and
	rairie Redox (A16) (N	ILRA 150A	_					hydrology must be	-
	Mucky Mineral (S1) (L		Delta Ochric					disturbed or proble	
	Gleyed Matrix (S4)		Reduced Ver			0A, 150B)			
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	9A)		
	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 15	3D)	
	ırface (S7) (LRR P, S	, T, U)							
Restrictive	Layer (if observed):								
Type:									.,
Depth (in	ches):						Hydric Soil Pre	sent? Yes	No
Remarks:									
1									
İ									
1									
1									
1									



Photo 1
Upland data point wcmf005_u facing northwest



Photo 2
Upland data point wcmf005_u facing northeast

Project/Site: Atlantic Coast Pipeline	City/County: Cum	berland County	_ Sampling Date: 4/14/2016		
Applicant/Owner: Dominion State: NC Sampling I					
Investigator(s): SH ,SA Section, Township, Range: No PLSS in this area					
Landform (hillslope, terrace, etc.): Flat					
Subregion (LRR or MLRA): P					
Soil Map Unit Name: Grantham loam	Lat	Long	Datum. None		
		NWI classif			
Are climatic / hydrologic conditions on the site typical for					
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances"	present? Yes No		
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS - Attach site m	ap showing sampling po	int locations, transect	s, important features, etc.		
Hydrophytic Vegetation Present? Yes	No Is the San				
	No.	npled Area	/ Na		
Wetland Hydrology Present? Yes <u>✓</u>	within a W	vetiand? res	No		
Remarks:	<u> </u>				
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary India	cators (minimum of two required)		
Primary Indicators (minimum of one is required; check	κ all that apply)	Surface So	il Cracks (B6)		
Surface Water (A1) Aqu	uatic Fauna (B13)	Sparsely V	egetated Concave Surface (B8)		
<u>✓</u> High Water Table (A2) Mai	rl Deposits (B15) (LRR U)	Drainage P	atterns (B10)		
	drogen Sulfide Odor (C1)	Moss Trim			
· · ·	dized Rhizospheres along Living		n Water Table (C2)		
	esence of Reduced Iron (C4)		Crayfish Burrows (C8)		
	cent Iron Reduction in Tilled Soils n Muck Surface (C7)		Visible on Aerial Imagery (C9) c Position (D2)		
	ner (Explain in Remarks)				
Inundation Visible on Aerial Imagery (B7)	er (Explain in Romano)	Shallow Aquitard (D3) ✓ FAC-Neutral Test (D5)			
Water-Stained Leaves (B9)			moss (D8) (LRR T, U)		
Field Observations:					
Surface Water Present? Yes No					
Water Table Present? Yes No					
Saturation Present? Yes V No	Depth (inches): 0	Wetland Hydrology Prese	ent? Yes 🔽 No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous insper	tions), if available:			
		,			
Remarks:					

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	60	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
7		-		Total % Cover of: Multiply by:
8	60			OBL species
20		= Total Cov		FACW species x 2 = 40
50% of total cover:30	20% of	total cover:	12	130 300
Sapling/Shrub Stratum (Plot size: 0)				FAC species x 3 = 0
1. Acer rubrum	20	Yes	FAC	FACU species X 4 =
2. Pinus taeda	15	Yes	FAC	UPL species x 5 =
3.				Column Totals:180 (A)460 (B)
4.				Prevalence Index = R/A = 2.55
Ē				T Tevalcinec index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:17.5	20% of	total cover:	7	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1 Andropogon virginicus	35	Yes	FAC	be present, unless disturbed or problematic.
2. Juncus effusus	20	Yes	OBL	Definitions of Four Vegetation Strata:
3. Dichanthelium scoparium	20	Yes	FACW	Definitions of Four Vegetation Strata.
4. Woodwardia virginica		No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
14/ / " / /		No	OBL	more in diameter at breast height (DBH), regardless of
5. Woodwardia areolata			— OBL	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.				Was trades Allows to size a sector than 0.00 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
12.	85	= Total Cov		
50% of total cover: 42.5				
	20% of	total cover:		
Woody Vine Stratum (Plot size: 0)				
1				
2				
3				
4				
5.				Hydrophytic
•	0	= Total Cov	er	Vegetation
50% of total cover:		total cover:		Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf005f1_w

Depht
10-10 10 YR 2/1 95 10 YR 4/6 5 C PL SCL 10-18 10 YR 2/1 95 10 YR 4/6 5 C PL SC 10-18 10 YR 2/1 95 10 YR 4/6 SO PORIBION, M=Matrix. 10-18 10 YR 2/1 95 10 YR
10-18 10YR 2/1 95 10YR 4/6 5 C PL SC 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Mask
1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F6) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Thic Dark Surface (A12) Loamy Gleyed Matrix (F2) Depleted Dorhic (F11) (MLRA 151) Depleted Below Dark Surface (A12) Thic Dark Surface (A12) Sandy Mucky Mineral (S1) (LRR O, S) Selfa Organic Rodies (A6) (MLRA 150A) Depleted Orbric (F17) (MLRA 151) Depleted Below Dark Surface (A12) Thic Dark Surface (A12) Sandy Gleyed Matrix (S4) Depleta Orbric (F17) (MLRA 150A) Depleta Dorhic (F17) (MLRA 150A) Deplete Orbric (F17) (MLRA 150A) Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stratified Salface (S9) (LRR V) Type: Depth (inches): Hydric Soil Present? Yes Indicators of Problematic Hydric Soils³: Indicators of Problematic Hydric Soils³: Indicators of Problematic Hydric Soils³: Indicators of Problematic Hydric Soils Present? Yes All Cacation: PL=Pore Lining, M=Matrix. Indicators of Problematic Hydric Soils³: Indicators of Problematic Hydric Soils³: Indicators of Problematic Hydric Soils Present? Yes No Anomalous Bright Loamy Soils (F20) (MLRA 149A) Hydric Soil Present? Yes No No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histosol (A2) Hydrogen Sulfide (A4) Cray Gleyed Matrix (F2) Cray Muck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F13) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Sandy Redox (S5) Sandy Redox (S5) Deta Ochric (F17) (MLRA 151) Stripped Matrix (S6) Dark Surface (S9) (LRR S, T, U) Loamy Gleyed Matrix (F2) Depleted Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histosol (A2) Hydrogen Sulfide (A4) Cray Gleyed Matrix (F2) Cray Muck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F13) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Sandy Redox (S5) Sandy Redox (S5) Deta Ochric (F17) (MLRA 151) Stripped Matrix (S6) Dark Surface (S9) (LRR S, T, U) Loamy Gleyed Matrix (F2) Depleted Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Crganic Bodies (A6) (LRR P, T, U) House Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Dark Surface (F7) Muck A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Detla Ochric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F17) (MLRA 151) Sandy Redox (S5) Depleted Ochric (F17) (MLRA 151) Depleted Ochric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Crganic Bodies (A6) (LRR P, T, U) House Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Dark Surface (F7) Muck A9) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Detla Ochric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F17) (MLRA 151) Sandy Redox (S5) Depleted Ochric (F17) (MLRA 151) Depleted Ochric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histosol (A2) Hydrogen Sulfide (A4) Cray Gleyed Matrix (F2) Cray Muck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F13) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Sandy Redox (S5) Sandy Redox (S5) Deta Ochric (F17) (MLRA 151) Stripped Matrix (S6) Dark Surface (S9) (LRR S, T, U) Loamy Gleyed Matrix (F2) Depleted Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histosol (A2) Hydrogen Sulfide (A4) Cray Gleyed Matrix (F2) Cray Muck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F13) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Sandy Redox (S5) Sandy Redox (S5) Deta Ochric (F17) (MLRA 151) Stripped Matrix (S6) Dark Surface (S9) (LRR S, T, U) Loamy Gleyed Matrix (F2) Depleted Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histosol (A2) Hydrogen Sulfide (A4) Cray Gleyed Matrix (F2) Cray Muck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F13) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Sandy Redox (S5) Sandy Redox (S5) Deta Ochric (F17) (MLRA 151) Stripped Matrix (S6) Dark Surface (S9) (LRR S, T, U) Loamy Gleyed Matrix (F2) Depleted Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Histosol (A2) Black Histosol (A2) Hydrogen Sulfide (A4) Cray Gleyed Matrix (F2) Cray Muck (A6) (LRR P, T, U) Depleted Dark Surface (F6) Muck Presence (A8) (LRR P, T) Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Depleted Ochric (F13) (MLRA 151) Coast Prairie Redox (A16) (MLRA 150A) Sandy Redox (S5) Sandy Redox (S5) Deta Ochric (F17) (MLRA 151) Stripped Matrix (S6) Dark Surface (S9) (LRR S, T, U) Loamy Gleyed Matrix (F2) Depleted Dark Surface (F6) (MLRA 153B) Red Parent Material (TF2) Wery Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Other (Explain in Remarks) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Histosol (A1)
Histic Epipedon (A2) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Muck Presence (A8) (LRR P, T, U) Depleted Matrix (F3) Horizon Muck (A10) (LRR P, T) Muck Presence (A8) (LRR P, T) Depleted Delro (LRR U) Thick Dark Surface (A11) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (LRR P, T, U) Delta Cohric (F11) (MLRA 151) Sandy Redox (S5) Piedmont Floodplain Soils (F20) Muck Presence (A8) (LRR P, T, U) Delta Cohric (F11) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Piedmont Floodplain Soils (F20) Muck Presence (A8) (LRR P, T, U) Marl (F10) (LRR U) Depleted Delro (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Black Histic (A3)
Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Stratified Layers (A7) (LRR P, T, U) Muck Presence (A8) (LRR U) Tom Muck (A9) (LRR P, T) Depleted Below Dark Surface (F1) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Redox (S5) Sandy Redox (S5) Delta Ochric (F11) (MLRA 150A) Sandy Redox (S5) Delta Ochric (F18) (MLRA 150A, 150B) Reduced Vertic (F18) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Other (Explain in Remarks) Indicators of hydrophytic vegetation and wetland hydrology must be pre
Stratified Layers (A5)
Organic Bodies (A6) (LRR P, T, U)
Organic Bodies (A6) (LRR P, T, U)
Muck Presence (A8) (LRR U)
1 cm Muck (A9) (LRR P, T)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Delta Ochric (F17) (MLRA 151) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S6) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Iron-Manganese Masses (F12) (LRR P, T, U) Wetland hydrology must be present, unless disturbed or problematic. Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Hydric Soil Present? Yes No
Thick Dark Surface (A12)
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):
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) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed):
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):
Type: Depth (inches):
Depth (inches): No
Remarks:



Photo 1Wetland data point wcmf005f1_w facing southwest



Photo 2
Wetland data point wcmf005f1_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: Cumberland Cou	unty	Sampling Date: <u>4/14/2016</u>		
Applicant/Owner: Dominion			Sampling Point: wcmf005f2_w		
Investigator(s): SH, SA			·		
Landform (hillslope, terrace, etc.): Flat					
Subregion (LRR or MLRA): P Lat: 35.0 Soil Map Unit Name: Torhunta and Lynn Haven soils	Long:		None		
Are climatic / hydrologic conditions on the site typical for this time of					
Are Vegetation, Soil, or Hydrology significan	ntly disturbed? Are "Norma	al Circumstances" p	resent? Yes No		
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed,	explain any answer	s in Remarks.)		
SUMMARY OF FINDINGS - Attach site map showi	ng sampling point locati	ons, transects,	important features, etc.		
Hydrophytic Vegetation Present? Yes <u>✓</u> No					
Hydric Soil Present? Yes V No	is the Sampled Area				
Wetland Hydrology Present? Yes V No		Yes	No		
Remarks:	<u> </u>				
NC WAM - Hardwood Flat: Area is saturated, areas of seasonal inc point loction. See additional photos of inundated areas Area recei			at the surface at wetland data		
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that app	<u>ly)</u>	Surface Soil (Cracks (B6)		
Surface Water (A1) Aquatic Fauna (Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2) Marl Deposits (E	Drainage Pat				
Saturation (A3) Hydrogen Sulfid	Moss Trim Lir				
Water Marks (B1) Oxidized Rhizos		Vater Table (C2)			
Sediment Deposits (B2) Presence of Reconst Iron Per	Crayfish Burn				
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Image					
Iron Deposits (B5) Other (Explain in	ard (D3)				
Inundation Visible on Aerial Imagery (B7)	✓ FAC-Neutral	, ,			
Water-Stained Leaves (B9)		Sphagnum m	oss (D8) (LRR T, U)		
Field Observations:					
Surface Water Present? Yes No Depth (inch					
Water Table Present? Yes No Depth (inch	ies): 4				
Saturation Present? Yes No Depth (inch	nes): Wetland	Hydrology Present	t? Yes <u>/</u> No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if av	ailable:			
	,, , , , , , , , , , , , , , , , , , ,				
Remarks:					

٥	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:)		Species?		Number of Dominant Species _		
1. Liriodendron tulipifera	30	Yes	FACU	That Are OBL, FACW, or FAC:7 (A)		
2. Acer rubrum	20	Yes	FAC	Total Number of Dominant		
3. Magnolia virginiana	15	Yes	FACW	Species Across All Strata: 8 (B)		
4. Chamaecyparis thyoides	10	No	OBL	Percent of Deminant Species		
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 87.5 (A/B)		
6						
7				Prevalence Index worksheet:		
8.				Total % Cover of: Multiply by:		
	75	= Total Cov	er	OBL species X1 = 10		
50% of total cover: 37.5		total cover:	15	FACW species x 2 = x 2 =		
Sapling/Shrub Stratum (Plot size: 0)	2070 01	10101 00101	·	FAC species30 x 3 =90		
1 llex coriacea	75	Yes	FACW	FACU species40		
2 Liriodendron tulipifera	10	No	FACU	UPL species0 x 5 =0		
3. Magnolia virginiana	5	No	FACW	Column Totals:197 (A)494 (B)		
4 Lyonia lucida		No	FACW	,		
T				Prevalence Index = B/A =2.5		
5				Hydrophytic Vegetation Indicators:		
6				1 - Rapid Test for Hydrophytic Vegetation		
7				✓ 2 - Dominance Test is >50%		
8				3 - Prevalence Index is ≤3.0 ¹		
		= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)		
50% of total cover: 47.5	20% of total cover: 19		19	<u> </u>		
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must		
1 llex coriacea	5	Yes	FACW	be present, unless disturbed or problematic.		
2. Ilex opaca	5	Yes	FAC	Definitions of Four Vegetation Strata:		
3. Acer rubrum	5	Yes	FAC			
4 Smilax laurifolia	2	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or		
T	-			more in diameter at breast height (DBH), regardless of height.		
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
7				than 3 iii. DBH and greater than 3.20 it (1 iii) taii.		
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						
	17:	= Total Cov	er			
50% of total cover: 8.5	20% of	total cover:	3.4			
Woody Vine Stratum (Plot size: 0)						
1. Smilax laurifolia	10	Yes	FACW			
2						
3						
4.						
5.				Hodoobada		
·	10	= Total Cov	or	Hydrophytic Vegetation		
50% of total cover: 5		total cover:	0	Present? Yes No		
30 /0 OI total cover.		lotal cover.				
Remarks: (If observed, list morphological adaptations below	W).					

SOIL Sampling Point: wcmf005f2_w

Profile Description: (Description: Matrix	_		x Feature						
(inches) Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	
0-12 2.5Y 2.5/1	100						Organic soil m	naterial - mi	ucky peat
12-18 2.5Y 2.5/1	100					S	Mucky sand		
12-18 2.5Y 2.5/1 1Type: C=Concentration, D=D Hydric Soil Indicators: (App Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRF 5 cm Mucky Mineral (A7) Muck Presence (A8) (LRR P, 1 cm Muck (A9) (LRR P, 2 cm Mucky Mineral (A1) Depleted Below Dark Surface (A12) Coast Prairie Redox (A16) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	R P, T, U) (LRR P, T, U) (LRR P, T, U) (O) (LRR P, T, U) (O) (O) (O) (O) (O) (O) (O) (O) (O) (O	LRRs, unless othe Polyvalue Be Thin Dark St Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L Depleted Oc Iron-Mangan	rwise note elow Surfa urface (S9) sy Mineral ed Matrix (F3) Surface (F18 Surface essions (F11) heric (F11) esse Masse ace (F13) (F17) (ML rtic (F18) (F10)	ed.) ce (S8) (L) (LRR S, (F1) (LRR F2) (6) (F7) 8) (MLRA 15) (LRR P, T LRA 151) (MLRA 15) oils (F19)	RR S, T, U T, U) O) LRR O, P, U) 0A, 150B) (MLRA 149	2Location: Indicators 1 cm 2 cm Reduction: Reduction: Red Fiedn Other T) 3Indi we un	E PL=Pore Linings for Problemate Muck (A9) (LRR Muck (A10) (LRI ced Vertic (F18) nont Floodplain Stalous Bright Loa RA 153B) Parent Material (Shallow Dark Su (Explain in Rem cators of hydrop etland hydrology less disturbed on	ic Hydric S O) R S) (outside N Soils (F19) amy Soils (F TF2) urface (TF12 narks) hytic vegeta	Soils ³ : ILRA 150A,B) (LRR P, S, T) =20) ation and esent,
Dark Surface (S7) (LRR F Restrictive Layer (if observe	d):		эпупі соаг	Thy Solis (-20) (WILK)	Hydric Soi		es_ V	No
Remarks:									



Photo 1Wetland data point wcmf005f depicting seasonally flooded area in hardwood flat



Photo 2
Wetland data point wcmf005f2_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberlar	and County		Sampling Date: 4/14/2016		
Applicant/Owner: Dominion								
• • • • • • • • • • • • • • • • • • • •		Section				. •		
Landform (hillslope, terrace, etc.): Flat								
Subregion (LRR or MLRA): P								
Soil Map Unit Name: Grantham loam		Lat				ation: PFO1/3B, PFO4B,		
Are climatic / hydrologic conditions on the site								
Are Vegetation, Soil, or Hydro								
Are Vegetation, Soil, or Hydro					-	rs in Remarks.)		
SUMMARY OF FINDINGS – Attac	n site ma	ap showing sam	npling point lo	ocations,	transects	, important features, etc.		
Hydrophytic Vegetation Present? Y	es 🗸	No	Is the Sampled	I A				
		No	within a Wetlan		Voc V	No		
Wetland Hydrology Present? Y	es <u>/</u>	No	within a wellan	iu:	163			
Remarks:								
Disturbed utility ROW								
HYDROLOGY								
Wetland Hydrology Indicators:		- II 41 4 h - \				tors (minimum of two required)		
Primary Indicators (minimum of one is requ					Surface Soil (
Surface Water (A1)		atic Fauna (B13)	D IIV			etated Concave Surface (B8)		
✓ High Water Table (A2)		Deposits (B15) (LRI			Drainage Pat Moss Trim Lii			
Saturation (A3) Water Marks (B1)	-	rogen Sulfide Odor (0 dized Rhizospheres a						
Sediment Deposits (B2)		sence of Reduced Iro			C3) Dry-Season Water Table (C2) ✓ Crayfish Burrows (C8)			
Drift Deposits (B3)		ent Iron Reduction in			-	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Muck Surface (C7)			Geomorphic Position (D2)			
Iron Deposits (B5)		er (Explain in Remark	(S)	_	Shallow Aqui	tard (D3)		
Inundation Visible on Aerial Imagery (B	7)			<u> </u>	FAC-Neutral	Test (D5)		
Water-Stained Leaves (B9)				<u> </u>	Sphagnum m	oss (D8) (LRR T, U)		
Field Observations:								
		Depth (inches):						
Water Table Present? Yes	No	Depth (inches): $\frac{3}{0}$						
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches): 0	Wet	etland Hydro	logy Presen	t? Yes No		
Describe Recorded Data (stream gauge, m	onitoring w	ell, aerial photos, pre	vious inspections)	s), if available	:			
Remarks:								

0		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:50 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by: OBL species 10 v.1 = 10
	0	= Total Cov	er	OBL species
50% of total cover:0	20% of	total cover:	0	FACW species $\frac{60}{10}$ x 2 = $\frac{120}{30}$
Sapling/Shrub Stratum (Plot size: 0)	<u></u>			FAC species x 3 =
1				FACU species x 4 =
2.				UPL species x 5 =
				Column Totals:80
3				
4				Prevalence Index = B/A =2
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	0			<u>✓</u> 3 - Prevalence Index is ≤3.0 ¹
0		= Total Cov	•	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 0	20% of	total cover:	0	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Sphagnum sp.	90	Yes		be present, unless disturbed or problematic.
2. Arundinaria gigantea	60	Yes	FACW	Definitions of Four Vegetation Strata:
3. Rubus argutus	10	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Typha angustifolia	10	No	OBL	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 back as a second for a second of a least a second large
9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
4.4				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.	80	= Total Cov		
50% of total cover: 85		total cover:		
50 % Of total cover.	20% 01	total cover:		
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf005e_w

Profile Description: (Describe to t	he depth needed to docume	nt the indicator or confirm	the absence of in	dicators.)
Depth <u>Matrix</u>		eatures		
(inches) Color (moist)	% Color (moist)	% Type ¹ Loc ²	Texture	Remarks
0-12 2.5Y 2.5/1	100		SCL Mud	cky
12-18 2.5Y 2.5/1	100		SC Muc	ckv
				
1T C-Consortantina D-Douletin	- DM-Dadwaad Matrix MC-	Mankad Cand Carina	21 anation: DI -	Dana Limina M-Matrix
¹ Type: C=Concentration, D=Depletion Hydric Soil Indicators: (Applicable)				Problematic Hydric Soils ³ :
1 ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		•		•
Histosol (A1)		w Surface (S8) (LRR S, T, U)		
Histic Epipedon (A2)		ace (S9) (LRR S, T, U)		(A10) (LRR S)
Black Histic (A3)		Mineral (F1) (LRR O)		ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed			loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T,			(MLRA 15	-
5 cm Mucky Mineral (A7) (LRR I	· · · ·			Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depress		-	w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRI		Other (Expl	ain in Remarks)
Depleted Below Dark Surface (A		c (F11) (MLRA 151)	3, ₁ , ,	
Thick Dark Surface (A12)		e Masses (F12) (LRR O, P, T	•	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLF		(F13) (LRR P, T, U)		hydrology must be present,
Sandy Mucky Mineral (S1) (LRR		17) (MLRA 151)	uniess a	isturbed or problematic.
Sandy Gleyed Matrix (S4)		(F18) (MLRA 150A, 150B)		
Sandy Redox (S5)		dplain Soils (F19) (MLRA 149		D)
Stripped Matrix (S6)		ght Loamy Soils (F20) (MLRA	149A, 153C, 153	ט)
Dark Surface (S7) (LRR P, S, T,	U)			
Restrictive Layer (if observed):				
Type:				
Depth (inches):			Hydric Soil Pres	ent? Yes No
Remarks:				



Photo 1
Wetland data point wcmf005e_w facing south



Photo 2
Wetland data point wcmf005e_w facing north

Project/Site: Atlantic Coast Pipeline		City/0	County: Cumberland Co	unty	_ Sampling Date: 4/14/2016			
Applicant/Owner: Dominion					Sampling Point: wcmf005_u			
Investigator(s): SH		Secti			•			
Landform (hillslope, terrace, etc.):								
Subregion (LRR or MLRA): P								
Soil Map Unit Name: Nahunta loam		Lat	Long					
Are climatic / hydrologic conditions o		. Halla Himana af a. O. N						
Are Vegetation, Soil,								
Are Vegetation, Soil,	or Hydrology	naturally problem	atic? (If needed,	explain any answ	ers in Remarks.)			
SUMMARY OF FINDINGS –	Attach site ma	ap showing sar	npling point locati	ons, transect	s, important features, etc.			
Hydrophytic Vegetation Present?	Yes 🗸	No	la (b 0 la d. A					
Hydric Soil Present?	Yes	No 🔽	Is the Sampled Area within a Wetland?	Vac	No 🗸			
Wetland Hydrology Present?	Yes	No	within a welland?	res	NO			
LIVEROLOGY								
HYDROLOGY Wetland Hydrology Indicators:				Secondary India	ators (minimum of two required)			
Primary Indicators (minimum of one	e is required: check	all that annly)		Surface Soi				
Surface Water (A1)	-	atic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)			R U)					
Saturation (A3)	Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)							
Water Marks (B1)		=	along Living Roots (C3)		Water Table (C2)			
Sediment Deposits (B2)	Pres	ence of Reduced Ire	on (C4)	Crayfish Bu	rrows (C8)			
Drift Deposits (B3)		ent Iron Reduction ir	n Tilled Soils (C6)		/isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Muck Surface (C7)			Position (D2)			
Iron Deposits (B5)		er (Explain in Remar	KS)	Shallow Aqu				
Inundation Visible on Aerial Im- Water-Stained Leaves (B9)	agery (B7)			✓ FAC-Neutra	moss (D8) (LRR T, U)			
Field Observations:				Opilagilalii	111033 (DO) (ERRY 1, O)			
	s No 🗸	Depth (inches):						
		Depth (inches):						
		Depth (inches):		Hydrology Prese	nt? Yes No <u> </u>			
(includes capillary fringe) Describe Recorded Data (stream g	augo monitoring w	all parial photos pr	ovious inspections) if av	ailabla:				
Describe Recorded Data (stream g	auge, monitoring we	eli, aeriai priotos, pri	evious inspections), if av	allable:				
Remarks:								

•	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	40	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2				
3.				Total Number of Dominant Species Across All Strata: 5 (B)
				Species Across All Strata:5 (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:80 (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by: ORL procies 0 v.1 = 0
	40	= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:	8	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 0)				FAC species 49
1 Pinus taeda	5	Yes	FAC	FACU species15 x 4 =60
2 Liquidambar styraciflua	2	Yes	FAC	UPL species $0 \times 5 = 0$
			FAC	Column Totals: 94 (A) 267 (B)
3				Goldmin Totals (A) (B)
4				Prevalence Index = B/A = 2.84
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
8	7			3 - Prevalence Index is ≤3.0 ¹
3.5		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 3.5	20% of	total cover:	1.4	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	20	Yes	FACW	be present, unless disturbed or problematic.
2. Pteridium aquilinum	10	Yes	FACU	Definitions of Four Vegetation Strata:
3. Dichanthelium scoparium	5	No	FACW	
4. Lonicera japonica	5	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5 1 1 1	5	No	FACW	more in diameter at breast height (DBH), regardless of height.
5. Persea borbonia Toxicodendron radicans			FAC	noight.
6. Toxicodendron radicans		No	-FAC	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.				
44				Woody vine – All woody vines greater than 3.28 ft in
·				height.
12	47			
22.5		= Total Cov	^ 4	
50% of total cover: 23.5	20% of	total cover:	9.4	
Woody Vine Stratum (Plot size: 0)				
1				
2.				
3.				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	w)			1
Tromano. (ii oboortoa, iiot morphological adaptationo bolo	••).			

SOIL Sampling Point: wcmf005_u

Profile Desc	cription: (Describe	to the depth	needed to docu	ment the i	ndicator	or confirm	the absence o	f indicators	s.)	
Depth	Matrix	0/		ox Features		. 2	- .		5 .	
(inches) 0-12	Color (moist) 10YR 3/1	<u>%</u> 100	Color (moist)	%	Type ¹	Loc ²	Texture SCL		Remarks	
12-18	2.5Y 5/4	95 1	0YR 5/6	5	C	PL_	SC			
		·								
	_									
¹ Type: C=C	oncentration, D=Dep	letion, RM=R	educed Matrix, M	S=Masked	Sand Gra	ains.	² Location: F	L=Pore Lini	ing, M=Matr	ix.
Hydric Soil	Indicators: (Applic	able to all Li	RRs, unless othe	rwise note	ed.)		Indicators for	or Problema	atic Hydric	Soils ³ :
Histosol	(A1)		Polyvalue Be	elow Surfac	ce (S8) (L	.RR S, T, U) 1 cm Μι	ick (A9) (LR	R O)	
	pipedon (A2)		Thin Dark S					ıck (A10) (L l		
	istic (A3)		Loamy Muck			(O)				MLRA 150A,E
	en Sulfide (A4)		Loamy Gley		F2)					(LRR P, S, T
	d Layers (A5)	T 11\	Depleted Ma Redox Dark		(C)			_	oamy Soils ((F20)
_	Bodies (A6) (LRR P ucky Mineral (A7) (LF		Depleted Da					\ 153B) ent Material	(TF2)	
	resence (A8) (LRR U		Redox Depre						Surface (TF1	12)
	uck (A9) (LRR P, T)	,	Marl (F10) (I		-,			xplain in Re		/
Deplete	d Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)				
·	ark Surface (A12)		Iron-Mangar				•		phytic vege	
	rairie Redox (A16) (N					, U)			y must be p	
-	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric			0.4 4E0B\	unles	s disturbed	or problema	atic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ve				24)			
-	Matrix (S6)		Anomalous I					153D)		
	rface (S7) (LRR P, S	s, T, U)			,		, , , , , , , , , , , , , , , , , , , ,	,		
	Layer (if observed):									
Type:			<u></u>							
Depth (in	ches):						Hydric Soil P	resent?	Yes	No
Remarks:										



Photo 1
Upland data point wcmf005_u facing northwest



Photo 2
Upland data point wcmf005_u facing northeast

Project/Site: Atlantic Coast Pipeline	City/County: Cum	berland County	_ Sampling Date: 4/14/2016				
Applicant/Owner: Dominion							
••	Section, Townshi		- · · -				
Landform (hillslope, terrace, etc.): Flat							
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Grantham loam	Lat	Long	Datum. None				
		NWI classif					
Are climatic / hydrologic conditions on the site typical for							
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances"	present? Yes No				
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	ers in Remarks.)				
SUMMARY OF FINDINGS - Attach site m	ap showing sampling po	int locations, transect	s, important features, etc.				
Hydrophytic Vegetation Present? Yes	No Is the San						
	No.	npled Area	/ Na				
Wetland Hydrology Present? Yes <u>✓</u>	within a W	vetiand? res	No				
Remarks:	<u> </u>						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary India	cators (minimum of two required)				
Primary Indicators (minimum of one is required; check	κ all that apply)	Surface So	Surface Soil Cracks (B6)				
Surface Water (A1) Aqu	uatic Fauna (B13)	Sparsely V	Sparsely Vegetated Concave Surface (B8)				
<u>✓</u> High Water Table (A2) Mai	rl Deposits (B15) (LRR U)	Drainage P	atterns (B10)				
	drogen Sulfide Odor (C1)		Moss Trim Lines (B16)				
· · ·	dized Rhizospheres along Living						
	esence of Reduced Iron (C4)	Crayfish Bu					
	cent Iron Reduction in Tilled Soils n Muck Surface (C7)		Visible on Aerial Imagery (C9)				
	ner (Explain in Remarks)		Geomorphic Position (D2) Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	er (Explain in Romano)	FAC-Neutral Test (D5)					
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)					
Field Observations:							
Surface Water Present? Yes No							
Water Table Present? Yes No							
Saturation Present? Yes V No	Depth (inches): 0	Wetland Hydrology Prese	ent? Yes 🔽 No				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w	vell, aerial photos, previous insper	tions), if available:					
		,					
Remarks:							

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	60	Yes	FAC	That Are OBL, FACW, or FAC: 6 (A)
2				Total Number of Dominant
3				Species Across All Strata: 6 (B)
4				
5				Percent of Dominant Species That Are OBL FACW or FAC: 100 (A/B)
				That Are OBL, FACW, or FAC:(A/B)
				Prevalence Index worksheet:
7		-		Total % Cover of: Multiply by:
8	60			OBL species
20		= Total Cov		FACW species x 2 = 40
50% of total cover:30	20% of	total cover:	12	130 300
Sapling/Shrub Stratum (Plot size: 0)				FAC species x 3 = 0
1. Acer rubrum	20	Yes	FAC	FACU species X 4 =
2. Pinus taeda	15	Yes	FAC	UPL species x 5 =
3.				Column Totals:180 (A)460 (B)
4.				Prevalence Index = R/A = 2.55
Ē				T Tevalcinec index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
		= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:17.5	20% of	total cover:	7	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1 Andropogon virginicus	35	Yes	FAC	be present, unless disturbed or problematic.
2. Juncus effusus	20	Yes	OBL	Definitions of Four Vegetation Strata:
3. Dichanthelium scoparium	20	Yes	FACW	Definitions of Four Vegetation Strata.
4. Woodwardia virginica		No	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
14/ / " / /		No	OBL	more in diameter at breast height (DBH), regardless of
5. Woodwardia areolata			— OBL	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.				Was trades Allows to size a sector than 0.00 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
12.	85	= Total Cov		
50% of total cover: 42.5				
	20% of	total cover:		
Woody Vine Stratum (Plot size: 0)				
1				
2				
3				
4				
5.				Hydrophytic
•	0	= Total Cov	er	Vegetation
50% of total cover:		total cover:		Present? Yes No
		total cover.		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf005f1_w

	cription: (Describe	to the depth				or confirm	the absence of	indicators.)
Depth	Matrix Color (moist)	<u></u> %	Redo Color (moist)	x Feature %	1	Loc ²	Texture	Remarks
(inches) 0-10	10YR 2/1		OYR 4/6	- <u>%</u> - 5	Type' C	PL	SCL	Velliques
					. ——			
10-18	10YR 2/1	95 1	0YR 4/6	5	C	PL	SC	
								_
				-	· 			_
				-				_
¹ Type: C=C	oncentration, D=Depl	etion, RM=R	teduced Matrix, MS	S=Masked	d Sand Gr	ains.	² Location: Pl	L=Pore Lining, M=Matrix.
	Indicators: (Applica							r Problematic Hydric Soils³:
Histoso	I (A1)		Polyvalue Be	low Surfa	ce (S8) (L	.RR S, T, U) 1 cm Muc	ck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					ck (A10) (LRR S)
	istic (A3)		Loamy Muck			? O)		Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)			t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma					us Bright Loamy Soils (F20)
_	Bodies (A6) (LRR P,		Redox Dark	•	,		(MLRA	
	ucky Mineral (A7) (LR		Depleted Date					ent Material (TF2)
	resence (A8) (LRR U) uck (A9) (LRR P, T))	Redox Depre		8)			llow Dark Surface (TF12) φlain in Remarks)
	d Below Dark Surface	(A11)	Depleted Ocl		(MIRA1	51)	Other (LX	cpiain in Remarks)
-	ark Surface (A12)	, (, (, , ,	Iron-Mangan				T) ³ Indicate	ors of hydrophytic vegetation and
	rairie Redox (A16) (N	ILRA 150A)	_					nd hydrology must be present,
	Mucky Mineral (S1) (L		Delta Ochric					s disturbed or problematic.
Sandy (Gleyed Matrix (S4)		Reduced Ver	tic (F18) ((MLRA 15	0A, 150B)		
	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	9A)	
	d Matrix (S6)		Anomalous E	Bright Loai	my Soils (F20) (MLR	A 149A, 153C, 1	53D)
	ırface (S7) (LRR P, S	, T, U)					1	
Restrictive	Layer (if observed):							
Type:								
Depth (in	ches):		<u></u>				Hydric Soil Pr	resent? Yes No
Remarks:								



Photo 1Wetland data point wcmf005f1_w facing southwest



Photo 2
Wetland data point wcmf005f1_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: Cumberland Cou	unty	Sampling Date: <u>4/14/2016</u>	
Applicant/Owner: Dominion			Sampling Point: wcmf005f2_w	
Investigator(s): SH, SA			·	
Landform (hillslope, terrace, etc.): Flat				
Subregion (LRR or MLRA): P Lat: 35.0 Soil Map Unit Name: Torhunta and Lynn Haven soils	Long:		None	
Are climatic / hydrologic conditions on the site typical for this time of				
Are Vegetation, Soil, or Hydrology significan	ntly disturbed? Are "Norma	al Circumstances" p	resent? Yes No	
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed,	explain any answer	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showi	ng sampling point locati	ons, transects,	important features, etc.	
Hydrophytic Vegetation Present? Yes <u>✓</u> No				
Hydric Soil Present? Yes V No	is the Sampled Area			
Wetland Hydrology Present? Yes No		Yes	No	
Remarks:	<u> </u>			
NC WAM - Hardwood Flat: Area is saturated, areas of seasonal inc point loction. See additional photos of inundated areas Area recei			at the surface at wetland data	
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)	
Primary Indicators (minimum of one is required; check all that app	<u>ly)</u>	Surface Soil (Cracks (B6)	
Surface Water (A1) Aquatic Fauna (Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2) Marl Deposits (E		Drainage Patterns (B10)		
Saturation (A3) Hydrogen Sulfid		Moss Trim Lines (B16)		
	spheres along Living Roots (C3)		Vater Table (C2)	
Sediment Deposits (B2) Presence of Rec Drift Deposits (B3) Recent Iron Rec	duction in Tilled Soils (C6)	Crayfish Burn	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4) Thin Muck Surfa	` '	Geomorphic I	= : : :	
Iron Deposits (B5) Other (Explain in	` '	Shallow Aquit		
Inundation Visible on Aerial Imagery (B7)	· · · · · · · · · · · · · · · · · · ·	✓ FAC-Neutral	, ,	
Water-Stained Leaves (B9)		Sphagnum m	oss (D8) (LRR T, U)	
Field Observations:				
Surface Water Present? Yes No Depth (inch				
Water Table Present? Yes No Depth (inch	ies): 4			
Saturation Present? Yes No Depth (inch	nes): Wetland	Hydrology Present	t? Yes <u>/</u> No	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if av	ailable:		
	,, , , , , , , , , , , , , , , , , , ,			
Remarks:				

0	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species _
1. Liriodendron tulipifera	30	Yes	FACU	That Are OBL, FACW, or FAC:7 (A)
2. Acer rubrum	20	Yes	FAC	Total Number of Dominant
3. Magnolia virginiana	15	Yes	FACW	Species Across All Strata: 8 (B)
4. Chamaecyparis thyoides	10	No	OBL	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 87.5 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	75	= Total Cov	er	OBL species x 1 =
50% of total cover: 37.5		total cover:	15	FACW species x 2 = 234
Sapling/Shrub Stratum (Plot size: 0)	2070 01	total cover.		FAC species30
1 llex coriacea	75	Yes	FACW	FACU species40 x 4 =160
Liste de la della Malla Malla	10	No	FACU	UPL species0 x 5 =0
2. Linoaendron tulipitera 3. Magnolia virginiana	5	No	FACW	Column Totals: 197 (A) 494 (B)
		No	FACW	(-)
4. Lyonia lucida			TACVV	Prevalence Index = B/A = 2.5
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	95	= Total Cov	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 47.5	20% of	total cover:	. 19	Troblemate tryatephysic vegetation (Explain)
Herb Stratum (Plot size: 0)				¹ Indicators of hydric soil and wetland hydrology must
1 llex coriacea	5	Yes	FACW	be present, unless disturbed or problematic.
2. Ilex opaca	5	Yes	FAC	Definitions of Four Vegetation Strata:
3. Acer rubrum	5	Yes	FAC	Definitions of Four Vegetation offata.
4 Smilax laurifolia	2	No	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
··-				more in diameter at breast height (DBH), regardless of height.
5				noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
	17	= Total Cov	er	
50% of total cover: 8.5		total cover:		
Woody Vine Stratum (Plot size:0)				
1 Smilax laurifolia	10	Yes	FACW	
···				
2			-	
3				
4				
5				Hydrophytic
<u>_</u>		= Total Cov	_	Vegetation Present? Yes No
50% of total cover:5	20% of	total cover:	2	rieseitt! iesNo
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wcmf005f2_w

Profile Description: (Description: Matrix	_		x Feature						
(inches) Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture		Remarks	
0-12 2.5Y 2.5/1	100						Organic soil m	naterial - mi	ucky peat
12-18 2.5Y 2.5/1	100					S	Mucky sand		
12-18 2.5Y 2.5/1 1Type: C=Concentration, D=D Hydric Soil Indicators: (App Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRF 5 cm Mucky Mineral (A7) Muck Presence (A8) (LRR P, 1 cm Muck (A9) (LRR P, 2 cm Mucky Mineral (A1) Depleted Below Dark Surface (A12) Coast Prairie Redox (A16) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	R P, T, U) (LRR P, T, U) (LRR P, T, U) (O) (LRR P, T, U) (O) (O) (O) (O) (O) (O) (O) (O) (O) (O	LRRs, unless othe Polyvalue Be Thin Dark St Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L Depleted Oc Iron-Mangan	rwise note elow Surfa urface (S9) sy Mineral ed Matrix (F3) Surface (F18 Surface essions (F11) heric (F11) esse Masse ace (F13) (F17) (ML rtic (F18) (F10)	ed.) ce (S8) (L) (LRR S, (F1) (LRR F2) (6) (F7) 8) (MLRA 15) (LRR P, T LRA 151) (MLRA 15) oils (F19)	RR S, T, U T, U) O) LRR O, P, U) 0A, 150B) (MLRA 149	2Location: Indicators 1 cm 2 cm Reduction: Reduction: Red Fiedn Other T) 3Indi we un	E PL=Pore Linings for Problemate Muck (A9) (LRR Muck (A10) (LRI ced Vertic (F18) nont Floodplain Stalous Bright Loa RA 153B) Parent Material (Shallow Dark Su (Explain in Rem cators of hydrop etland hydrology less disturbed on	ic Hydric S O) R S) (outside N Soils (F19) amy Soils (F TF2) urface (TF12 narks) hytic vegeta	Soils ³ : ILRA 150A,B) (LRR P, S, T) =20) ation and esent,
Dark Surface (S7) (LRR F Restrictive Layer (if observe	d):		эпупі соаг	Thy Solis (-20) (WILK)	Hydric Soi		es_ V	No
Remarks:									



Photo 1Wetland data point wcmf005f depicting seasonally flooded area in hardwood flat



Photo 2
Wetland data point wcmf005f2_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberlar	and County		Sampling Date: 4/14/2016		
Applicant/Owner: Dominion								
Investigator(s): SH, SA			. •					
Landform (hillslope, terrace, etc.): Flat								
Subregion (LRR or MLRA): P								
Soil Map Unit Name: Grantham loam		Lat				ation: PFO1/3B, PFO4B,		
Are climatic / hydrologic conditions on the site								
Are Vegetation, Soil, or Hydro								
Are Vegetation, Soil, or Hydro					-	rs in Remarks.)		
SUMMARY OF FINDINGS – Attac	n site ma	ap showing sam	npling point lo	ocations,	transects	, important features, etc.		
Hydrophytic Vegetation Present? Y	es 🗸	No	Is the Sampled	I A				
		No	within a Wetlan		Voc V	No		
Wetland Hydrology Present? Y	es <u>/</u>	No	within a wellan	iu:	163			
Remarks:								
Disturbed utility ROW								
HYDROLOGY								
Wetland Hydrology Indicators:		- II 41 4 h - \				tors (minimum of two required)		
Primary Indicators (minimum of one is requ					Surface Soil (
Surface Water (A1)		atic Fauna (B13)	D 11\			etated Concave Surface (B8)		
✓ High Water Table (A2)		Deposits (B15) (LRI			Drainage Pat Moss Trim Lii			
Saturation (A3) Water Marks (B1)	-	rogen Sulfide Odor (0 dized Rhizospheres a				Nater Table (C2)		
Sediment Deposits (B2)		sence of Reduced Iro			-			
Drift Deposits (B3)		ent Iron Reduction in			✓ Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Muck Surface (C7)			Geomorphic Position (D2)			
Iron Deposits (B5)		er (Explain in Remark	(S)	_	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B	7)			FAC-Neutral Test (D5)				
Water-Stained Leaves (B9)				<u> </u>	Sphagnum m	oss (D8) (LRR T, U)		
Field Observations:								
		Depth (inches):						
Water Table Present? Yes	No	Depth (inches): $\frac{3}{0}$						
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches): 0	Wet	etland Hydro	logy Presen	t? Yes No		
Describe Recorded Data (stream gauge, m	onitoring w	ell, aerial photos, pre	vious inspections)	s), if available	:			
Remarks:								

0		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)		Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:50 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by: OBL species 10 v.1 = 10
	0	= Total Cov	er	OBL species
50% of total cover:0	20% of	total cover:	0	FACW species $\frac{60}{10}$ x 2 = $\frac{120}{30}$
Sapling/Shrub Stratum (Plot size: 0)	<u></u>			FAC species x 3 =
1				FACU species x 4 =
2.				UPL species x 5 =
				Column Totals:80
3				
4				Prevalence Index = B/A =2
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	0			<u>✓</u> 3 - Prevalence Index is ≤3.0 ¹
0		= Total Cov	•	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 0	20% of	total cover:	0	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Sphagnum sp.	90	Yes		be present, unless disturbed or problematic.
2. Arundinaria gigantea	60	Yes	FACW	Definitions of Four Vegetation Strata:
3. Rubus argutus	10	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Typha angustifolia	10	No	OBL	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.				Hart. All back account (one was do) alors to account
9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				
4.4				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.	80	= Total Cov		
50% of total cover: 85		total cover:		
50 % Of total cover.	20% 01	total cover:		
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmf005e_w

Depth	cription: (Describe to Matrix			x Feature		- 			- ,	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-12	2.5Y 2.5/1	100					SCL	Mucky		
12-18	2.5Y 2.5/1	100					SC	Mucky		
				-						
				-						
				-				•		
				-						
				- '						
	oncentration, D=Depl					ains.	² Location:	: PL=Pore L	ining, M=Matr	ix.
-	Indicators: (Applica	able to all L							matic Hydric	Soils ³ :
Histoso			Polyvalue Be					Muck (A9) (L		
	pipedon (A2)		Thin Dark Su					Muck (A10)		MI DA 450A D\
	istic (A3) en Sulfide (A4)		Loamy Muck Loamy Gleye	-		(0)				MLRA 150A,B) (LRR P, S, T)
	d Layers (A5)		Depleted Ma		(Г2)				Loamy Soils (F19)	
	Bodies (A6) (LRR P,	T. U)	Redox Dark		- 6)			.RA 153B)	Loanly Colls	(1 20)
	ucky Mineral (A7) (LR		Depleted Da					Parent Mater	ial (TF2)	
	resence (A8) (LRR U		Redox Depre						k Surface (TF1	12)
	uck (A9) (LRR P, T)		Marl (F10) (L		ŕ		Other	(Explain in I	Remarks)	,
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)				
	ark Surface (A12)		Iron-Mangan						drophytic vege	
	rairie Redox (A16) (N					', U)		-	ogy must be p	
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric			4505)	un	less disturbe	ed or problema	atic.
	Gleyed Matrix (S4)		Reduced Ve							
	Redox (S5) d Matrix (S6)		Piedmont Flo					152D)		
	i Matrix (S6) irface (S7) (LRR P, S	T 11)	Anomalous I	Srigrit Loa	illy Solis (F20) (WILK)	A 149A, 1550	J, 133D)		
	Layer (if observed):									
Type:										
	ches):						Hydric Soi	I Present?	Yes	No
Remarks:							,			



Photo 1
Wetland data point wcmf005e_w facing south



Photo 2
Wetland data point wcmf005e_w facing north

Project/Site: Atlantic Coast Pipeline		City/0	County: Cumberland Co	unty	_ Sampling Date: 4/14/2016		
Applicant/Owner: Dominion					Sampling Point: wcmf005_u		
Investigator(s): SH		Secti			•		
Landform (hillslope, terrace, etc.):							
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Nahunta loam		Lat	Long				
Are climatic / hydrologic conditions o		. Halla Himana af a. O. N					
Are Vegetation, Soil,							
Are Vegetation, Soil,	or Hydrology	naturally problem	atic? (If needed,	explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS –	Attach site ma	ap showing sar	npling point locati	ons, transect	s, important features, etc.		
Hydrophytic Vegetation Present?	Yes 🗸	No	la (b 0 la d. A				
Hydric Soil Present?	Yes	No 🔽	Is the Sampled Area within a Wetland?	Vac	No 🗸		
Wetland Hydrology Present?	Yes	No	within a welland?	res	NO		
LIVEROLOGY							
HYDROLOGY Wetland Hydrology Indicators:				Secondary India	ators (minimum of two required)		
Primary Indicators (minimum of one	e is required: check	all that annly)		Surface Soi			
Surface Water (A1)	-	atic Fauna (B13)			egetated Concave Surface (B8)		
High Water Table (A2)		Deposits (B15) (LR	R U)	Drainage Patterns (B10)			
Saturation (A3)		rogen Sulfide Odor (Moss Trim I			
Water Marks (B1)		=	along Living Roots (C3)				
Sediment Deposits (B2)	Pres	ence of Reduced Ire	on (C4)	Crayfish Burrows (C8)			
Drift Deposits (B3)		ent Iron Reduction ir	n Tilled Soils (C6)				
Algal Mat or Crust (B4)		Muck Surface (C7)			Position (D2)		
Iron Deposits (B5)		er (Explain in Remar	KS)	Shallow Aqu			
Inundation Visible on Aerial Im- Water-Stained Leaves (B9)	agery (B7)			✓ FAC-Neutra	moss (D8) (LRR T, U)		
Field Observations:				Opilagilalii	111033 (DO) (ERRY 1, O)		
	s No 🗸	Depth (inches):					
		Depth (inches):					
		Depth (inches):		Hydrology Prese	nt? Yes No <u> </u>		
(includes capillary fringe) Describe Recorded Data (stream g	augo monitoring w	all parial photos pr	ovious inspections) if av	ailabla:			
Describe Recorded Data (stream g	auge, monitoring we	eli, aeriai priotos, pri	evious inspections), if av	allable:			
Remarks:							

•	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	40	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2				
3.				Total Number of Dominant Species Across All Strata: 5 (B)
				Species Across All Strata:5 (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:80 (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by: ORL species 0 v.1 = 0
	40	= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:	8	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 0)				FAC species 49
1 Pinus taeda	5	Yes	FAC	FACU species15 x 4 =60
2 Liquidambar styraciflua	2	Yes	FAC	UPL species $0 \times 5 = 0$
			FAC	Column Totals: 94 (A) 267 (B)
3				Goldmin Totals (A) (B)
4				Prevalence Index = B/A = 2.84
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
8	7			3 - Prevalence Index is ≤3.0 ¹
3.5		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 3.5	20% of	total cover:	1.4	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	20	Yes	FACW	be present, unless disturbed or problematic.
2. Pteridium aquilinum	10	Yes	FACU	Definitions of Four Vegetation Strata:
3. Dichanthelium scoparium	5	No	FACW	
4. Lonicera japonica	5	No	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5 1 1 1		No	FACW	more in diameter at breast height (DBH), regardless of height.
5. Persea borbonia Toxicodendron radicans			FAC	noight.
6. Toxicodendron radicans		No	-FAC	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.				
44				Woody vine – All woody vines greater than 3.28 ft in
·				height.
12	47			
22.5		= Total Cov	^ 4	
50% of total cover: 23.5	20% of	total cover:	9.4	
Woody Vine Stratum (Plot size: 0)				
1				
2.				
3.				
4				
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	Present? Yes No No
Remarks: (If observed, list morphological adaptations below	w)			1
Tromano. (ii oboortoa, iiot morphological adaptationo bolo	••).			

SOIL Sampling Point: wcmf005_u

Depth	cription: (Describe t Matrix	aopi		x Feature					
(inches)	Color (moist)	%	Color (moist)	<u> %</u>	Type ¹	Loc ²	Texture	Remark	s
0-12	10YR 3/1	100					SCL		
12-18	2.5Y 5/4	95	10YR 5/6	5	С	PL	SC		
-						-			
¹ Type: C=C	oncentration, D=Depl	etion RM=	Reduced Matrix. MS	S=Masked	d Sand Gr	ains.	² Location: PL:	=Pore Lining, M=Ma	atrix.
	Indicators: (Applica							Problematic Hydr	
Histoso	I (A1)		Polyvalue Be	low Surfa	ice (S8) (L	.RR S, T, U) 1 cm Muck	(A9) (LRR O)	
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)	
Black H	istic (A3)		Loamy Muck	y Mineral	(F1) (LRF	R O)	Reduced \	ertic (F18) (outsid	le MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)			Floodplain Soils (F1	
	d Layers (A5)		Depleted Ma					s Bright Loamy Soil	ls (F20)
_	Bodies (A6) (LRR P,		Redox Dark				(MLRA 1		
	ucky Mineral (A7) (LR		Depleted Da					t Material (TF2)	
	resence (A8) (LRR U))	Redox Depre Marl (F10) (L		8)			ow Dark Surface (T	F12)
	uck (A9) (LRR P, T) d Below Dark Surface	(Δ11)	Nair (F10) (L		(MIRA1	51)	Other (Exp	lain in Remarks)	
	ark Surface (A12)	(((1))	Iron-Mangan	, ,	•	-	T) ³ Indicator	s of hydrophytic ve	getation and
	rairie Redox (A16) (N	ILRA 150A	_					hydrology must be	-
	Mucky Mineral (S1) (L		Delta Ochric					disturbed or proble	
	Gleyed Matrix (S4)		Reduced Ver			0A, 150B)			
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	9A)		
	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 15	3D)	
	ırface (S7) (LRR P, S	, T, U)							
Restrictive	Layer (if observed):								
Type:									.,
Depth (in	ches):						Hydric Soil Pre	sent? Yes	No
Remarks:									
1									
İ									
1									
1									
1									



Photo 1
Upland data point wcmf005_u facing northwest



Photo 2
Upland data point wcmf005_u facing northeast

Project/Site: ACP City/	County: Climber and Sampling Date: 5/12/16
Applicant/Owner: Dominion	State: NC Sampling Point: WCM V 003e-W
Investigator(s): ESI-Kmarkoon, K. Murphrey Sect	State: 742 Sampling Found.
Investigator(s):	Il relief (concave, convex, none): CONCAVE Slope (%): 2-4
Landform (hillslope, terrace, etc.): Fort Loca	Trelief (concave, convex, none): Concave Slope (%).
Subregion (LRR or MLRA): Lat: 55.05	192 Long: -78.73802 Datum: W65 &
Soil Map Unit Name: Wagram Loony Sond, 0-6% SI	NWI classification: PEM
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	
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:	
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) Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor United Water Marks (B1) Oxidized Rhizospheres	[
Water Marks (B1) Sediment Deposits (B2) Oxidized Rhizospheres Presence of Reduced In	
Drift Deposits (B3) Recent Iron Reduction in	사용하는 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
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:	IA I
Surface Water Present? Yes No Depth (inches): _N	27011
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, pr	evious inspections), if available:
Remarks:	
, and the second	

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

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30F+X 30F+)	% Cover Species? Status	Number of Dominant Species
1. None Present		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
5		Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6		B. J. Jadan and Jaharta
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3054 X3c54)		FAC species x 3 =
00		FACU species x 4 =
2.		UPL species x 5 =
3		Column Totals: (A) (B)
		Boundary Indoor BIA -
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 Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 3054 X 3054)	CA Y FACH	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea		be present, unless disturbed or problematic.
2. Rubus avanths	25 Y FAC	Definitions of Four Vegetation Strata:
3. Eupotorium capillifolium	5 N FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Juneus PERUSUS	2 N FACW	more in diameter at breast height (DBH), regardless of
5. Eupatorium votundisolium	2 N FAC	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		l list
12.	9H = Total Cover	
50% of total cover: 47	20% of total cover: 18.8	
Woody Vine Stratum (Plot size: 2084 X 3084)	20% bi total cover	
1. None Present		
2		
3		
4		
5		Hydrophytic
	() = Total Cover	Vegetation Present? Yes No
50% of total cover:	20% of total cover:	Presenti its its
Remarks: (If observed, list morphological adaptations belo	w).	
		The second control of the second control of

Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc ²	Texture Remarks
0-2 10VR3/1 (01)	L
2-12 104R2/1 95 2,54R2,544 5 CM	CL
= 0 11/0 02/ 0 011/1/ 0 = 00	SCL
12-20 2.544/2 48 104R4/4 di C/M	SCE
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosof (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O)
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Under (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	3. V. to a fluid a butio was station and
Thick Dark Surface (A12)	T) Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLR.	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Type:	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
	a., ' a ' <u>b 1</u> '

Environmental Field Surveys Wetland Photo Page



Wetland data point wcmr003e_w facing northwest.



Wetland data point wcmr003e_w facing southwest.

Project/Site: ACP	ity/County: Camperiond Sampling Date: 5/12/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmr0031-w
Investigator(s): EST-K. Markham, IS. MulPhrey s	Castion Toursehin Panga: NA
investigator(s):	ocal relief (concave, convex, none): CONCAVE Slope (%): 2-4
Landform (hillslope, terrace, etc.):	03490 Long: 78.73772 Datum: W65 84
Subregion (LRR or MLRA): Lat: Social Lat:	Long: 70.757.2 Datum: VVOS 5
Soil Map Unit Name: Wagram Loomy Sond, 0-690	NVVI classification:
Are climatic / hydrologic conditions on the site typical for this time of year	/
Are Vegetation, Soil, or Hydrology significantly d	isturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally prob	lematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
Remarks: NEWAM: Hardwood Flort	
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)	
High Water Table (A2) Saturation (A3) Hydrogen Sulfide Oc	
	res along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduce	
	on in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (
Iron Deposits (B5) Uher (Explain in Re	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (B9)	Spnagnum moss (Do) (ERR 1, D)
Field Observations: Surface Water Present? Yes No Depth (inches):	NA
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes Depth (inches):	
Saturation Present? Yes No Depth (inches):	10.11
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:
Remarks:	
i e e e e e e e e e e e e e e e e e e e	

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

25.50	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size 305+ X305+)		Species?		Number of Dominant Species 7
1. Acer rubrum	20		FAC	That Are OBL, FACW, or FAC: (A)
2. GUELLUS NIGLO	60	<u> </u>	FAC	Total Number of Dominant
3. Liquidombor Styrocistus	20	-	FAC	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	100	= Total Cov	/er	OBL species x 1 =
50% of total cover:SC	20% of	total cover	20	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 205+ X3c5+)				FAC species x 3 =
1. Ilex coriacea	5	N	FACW	FACU species x 4 =
2. Symplocos tinctorio	5	N	FAC	UPL species x 5 =
3. Vaccinium corymbusum	5	N	FACW	Column Totals: (A) (B)
4. Callicarpa omericana	5	N	FACU	Prevalence Index = B/A =
5. CIPHATA ALAISONIO	5	N	FACH	Hydrophytic Vegetation Indicators:
6. HER rubrum	10	Y	FAC	1 Rapid Test for Hydrophytic Vegetation
7. QUEYCUS NIGEA	10	V	FAC	2 - Dominance Test is >50%
8.				
0	45	= Total Cov	/er	3 - Prevalence Index is ≤3.0¹
50% of total cover: 22.				Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 305+ X305+)	20 /8 01	total cover		1
1. Avundinaria sisentea	2	N	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Legiothoe axillaris	30	~	FACW	Definitions of Four Vegetation Strata:
3. Clethro allisolia	50	1	FACW	
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4.				more in diameter at breast height (DBH), regardless of height.
5				
6.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8.				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
() 1		= Total Cov		
50% of total cover:	20% of	total cover	16.4	
Woody Vine Stratum (Plot size:		1		
1. Smilax rotundifolia	2	N	FAC	
2				
3				
4				
5				Hydrophytic
	2	= Total Co	ver .	Vegetation
50% of total cover:	20% of	total cover	:0.4	Present? Yes No
Remarks: (If observed, list morphological adaptations belo				
Trainanta. (ii addartas, not marpharages daspisares and	,			
8				

Profile Description: (Describe to the dep	th needed to docum	ent the i	ndicator (or confirm		indicators.)
					the absence of	1
Depth Matrix	Redox	Features		Loc²	Taxtura	Remarks
(inches) Color (moist) %	Color (moist)	%	Type ¹	Loc	<u>Texture</u>	Remarks
0-8 104R2/1 10U					SCL	
8-20 W4R4/2 98	104R4/6	2	C	~	SCL	
0 00 0011111	100/100					
	0.000					
						The state of the s
¹ Type: C=Concentration, D=Depletion, RM	-Peduced Matrix MS	=Masked	Sand Gra	ins	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	I RRs. unless other	wise not	ed.)	1110.		r Problematic Hydric Soils ³ :
_ <u></u>				DD C T III		ck (A9) (LRR O)
Histosol (A1)	Polyvalue Bel					ck (A10) (LRR S)
Histic Epipedon (A2)	Thin Dark Sur					Vertic (F18) (outside MLRA 150A,B)
Black Histic (A3)	Loamy Mucky			0)		Floodplain Soils (F19) (LRR P, S, T)
Hydrogen Sulfide (A4)	Loamy Gleyed		F2)			us Bright Loamy Soils (F20)
Stratified Layers (A5)	Depleted Mate		· C\		(MLRA	
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S					ent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P, T, U						llow Dark Surface (TF12)
Muck Presence (A8) (LRR U)	Redox Depres		0)			plain in Remarks)
1 cm Muck (A9) (LRR P, T)	Depleted Och		AM DA 4	51)	L Other (L)	plant in the markey
Depleted Below Dark Surface (A11)	Iron-Mangane		*		T) ³ Indicate	ors of hydrophytic vegetation and
Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150	and the same of th					nd hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)				, 0,		s disturbed or problematic.
	Reduced Ver			0A 150B)		,
Sandy Gleyed Matrix (S4)	Piedmont Flo					
Sandy Redox (S5) Stripped Matrix (S6)					A 149A, 153C, 1	53D)
Dark Surface (S7) (LRR P, S, T, U)	III Allottalous b	mgm Loa	, (20) (., ,,, .	
Restrictive Layer (if observed):						/
Type:						
						No.
Depth (inches):					Hydric Soil P	resent? Yes No
Depth (inches):Remarks:					Hydric Soil P	resent? Yes No
			200		Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No No
					Hydric Soil P	resent? Yes No No No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No

Environmental Field Surveys Wetland Photo Page



Wetland data point wcmr003f_w facing east.



Wetland data point wcmr003f_w facing south.

Project/Site: ACP	City/County: Camber 10nd Sampling Date: 5/12/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmr003-1
Investigator(s): EST-K, Markham, K, Marphrey	
Landform (hillsland tarrace etc.): Flat	Local relief (concave, convex, none): $\frac{\mathcal{E} \cdot \alpha + }{73779}$ Slope (%): $\frac{\mathcal{O} - 2}{}$ Datum: $\frac{\mathcal{O} \cdot \alpha + }{}$ Slope (%): $\frac{\mathcal{O} - 2}{}$
Subsection (IRR or MIRA): LRRP	03510 Long: -78.73779 Datum: W65 8
Soil Map Unit Name: Wagrom 10amg Sond, 0-6	Plo SIOPES NWI classification: N/A
Soil Map Unit Name: Magistri Toparis Soil Map Unit Name:	NVVI classification.
Are climatic / hydrologic conditions on the site typical for this time of year	
	disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro	blematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Hydric Soil Present? Hydric Soil Present? Yes No No No No No No No No No No No No No	Is the Sampled Area within a Wetland? Yes No No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13	
High Water Table (A2) Saturation (A3) High Warl Deposits (B15) Hydrogen Sulfide O	
	eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduce	
	ion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
☐ Iron Deposits (B5) ☐ Other (Explain in Re	The state of the s
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
☐ Water-Stained Leaves (B9) Field Observations:	Spriagridin moss (56) (Erric 1, 5)
Surface Water Present? Yes NoDepth (inches)	· NA
Water Table Present? Yes No Depth (inches)	>2011
Saturation Present? Yes No Depth (inches)	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), ii available.
Remarks:	
5. 47	
*	
T. Control of the Con	

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

2000	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 305 X 3054)	% Cover	Species?	Status FAC	Number of Dominant Species That Are OBL FACW of FAC: (A)
1. Pinus taeda		-/-	FAC	That Are OBL, FACW, or FAC: (A)
3.				Total Number of Dominant Species Across All Strata:(B)
4				Percent of Dominant Species / 79
5				That Are OBL, FACW, or FAC: 6/96 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	20	= Total Co		OBL species x 1 =
50% of total cover:	200/ 0	total cover	H	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3004 X 3004)	20% 01	total cover		FAC species x 3 =
1. Liquidember stylecifine	60	Y	FAC	FACU species x 4 =
2 Morella cerifera	15	N	FAC	UPL species x 5 =
3. Pinus taeda	10	N	FAC	Column Totals: (A) (B)
4. QUETCUS nigra	10	N	FAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	06			3 - Prevalence Index is ≤3.01
1.7	45	= Total Co	ver Q	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>47.</u>	20% of	total cover	:	
1. Asplenium plotyneurun	5	4	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Chasmonthium laxum	5	Y	FACW	Definitions of Four Vegetation Strata:
3. Rubus trivialis	10	4	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 of size, and woody plants less than 3.28 ft tall.
9				
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
12.	20	= Total Co	ver	
50% of total cover:		total cover	1.0	
Woody Vine Stratum (Plot size: 3054X3054				
1. Copisemium sempervirens	10	1	FAC	
2.		,		
3.				
4.				
5				Hydrophytic
	10	= Total Co	ver	Vegetation
50% of total cover:S		total cover		Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			
	-			

Depth Matrix	Redox Feat		the absence of indicat	5
inches) Color (moist) %	Color (moist) %	Type Loc2	<u>Texture</u>	Remarks
1-10 2.543/2 100			L5	
7-16 2.545/3 100			SCL	
10 41 11 160			SCL	
9-20 2,544/4 100				
			4.0 T	
			21	Lining MaMatrix
Type: C=Concentration, D=Depletion, RM	=Reduced Matrix, MS=Ma	sked Sand Grains.	² Location: PL=Pore	ematic Hydric Soils ³ :
lydric Soil Indicators: (Applicable to all			П	
Histosol (A1)		urface (S8) (LRR S, T, L	2 cm Muck (A10	
Histic Epipedon (A2)	Loamy Mucky Min	(S9) (LRR S, T, U)	Reduced Vertic	(F18) (outside MLRA 150A,B)
Black Histic (A3)	Loamy Gleyed Ma			plain Soils (F19) (LRR P, S, T)
Hydrogen Sulfide (A4)	Depleted Matrix (F			nt Loamy Soils (F20)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface		(MLRA 153B)	
5 cm Mucky Mineral (A7) (LRR P, T, U			Red Parent Mat	erial (TF2)
Muck Presence (A8) (LRR U)	Redox Depression			ark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR L	1)	Other (Explain i	Remarks)
Depleted Below Dark Surface (A11)	☐ Depleted Ochric (F			and a supplement
Thick Dark Surface (A12)	2. 10 <u></u>	lasses (F12) (LRR O, P,		ydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150	A) Umbric Surface (F		wetland hydr	ology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17)			bed or problematic.
Sandy Gleyed Matrix (S4)		18) (MLRA 150A, 150B)		
Sandy Redox (S5)	Piedmont Floodpla	ain Soils (F19) (MLRA 14 Loamy Soils (F20) (MLF	19A) 2A 140A 153C 153D\	
Stripped Matrix (S6)	Anomalous Bright	Loamy Soils (F20) (MLF	(A 149A, 155C, 155D)	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):				
Type:	VALUE OF STREET		Hydric Soil Present	? Yes No
Depth (inches):			Tilyania dani Tidaani	
Remarks:				

Environmental Field Surveys Wetland Photo Page



Upland data point wcmr003_u facing east.



Upland data point wcmr003_u facing north.

Project/Site: ACP City/	County: Climber and Sampling Date: 5/12/16
Applicant/Owner: Dominion	State: NC Sampling Point: WCM V 003e-W
Investigator(s): ESI-Kmarkoon, Kmurphrey Sect	State. 142 Sampling Forms 442
Investigator(s):	Il relief (concave, convex, none): CONCAVE Slope (%): 2-4
Landform (hillslope, terrace, etc.): Fort Loca	Trelief (concave, convex, none): Concave Slope (%).
Subregion (LRR or MLRA): Lat: 30.000	192 Long: -78.73802 Datum: W65 &
Soil Map Unit Name: Wagram Loony Sond, 0-6% SI	NWI classification: PEM
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	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No No	within a Wetland? Yes No
Remarks:	
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) Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor United Water Marks (B1) Oxidized Rhizospheres	[
Water Marks (B1) Sediment Deposits (B2) Oxidized Rhizospheres Presence of Reduced In	
Drift Deposits (B3) Recent Iron Reduction in	사용하는 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10
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:	IA I
Surface Water Present? Yes No Depth (inches): _N	27011
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, pr	evious inspections), if available:
N. C. C. C. C. C. C. C. C. C. C. C. C. C.	
Remarks:	
, and the second	

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

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30F+X 30F+)	% Cover Species? Status	Number of Dominant Species
1. None Present		That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
5		Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6		Prevalence Index worksheet:
7		
8		Total % Cover of: Multiply by:
20	= Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 3054 X3654)		FAC species x 3 =
00		FACU species x 4 =
2.		UPL species x 5 =
3		Column Totals: (A) (B)
4.		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6.		Trapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8.		3 - Prevalence Index is ≤3.0¹
	= Total Cover	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover	20% of total cover:	Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 3054 X 3054)	2070 01 10101 00701	¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria ajantea	60 Y FACW	be present, unless disturbed or problematic.
2. Rubus avantus	25 Y FAC	Definitions of Four Vegetation Strata:
3. Eupardium Capilli Folium		
4. Juneus extysus	2 N FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Eupotovium votundi Polium	LICTO	height.
•		
6		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		
8.		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		of size, and woody plants less than 3.26 it tail.
10		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12		
47	- 9H = Total Cover	
50% of total cover:	20% of total cover: 18.8	
Woody Vine Stratum (Plot size: 3084 X3084)		
1. None present		
2		
3		
4		
5		Hydrophytic
1.8	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).	
		The second control of the second control of

Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc ²	Texture Remarks
0-2 10VR3/1 (01)	L
2-12 104R2/1 95 2,54R2,544 5 CM	CL
= 0 11/0 02/ 0 011/1/ 0 = 00	SCL
12-20 2.544/2 48 104R4/4 di C/M	SCE
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
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) ☐ Very Shallow Dark Surface (TF12)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	Other (Explain in Remarks)
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)	T) ³ Indicators 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,
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Mucky Mineral (S1) (LRR 0, 5) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)	La contraction of the contractio
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLR.	
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Type:	
The state of the s	Hydric Soil Present? Yes No
Depth (inches):	
Remarks:	

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Wetland data point wcmr003e_w facing northwest.



Wetland data point wcmr003e_w facing southwest.

Project/Site: ACC Ci	ity/County: Camperiond Sampling Date: 5/12/16
Applicant/Owner: DOMINIO	State: NC Sampling Point: Wcmr0031-w
Investigator(s): EST-K. Markham, IS. Marphrey Se	cetion Township Banga: NA
investigator(s):	ocal relief (concave, convex, none): CON COVE Slope (%): 2-4
Landform (hillslope, terrace, etc.): 6 1/A	03490 Long: 78.73772 Datum: W65 84
Subregion (LRR or MLRA): Lat: 55.0	Long: 70.737 Datum: VACCO
Soil Map Unit Name: Wagram Loong Sond, 0-690 5	NVII classification:
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly di	sturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally probl	lematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	Within a Wetland 7
Remarks: NEWAM: Hardwood Flot	
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)	
High Water Table (A2) Marl Deposits (B15) (Marl Deposits (B15) (Marl Deposits (B16) (
Saturation (A3) Hydrogen Sulfide Odi 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 Reductio	
Algal Mat or Crust (B4) Thin Muck Surface (C	
☐ Iron Deposits (B5) ☐ Other (Explain in Ren	
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
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,	previous inspections), if available:
Remarks:	

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

25.50	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size 305+ X305+)		Species?		Number of Dominant Species 7
1. Acer rubrum	20		FAC	That Are OBL, FACW, or FAC: (A)
2. GUELLUS NIGLO	60	<u> </u>	FAC	Total Number of Dominant
3. Liquidombor Stylocistua	20	-	FAC	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	100	= Total Cov	/er	OBL species x 1 =
50% of total cover:SC	20% of	total cover	20	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 205+ X3c5+)				FAC species x 3 =
1. Ilex coriacea	5	N	FACW	FACU species x 4 =
2. Symplocos tinctoria	5	N	FAC	UPL species x 5 =
3. Vaccinium corymbusum	5	N	FACW	Column Totals: (A) (B)
4. Callicarpa omericana	5	N	FACU	Prevalence Index = B/A =
5. CIPHATA ALAISONIO	5	N	FACH	Hydrophytic Vegetation Indicators:
6. HER rubrum	10	Y	FAC	1 Rapid Test for Hydrophytic Vegetation
7. QUEYCUS NIGEA	10	V	FAC	2 - Dominance Test is >50%
8.				
0	45	= Total Cov	/er	3 - Prevalence Index is ≤3.0¹
50% of total cover: 22.				Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 305+ X305+)	20 /8 01	total cover		1
1. Avundinaria sisentea	2	N	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Legiothoe axillaris	30	~	FACW	Definitions of Four Vegetation Strata:
3. Clethro allisolia	50	1	FACW	
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4.				more in diameter at breast height (DBH), regardless of height.
5				
6.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8.				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
() 1		= Total Cov		
50% of total cover:	20% of	total cover	: 16.4	
Woody Vine Stratum (Plot size:		. 1		
1. Smilax rotundifolia	2	N	FAC	
2				
3				
4				
5				Hydrophytic
	2	= Total Co	ver	Vegetation
50% of total cover:	20% of	total cover	:0.4	Present? Yes No
Remarks: (If observed, list morphological adaptations belo				
, , , , , , , , , , , , , , , , , , , ,	,			
e				

Profile Description: (Describe to the dep	th needed to docum	ent the i	ndicator (or confirm		indicators.)
					the absence of	1
Depth Matrix	Redox	Features		Loc²	Taxtura	Remarks
(inches) Color (moist) %	Color (moist)	%	Type ¹	Loc	<u>Texture</u>	Remarks
0-8 104R2/1 10U					SCL	
8-20 W4R4/2 98	104R4/6	2	C	~	SCL	
0 00 0011111	100/100					
	0.000					
						The state of the s
¹ Type: C=Concentration, D=Depletion, RM	-Peduced Matrix MS	=Masked	Sand Gra	ins	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	I RRs. unless other	wise not	ed.)	1110.		r Problematic Hydric Soils ³ :
_ <u></u>				DD C T III		ck (A9) (LRR O)
Histosol (A1)	Polyvalue Bel					ck (A10) (LRR S)
Histic Epipedon (A2)	Thin Dark Sur					Vertic (F18) (outside MLRA 150A,B)
Black Histic (A3)	Loamy Mucky			0)		Floodplain Soils (F19) (LRR P, S, T)
Hydrogen Sulfide (A4)	Loamy Gleyed		F2)			us Bright Loamy Soils (F20)
Stratified Layers (A5)	Depleted Mate		· C\		(MLRA	
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S					ent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P, T, U						llow Dark Surface (TF12)
Muck Presence (A8) (LRR U)	Redox Depres		0)			plain in Remarks)
1 cm Muck (A9) (LRR P, T)	Depleted Och		AM DA 4	51)	L Other (L)	plant in the markey
Depleted Below Dark Surface (A11)	Iron-Mangane		*		T) ³ Indicate	ors of hydrophytic vegetation and
Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150	and the same of th					nd hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)				, 0,		s disturbed or problematic.
	Reduced Ver			0A 150B)		,
Sandy Gleyed Matrix (S4)	Piedmont Flo					
Sandy Redox (S5) Stripped Matrix (S6)					A 149A, 153C, 1	53D)
Dark Surface (S7) (LRR P, S, T, U)	III Allottalous b	mgm Loa	, (20) (., ,,, .	
Restrictive Layer (if observed):						/
Type:						
						No.
Depth (inches):					Hydric Soil P	resent? Yes No
Depth (inches):Remarks:					Hydric Soil P	resent? Yes No
			200		Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No No
					Hydric Soil P	resent? Yes No No No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No
					Hydric Soil P	resent? Yes No No

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Wetland data point wcmr003f_w facing east.



Wetland data point wcmr003f_w facing south.