Project/Site: 1-Cf City/Coun	ty: Cumberland Sampling Date: 9/11/14
Applicant/Owner: Domin to n	State: NC Sampling Point: Wcmo OIIf_
Investigator(s) ESI-K. Markham, K. Marphieg Section, 7	Ownship Range: NA
Landform (hillslope, terrace, etc.): drainageway Local relie	the control of the co
Subregion (LRR or MLRA): LRR Q Lat: 35.21417	-78 G SOP 8
	Long: 78,03010 Datum; VVVO D
Soil Map Unit Name: Pantegu Loam	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes_	· · · · · · · · · · · · · · · · · · ·
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 sampli	ng point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesNo	Was Downsto LAnne
Hydric Soil Present?	the Sampled Area thin a Wetland? Yes No
Wetland Hydrology Present? Yes No	thin a Wetland? Yes No
Remarks:	trantage and lose in wetland.
Remarks: Active timbering on adjacent upland,	ivee to ps and logs in vocada.
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)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) High Water Table (A2) High Water Table (A2)	
Saturation (A3) Yydrogen Sulfide Odor (C1) Oxidinad Dhizapabasa slap	Moss Trim Lines (B16)
Water Marks (B1) Sediment Deposits (B2) Water Marks (B1) Presence of Reduced Iron (C	
Drift Deposits (B3) Recent Iron Reduction in Till	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5)	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? YesNo Depth (inches): NA	
Water Table Present? Yes No Depth (inches): 8	<u> </u>
Saturation Present? Yes Vo Depth (inches): 2	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	us inspections), if available:
Remarks:	
1	j

			I - P I	
Tree Stratum (Plot size: 30 'X30')		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 / 30)		Species?		Number of Dominant Species 5
1. Acer rubium	12	<u>y</u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidambor Statacifina	15	1.	FAC	
2. Draget Contribute Brazilla		-y		Total Number of Dominant
3			· 	Species Across All Strata: (B)
4.				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:
6				``
				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
U	20		·	OBL species x 1 =
		= Total Co	ver	· ———
50% of total cover:	20% of	f total cover	r: 6	FACW species x 2 =
2/1/3/1				FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 301X301)				FACU species x 4 =
1. QUEYCUS nigra	<u> 5</u>	У.	FAC	
2 Persea burbania		1/2	FACIN	UPL species x 5 =
2. Bev DON BOTTO	·	' '/	1-11-00	1
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7	. <u> </u>			2 - Dominance Test is >50%
8.				
o	-10			3 - Prevalence Index is ≤3.0¹
_				Problematic Hydrophytic Vegetation¹ (Explain)
_ 50% of total cover: <u>5</u>	20% o	f total cove	r 2	, _
2/11/2/1		. 1010. 0010		
Herb Stratum (Plot size: 30 1 X 30)	20			¹ Indicators of hydric soil and wetland hydrology must
1. Woodwardia arediata	20	У	OBL	be present, unless disturbed or problematic.
2.	-		- —	Definitions of Four Vegetation Strata:
3				To a March of the desired and the control of the co
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		· —		more in diameter at breast height (DBH), regardless of
5				height.
6			- —	Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.				
		7.1.10		
	. ———	. = Total Co	- 1	
50% of total cover: 10	20% c	f total cove	er: _ - 14	
Woody Vine Stratum (Plot size: 30'X3d')				
vvoody vine Stratum (Plot size: 20 7 30)	^			\
1. Smilax rotundifolia	ユ	Ŋ	FAC	
2				
۷	-		- 	
3				
A				
4				
5				Hydrophytic
	2	= Total Co	nver	Vegetation
		-		Present? Yes No
50% of total cover:	20% (of total cove	er: Ve Y	
Remarks: (If observed, list morphological adaptations bel	um)			<u> </u>
Active timbering, tree to	105	0 01	40	
しひじょしょく フロバのにょしきみきつ しょく しょ		. , . ,	•	
)(-)			
),	, , ,			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
	, ,			·
	, ,			
	,			
,	, ,			

Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the i	indicator	or confirm	the absence of it	ndicators.)	
Depth	Matrix		Redox	Feature:	s			·	
(inches)	Color (moist)	<u> %</u>	Color (moist)	<u>%</u>	Type	<u>Loc²</u>	Texture	Remarks	
0-3	104R2/1	<u> (30</u>					<u></u> _		
5-6	104R3/2	<u>BO</u> _	104RS/4	15		<u> </u>	<u> </u>		
	,	,	7,54R4/6	5	C	PL	CL		
6-8	104R3/1	98	10424/6	2		PL	1 <		
8-12	104R5/2	95	104R5/8	5		W	13 -		
				40			<u></u>		
12-20	10414011	<u>60</u>	104R 6/8	40		$\overline{\mathcal{N}}$	<u> 2C</u> –		
<u> </u>									
	oncentration, D=Dep					ains.		Pore Lining, M=Matrix	
Hydric Soil	Indicators: (Applica	able to all			-			Problematic Hydric S	oils³:
Histosol			Polyvalue Bel					(A9) (LRR O)	
· • • • • • • • • • • • • • • • • • • •	oipedon (A2)		Thin Dark Su					(A10) (LRR S)	
. =	istic (A3)		Loamy Mucky			: O)		/ertic (F18) (outside M	
_	en Sulfide (A4)		Loamy Gleye		(F2)			Floodplain Soils (F19) (
	d Layers (A5)	T 115	Depleted Mat		-0)			s Bright Loamy Soils (F	20)
_	Bodies (A6) (LRR P, ucky Mineral (A7) (LR	•	Redox Dark S Depleted Dar	•	•		(MLRA 1	t Material (TF2)	
	esence (A8) (LRR U		Redox Depre					it material (1F2) ow Dark Surface (TF12	,
	uck (A9) (LRR P, T)	,	Marl (F10) (LI		0)			olain in Remarks)	'
	d Below Dark Surface	- (A11)	Depleted Och	-	(MI RA 1	51)	Other (Exp	main in remarks)	
. = .	ark Surface (A12)	,	Iron-Mangane		-	-	T) ³ Indicator	s of hydrophytic vegeta	ition and
_	rairie Redox (A16) (N	/ILRA 150					-	hydrology must be pre	
	lucky Mineral (S1) (L		Delta Ochric			•		disturbed or problemat	· · · · · · · · · · · · · · · · · · ·
	Bleyed Matrix (S4)		Reduced Ver			0A, 150B)		•	
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	9A)		
☐ Stripped	l Matrix (S6)		Anomalous B	right Loa	my Soils (F20) (MLR	A 149A, 153C, 15	3D)	
	rface (S7) (LRR P, S								
Restrictive	Layer (if observed):								
Type:									
Depth (in	ches):						Hydric Soil Pre	sent? Yes	No
Remarks:									
	* * * * * * * * * * * * * * * * * * * *								
								•	•
				•					
1									
ţ									



Wetland data point wcmo011f_w facing southwest



Wetland data point wcmo011f_w facing southeast.

Project/Site: ACP City/County: Cumberland Sampling Date: 5/7/15
Applicant/Owner: DOMINION State: NC Sampling Point; WcmoOlls_w
Investigator(s): ESTLRoper, Harbour) Section, Township, Range: None,
Landform (hillslope, terrace, etc.): + 1 Local relief (concave, convex, none): <u>None</u> Slope (%): <u>0-31</u>
Subregion (LRR or MLRA): LRP Lat: 35.21477 Long: -78.64903 Datum: W6684
Soil Map Unit Name: Altivista Fine Sandy loam NWI classification: PSS
i /
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No le the Sampled Area
Hudrig Sail Present?
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) Fligh Water Table (A2) Aquatic Fauna (B13) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
☐ Water Marks (B1) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:
Surface Water Present? Yes No Depth (inches): N A
Water Table Present? YesNo Depth (inches):Sucface
Saturation Present? Yes No Depth (inches): 54 Face Wetland Hydrology Present? Yes No No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Describe Recorded Data (Stream gauge, monitoring well, aerial photos, previous inspections), il available.
Remarks:

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30f+x30f+)	% Cover			
1. none			_	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2.				
				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: \\ \OO\\(\int_{l}\) (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
				FACW species x 2 =
50% of total cover:	20% of	total cover	· ——	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)		•.		
1. Acer rubrum	15		FAC	FACU species x 4 =
2. Pinus taeda	15	Υ	FAC	UPL species x 5 =
3. Liquidam bar styraciflua	D	<u> </u>	FAC	Column Totals: (A) (B)
4. Salix nigra		N	OBL	1
4. <u>OA II A KIGI A</u>				Prevalence Index = B/A =
5. Ilex glabra	_5_	<u>N</u>	FACW	Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				1 1 - 1 1
- O	50	= Total Co		3 - Prevalence Index is ≤3.0¹
3 @				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 25	20% of	total cover	:_ <u>1U</u>	
Herb Stratum (Plot size: 30 ft x 30 ft)		.,	•	Indicators of hydric soil and wetland hydrology must
1. Junius effusus	. 13 .	, y	OBL	be present, unless disturbed or problematic.
2. Arundinavia gigantea	10	A	FACW	Definitions of Four Vegetation Strata:
2 SCICOUS MORNING	. 	~	OBL	
3. Scirpus opperinus	<u> </u>	N		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Salix nigrá			08L	more in diameter at breast height (DBH), regardless of
5. <u>Saururus ^Ucernuus</u>	<u> </u>	<u>_</u>	<u>0BL</u>	height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				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				
	50	= Total Co	wor	
25	<u> </u>			
50% of total cover: <u>25</u>	20% c	f total cove	r: <u>10</u>	
Woody Vine Stratum (Plot size: 3Dft x30ft)				
1. none				
2				
1				
3				
4.		-		
5				Hydrophytic
	0	= Total Co	over	Vegetation
50% of total cover:	20% (- of total cove	or.	Present? Yes No
		77 10101 0071		
Remarks: (If observed, list morphological adaptations bel	iow).			
İ				

Profile Desc	ription: (Describe	to the dept	h needed to docum	nent the i	ndicator	or confirm	n the absence		ors.)	
Depth	Matrix			x Features			. .			
(inches) 0 - 3	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc ²	Texture		Remarks	
	10 1R 5/2	47	1042 5/4	7						
3-20	10 1K 25	71	10 1K 14	<u> </u>		<u>M</u>	Coarse	Sand	<u> </u>	
		·	· · · · · · · · · · · · · · · · · · ·							
¹Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	²Location:	PL=Pore L	ining, M=Matrix	-
			LRRs, unless other				Indicators	for Proble	matic Hydric S	ioils³:
. Histosol	(A1)		Polyvalue Be				U) 🛄 1 cm l	Muck (A9) (L	RR O)	
	oipedon (A2)		Thin Dark Su					Muck (A10)		
Black Hi	istic (A3) en Sulfide (A4)		Loamy Mucky			₹ (0)			18) (outside M	
= -	i Layers (A5)		Loamy Gleye Depleted Mat		F2)				ain Soils (F19) Loamy Soils (F	
	Bodies (A6) (LRR P	, T, U)	Redox Dark		6)			RA 153B)	Loanly Cons (i	20)
☐ 5 cm Mu	icky Mineral (A7) (LF	RR P, T, U)					☐ Red F	arent Mater		
	esence (A8) (LRR U)	Redox Depre		8)				k Surface (TF12	2)
	ick (A9) (LRR P, T) d Below Dark Surfac	~ (A11)	Marl (F10) (L		/MI DA 4	E4\	Other	(Explain in	Remarks)	
	ark Surface (A12)	e (ATT)	Depleted Och		•	•	. T\ ³ Indi	cators of hy	drophytic veget	ation and
	rairie Redox (A16) (MLRA 150A					•		logy must be pr	
	/lucky Mineral (S1) (I	_RR O, \$}	Delta Ochric						ed or problemat	
	Sleyed Matrix (S4)		Reduced Ver							
Sandy F	Redox (S5) I Matrix (S6)		Piedmont Flo				49A) RA 149A, 1530	3 4ESD)		
	rface (S7) (LRR P, S	S. T. U)	III Antomalous E	silgiil Loa	iny Sulis i	(120) (WIL	ra 148A, 1931	J, 153D)		
	Layer (if observed):									
Туре:									/	
Depth (in	ches):		· · · · · · · · · · · · · · · · · · ·				Hydric So	Il Present?	Yes	No
Remarks:									_	
								•		
	•									
					•				•	



Wetland data point wcmo011s_w facing east.

Project/Site: A CP	City/County: Cumberland Sampling Date: 9/11/14
Applicant/Owner: DOMINION	State: NC Sampling Point: WCMOOII_UI
Investigator(s): ESI-15. Markham, K. Murenrey	VA
Landform (hillstope, terrace, etc.): \(\frac{\lambda(1\S \log \text{Pe}}{\log \text{O} \text{Pe}}\)	Local relief (concave, convex, none): CONVEX Slope (%): 2-4
Subregion (LRR or MLRA): LRR P Lat: 3516	
Soil Map Unit Name: Udorthents/10amy	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	. /
Are Vegetation, Soil, or Hydrology naturally pro	
	g sampling point locations, transects, important features, etc.
	J sampling point locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Active timbering - no intact veget	ation in plot
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide (Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosph	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	
<u> </u>	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in F	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (89) Field Observations:	Sphaghan noss (bo) (ERR 1, 0)
Surface Water Present? Yes No Depth (inches	sk: N/A
Water Table Present? Yes No Depth (inches	·
Saturation Present? Yes No Depth (inches	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	itos, previous inspections), if available:
Remarks:	
T Contains.	

201421	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'×30')	% Cover Species? Status	Number of Dominant Species
. AAA. (11/2×//A		That Are OBL, FACW, or FAC: (A)
		Marke OBL, FACW, OF FAC.
2,		Total Number of Beninsta
		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		
- ·		Prevalence Index worksheet:
		Total % Cover of:Multiply by:
8		OBI coopies v 1 =
	= Total Cover	OBL species x 1 =
		FACW species x 2 =
50% of total cover:	20% of total cover:	
Sepling/Shrub Stretum (Plot size: <u>名の、メるが</u>)		FAC species x 3 =
AV- OF ORCOGO		FACU species x 4 =
1. none Present		
2		UPL species x 5 =
2		· I
3		Column Totals: (A) (B)
· · · · · · · · · · · · · · · · · · ·		1a
4		Prevalence Index = B/A = N/A
5		
		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
		
7		2 - Dominance Test is >50%
8	<u> </u>	3 - Prevalence Index is ≤3.01
	= Total Cover	I —
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
. 50% of total cover:	20% of total cover:	
30/820		`
Herb Stratum (Plot size: 30 X301)		Indicators of hydric soil and wetland hydrology must
1. NONE PRESENT		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
1		height.
5		· height.
6		m - 11 - 12 - 12 - 12 - 12 - 12 - 12 - 1
6		Sapling/Shrub - Woody plants, excluding vines, less
7 .		than 3 in, DBH and greater than 3,28 ft (1 m) tall.
7		
8		
8		- Herb – Ali herbaceous (non-woody) plants, regardless
9		
8		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
8		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
9		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
8		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
8		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
8	= Total Cover	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
8	= Total Cover	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
8	= Total Cover	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
8	= Total Cover	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
8	= Total Cover	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
8	= Total Cover	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
8	= Total Cover	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
8	= Total Cover 20% of total cover:	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
8	= Total Cover 20% of total cover:	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
8	= Total Cover 20% of total cover:	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
8	= Total Cover 20% of total cover:	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
8	= Total Cover 20% of total cover:	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
8		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
8	= Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover:	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	= Total Cover 20% of total cover: = Total Cover 20% of total cover: elow).	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

Profile Description: (Describe to the depth needed to document the indicator or confirm	n the absence of indicators.)
Depth Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc²	Texture Remarks
0-4 104R3/2100	
4-16 10gR 4/4 100	SL
16-20 104R3/2 90 104RS/6 10 C M	7 <
10 20 10916 12 10 10 10 10 10 10	
	· · · · · · · · · · · · · · · · · · ·
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 Solis ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T,	· -
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
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) Other (Explain in Remarks)
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) 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) ³ 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 1	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (ML	
Dark Surface (S7) (LRR P, S, T, U)	, ,
Restrictive Layer (if observed):	
	, ·
Туре:	Hudric Sail Procent? Voc. No.
Type: Depth (inches):	Hydric Soil Present? Yes No No
Туре:	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No



Upland data point wcmo011_u1 facing north.

Project/Site: ACP	City/County: Cumberland Sampling Date: 9/11/14
Applicant/Owner: DOMINIO	State: NC Sampling Point: WCmoOll_u2
Investigator(s): ESI-K.markham, K.murewey	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Flat Slope (%): 0-2
Subregion (LRR or MLRA): LRR P Lat: 35.	21467 Long: -78,69451 Dalum: WGS 84
Soil Map Unit Name: Altavista Fine Sandy L	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS - Attach site map showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	In this Committed Asses
Hydric Soil Present? Yes No	- Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
HADBOI OCA	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2) Marl Deposits (B	- · · · · · · · · · · · · · · · · · · ·
✓ Saturation (A3) Hydrogen Sulfide	<u> </u>
	pheres along Living Roots (C3) Dry-Season Water Table (C2) duced Iron (C4) Crayfish Burrows (C8)
<u> </u>	luction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	· · · —
Iron Deposits (85) Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? YesNo Depth (inche	es): NA
	nes): 720
Saturation Present? Yes No Depth (inchi	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	rotes provious inspections) if available:
Describe Recorded Data (stream gauge, monitoring well, aenar pri	iotos, previous inspections), il available.
Remarks:	
6 inches of rain un 9/	8/14
	į

3017201		Dominant	. 1	Dominance Test worksheet:
Tree Stratum (Plot size: 301×301) 1. AONE Present	% Cover	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.				
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6			—— h	Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	0			OBL species x 1 =
50% of total cover:		total cover	· .	FACW species x 2 =
Sepling/Shrub Stratum (Plot size: 3d \X301)	2070 01	total cover		FAC species x 3 =
1. Pinus talda	60	У	FAC	FACU species x 4 =
2. Liquidambor Styracifica	20	-	FAC	UPL species x 5 =
3. Li riodendrun tulipitera	2	N	FACU	Column Totals: (A) (B)
4. QUEYCUS DIGYON	2	N	FAC	Prevalence Index = B/A =
5. Symplocus tincturia	5	N	FAC	Hydrophytic Vegetation Indicators:
6				
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
	<u>89</u>	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 44	<u>.5</u> 20% o	f total cover	: 17.8	
Herb Stratum (Plot size: 30 X30)	80	V	FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Lyonia mariana	10	N	FAC	Definitions of Four Vegetation Strata:
3				, and the second
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.				height.
6.				SapIing/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 w∞dy vines greater than 3.28 ft in
11				height.
12	00			
11.	, <u>40</u>	= Total Co		
50% of total cover: 4	<u>)</u> 20% c	of total cove	r. <u>1 <i>D</i> </u>	
Woody Vine Stratum (Plot size: 301/301)	<	W	EA/	
	- <u> </u>	- X -	= = =	
11.11		- \	- (/ ()	
3. VITIS (DAGNOTTONA		- '	110	
4				
5	12			Hydrophytic
		_ = Total Co		Vegetation Present? Yes No
50% of total cover:		of total cove	r: <u>Zı' L</u>	
Remarks: (If observed, list morphological adaptations be	elow).			
			•	
į				

Profile Description: (Describe to the dept	th needed to document the Indicator or confirm	the absence of Indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type Loc2	
0-5 104R3/1 100		L5
5-20 10GR5/4 100		<u></u>
3 20 100/1011 10-		_ ~
1Times C-Consentration D-Dardetion DMs	=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators: (Applicable to all		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)	Loarny Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	Tt Shadaadaaa as taadaaahadaad.:d
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	, , , , , , , , , , , , , , , , , , , ,
Coast Prairie Redox (A16) (MLRA 150,	· -	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)		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):		
Туре:	<u></u>	
Depth (inches):		Hydric Soil Present? Yes No
Remarks:	·	
·		
1		



Upland data point wcmo011_u2 facing northeast.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region _____ City/County: CUMberland Sampling Date: 5/2/16 State: NC Sampling Point: Wcmo 011-u3 Project/Site: __ACC Applicant/Owner: Dominion Investigator(s): ESI-K, Markham, K, Murphrey Section, Township, Range: NA Landform (hillslope, terrace, etc.): \(\subseteq \text{ill Slope} \) \(\subseteq \text{Local relief (concave, convex, none): } \(\subseteq \text{COVEX} \) \(\subseteq \text{Slope} \) (%): \(\subseteq \text{Convex, none} \) Lat: 35.22454 Long: -78.623 21 Subregion (LRR or MLRA): LRR P Soil Map Unit Name: Pactolus wany sand NWI classification: ____ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are "Normal Circumstances" present? Yes ____ Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) Drainage Patterns (B10) Marl Deposits (B15) (LRR U) High Water Table (A2) Moss Trim Lines (B16) ☐ Hydrogen Sulfide Odor (C1) Saturation (A3) Dry-Season Water Table (C2) Oxidized Rhizospheres along Living Roots (C3) 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) Other (Explain in Remarks) Shallow Aguitard (D3) 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? No V Depth (inches): >20 Water Table Present? Wetland Hydrology Present? Yes _____ No_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

2.4	Absolute	Dominan	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 3084 X 3084)			Status	
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: 275% (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Co	ver	N 20 1 20 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
50% of total cover:	20% of	total cove	r:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size 308+X 305+)				FAC species x 3 =
1. Quercus nigro	10	Y	FAC	FACU species x 4 =
2 Liquidambor styraciflua	10	-	FAC	UPL species x 5 =
2. Liquicotti-ot statution		-/-	FAC	Column Totals: (A) (B)
3. Pinus taeda	10	7		()
4. ACEY VUIOVUIVI	10	7	FAC	Prevalence Index = B/A =
5. QUEILUS Milhauxii	5	N	FACW	Hydrophytic Vegetation Indicators:
6				
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	TIC			3 - Prevalence Index is ≤3.01
		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 22.	5 20% of	total cove	r: <u>1 </u>	
Herb Stratum (Plot size: 305+ X 305)+				¹ Indicators of hydric soil and wetland hydrology must
1. Rulans argunas	20	1	FAC	be present, unless disturbed or problematic.
2. grass sp.	20		UNK	
	20			Definitions of Four Vegetation Strata:
3. Euponovium capillifolium		N	FACIA	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Saccharum gigonteum	2	N	FACW	more in diameter at breast height (DBH), regardless of
5. Nuttalanthuis canadensis	2	N	UPL	height.
				Carllande Manda plants evaluding vines loss
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				Manufacture All was deviced assets then 2.29 ft in
11				Woody vine – All woody vines greater than 3.28 ft in height.
		-		Height.
12	111			
	40	= Total Co	ver a	
50% of total cover: _2	20% of	total cove	r: 1.d	
Woody Vine Stratum (Plot size: 3054 X 3754				
1. Witis rotundifolia	10	Y	FAC	
2. Smilax rotundiblia		1/1	FAC	
	00	-14	FACO	
3. Parthenocissus quinquefolia	de	7	FALL	
4				
5.				Hydrophytic
	25	= Total Co	VOF	Vegetation
	4		The same of the sa	Present? Yes No
50% of total cover: 1/1	<u>></u> 20% of	total cove	r:/_	
Remarks: (If observed, list morphological adaptations belo	w).			

					the absence of indicators.)
Depth	Matrix			x Features "Type" Loc2	Texture Remarks
(inches)	Color (moist)	150	Color (moist)	%Type¹Loc²	LS 730% unconted sandar
0-2	104R2/1				1 S John Office Street
2-6	(UGR 3/3	100			L 5
6-14	104R3/4	100			LS
14-20	104R4/4	150			3
	-				
	-				
					21 and long Display Lining Making
'Type: C=C	oncentration, D=Dep Indicators: (Applic	letion, RM=R	educed Matrix, Mi	S=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
		able to all Ln		elow Surface (S8) (LRR S, T, U	
Histoso	pipedon (A2)			irface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
	istic (A3)			y Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)			ed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma		Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U)	Redox Dark	Surface (F6)	(MLRA 153B)
☐ 5 cm M	ucky Mineral (A7) (LI	RR P, T, U)		rk Surface (F7)	Red Parent Material (TF2)
	resence (A8) (LRR L	J)	Redox Depre		Very Shallow Dark Surface (TF12)
	uck (A9) (LRR P, T)	- / / / / /	Mari (F10) (L		Other (Explain in Remarks)
	ed Below Dark Surfact ark Surface (A12)	e (A11)		hric (F11) (MLRA 151) lese Masses (F12) (LRR O, P,	T) Indicators of hydrophytic vegetation and
_	Prairie Redox (A16) (I	MI RA 150A)	-	ace (F13) (LRR P, T, U)	wetland hydrology must be present,
	Mucky Mineral (S1) (- Comment	(F17) (MLRA 151)	unless disturbed or problematic.
	Gleyed Matrix (S4)			rtic (F18) (MLRA 150A, 150B)	
	Redox (S5)			oodplain Soils (F19) (MLRA 14	
	d Matrix (S6)		Anomalous I	Bright Loamy Soils (F20) (MLR.	A 149A, 153C, 153D)
	urface (S7) (LRR P,				ACCUSATE OF THE SERVICE OF THE SERVI
Restrictive	Layer (if observed)	•			
100000000000000000000000000000000000000		•			
Туре:		•	_		Undels Sell Brossett Vos.
Depth (ir	nches):	•	_		Hydric Soil Present? Yes No
		•			Hydric Soil Present? Yes No
Depth (in		•	_		Hydric Soil Present? Yes No
Depth (in		•			Hydric Soil Present? Yes No
Depth (in		•			Hydric Soil Present? Yes No
Depth (in		•			Hydric Soil Present? Yes No
Depth (ir		•			Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (ir					Hydric Soil Present? Yes No



Upland data point wcmo011_u3 facing south.



Upland data point wcmo011_u3 facing west.

Project/Site: ACP	City/County: CU	mberiand	Sampling Date: 10/6/14 Sampling Point: Wcmo 015e.
Applicant/Owner: DOM (100		State: NC	Sampling Point: Wcmo 015e
Investigatories FST-K, MAYKham, K, MUY	Section Township	Range: NA	
Landform (hillslope, terrace, etc.): ARPRESSION Subregion (LRR or MLRA): LRR Lat	l ocal relief (concav	e convex none). CONC	ave sione (%): 0-2
Cubracian (DD and DA)	25 224+7	1000 78 6257	22 Datumbol (25 84
Subregion (LRR or MLRA): CRITICAL COMPANY	٠.٥٠٠ ١ (٧	_ Long	Datum. VVOS D
Soil Map Unit Name: JohnSton Loam		NWI classif	
Are climatic / hydrologic conditions on the site typical for this t			
Are Vegetation, Soil, or Hydrology sig		re "Normal Circumstances"	present? Yes Vo No
Are Vegetation, Soil, or Hydrology na	turally problematic? (I	f needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map s	howing sampling poir	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No	is the Samp	•	No
Wetland Hydrology Present? Yes No Remarks:			-
HYDROLOGY			
Wetland Hydrology Indicators:			cators (minimum of two required)
Primery Indicators (minimum of one is required; check all the		_	oil Cracks (B6)
 	auna (B13)		regetated Concave Surface (B8)
	osits (B15) (LRR U)		Patterns (B10)
	n Sulfide Odor (C1) Rhizospheres along Living R		Lines (B16) on Water Table (C2)
 	of Reduced Iron (C4)	· · · · —	urrows (C8)
	on Reduction in Tilled Soils (Visible on Aerial Imagery (C9)
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	k Surface (C7)	_	nic Position (D2)
	kplain in Remarks)	☐ Shellow A	quitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neut	ral Test (D5)
☐ Water-Stained Leaves (B9)			n moss (D8) (LRR T, U)
Field Observations:	1/		
	th (inches): 10		_
<u> </u>	th (inches):	H	
Saturation Present? Yes Vo Dep (includes capillary fringe)	th (inches):	Wetland Hydrology Pres	sent? Yes No
Describe Recorded Data (stream gauge, monitoring well, a	erial photos, previous inspec	tions), if available:	
Remarks:			
			,

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

200,000	Absolute D	ominant Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30++ × 30=+)		Species? Status	Number of Dominant Species	2
1. none Present			That Are OBL, FACW, or FAC:	(A)
2.				_
3			Total Number of Dominant Species Across All Strata:	2 _(B)
4.			opedes Adioss Ali Stiata.	(6)
			Percent of Dominant Species	00°/0 (A/B)
5		I	That Are OBL, FACW, or FAC:	10 (A/B)
6			Prevalence Index worksheet:	
7				. National to a decision
8				ultiply by:
	=	Total Cover	OBL species x 1 =	
50% of total cover:	20% of to	tal cover:	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 3) (CX 30 (CX)			FAC species x3=	
1. None present			FACU species x4=	
• •	· · · · · · · · · · · · · · · · · · · 		UPL species x 5 =	
2			Column Totals: (A)	
3			(,	(-/
4			Prevalence Index = B/A =	
5			Hydrophytic Vegetation Indicators	
6	. — — –		Rapid Test for Hydrophytic V	
7			2 - Dominance Test is >50%	~ · · · · ·
8			3 - Prevalence Index is ≤3.0¹	
		Total Cover	I 	.4:1 (=1_:
50% of total cover:			Problematic Hydrophytic Vegeta	ition (Explain)
Herb Stretum (Plot size: 308+ × 30)	20 % 01 10	Mai Cover.		
1. Typha latifolia	2/)	Y OBL	¹ Indicators of hydric soil and wetland	hydrology must
1. TOPPORT TOPPER	10 -		be present, unless disturbed or prob	
2 Scirpus caperinas	10	N OBL	Definitions of Four Vegetation Str	ata:
3. CUPERUS erythrorhizos	- ユ	N OBL	Tree - Woody plants, excluding vine	e 3 in /7 6 cm\ or
4. LEMMA MINOY	15_	y obe	more in diameter at breast height (D	BH), regardless of
5			height.	,, 3
6.			Sapling/Shrub - Woody plants, exc	dudina vinan loon
7			than 3 in. DBH and greater than 3.28	auding vines, less B ft (1 m) tall.
			j	,
8			Herb – All herbaceous (non-woody)	
9			of size, and woody plants less than:	3,28 ft tall.
10			Woody vine - All woody vines great	ter than 3.28 ft in
11.			height.	
12	- -			
	<u>57 </u>	Total Cover		
50% of total cover: 28		1111		
Woody Vine Stratum (Plot size: 30FCX301)				
1. NONE PRESENT				
2				
3				
4				
5	 -		Hydrophytic	
	=	Total Cover	Vegetation	
50% of total cover:	20% of t	otal cover:	Present? Yes	No
Remarks: (If observed, list morphological adaptations bel				
/ / Observed, list morphological adaptations be	OW).			
			•	
N				

Depth			,			0, 00,,,,,,,,	the absence of in	dicators.)
(inches)	Matri Color (moist) %	Color (n	Redox Featu noist) %		Loc²	Texture -	Remarks
0-10	104R3/1	100					_SCL_	
	r						-	
								
							· · · · · · · · · · · · · · · · · · ·	·
			. ——			-		
								
ype: C=Co	ncentration, D=	Depletion, RN	/I=Reduced I	Matrix, MS=Mask	ced Sand Gr	ains.	² Location: PL=1	Pore Lining, M=Matrix.
ydric Soil I	ndicators: (Ap	plicable to a	II LRRs, uni	ess otherwise n	oted.)		Indicators for P	roblematic Hydric Soils³:
] Histosol	, ,			yvalue Below Su				(A9) (LRR O)
	ipedon (A2)			n Dark Surface ((A10) (LRR S)
Black His				my Mucky Miner		t O)		ertic (F18) (outside MLRA 150A,E
=	n Sulfide (A4)		=	my Gleyed Matri				loodplain Soils (F19) (LRR P, S, T
	Layers (A5) Bodies (A6) (LR	D D T 111	_	oleted Matrix (F3) dox Dark Surface	•		Anomalous	Bright Loamy Soils (F20)
	cky Mineral (A7)			oleted Dark Surfa	` '			Material (TF2)
	esence (A8) (LR			dox Depressions				w Dark Surface (TF12)
	ck (A9) (LRR P,		=	rl (F10) (LRR U)				ain in Remarks)
 -	l Below Dark Su	-	☐ Der	oleted Ochric (F1	1) (MLRA 1	51)	_ ` ` `	,
	rk Surface (A12			n-Manganese Ma	asses (F12)	LRR O, P,	T) ³ Indicators	of hydrophytic vegetation and
_	airie Redox (A1			bric Surface (F1:				hydrology must be present,
=	ucky Mineral (S			ta Ochric (F17) (uniess d	isturbed or problematic.
=	leyed Matrix (Se	4)		duced Vertic (F1				
	edox (S5) Matrix (S6)			dmont Floodplair		-	•	D)
	face (S7) (LRR	PSTIN	LI AIR	maious bright L	oarny Sons	(FZU) (WILK	A 149A, 153C, 153)
	ayer (if observ		-					
Type:	•	•						
• • • • • • • • • • • • • • • • • • • •	:hes):						Hydric Soil Pres	sent? Yes No
Remarks:								
	_		a./a	0001	1 ä	1	aC	
Ould	107	reti	eve	past	(C)	INCH	e>.	
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Wetland data point wcmo015e_w facing west.

Project/Site: ACP City/Co	ounty: Cumberland Sampling Date: 10/6/14 State: NC Sampling Point: Wcmo 0155-w
Applicant/Owner: Daminion	State: NC Sampling Point: WCmo 0155-W
Investigator(s): ESI-IK. Mar Phylory, K. Mar Khansectio	n Townshin Range: AIA
Landform (hillslope, terrace, etc.): deplesion Local of L	
Carluform (missope, terrace, etc.). (ACC)	2 Long: 78, 6258 5 Datum: WGS &
Subregion (LRR or MLRA): Lat: 25 Annual Lat: 25 Ann	Long: 70; 000 Datum: 403
	NWI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of year? You	· · · · · · · · · · · · · · · · · · ·
Are Vegetation, Soil, or Hydrology significantly disturb	ped? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problema	itic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? YesNo	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRI	
☐ Saturation (A3) ☐ Hydrogen Sulfide Odor (©	
一一一	
Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iro Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
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:	μ1
Surface Water Present? Yes No Depth (inches):	<u>`</u>
Water Table Present? YesNo Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
	,
Remarks:	
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200,42.50		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 305-X355-K) 1. None 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.				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8		= Total Co	ver	OBL species x 1 =
50% of total cover:		f total cover		-FACW species x-2 =
Sapling/Shrub Stratum (Plot size: 30 (CX 3) (CX)				FAC species x 3 =
1. Acer rubrum	<u> 30 </u>	<u>X</u>	FAC	FACU species x 4 =
2 Liquidambar StyraciFluo		<u> </u>	FAC	UPL species x 5 =
3. Baccharts halimitalia	5	<u> N</u>	FAC	Column Totals: (A) (B)
				Prevalence Index = B/A =
5		-	. ——	Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7			. ——	2 - Dominance Test is >50%
8	40	= Total Co		☐ 3 - Prevalence Index is ≤3.01
50% of total cover: _ &				Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size: 30% of total coverX	20%0	i total cove	1. <u>//</u>	1
1. Leersia oryzoides	5	V	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Saccharum giganteum	5	4	FACW	Definitions of Four Vegetation Strata:
3. Persicaria pensylvanica	5	4	FACW	-
4. Scitlus cupelinas	5	<u> </u>	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.		7		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	<u>20</u>	_	- +	
	. ——	_ = Total Co		
50% of total cover: 10 Woody Vine Stratum (Plot size: 30 FCX 30 FCX)	<u>)</u> 20% (of total cove	er:	•
1. Smilex glauca	5	V	FAC	
1 -		- —	171	•
2		-	-	•
3	_			-
				-
3		_ = Total C	over	- Hydrophytic Vegetation
50% of total cover: 2.	5 20%	of total cov		Present? Yes No
Remarks: (If observed, list morphological adaptations by		01 (0101 001	<u> </u>	-
Transmis. In observed, list morphological adaptations of	C.017).			•
				ı
·				
·				
I				

ofile Description: (Describ	e to the depth	needed to document the indicator or confirm t	Sampling Point: Wcmo 015
epth <u>Matrix</u>		Redox Features	
ches) Color (moist)		Color (moist) % Type ¹ Loc ²	Texture Remarks
-10 100R3/1	<u>(00</u>		SCL
('			

		•	
			<u> </u>
		Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
ric Soil Indicators: (App	licable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)		Polyvalue Below Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)		Depleted Matrix (F3)	L Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR		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) (LRF		Redox Depressions (F8)	
1 cm Muck (A9) (LRR P, 1		Marl (F10) (LRR U)	U Other (Explain in Remarks)
Depleted Below Dark Surf	face (A11)	Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12)		In Hon-Manganese Masses (F12) (LRR O, P, 7	
Coast Prairie Redox (A16)			wetland hydrology must be present,
Sandy Mucky Mineral (S1		Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	1	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 149	
Stripped Matrix (S6)) C T III	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Stripped Matrix (S6) Dark Surface (S7) (LRR F		Anomalous Bright Loamy Soils (P20) (MILRA	A 149A, 153C, 153D)
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe		Anomalous Bright Loamy Soils (P20) (MILRA	A 149A, 153G, 153D)
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type:		Anomalous Bright Loamy Soils (F20) (MLRA	
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type:		Anomalous Bright Loamy Soils (F20) (MLRA	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No



Wetland data point wcmo015s_w facing northwest.

Project/Site: ACP	_ City/County: Cumberione Sampling Date: 6/7/16
Applicant/Owner: Dominion	State: NC Sampling Point: WCmo 015
Investigator(s): ESI-R. TUIN bull, IS, MUIPLIE	
Investigator(s): ESTA, TOMOBET, IS, MICH PORCE	Local relief (concave, convex, none): None Slope (%): 0-2
Landform (hillslope, terrace, etc.): 11861 (ALA	Local relief (concave, convex, none): VIOVIE Slope (19).
	1,22460 Long: -78.62472 Datum: W65 8
Soil Map Unit Name: John Ston Loam	NWI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of	if year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	ing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Ves No No Ves No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
INDEAL COV	
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that app	LEGICAL CONTRACTOR OF THE SECOND CONTRACTOR OF
Surface Water (A1) Aquatic Fauna	
High Water Table (A2) Marl Deposits (사용용소 사용에 비용하는 사용하는 이번에 이번에 하는 것이 되었다. 그리고 그는 이번에 나를 살아 보고 있었다면 하는데 얼마를 살아 보고 있었다. 그는 사용이 없는데 나를 하는데 없는데 그는데 그렇다는데 그렇다면 그렇다는데 그렇다면 그렇다면 그렇다면 그렇다면 그렇다면 그렇다면 그렇다면 그렇다면
Saturation (A3) Hydrogen Sulfin	
	spheres along Living Roots (C3) Dry-Season Water Table (C2)
- 19 (19 (19 (19 (19 (19 (19 (19 (19 (19	educed Iron (C4) Crayfish Burrows (C8)
September 1 and the second and the s	duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	#####################################
Iron Deposits (B5) U Other (Explain	in Remarks)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
	hes): NA
Water Table Present? Yes No Depth (inc	hes): Surface
Saturation Present? Yes V No Depth (inc	hes): SUFFICE Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial p	notos, previous inspections), il available.
Demotion	
Remarks:	

THE COLUMN TERMINAL PROPERTY OF THE ACTION O		Dominan		Dominance Test worksheet:
1. NONE PRESENT		Species	07-40/06/1909/04	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6.				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
	0	= Total Co	ver	Characteristics Authority (CDA) - and acceptable control of AUC CDA (CDA) represents the project CDA (CDA) (CDA)
50% of total cover:	20% of	total cove	r:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 308+X306+)	_			FAC species x 3 =
1. Pinus taeda	_5_	N	FAC	FACU species x 4 =
2. NUSSA AQUINTICA	10		OBL	UPL species x5 =
3. Salix nigla	15	4	OBL	Column Totals: (A) (B)
4. Arer rubrum	STATE OF THE PARTY	N	FAC	Prevalence Index = B/A =
CONTRACTOR AND A CONTRACTOR OF THE PROPERTY OF				Hydrophytic Vegetation Indicators:
6				1-Rapid Test for Hydrophytic Vegetation
7		17 (04) (10)		2 - Dominance Test is >50%
8	25	= Total Co		☐ 3 - Prevalence Index is ≤3.01
				Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 17.	<u>3</u> 20% of	total cover	r	
Herb Stratum (Plot size: 3084 X 3084)	40	\/	OBL	¹Indicators of hydric soil and wetland hydrology must
1. TUPNA latifulia		-/-		be present, unless disturbed or problematic.
2. Persicaria pensylvanica		N	FACW	Definitions of Four Vegetation Strata:
3. Scirpus cyperinys		N	OBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Rubus arguntas	SECTION OF A PRINCIPLE OF	N	FAC	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				
8			Charles of John Market Hall Services	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11.				height.
12.	15			
23	A come a serio debendo los finados de	= Total Co	A APPENDIX	
50% of total cover: 32.	20% of	total cove	1. 12	
Woody Vine Stratum (Plot size: 306+X306+)	2	V.		
1. Vitis rotandiforia			+TTC	
2.				
3		Contract Contract		
4				
5.				Hydrophytic
	2	= Total Co	ver	Vegetation
50% of total cover:	20% of	total cove	r: 0.4	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	ow).			

Profile Description: (Describe to the depth needed to do	ument the in	dicator	or confirm	the absence of inc	dicators.)
			or commit	the absence of his	3,04,010,7
	dox Features %		Loc²	Texture	Remarks
		1456	LOC	SL	
<u> </u>					
5-8 2.54/1100				SL_	
8-20 2,544/1 80 7,54RH	14 20	(M	5/1	
0-00 2.5911 30 1,3911			1725	000	
			100000000000000000000000000000000000000		
	SU GRANDEN	35.457	Water Inc.		
A STATE OF THE STA	UNIO CALL STATE	11-57 (57)			
				COMMENSATION OF THE	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix,	MS=Masked	Sand Gr	ains.		Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless of	herwise note	d.)		Indicators for P	Problematic Hydric Soils ³ :
	Below Surface		RR S. T. U	1 cm Muck	(A9) (LRR O)
	Surface (S9)	95 (B) \$472 (B) \$2.55 (A) (B)			(A10) (LRR S)
	icky Mineral (F				ertic (F18) (outside MLRA 150A,B)
	eyed Matrix (F			Piedmont F	loodplain Soils (F19) (LRR P, S, T)
The second secon	Matrix (F3)				Bright Loamy Soils (F20)
Ph	rk Surface (F6	5)		(MLRA 1	
	Dark Surface				Material (TF2)
	pressions (F8				w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)				Other (Expl	ain in Remarks)
	Ochric (F11) (MLRA 1	51)		
	janese Masse	s (F12)	LRR O, P,		s of hydrophytic vegetation and
	urface (F13) (L	LRR P, T	, U)		hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Och	ric (F17) (MLI	RA 151)		unless d	listurbed or problematic.
	Vertic (F18) (N	MLRA 1	50A, 150B)		
Sandy Redox (S5)	Floodplain So				
Stripped Matrix (S6) Anomalou	is Bright Loam	ny Soils ((F20) (MLR	A 149A, 153C, 153	3D)
Dark Surface (S7) (LRR P, S, T, U)					Marie Contract Contra
Restrictive Layer (if observed):		The same		STATE OF THE STATE OF	
Type:					3/
Depth (inches):				Hydric Soil Pres	sent? Yes No
April 10 and 10				and the control of th	And the state of t
Remarks:					
		Augustines.		Contraction of the contract of the	



Wetland data point wcmo015s_w2 facing northeast.



Wetland data point wcmo015s_w2 facing northwest.



Wetland data point wcmo015s_w2 facing southeast.



Wetland data point wcmo015s_w2 facing southwest.

Project/Site: ACP	City/County: <u>C</u>	umberland	Sampling Da	ate: 10/6/14
Applicant/Owner: Dominion		State:	NC Sampling Po	oint: wcmo015-u
Investigator(s): FST-K Morkham, K. Murf	hres Section, Town	ship, Range: NA		
Landform (hillslope, terrace, etc.): Roadbed		ncave, convex, none): <u>C</u>	onvex	Slope (%): 2H
Subregion (LRR or MLRA): LRR (Lat: 35,22447			
Soil Map Unit Name: JOhn Ston Loam	Lat. Doros I (i			Datam. <u>0700 70</u> (
	<u> </u>		classification:	
Are climatic / hydrologic conditions on the site typical for the				
Are Vegetation, Soil, or Hydrology		Are "Normal Circumst		
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain an	y answers in Remark	s.)
SUMMARY OF FINDINGS - Attach site map	showing sampling	point locations, trai	nsects, importar	nt features, etc.
Hydrophytic Vegetation Present? Yes	No In the s	Sampled Area		
Hydric Soil Present? Yes	No 1/		es No	
Wetland Hydrology Present? Yes	No	a Wedanu:	es NO	
Remarks:				
				ļ
	···			
HYDROLOGY	•			
Wetland Hydrology Indicators:		Seconda	ary Indicators (minimu	um of two required)
Primary Indicators (minimum of one is required; check a	II that apply)		face Soil Cracks (B6)	
	ic Fauna (B13)		rsely Vegetated Con	
 	Deposits (B15) (LRR U)		inage Patterns (B10)	
	gen Sulfide Odor (C1)	_	ss Trim Lines (B16)	(00)
	red Rhizospheres along Liv		-Season Water Table	(C2)
1 	nce of Reduced Iron (C4) nt Iron Reduction in Tilled S		yfish Burrows (C8) uration Visible on Aei	rial Imanery (C9)
	Muck Surface (C7)		omorphic Position (D2	
	(Explain in Remarks)	-	allow Aquitard (D3)	·
Inundation Visible on Aerial Imagery (B7)	,	_	C-Neutral Test (D5)	
Water-Stained Leaves (B9)		☐ Spi	hagnum moss (D8) (L	.RR T, U)
Field Observations:			<u></u>	
Surface Water Present? Yes No	Depth (inches): NA	[* :
Water Table Present? Yes No	Depth (inches):			
Saturation Present? Yes No [Depth (inches): フみるい	Wetland Hydrolog	gy Present? Yes _	No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we	II. aerial photos, previous ir	nspections), if available:		
garage, and garage				
Remarks:				
			•	
	٠.			
			140	
			\$	
	•			

Tree Stratum (Plot size: 3044 X (54)		Dominant		Dominance Test worksheet:
	% Cover	Species?	Status	Number of Dominant Species
1. None present				That Are OBL, FACW, or FAC:(A)
2				,
2				Total Number of Dominant
3	. <u> </u>			Species Across All Strata: (B)
A				,
4.				Percent of Dominant Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC:
6				,
				Prevalence Index worksheet:
7				Total 9/ Course of Multiple but
8				Total % Cover of: Multiply by:
		= Total Co		OBL species x 1 =
		= Total Co	vei	FACW species x 2 =
50% of total cover:	20% o	f total cove	r:	
Sapling/Shrub Stratum (Plot size: 30 FC X / SFC				FAC species x 3 =
Sapinigranius Stratum (Flot size. Str. 1 C X 1 C S) C	~ 30	V	TAI	FACU species x 4 =
1. Liquidombar styracific			FRC	1
2. Baccharis halimifolia	5	N	FAC	UPL species x 5 =
	<u> </u>	7	UPL	Column Totals: (A) (B)
3. RIVUS COPATTINAM	<u> </u>			
4. Pinus tarda	5	7	FAC	Prevalence Index = B/A =
	. —	•		l
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
•				
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	35	= Total Co	Wor	1 =
ח				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 17	<u>'</u> 20% o	f total cove	er:	
Herb Stratum (Plot size: 308-X154)		•		1
An heart Colons of the colons	LLO	\/	TA	¹Indicators of hydric soil and wetland hydrology must
1. Andropugun virginicus	70	. <u> </u>	FAC	be present, unless disturbed or problematic.
2. Chasmonthium laxum	5	N	FACW	Definitions of Four Vegetation Strata:
		N	-	
3. Paspallum urvillei	<u> </u>		<u>FAC</u>	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Dichanthelium dichotom	um 5	N	FAC	more in diameter at breast height (DBH), regardless of
5. Euthamia caroliniana		N	FAC	height.
	- ——	· 		1 -
6. Eurotorium capillifolium	<u> </u>	_ N	FACW	Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		·		than only objects than old it (1 m) tail
8				Herb – All herbaceous (non-woody) plants, regardless
,				of size, and woody plants less than 3.28 ft tall.
9				or size, and woody plants loss man olzo it tall.
10	_	_		Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				.
	65	_ = Total C	over	
50% of total cover: 32				
50% of total cover:	<u>v</u> 20% (or total cov	er: <u>I </u>	.
Woody Vine Stratum (Plot size: 30 FC X/54)				
1. None present				
1. Tione present				·
2				
				-
3				-
4				_ [
				``
5			_	- Hydrophytic
i		_ = Total C	Cover	Vegetation
50% of total cover:	200/	of total cov	or.	Present? Yes No
		or total COV	Ψ1	-
Remarks: (If observed, list morphological adaptations be	elow).			
	•			

Profile Des	cription: (Describe	to the dep	th needed to docu	ment the i	ndicator	or confirm	the absence o	of indicators.)
Depth	Matrix			ox Feature				
(inches)	Color (moist)		Color (moist)	%	Type	Loc²	Texture	Remarks
<u>0-70</u>	10(R43	<u>60</u>	104RS/6	<u> 30 </u>	_(_	_/٧\	<u> </u>	
1	1		109R5/1	10	Ť	W	SCL	
			· - · · · · · · · · · · · · · · · · ·	- <u>'</u>				
-								
				_				
				_				
						. ——		·
¹Type: C=0	Concentration, D=De	pletion, RM:	Reduced Matrix, M	IS=Masked	Sand G	rains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soi	Indicators: (Appli	cable to all	LRRs, unless other	erwise not	ed.)		Indicators	for Problematic Hydric Soils ³ :
☐ Histose	ol (A1)		☐ Polyvalue B	elow Surfa	ce (S8) (I	LRR S, T, L	J) 🔲 1 cm M	luck (A9) (LRR O)
\rightarrow	pipedon (A2)		Thin Dark S				. —	luck (A10) (LRR S)
:=	listic (A3)		Loamy Muc					ed Vertic (F18) (outside MLRA 150A,B)
_ =	en Sulfide (A4)		Loamy Gley			•		ont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)		Depleted M		. ,		11	lous Bright Loamy Soils (F20)
	c Bodies (A6) (LRR I	P. T. U)	Redox Dark		- 6)			RA 153B)
	lucky Mineral (A7) (L				-			arent Material (TF2)
_	resence (A8) (LRR		Redox Depi					hallow Dark Surface (TF12)
· =	luck (A9) (LRR P, T)	•	☐ Marl (F10) (•			Explain in Remarks)
_	ed Below Dark Surfa		Depleted O		(MLRA	151)		
_	Dark Surface (A12)		Iron-Manga	nese Mass	es (F12)	(LRR O, P,	T) ³ Indic	ators of hydrophytic vegetation and
Coast	Prairie Redox (A16)	(MLRA 150.	A) 🔲 Umbric Sur	face (F13)	(LRR P,	T, U)	wet	land hydrology must be present,
│	Mucky Mineral (S1)	(LRR O, S)	☐ Delta Ochri	c (F17) (M	LRA 151))	unle	ess disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced V	ertic (F18)	(MLRA 1	50A, 150B))	·
☐ Sandy	Redox (S5)		Piedmont F	loodplain S	Soils (F19) (MLRA 14	49A)	
	d Matrix (S6)		Anomalous	Bright Loa	my Soils	(F20) (MLF	RA 149A, 153C	, 153D)
	urface (S7) (LRR P,	S, T, U)		-	•			-
	Layer (if observed		•					
Type: _							İ	
'' -	nches):						Hydric Soil	Present? Yes No
Remarks:							,	
Remarks:			and ha	1				
Fill	monterie)	DAGISEC	•				
1	(101)	•						
		•						
İ								
1								
1								
1								
			•					,



Upland data point wcmo015_u facing southwest.

Project/Site: ACP	City/County: CU	mberiand	Sampling Date: 10/6/14 Sampling Point: Wcmo 015e.
Applicant/Owner: DOM (100		State: NC	Sampling Point: Wcmo 015e
Investigatories FST-K, MAYKham, K, MUY	Section Township	Range: NA	
Landform (hillslope, terrace, etc.): ARPRESSION Subregion (LRR or MLRA): LRR Lat	l ocal relief (concav	e convex none). CONC	ave sione (%): 0-2
Cubracian (DD and DA)	25 224+7	1000 78 6257	22 Datumbol (25 84
Subregion (LRR or MLRA): CRITICAL COMPANY	٠.٥٠٠ ١ (٧	_ Long	Datum. VVOS D
Soil Map Unit Name: JohnSton Loam		NWI classif	
Are climatic / hydrologic conditions on the site typical for this t			
Are Vegetation, Soil, or Hydrology sig		re "Normal Circumstances"	present? Yes Vo No
Are Vegetation, Soil, or Hydrology na	turally problematic? (I	f needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS - Attach site map s	howing sampling poir	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No	is the Samp	•	No
Wetland Hydrology Present? Yes No Remarks:			-
HYDROLOGY			
Wetland Hydrology Indicators:			cators (minimum of two required)
Primery Indicators (minimum of one is required; check all the		_	oil Cracks (B6)
 	auna (B13)		regetated Concave Surface (B8)
	osits (B15) (LRR U)		Patterns (B10)
	n Sulfide Odor (C1) Rhizospheres along Living R		Lines (B16) on Water Table (C2)
 	of Reduced Iron (C4)	· · · · —	urrows (C8)
	on Reduction in Tilled Soils (Visible on Aerial Imagery (C9)
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	k Surface (C7)	_	nic Position (D2)
	kplain in Remarks)	☐ Shellow A	quitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neut	ral Test (D5)
☐ Water-Stained Leaves (B9)			n moss (D8) (LRR T, U)
Field Observations:	1/		
	th (inches): 10		_
<u> </u>	th (inches):	H	
Saturation Present? Yes Vo Dep (includes capillary fringe)	th (inches):	Wetland Hydrology Pres	sent? Yes No
Describe Recorded Data (stream gauge, monitoring well, a	erial photos, previous inspec	tions), if available:	
Remarks:			
			,

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

200,000	Absolute D	ominant Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30++ × 30=+)		Species? Status	Number of Dominant Species	2
1. none Present			That Are OBL, FACW, or FAC:	(A)
2.				_
3			Total Number of Dominant Species Across All Strata:	2 _(B)
4.			opedes Adioss Ali Stiata.	(6)
			Percent of Dominant Species	00°/0 (A/B)
5		I	That Are OBL, FACW, or FAC:	10 (A/B)
6			Prevalence Index worksheet:	
7				. National to a decision
8				ultiply by:
	=	Total Cover	OBL species x 1 =	
50% of total cover:	20% of to	tal cover:	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 3) (CX 30 (CX)			FAC species x3=	
1. None present			FACU species x4=	
• •	· · · · · · · · · · · · · · · · · · · 		UPL species x 5 =	
2			Column Totals: (A)	
3			(,	(-/
4			Prevalence Index = B/A =	
5			Hydrophytic Vegetation Indicators	
6	. —— –		Rapid Test for Hydrophytic V	
7			2 - Dominance Test is >50%	~ · · · · ·
8			3 - Prevalence Index is ≤3.0¹	
		Total Cover	I 	.4:1 (=1_:
50% of total cover:			Problematic Hydrophytic Vegeta	ition (Explain)
Herb Stretum (Plot size: 308+ × 30)	20 % 01 10	Mai Cover.		
1. Typha latifolia	2/)	Y OBL	¹ Indicators of hydric soil and wetland	hydrology must
1. TOPPORT TOPPER	10 -		be present, unless disturbed or prob	
2 Scirpus caperinas	10	N OBL	Definitions of Four Vegetation Str	ata:
3. CUPERUS erythrorhizos	- ユ	N OBL	Tree - Woody plants, excluding vine	e 3 in /7 6 cm\ or
4. LEMMA MINOY	15_	y obe	more in diameter at breast height (D	BH), regardless of
5			height.	,, 3
6.			Sapling/Shrub - Woody plants, exc	dudina vinan loon
7			than 3 in. DBH and greater than 3.28	auding vines, less B ft (1 m) tall.
			j	,
8			Herb – All herbaceous (non-woody)	
9			of size, and woody plants less than:	3,28 ft tall.
10			Woody vine - All woody vines great	ter than 3.28 ft in
11.			height.	
12	- -			
	<u>57 </u>	Total Cover		
50% of total cover: 28		1111		
Woody Vine Stratum (Plot size: 30FCX301)				
1. NONE PRESENT				
2				
3				
4				
5	 -		Hydrophytic	
	=	Total Cover	Vegetation	
50% of total cover:	20% of t	otal cover:	Present? Yes	No
Remarks: (If observed, list morphological adaptations bel				
/ / Observed, list morphological adaptations be	OW).			
			•	
N				
<u> </u>				

Depth			,			0, 00,,,,,,,,	the absence of in	dicators.)
(inches)	Matri Color (moist) %	Color (n	Redox Featu noist) %		Loc²	Texture -	Remarks
0-10	104R3/1	100					_SCL_	
	r						-	
								
							· · · · · · · · · · · · · · · · · · ·	·
			. ——			-		
								
ype: C=Co	ncentration, D=	Depletion, RN	/I=Reduced I	Matrix, MS=Mask	ced Sand Gr	ains.	² Location: PL=1	Pore Lining, M=Matrix.
ydric Soil I	ndicators: (Ap	plicable to a	II LRRs, uni	ess otherwise n	oted.)		Indicators for P	roblematic Hydric Soils³:
] Histosol	, ,			yvalue Below Su				(A9) (LRR O)
	ipedon (A2)			n Dark Surface ((A10) (LRR S)
Black His				my Mucky Miner		t O)		ertic (F18) (outside MLRA 150A,E
=	n Sulfide (A4)		=	my Gleyed Matri				loodplain Soils (F19) (LRR P, S, T
	Layers (A5) Bodies (A6) (LR	D D T 111	_	oleted Matrix (F3) dox Dark Surface	•		Anomalous	Bright Loamy Soils (F20)
	cky Mineral (A7)			oleted Dark Surfa	` '			Material (TF2)
	esence (A8) (LR			dox Depressions				w Dark Surface (TF12)
	ck (A9) (LRR P,		=	rl (F10) (LRR U)				ain in Remarks)
 -	l Below Dark Su	-	☐ Der	oleted Ochric (F1	1) (MLRA 1	51)	_ ` ` `	,
	rk Surface (A12			n-Manganese Ma	asses (F12)	LRR O, P,	T) ³ Indicators	of hydrophytic vegetation and
_	airie Redox (A1			bric Surface (F1:				hydrology must be present,
=	ucky Mineral (S			ta Ochric (F17) (uniess d	isturbed or problematic.
=	leyed Matrix (Se	4)		duced Vertic (F1				
	edox (S5) Matrix (S6)			dmont Floodplair		-	•	D)
	face (S7) (LRR	PSTIN	<u> </u>	maious bright L	oarny Sons	(FZU) (WILK	A 149A, 153C, 153)
	ayer (if observ		-					
Type:	•	•						
• • • • • • • • • • • • • • • • • • • •	:hes):						Hydric Soil Pres	sent? Yes No
Remarks:								
	_		a./a	0001	1 ä	1	aC	
Ould	107	reti	eve	past	(C)	INCH	e>.	
-	1,							
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Wetland data point wcmo015e_w facing west.

Project/Site: ACP City/Co	ounty: Cumberland Sampling Date: 10/6/14 State: NC Sampling Point: Wcmo 0155-w
Applicant/Owner: Daminion	State: NC Sampling Point: WCmo 0155-W
Investigator(s): ESI-IK. Mar Phylory, K. Mar Khansectio	n Townshin Range: AIA
Landform (hillslope, terrace, etc.): deplesion Local of L	
Carluform (missope, terrace, etc.). (ACC)	2 Long: 78, 6258 5 Datum: WGS &
Subregion (LRR or MLRA): Lat: 25 Annual Lat: 25 Ann	Long: 70; 000 Datum: 403
	NWI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of year? You	· · · · · · · · · · · · · · · · · · ·
Are Vegetation, Soil, or Hydrology significantly disturb	ped? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problems	itic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? YesNo	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRI	
☐ Saturation (A3) ☐ Hydrogen Sulfide Odor (©	
一一一	
Sediment Deposits (B2) Drift Deposits (B3) Presence of Reduced Iro Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
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:	μ1
Surface Water Present? Yes No Depth (inches):	<u>`</u>
Water Table Present? YesNo Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pro	evious inspections), if available:
	,
Remarks:	
·	
·	·
	į,
I .	

200,42.50		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 305-X355-K) 1. None 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.				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8		= Total Co	ver	OBL species x 1 =
50% of total cover:		f total cover		-FACW species x-2 =
Sapling/Shrub Stratum (Plot size: 30 (CX 3) (CX)				FAC species x 3 =
1. Acer rubrum	<u> 30 </u>	<u>X</u>	FAC	FACU species x 4 =
2 Liquidambar StyraciFluo		<u> </u>	FAC	UPL species x 5 =
3. Baccharts halimitalia	5	<u> N</u>	FAC	Column Totals: (A) (B)
				Prevalence Index = B/A =
5		-	. ——	Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7			. ——	2 - Dominance Test is >50%
8	40	= Total Co		☐ 3 - Prevalence Index is ≤3.01
50% of total cover: _ &				Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size: 30% of total coverX	<u> </u>	i total cove	1. <u>//</u>	1
1. Leersia oryzoides	5	V	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Saccharum giganteum	5	4	FACW	Definitions of Four Vegetation Strata:
3. Persicaria pensylvanica	5	4	FACW	-
4. Scitlus cupelinas	5	<u> </u>	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.		7		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	<u>20</u>	_	- +	
	. ——	_ = Total Co		
50% of total cover: 10 Woody Vine Stratum (Plot size: 30 FCX 30 FCX)	<u>)</u> 20% (of total cove	er:	•
1. Smilex glauca	5	V	FAC	
1 -		- —	171	•
2		-	-	•
3				-
				-
3		_ = Total C	over	- Hydrophytic Vegetation
50% of total cover: 2.	5 20%	of total cov		Present? Yes No
Remarks: (If observed, list morphological adaptations by		01 (0101 001	<u> </u>	-
Transmis. In observed, list morphological adaptations of	C.017).			•
				ı
·				
·				
I				

ofile Description: (Describ	e to the depth	needed to document the indicator or confirm t	Sampling Point: Wcmo 015
epth <u>Matrix</u>		Redox Features	
ches) Color (moist)		Color (moist) % Type ¹ Loc ²	Texture Remarks
-10 100R3/1	<u>(00</u>		SCL
('			

		•	
			<u> </u>
		Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
ric Soil Indicators: (App	licable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1)		Polyvalue Below Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
Histic Epipedon (A2)		Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)		Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)		Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)		Depleted Matrix (F3)	L Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR		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) (LRF		Redox Depressions (F8)	
1 cm Muck (A9) (LRR P, 1		Marl (F10) (LRR U)	U Other (Explain in Remarks)
Depleted Below Dark Surf	face (A11)	Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12)		In Hon-Manganese Masses (F12) (LRR O, P, 7	
Coast Prairie Redox (A16)			wetland hydrology must be present,
Sandy Mucky Mineral (S1		Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	1	Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 149	
Stripped Matrix (S6)) C T III	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Stripped Matrix (S6) Dark Surface (S7) (LRR F		Anomalous Bright Loamy Soils (P20) (MLRA	A 149A, 153C, 153D)
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe		Anomalous Bright Loamy Soils (P20) (MILRA	A 149A, 153G, 153D)
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type:		Anomalous Bright Loamy Soils (F20) (MLRA	
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type:		Anomalous Bright Loamy Soils (F20) (MLRA	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):		Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe ype: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F strictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No
Stripped Matrix (S6) Dark Surface (S7) (LRR F trictive Layer (if observe Type: Depth (inches):	ed):	eve past 10 inche	Hydric Soil Present? Yes No



Wetland data point wcmo015s_w facing northwest.

Project/Site: ACP	_ City/County: Cumberione Sampling Date: 6/7/16
Applicant/Owner: Dominion	State: NC Sampling Point: WCmo 015
Investigator(s): ESI-R. TUIN bull, IS, MUIPLIE	
Investigator(s): ESTA, TOMOBET, IS, MICH PORCE	Local relief (concave, convex, none): None Slope (%): 0-2
Landform (hillslope, terrace, etc.): 11861 (ALA	Local relief (concave, convex, none): VIOVIE Slope (19).
	1,22460 Long: -78.62472 Datum: W65 8
Soil Map Unit Name: John Ston Loam	NWI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of	if year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significa	
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map show	ing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Ves No No Ves No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
INDEAL COV	
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that app	LEGICAL CONTRACTOR OF THE STATE
Surface Water (A1) Aquatic Fauna	
High Water Table (A2) Marl Deposits (사용용소 사용에 비용하는 사용하는 이번에 이번에 하는 것이 되었다. 그리고 그는 이번에 나를 살아 보고 있었다면 하는데 얼마를 살아 보고 있었다. 그는 사용이 없는데 나를 하는데 없는데 그는데 그렇다는데 렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다면 그렇다는데 그렇다면 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다는데 그렇다면 그렇다면 그렇다면 그렇다면 그렇다면 그렇다면 그렇다면 그렇다면
Saturation (A3) Hydrogen Sulfin	
	spheres along Living Roots (C3) Dry-Season Water Table (C2)
- 19 (19 (19 (19 (19 (19 (19 (19 (19 (19	educed Iron (C4) Crayfish Burrows (C8)
September 1 and the second and the s	duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	#####################################
Iron Deposits (B5) U Other (Explain	in Remarks)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
	hes): NA
Water Table Present? Yes No Depth (inc	hes): Surface
Saturation Present? Yes V No Depth (inc	hes): SULFACE Wetland Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial p	notos, previous inspections), il available.
Demotion	
Remarks:	

THE COLUMN STREET WAS ASSESSED. THE MAN TO SEE A STREET OF THE SECOND SE		Dominan		Dominance Test worksheet:
1. NONE PRESENT		Species	07-40/06/1909/04	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6.				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
	0	= Total Co	ver	Characteristics Authority (CDA) - and acceptable control of AUC CDA (CDA) represents the project CDA (CDA) (CDA)
50% of total cover:	20% of	total cove	r:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 308+X306+)	_			FAC species x 3 =
1. Pinus taeda	_5_	N	FAC	FACU species x 4 =
2. NUSSA AQUINTICA	10		OBL	UPL species x5 =
3. Salix nigla	15	4	OBL	Column Totals: (A) (B)
4. Arer rubrum	STATE OF THE PARTY	N	FAC	Prevalence Index = B/A =
CONTRACTOR AND A CONTRACTOR OF THE PROPERTY OF				Hydrophytic Vegetation Indicators:
6				1-Rapid Test for Hydrophytic Vegetation
7		17 (04.00)		2 - Dominance Test is >50%
8	25	= Total Co		☐ 3 - Prevalence Index is ≤3.01
				Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 17.	<u>3</u> 20% of	total cover	r	
Herb Stratum (Plot size: 3084 X 3084)	40	\/	OBL	Indicators of hydric soil and wetland hydrology must
1. TUPNA latifulia		-/-		be present, unless disturbed or problematic.
2. Persicaria pensylvanica		N	FACW	Definitions of Four Vegetation Strata:
3. Scirpus cyperinys		N	OBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Rubus arguntas	SECTION OF A PRINCIPLE OF	N	FAC	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				
8			Charles of John Market Hall St.	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11.				height.
12.	15			
23	A come a serio debendo los finados de	= Total Co	A APPENDIX	
50% of total cover: 32.	20% of	total cove	1. 12	
Woody Vine Stratum (Plot size: 306+X306+)	2	V.		
1. Vitis rotandiforia			+TTC	
2.				
3		Contract Contract		
4				
5.				Hydrophytic
	2	= Total Co	ver	Vegetation
50% of total cover:	20% of	total cove	r: 0.4	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	ow).			

Profile Description: (Describe to the depth needed to do	ument the in	dicator	or confirm	the absence of inc	dicators.)
			or commit	the absence of his	3,04,010,7
	dox Features %		Loc²	Texture	Remarks
		1456	LOC	SL	
<u> </u>					
5-8 2.54/1100				SL_	
8-20 2,544/1 80 7,54RH	14 20	(M	5/1	
0-00 2.5911 30 1,3911			1775	000	
			100000000000000000000000000000000000000		
	SU GRANDEN	35.457	Water Inc.		
A STATE OF THE STA	UNIO CALL STATE	11-57 (57)			
				COMMENTAL SHEET	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix,	MS=Masked	Sand Gr	ains.		Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless of	herwise note	d.)		Indicators for P	Problematic Hydric Soils ³ :
	Below Surface		RR S. T. U	1 cm Muck	(A9) (LRR O)
	Surface (S9)	95 (B) \$472 (B) \$2.55 (A) (B)			(A10) (LRR S)
	icky Mineral (F				ertic (F18) (outside MLRA 150A,B)
	eyed Matrix (F			Piedmont F	loodplain Soils (F19) (LRR P, S, T)
The second secon	Matrix (F3)				Bright Loamy Soils (F20)
Ph	rk Surface (F6	5)		(MLRA 1	
	Dark Surface				Material (TF2)
	pressions (F8				w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)				Other (Expl	ain in Remarks)
	Ochric (F11) (MLRA 1	51)		
	janese Masse	s (F12)	LRR O, P,		s of hydrophytic vegetation and
	urface (F13) (L	LRR P, T	, U)		hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Och	ric (F17) (MLI	RA 151)		unless d	listurbed or problematic.
	Vertic (F18) (N	MLRA 1	50A, 150B)		
Sandy Redox (S5)	Floodplain So				
Stripped Matrix (S6) Anomalou	is Bright Loam	ny Soils ((F20) (MLR	A 149A, 153C, 153	3D)
Dark Surface (S7) (LRR P, S, T, U)					
Restrictive Layer (if observed):		The same		STATE OF THE STATE OF	
Type:					3/
Depth (inches):				Hydric Soil Pres	sent? Yes No
April 10 and 10				and the control of th	And the state of t
Remarks:					
		Augustines.		Contraction of the contract of the	



Wetland data point wcmo015s_w2 facing northeast.



Wetland data point wcmo015s_w2 facing northwest.



Wetland data point wcmo015s_w2 facing southeast.



Wetland data point wcmo015s_w2 facing southwest.

Project/Site: ACP	City/County: <u>C</u>	umberland	Sampling Da	ate: 10/6/14
Applicant/Owner: Dominion		State:	NC Sampling Po	oint: wcmo015-u
Investigator(s): FST-K Morkham, K. Murf	hres Section, Town	ship, Range: NA		
Landform (hillslope, terrace, etc.): Roadbed		ncave, convex, none): <u>C</u>	onvex	Slope (%): 2H
Subregion (LRR or MLRA): LRR (Lat: 35,22447			
Soil Map Unit Name: JOhn Ston Loam	Lat. Doros I (i			Datam. <u>0700 70</u> (
	<u> </u>		classification:	
Are climatic / hydrologic conditions on the site typical for the				
Are Vegetation, Soil, or Hydrology		Are "Normal Circumst		
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain an	y answers in Remark	s.)
SUMMARY OF FINDINGS - Attach site map	showing sampling	point locations, trai	nsects, importar	nt features, etc.
Hydrophytic Vegetation Present? Yes	No In the s	Sampled Area		
Hydric Soil Present? Yes	No 1/		es No	
Wetland Hydrology Present? Yes	No	a Wedanu:	es NO	
Remarks:				
				ļ
	···			
HYDROLOGY	•			
Wetland Hydrology Indicators:		Seconda	ary Indicators (minimu	um of two required)
Primary Indicators (minimum of one is required; check a	II that apply)		face Soil Cracks (B6)	
	ic Fauna (B13)		rsely Vegetated Con	
 	Deposits (B15) (LRR U)		inage Patterns (B10)	
	gen Sulfide Odor (C1)	_	ss Trim Lines (B16)	(00)
	red Rhizospheres along Liv		-Season Water Table	(C2)
1 	nce of Reduced Iron (C4) nt Iron Reduction in Tilled S		yfish Burrows (C8) uration Visible on Aei	rial Imanery (C9)
	Muck Surface (C7)		omorphic Position (D2	
	(Explain in Remarks)	-	allow Aquitard (D3)	·
Inundation Visible on Aerial Imagery (B7)	,	_	C-Neutral Test (D5)	
Water-Stained Leaves (B9)		☐ Spi	hagnum moss (D8) (L	.RR T, U)
Field Observations:			<u></u>	
Surface Water Present? Yes No	Depth (inches): NA	[* :
Water Table Present? Yes No	Depth (inches):			
Saturation Present? Yes No [Depth (inches): 22011	Wetland Hydrolog	gy Present? Yes _	No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring we	II. aerial photos, previous ir	nspections), if available:		
garage, and garage				
Remarks:				
			•	
	٠.			
			140	
			\$	
	•			

Tree Stratum (Plot size: 3044 X (54)		Dominant		Dominance Test worksheet:
	% Cover	Species?	Status	Number of Dominant Species
1. None present				That Are OBL, FACW, or FAC:(A)
2				,
2				Total Number of Dominant
3				Species Across All Strata: (B)
A				,
4.				Percent of Dominant Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC:
6				,
				Prevalence Index worksheet:
7				Total 9/ Course of Multiple but
8				Total % Cover of: Multiply by:
		= Total Co		OBL species x 1 =
		= Total Co	vei	FACW species x 2 =
50% of total cover:	20% o	f total cove	r:	
Sapling/Shrub Stratum (Plot size: 30 FC X / SFC				FAC species x 3 =
Sapinigranius Stratum (Flot size. Sec. 1 - 71 (3))	~ 30	V	TAI	FACU species x 4 =
1. Liquidombar styracific			FRC	1
2. Baccharis halimifolia	5	N	FAC	UPL species x 5 =
	<u> </u>	7	UPL	Column Totals: (A) (B)
3. RIVUS COPATTINAM	<u> د د </u>			
4. Pinus tarda	5	7	FAC	Prevalence Index = B/A =
	. —	•		l
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
•				
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	35	= Total Co	Wor	1 =
ח				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 17	<u>'</u> 20% o	f total cove	er:	
Herb Stratum (Plot size: 308-X154)		•		1
An heart Colons to the control of th	LLO	\/	TA	¹Indicators of hydric soil and wetland hydrology must
1. Andropugun virginicus	70	. <u> </u>	FAC	be present, unless disturbed or problematic.
2. Chasmonthium laxum	5	N	FACW	Definitions of Four Vegetation Strata:
		N	-	
3. Paspallum urvillei	<u> </u>		FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Dichanthelium dichotom	um 🔈	N	FAC	more in diameter at breast height (DBH), regardless of
5 Euthomia caroliniana		N	FAC	height.
	- 🗻	· 		1 -
6. Eurotorium capillifolium) 5	Ν	FACW	Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		·		than 5 m. Don and greater than 5.25 it (1 m) tail.
8	_			Herb – All herbaceous (non-woody) plants, regardless
		-		of size, and woody plants less than 3.28 ft tall.
9				or size, and woody plants less than o.zo it tail.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
				, g
12				.
	65	_ = Total C	over	
50% of total cover: 32				
50% of total cover:	<u>v</u> 20% (or total cov	er: <u>I </u>	.
Woody Vine Stratum (Plot size: 30 FC X/54)				
1. None present				
1. Tione present	_			•
2				
3				-
4				
5		_		- Hydrophytic
i		_ = Total C	over	Vegetation
50% of total cover:	200/	of total case	or.	Present? Yes No
		or total COV	Ψ1	-
Remarks: (If observed, list morphological adaptations be	ilow).			
	•			

Profile Des	cription: (Describe	to the dep	th needed to docu	ment the i	ndicator	or confirm	the absence o	of indicators.)
Depth	Matrix			ox Feature				
(inches)	Color (moist)		Color (moist)	- %	Type	Loc²	Texture	Remarks
<u>0-70</u>	10(R43	<u>60</u>	104RS/6	<u> 30 </u>	_(_	_/٧\	<u> </u>	
	1		109RS/1	10	Ť	W	SCL	
			· · · · · · · · · · · · · · · · · · ·	- '				
-								
				_				
			··					
				_				
						. ——		·
¹ Type: C=0	Concentration, D=De	pletion, RM:	Reduced Matrix, M	IS=Masked	Sand G	rains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soi	Indicators: (Appli	cable to all	LRRs, unless other	erwise not	ed.)		Indicators	for Problematic Hydric Soils ³ :
☐ Histose	ol (A1)		☐ Polyvalue B	elow Surfa	ce (S8) (I	LRR S, T, L	J) 🔲 1 cm M	luck (A9) (LRR O)
\rightarrow	pipedon (A2)		Thin Dark S				. —	luck (A10) (LRR S)
:=	listic (A3)		Loamy Muc					ed Vertic (F18) (outside MLRA 150A,B)
_ =	en Sulfide (A4)		Loamy Gley			•		ont Floodplain Soils (F19) (LRR P, S, T)
	ed Layers (A5)		Depleted Ma		. ,		11	lous Bright Loamy Soils (F20)
	c Bodies (A6) (LRR I	P, T, U)	Redox Dark		F6)			RA 153B)
	lucky Mineral (A7) (L				-			arent Material (TF2)
_	resence (A8) (LRR		Redox Depi					hallow Dark Surface (TF12)
☐ 1 cm M	luck (A9) (LRR P, T))	☐ Marl (F10) ((LRR U)			Other ((Explain in Remarks)
☐ Deplet	ed Below Dark Surfa	ce (A11)	Depleted O	chric (F11)	(MLRA 1	151)		
Thick [Dark Surface (A12)		☐ Iron-Manga	nese Mass	es (F12)	(LRR O, P,	, T) ³Indic	ators of hydrophytic vegetation and
Coast	Prairie Redox (A16)	(MLRA 150.	A) 🔲 Umbric Sur	face (F13)	(LRR P,	T, U)	wet	land hydrology must be present,
│	Mucky Mineral (S1)	(LRR O, S)	☐ Delta Ochri	c (F17) (MI	LRA 151))	unle	ess disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced V	ertic (F18)	(MLRA 1	50A, 150B))	·
☐ Sandy	Redox (S5)		Piedmont F	loodplain 8	Soils (F19) (MLRA 14	49A)	
	d Matrix (S6)		Anomalous	Bright Loa	my Soils	(F20) (MLF	RA 149A, 153C	, 153D)
	urface (S7) (LRR P,	S, T, U)		•	•			-
Restrictive	Layer (if observed	l):						
Type: _							İ	
'' -	nches):						Hydric Soil	Present? Yes No
Remarks:							,	
Remarks:			andhe	1				
Fill	monterie)	DAGISEC	.				
1	(101)	•						
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1								
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								,
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Upland data point wcmo015_u facing southwest.

Project/Site: 1-Cf City/Coun	ty: Cumberland Sampling Date: 9/11/14
Applicant/Owner: Domin to n	State: NC Sampling Point: Wcmo OIIf_
Investigator(s) ESI-K. Markham, K. Marphey Section, 7	Ownship Range: NA
Landform (hillslope, terrace, etc.): drainageway Local relie	the control of the co
Subregion (LRR or MLRA): LRR Q Lat: 35.21417	-78 G SOP 8
	Long: 78,03010 Datum: VVVO D
Soil Map Unit Name: Pantegu Loam	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes_	· · · · · · · · · · · · · · · · · · ·
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 sampli	ng point locations, transects, important features, etc.
Hydrophytic Vegetation Present? YesNo	Was Downsto LAnne
Hydric Soil Present?	the Sampled Area thin a Wetland? Yes No
Wetland Hydrology Present? Yes No	thin a Wetland? Yes No
Remarks:	trantage and lose in wetland.
Remarks: Active timbering on adjacent upland,	ivee tops and logs in vocada.
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)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) High Water Table (A2) High Water Table (A2)	
Saturation (A3) Yydrogen Sulfide Odor (C1) Oxidinad Dhizapabasa slap	Moss Trim Lines (B16)
Water Marks (B1) Sediment Deposits (B2) Water Marks (B1) Presence of Reduced Iron (C	
Drift Deposits (B3) Recent Iron Reduction in Till	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5)	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? YesNo Depth (inches): NA	
Water Table Present? Yes No Depth (inches): 8	<u> </u>
Saturation Present? Yes Vo Depth (inches): 2	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	us inspections), if available:
Remarks:	
1	j

			1 - 1 - 1	
Tree Stratum (Plot size: 30 'X30')		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 / 30)		Species?		Number of Dominant Species 5
1. Acer rubium	12	<u>y</u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidambor Statacifina	15	1.	FAC	
2. Draget Contribute Brazile		-y		Total Number of Dominant
3			· 	Species Across All Strata: (B)
4.				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:
6				``
				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
U	20		·	OBL species x 1 =
		= Total Co	ver	· ———
50% of total cover:	20% of	f total cover	r: 6	FACW species x 2 =
2/1/3/1				FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 301X301)				FACU species x 4 =
1. QUEYCUS nigra	<u> 5</u>	У.	FAC	
2 Persea burbania		1/2	FACIN	UPL species x 5 =
2. Bev DON BOTTO	·	' '/	1-11-00	1
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7	. <u> </u>			2 - Dominance Test is >50%
8.				
o	-10			3 - Prevalence Index is ≤3.0¹
_				Problematic Hydrophytic Vegetation¹ (Explain)
_ 50% of total cover: <u>5</u>	20% o	f total cove	r 2	, _
2/11/2/1		. 1010. 0010		
Herb Stratum (Plot size: 30 1 X 30)	20			¹ Indicators of hydric soil and wetland hydrology must
1. Woodwardia arediata	20	У	OBL	be present, unless disturbed or problematic.
2.	-		- —	Definitions of Four Vegetation Strata:
3				To a March and a substitute and a control of the co
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		· —		more in diameter at breast height (DBH), regardless of
5				height.
6			- —	Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.				
		7.1.10		
	. ———	. = Total Co	- 1	
50% of total cover:	20% c	f total cove	er: _ - 14	
Woody Vine Stratum (Plot size: 30'X3d')				
vvoody vine Stratum (Plot size: 20 7 30)	^			\
1. Smilax rotundifolia	ユ	Ŋ	FAC	
2				
۷	-		- 	
3				
A				
4				
5				Hydrophytic
	2	= Total Co	nver	Vegetation
		-		Present? Yes No
50% of total cover:	20% (of total cove	er: Ve Y	
Remarks: (If observed, list morphological adaptations bel	um)			<u> </u>
Active timbering, tree to	105	0 01	40	
しひじょしょく フロバのにょしきみきつ しょく しょ		. , . ,	•	
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Profile Desc	ription: (Describe	to the dep	th needed to docum	ent the i	indicator	or confirm	the absence of it	ndicators.)	
Depth	Matrix		Redox	Feature:	s			·	
(inches)	Color (moist)	<u> %</u>	Color (moist)	<u>%</u>	Type	<u>Loc²</u>	Texture	Remarks	
0-3	104R2/1	<u> (30</u>					<u></u> _		
5-6	104R3/2	<u>BO</u> _	104RS/4	15		<u> </u>	<u> </u>		
	,	,	7,54R4/6	5	C	PL	CL		
6-8	104R3/1	98	10424/6	2		PL	1 <		
8-12	104R5/2	95	104R5/8	5		W	13 -		
				40			<u></u>		
12-20	10414011	<u>60</u>	104R 6/8	40		$\overline{\mathcal{N}}$	<u> 2C</u> –		
<u> </u>									
	oncentration, D=Dep					ains.		Pore Lining, M=Matrix	
Hydric Soil	Indicators: (Applica	able to all			-			Problematic Hydric S	oils³:
Histosol			Polyvalue Bel					(A9) (LRR O)	
· • • • • • • • • • • • • • • • • • • •	oipedon (A2)		Thin Dark Su					(A10) (LRR S)	
. =	istic (A3)		Loamy Mucky			: O)		/ertic (F18) (outside M	
	en Sulfide (A4)		Loamy Gleye		(F2)			Floodplain Soils (F19) (
	d Layers (A5)	T 115	Depleted Mat		-0)			s Bright Loamy Soils (F	20)
_	Bodies (A6) (LRR P, ucky Mineral (A7) (LR	•	Redox Dark S Depleted Dar	•	•		(MLRA 1	t Material (TF2)	
	esence (A8) (LRR U		Redox Depre					it material (1F2) ow Dark Surface (TF12	,
	uck (A9) (LRR P, T)	,	Marl (F10) (LI		0)			olain in Remarks)	'
	d Below Dark Surface	- (A11)	Depleted Och	-	(MI RA 1	51)	Other (Exp	main in remarks)	
. = .	ark Surface (A12)	,	Iron-Mangane		-	-	T) ³ Indicator	s of hydrophytic vegeta	ition and
_	rairie Redox (A16) (N	/ILRA 150					-	hydrology must be pre	
	lucky Mineral (S1) (L		Delta Ochric			•		disturbed or problemat	· · · · · · · · · · · · · · · · · · ·
	Eleyed Matrix (S4)		Reduced Ver			0A, 150B)		•	
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	9A)		
☐ Stripped	l Matrix (S6)		Anomalous B	right Loa	my Soils (F20) (MLR	A 149A, 153C, 15	3D)	
	rface (S7) (LRR P, S								
Restrictive	Layer (if observed):								
Type:									
Depth (in	ches):						Hydric Soil Pre	sent? Yes	No
Remarks:									
	* * * * * * * * * * * * * * * * * * * *								
								•	•
				•					
1									
ţ									



Wetland data point wcmo011f_w facing southwest



Wetland data point wcmo011f_w facing southeast.

Project/Site: ACP City/	county: Cumberland Sampling Date: 5/7/15
Applicant/Owner: Dominion	State: NC Sampling Point; WcmoOlls_w
Investigator(s): ESTLRoper, Harbour) Sect	
· · · · · · · · · · · · · · · · · · ·	al relief (concave, convex, none): None Slope (%): 0-31
	477 Long: -78, 64903 Datum: W6684
Soll Map Unit Name: Altivista Fine Sandy	
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	
	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
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Aquatic Fauna (B13)	
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (Li	
Saturation (A3) Hydrogen Sulfide Odor	
	s along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced I	ron (C4)
☐ Drift Deposits (B3) ☐ Recent Iron Reduction	
Algal Mat or Crust (B4) Thin Muck Surface (C7	·
Iron Deposits (B5) Unique Other (Explain in Remain Indiana Visible on Agric Imagent (B7)	arks)
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? YesNo Depth (inches): _	<u>Surface</u>
Saturation Present? Yes No Depth (inches): 5 (includes capillary fringe)	Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
	`
	•

<u> </u>	Absolute	Dominant	Indicator	Domingnee Test workshoots
Tree Stratum (Plot size: 30ff x30ff)		Species?		Dominance Test worksheet:
1. none	70 00101	Opcoico:		Number of Dominant Species
· ·				That Are OBL, FACW, or FAC:(A)
2				Total Number of Descious
3				Total Number of Dominant
				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: \\ \OO\\(\frac{1}{l}\) (A/B)
6				Macrae Obe, 17000, 01170:
				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 =
				FACW species x 2 =
50% of total cover:	20% of	total cover		
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)				FAC species x 3 =
1. Acer rubrum	15	Ŋ	FAC	FACU species x 4 =
				UPL species x 5 =
2. Pinus taeda	_15_		FAC	
3. Liquidam bar styraciflua	ID	Υ.	FAC	Column Totals: (A) (B)
4. Salix nigra		\overline{N}	OBL	
				Prevalence Index = B/A =
5. Ilex glabra	_5_	<u> </u>	FACW	Hydrophytic Vegetation Indicators:
6				1
				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	SD	= Total Co	ver.	i
7 C				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 25	20% o	f total cover	:_ <u>'U</u>	
Herb Stratum (Plot size: 30 ft x 3 off)	_			¹Indicators of hydric soil and wetland hydrology must
1. Junius ettusus	15	У	OBL	be present, unless disturbed or problematic.
	- 15	- \(\)		
2. Hrundinavia gigantea	<u> </u>	. <u> </u>	FACW	Definitions of Four Vegetation Strata:
3. Scirpus experinus	10	Y	OBL	1
4. Salix niura	5	N	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
5. <u>Saururus ^Ucernuus</u>	10	. 	<u>0BL</u>	height.
6. <u>2.0</u>				Sapling/Shrub - Woody plants, excluding vines, less
			·	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				and our Derrand greater than o.20 it (1 m) tail.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11			- 	height.
12				
12.	50		-	
٠, ١	20	= Total Co		
50% of total cover: <u>25</u>	20% (of total cove	:r; (O	
Woody Vine Stratum (Plot size: 30ft x30ft)				
1				
1. none			- -	
2				
		-		
3	_	_		
4				
5	- —			Hydrophytic
	_0	_ = Total Co	over	Vegetation
50% of total cover:	20%	of total cove	er.	Present? Yes No
Remarks: (If observed, list morphological adaptations be	low).			
<u> </u>				
1				
1				

Profile Desc	ription: (Describe	to the dept	h needed to docum	nent the i	ndicator	or confirm	n the absence		ors.)	
Depth	Matrix			x Features			. .			
(inches) 0 - 3	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc ²	Texture		Remarks	
	10 1R 5/2	47	1042 5/4	7				-		
3-20	10 1K 25	71	10 1K 14	<u> </u>		<u>M</u>	Coarse	Sand	<u> </u>	
		·	· · · · · · · · · · · · · · · · · · ·							
¹Type: C=C	oncentration, D=Dep	letion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	²Location:	PL=Pore L	ining, M=Matrix	-
			LRRs, unless other				Indicators	for Proble	matic Hydric S	ioils³:
. Histosol	(A1)		Polyvalue Be				U) 🛄 1 cm l	Muck (A9) (L	RR O)	
	oipedon (A2)		Thin Dark Su					Muck (A10)		
Black Hi	istic (A3) en Sulfide (A4)		Loamy Mucky			₹ (0)			18) (outside M	
= -	i Layers (A5)		Loamy Gleye Depleted Mat		F2)				ain Soils (F19) Loamy Soils (F	
	Bodies (A6) (LRR P	, T, U)	Redox Dark		6)			RA 153B)	Loanly Cons (i	20)
☐ 5 cm Mu	icky Mineral (A7) (LF	RR P, T, U)					☐ Red F	arent Mater		
	esence (A8) (LRR U)	Redox Depre		8)				k Surface (TF12	2)
	ick (A9) (LRR P, T) d Below Dark Surfac	~ (A11)	Marl (F10) (L		/MI DA 4	E4\	Other	(Explain in	Remarks)	
	ark Surface (A12)	e (ATT)	Depleted Och		•	•	. T\ ³ Indi	cators of hy	drophytic veget	ation and
	rairie Redox (A16) (MLRA 150A					•		logy must be pr	
	/lucky Mineral (S1) (I	_RR O, \$}	Delta Ochric						ed or problemat	
	Sleyed Matrix (S4)		Reduced Ver							
Sandy F	Redox (S5) I Matrix (S6)		Piedmont Flo				49A) RA 149A, 1530	3 4ESD)		
	rface (S7) (LRR P, S	S. T. U)	III Aitoiliaicus E	silgiil Loa	iny Sulis i	(120) (WIL	KA 148A, 1931	J, 153D)		
	Layer (if observed):									
Туре:									/	
Depth (in	ches):		· · · · · · · · · · · · · · · · · · ·				Hydric So	Il Present?	Yes	No
Remarks:									_	
								•		
	•									
					•				•	



Wetland data point wcmo011s_w facing east.

Project/Site: A CP	City/County: Cumberland Sampling Date: 9/11/14
Applicant/Owner: DOMINION	State: NC Sampling Point: WCMOOII_UI
Investigator(s): ESI-15. Markham, K. Murenrey	VA
Landform (hillstope, terrace, etc.): \(\frac{\lambda(1\S \log \text{Pe}}{\log \text{CS}}\)	Local relief (concave, convex, none): CONVEX Slope (%): 2-4
Subregion (LRR or MLRA): LRRP Lat: 3516	
Soil Map Unit Name: Udorthents/10amy	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	. /
Are Vegetation, Soil, or Hydrology naturally pro	
	g sampling point locations, transects, important features, etc.
	J sampling point locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Active timbering - no intact veget	ation in plot
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1	13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B1	5) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide (Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosph	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	
<u> </u>	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in F	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (89) Field Observations:	Sphaghan noss (bo) (ERR 1, 0)
Surface Water Present? Yes No Depth (inches	sk: N/A
Water Table Present? Yes No Depth (inches	·
Saturation Present? Yes No Depth (inches	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	itos, previous inspections), if available:
Remarks:	
T Contains.	

	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'X30')	% Cover Species? Status	
1,0000 Present		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	·	mai Ale OBL, FACVV, OI 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.		Prevalence Index worksheet:
7		
8.		Total % Cover of: Multiply by:
·	= Total Cover	OBL species x 1 =
		FACW species x 2 =
50% of total cover;:	20% of total cover:	
Sepling/Shrub Stretum (Plot size: 30' x 30')		FAC species x 3 =
1 hone Present		FACU species x 4 =
•		UPL species x 5 =
2.		1
3		Column Totals: (A) (B)
4		Prevalence Index = B/A = N/A
·		
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
		<u> </u>
8	O - Tatal Cavas	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: 30 X301)		Indicators of hydric cail and watland hydrology must
Ω		'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		Definitions of Four Vegetation Strata:
3		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
		height.
5		-
6		Sapling/Shrub - Woody plants, excluding vines, less
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.
		- 1
12		-
	= Total Cover	
	20% of total cover:	_
Woody Vine Stratum (Plot size: 多いス多い)		
1. None Present		
		-
2		_
3.		
		-
4		-
5		- Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No
		<u>- </u>
Remarks: (If observed, list morphological adaptations be		
active timbering, clear	cut	
1		
1		

Profile Description: (Describe to the depth needed to document the indicator or confirm	n the absence of indicators.)
Depth Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc²	Texture Remarks
0-4 104R3/2100	
4-16 10gR 4/4 100	SL
16-20 104R3/2 90 104RS/6 10 C M	7 <
10 20 10916 12 10 10 10 10 10 10	
	· · · · · · · · · · · · · · · · · · ·
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 Solis ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T,	· -
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
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) Other (Explain in Remarks)
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) 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) ³ 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 1	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (ML	
Dark Surface (S7) (LRR P, S, T, U)	, ,
Restrictive Layer (if observed):	
	, ·
Туре:	Hudric Sail Procent? Voc. No.
Type: Depth (inches):	Hydric Soil Present? Yes No No
Туре:	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No
Type: Depth (inches):	Hydric Soil Present? Yes No No



Upland data point wcmo011_u1 facing north.

Project/Site: ACP	City/County: Cumberland Sampling Date: 9/11/14
Applicant/Owner: DOMINIO	State: NC Sampling Point: WCmoOll_u2
Investigator(s): ESI-K.markham, K.murewey	
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): Flat Slope (%): 0-2
Subregion (LRR or MLRA): LRR P Lat: 35.	21467 Long: -78,69451 Dalum: WGS 84
Soil Map Unit Name: Altavista Fine Sandy L	NWI classification: NA
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	
SUMMARY OF FINDINGS - Attach site map showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	In this Committed Asses
Hydric Soil Present? Yes No	- Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
HADBOI OCA	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2) Marl Deposits (B	- · · · · · · · · · · · · · · · · · · ·
✓ Saturation (A3) Hydrogen Sulfide	<u> </u>
	pheres along Living Roots (C3) Dry-Season Water Table (C2) duced Iron (C4) Crayfish Burrows (C8)
<u> </u>	luction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	· · · —
Iron Deposits (85) Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? YesNo Depth (inche	es): NA
	nes): 720
Saturation Present? Yes No Depth (inchi	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	rotes provious inspections) if available:
Describe Recorded Data (stream gauge, monitoring well, aenar pri	iotos, previous inspections), il available.
Remarks:	
6 inches of rain un 9/	8/14
	į

3017201		Dominant	. 1	Dominance Test worksheet:
Tree Stratum (Plot size: 301×301) 1. AONE Present	% Cover	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2.				
3				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6			—— h	Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	0			OBL species x 1 =
50% of total cover:		total cover	· .	FACW species x 2 =
Sepling/Shrub Stratum (Plot size: 3d \X301)	2070 01	total cover		FAC species x 3 =
1. Pinus talda	60	У	FAC	FACU species x 4 =
2. Liquidambor Styracifica	20	-	FAC	UPL species x 5 =
3. Li riodendrun tulipitera	2	N	FACU	Column Totals: (A) (B)
4. QUEYCUS DIGYON	2	N	FAC	Prevalence Index = B/A =
5. Symplocus tincturia	5	N	FAC	Hydrophytic Vegetation Indicators:
6				
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
	<u>89</u>	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 44	<u>.5</u> 20% o	f total cover	: 17.8	
Herb Stratum (Plot size: 30 X30)	80	V	FACW	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Lyonia mariana	10	N	FAC	Definitions of Four Vegetation Strata:
3				, and the second
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.				height.
6.				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All w∞dy vines greater than 3.28 ft in
11				height.
12	00			
11.	, <u>40</u>	= Total Co		
50% of total cover: 4	<u>)</u> 20% c	of total cove	r. <u>1 <i>D</i> </u>	
Woody Vine Stratum (Plot size: 301/301)	<	W	EA/	
	- <u> </u>	- X	= = =	
11.11		- \	- (/ ()	
3. VITIS (DAGNOTTONA		- '	110	
4				
5	12			Hydrophytic
		_ = Total Co		Vegetation Present? Yes No
50% of total cover:		of total cove	r: <u>Zı' L</u>	
Remarks: (If observed, list morphological adaptations be	elow).			
			•	
į				

Profile Description: (Describe to the dept	th needed to document the Indicator or confirm	the absence of Indicators.)
Depth Matrix	Redox Features	
(inches) Color (moist) %	Color (moist) % Type Loc2	
0-5 104R3/1 100		L5
5-20 10GR5/4 100		<u></u>
3 20 100/1011 10-		_ ~
1Times C-Consentration D-Dardetion DMs	=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soll Indicators: (Applicable to all		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)	Loarny Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	Tt Shadaadaaa as taadaaahadaad.:d
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	, , , , , , , , , , , , , , , , , , , ,
Coast Prairie Redox (A16) (MLRA 150,	· -	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)		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):		
Туре:	<u></u>	
Depth (inches):		Hydric Soil Present? Yes No
Remarks:	·	
·		
1		



Upland data point wcmo011_u2 facing northeast.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region _____ City/County: CUMberland Sampling Date: 5/2/16 State: NC Sampling Point: Wcmo 011-u3 Project/Site: __ACC Applicant/Owner: Dominion Investigator(s): ESI-K, Markham, K, Murphrey Section, Township, Range: NA Landform (hillslope, terrace, etc.): \(\subseteq \text{ill Slope} \) \(\subseteq \text{Local relief (concave, convex, none): } \(\subseteq \text{COVEX} \) \(\subseteq \text{Slope} \) (%): \(\subseteq \text{Convex, none} \) Lat: 35.22454 Long: -78.623 21 Subregion (LRR or MLRA): LRR P Soil Map Unit Name: Pactolus wany sand NWI classification: ____ (If no, explain in Remarks.) Are climatic / hydrologic conditions on the site typical for this time of year? Yes Are "Normal Circumstances" present? Yes _____ Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) Drainage Patterns (B10) Marl Deposits (B15) (LRR U) High Water Table (A2) Moss Trim Lines (B16) ☐ Hydrogen Sulfide Odor (C1) Saturation (A3) Dry-Season Water Table (C2) Oxidized Rhizospheres along Living Roots (C3) 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) Other (Explain in Remarks) Shallow Aguitard (D3) 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? No V Depth (inches): >20 Water Table Present? Wetland Hydrology Present? Yes _____ No_ Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

7.2021111011 (1.011011111)				
Tree Stratum (Plot size: 2064 × 3064)	% Cover	Species'	t Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL FACW or FAC: (A)
1. None present				That Are OBL, FACW, or FAC: (A)
2. 3.				Total Number of Dominant Species Across All Strata: (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 275% (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	_	- T-1-1 C-		OBL species x 1 =
500/ -f4-4d	= Total Cover 20% of total cover:			FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 308+X 305+)	20% 01	total cove		FAC species x 3 =
1. Quercus nigo	10	~	FAC	FACU species x 4 =
	10	-	FAC	UPL species x 5 =
2 Liquidambar Styraciflua		7.	FAC	Column Totals: (A) (B)
3. Pinus taeda	10			()
4. Acer rubrum	10	7	FAC	Prevalence Index = B/A =
5. QUETCUS Michauxii		N	FACW	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 22.	<u>5</u> 20% of	total cove	r: <u>4</u>	
Herb Stratum (Plot size: 305+ X 305)	20	. /	FNC	¹ Indicators of hydric soil and wetland hydrology must
1. Rulaus argutus	20		FAC	be present, unless disturbed or problematic.
2. grass sp.	20		UNK	Definitions of Four Vegetation Strata:
3. Euponorium capillifolium		N	FACIA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Saccharum gigonteum	2	N	FACW	more in diameter at breast height (DBH), regardless of
5. Nuttalanthuis canadensis	2	N	UPL	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	Lka	= Total Co		
50% of total cover: _23	-	total cove	(1)	
Woody Vine Stratum (Plot size: 3054	20% 0	total cove	1.2	
1. Witis rotundible	10	V	FAC	
	10	- 2)	FAC	
	20	-14	FACCA	
3. Parthenocissus quinquefolia	of C	7	FILLO	
4				
5				Hydrophytic
	A	= Total Co	The same of the sa	Vegetation Present? Yes No
50% of total cover:	<u>S</u> 20% of	f total cove	r:/_	Present? Tes
Remarks: (If observed, list morphological adaptations belo	w).			

					the absence of indicators.)
Depth	Matrix			x Features "Type" Loc2	Texture Remarks
(inches)	Color (moist)	150	Color (moist)	%Type¹Loc²	LS 730% unconted sandar
0-2	104R2/1				1 S John Office Street
2-6	(UGR 3/3	100			L 5
6-14	104R3/4	100			LS
14-20	104R4/4	150			3
	-				
	-				
					21 and long Display Lining Making
'Type: C=C	oncentration, D=Dep Indicators: (Applic	letion, RM=R	educed Matrix, Mi	S=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
		able to all Ln		elow Surface (S8) (LRR S, T, U	
Histoso	pipedon (A2)			irface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
	istic (A3)			y Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)			ed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma		Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U)	Redox Dark	Surface (F6)	(MLRA 153B)
☐ 5 cm M	ucky Mineral (A7) (LI	RR P, T, U)		rk Surface (F7)	Red Parent Material (TF2)
	resence (A8) (LRR L	J)	Redox Depre		Very Shallow Dark Surface (TF12)
	uck (A9) (LRR P, T)	- / / / / /	Mari (F10) (L		Other (Explain in Remarks)
	ed Below Dark Surfact ark Surface (A12)	e (A11)		hric (F11) (MLRA 151) lese Masses (F12) (LRR O, P,	T) Indicators of hydrophytic vegetation and
_	Prairie Redox (A16) (I	MI RA 150A)	-	ace (F13) (LRR P, T, U)	wetland hydrology must be present,
	Mucky Mineral (S1) (- Comment	(F17) (MLRA 151)	unless disturbed or problematic.
	Gleyed Matrix (S4)			rtic (F18) (MLRA 150A, 150B)	
	Redox (S5)			oodplain Soils (F19) (MLRA 14	
	d Matrix (S6)		Anomalous I	Bright Loamy Soils (F20) (MLR.	A 149A, 153C, 153D)
	urface (S7) (LRR P,				ACCUSATE OF THE SERVICE AND ADDRESS OF THE SERVI
Restrictive	Layer (if observed)	•			
100000000000000000000000000000000000000		•			
Туре:		•	_		Undels Sell Brossett Vos.
Depth (ir	nches):	•	_		Hydric Soil Present? Yes No
		•			Hydric Soil Present? Yes No
Depth (in		•	_		Hydric Soil Present? Yes No
Depth (in		•			Hydric Soil Present? Yes No
Depth (in		•			Hydric Soil Present? Yes No
Depth (in		•			Hydric Soil Present? Yes No
Depth (ir		•			Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (in					Hydric Soil Present? Yes No
Depth (ir					Hydric Soil Present? Yes No



Upland data point wcmo011_u3 facing south.



Upland data point wcmo011_u3 facing west.

Project/Site: Atlantic Coast Pipeline	;	City/C	County: Cumberland		Sampling Date: 2/11/2015
Applicant/Owner: DOMINION				State: NC	Sampling Point: wcmc006s_w
Investigator(s): Team C			on, Township, Range: No		
Landform (hillslope, terrace, etc.):					
Subregion (LRR or MLRA): P					
Soil Map Unit Name: Grantham loa	m			NWI classific	cation: None
Are climatic / hydrologic conditions	on the site typical	for this time of year? Y	′es No	(If no, explain in R	Remarks.)
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances"	oresent? Yes No
Are Vegetation, Soil					
SUMMARY OF FINDINGS					
Hydrophytic Vegetation Present?	Vec 🗸	No			
Hydric Soil Present?	Yes V	No	Is the Sampled Area		NI-
Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:		<u> </u>			
HYDROLOGY					
				Cocondon, India	atora (minimum of two required)
Wetland Hydrology Indicators:	a i a raquirad, aba	als all that annly)			ators (minimum of two required)
Primary Indicators (minimum of or	-		(D4.4)	Surface Soil	
Surface Water (A1) ✓ High Water Table (A2)		True Aquatic Plants (Hydrogen Sulfide Od		Sparsely ve ✓ Drainage Pa	getated Concave Surface (B8)
Saturation (A3)				Moss Trim L	
Water Marks (B1)		Presence of Reduced		· · · · · · · · · · · · · · · · · · ·	Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Bur	
Drift Deposits (B3)		Thin Muck Surface (0			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_	_ _ Other (Explain in Rer			itressed Plants (D1)
Iron Deposits (B5)				Geomorphic	Position (D2)
Inundation Visible on Aerial In	nagery (B7)			Shallow Aqu	itard (D3)
Water-Stained Leaves (B9)				Microtopogra	aphic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutra	Test (D5)
Field Observations:					
		Depth (inches):			
		Depth (inches):	2		
	s <u> </u>	Depth (inches):	0 Wetland F	lydrology Presei	nt? Yes V No
(includes capillary fringe) Describe Recorded Data (stream)	gauge, monitoring	well, aerial photos, pre	vious inspections), if ava	ilable:	
, ,			, ,		
Remarks:					
Wetland hydrology present					

	00	Absolute	Dominant		Dominance Test worksheet:		
<u>Free Stratum</u> (Plot size: 	30)	<u>% Cover</u> 15	Species? Yes	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:	3 (/	A)
! 3					Total Number of Dominant Species Across All Strata:	3 (I	B)
					Percent of Dominant Species That Are OBL, FACW, or FAC:	100	A/B
S						(/	-,,,
·					Prevalence Index worksheet: Total % Cover of: N	Multiply by:	
	50% of total cover:		= Total Cover:	_	OBL species 0 x 1 =	0	
Sapling/Shrub Stratum (Plot si Pinus taeda	15	50	Yes	FAC	FACW species 60	270	
Acer rubrum		10	No	FAC	FACU species 10 x 4 =	40	
					UPL species0 x 5 =		
4					Column Totals: 160 (A)	430	(B)
5					Prevalence Index = B/A =	2.68	
6					Hydrophytic Vegetation Indicator	s:	
7			-		1 - Rapid Test for Hydrophytic \	Vegetation	
3			-		✓ 2 - Dominance Test is >50%		
)		60			3 - Prevalence Index is ≤3.0 ¹		
	50% of total cover:		= Total Cover:	er 12	4 - Morphological Adaptations ¹	(Provide suppo	rtin
Herb Stratum (Plot size:	5				data in Remarks or on a sep	parate sheet)	
Arundinaria gigantea		60	Yes	FACW	Problematic Hydrophytic Veget	ation ¹ (Explain)	
2. Dichanthelium laxiflorum		10	No	FACU	1		
3. Rubus pensilvanicus		10	No	FAC	¹ Indicators of hydric soil and wetland be present, unless disturbed or prob		st
_{1.} Lonicera japonica		5	No	FAC	Definitions of Four Vegetation Str		
5					Tree – Woody plants, excluding vine	es 3 in (7.6 cm	n) o
6 -					more in diameter at breast height (D		
7					height.		
3			-		Sapling/Shrub - Woody plants, exc		
9. <u> </u>					than 3 in. DBH and greater than or a m) tall.	equal to 3.28 ft	(1
10 11.			-		,		
· · · · · · · · · · · · · · · · · · ·		85	= Total Cov		Herb – All herbaceous (non-woody) of size, and woody plants less than		ess
	50% of total cover:		total cover:				
Noody Vine Stratum (Plot size	00				Woody vine – All woody vines great height.	iter than 3.28 ft	ın
l. <u> </u>							
2							
3							
4							
5.					Hydrophytic Vegetation		
1		0	= Total Cov	er		No	
	50% of total cover:		total cover:	0			
Remarks: (Include photo numl		<u> </u>			1		
(,					

Sampling Point: wcmc006s_w

Profile Desc	ription: (Describe t	o the dep	oth needed to docum	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redox	(Feature	s			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	<u>Texture</u>	<u>Remarks</u>
0-3	10 YR 3/2	100					CL_	
3-14	10 YR 6/1	95	10 YR 5/8	5	С	PL/M	SIL	
	-		-					
-	-		-					
1Type: C-C	ncentration D-Denk	etion RM	=Reduced Matrix, MS	-Maskad	I Sand Gr	aine	² l ocation: P	PL=Pore Lining, M=Matrix.
Hydric Soil		elion, Kivi	=Reduced Matrix, Mc	=iviaskec	i Sanu Gi	airis.		ators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(\$7)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Bel		ce (S8) (N	/II RΔ 147		Coast Prairie Redox (A16)
Black Hi			Thin Dark Su				140, ((MLRA 147, 148)
	n Sulfide (A4)		Loamy Gleye			,,	F	Piedmont Floodplain Soils (F19)
	Layers (A5)		<u>✓</u> Depleted Mat		,		· 	(MLRA 136, 147)
	ck (A10) (LRR N)		Redox Dark S		⁻ 6)		\	/ery Shallow Dark Surface (TF12)
	Below Dark Surface	(A11)	Depleted Dar				(Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	lucky Mineral (S1) (L	RR N,	Iron-Mangane		es (F12) (LRR N,		
	147, 148)		MLRA 136				3,	
	leyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	edox (S5) Matrix (S6)		Piedmont Flo Red Parent M					etland hydrology must be present, nless disturbed or problematic.
	_ayer (if observed):		Ned Falent iv	iateriai (i	ZI) (IVILIN	A 121, 141	ui ui	liess disturbed of problematic.
	ayer (ii observed).							
Type:	-h\-						Unadaia Cai	I Present? Yes No
Depth (inc	cnes):						Hydric Soi	I Present? Yes No
Remarks:								
Hydric soil pre	esent							



Photo 1 Wetland data point wcmc006s_w facing east



Photo 2
Wetland data point wcmc006s_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: Cumberland	Sampling Date: 2/12/2015			
Applicant/Owner: DOMINION		State: NC Sampling Point: wcmc006_u			
	Section, Township, Range:	No PLSS in this area			
Landform (hillslope, terrace, etc.): Slight Slope					
Subregion (LRR or MLRA): P	Lat: 35.21476834 Long: -7	8.6632649 Datum: WGS 1984			
Soil Map Unit Name: Grantham loam		NWI classification: None			
Are climatic / hydrologic conditions on the site typic					
		nal Circumstances" present? Yes No			
Are Vegetation, Soil, or Hydrology _					
		tions, transects, important features, etc.			
Command of Findings According					
	No V Is the Sampled Area	a			
Hydric Soil Present? Yes	No within a Wetland?	Yes No			
Wetland Hydrology Present? Yes Remarks:	No				
Data point taken next to a logging road					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; c	heck all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1)	True Aquatic Plants (B14)	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Odor (C1)	Drainage Patterns (B10)			
Saturation (A3)	Oxidized Rhizospheres on Living Roots (C3	B) Moss Trim Lines (B16)			
Water Marks (B1)	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)			
Drift Deposits (B3)	Thin Muck Surface (C7)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)		Geomorphic Position (D2)			
Inundation Visible on Aerial Imagery (B7)		Shallow Aquitard (D3)			
Water-Stained Leaves (B9)		Microtopographic Relief (D4)			
Aquatic Fauna (B13)		FAC-Neutral Test (D5)			
Field Observations:	V Donath (inch as).				
	Depth (inches):				
	Depth (inches):				
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): Wetland	d Hydrology Present? Yes No			
Describe Recorded Data (stream gauge, monitori	ng well, aerial photos, previous inspections), if a	vailable:			
Remarks: No wetland hydrology present					
No wettarid flydrology present					

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

__)

50% of total cover: ___

50% of total cover: 12.5

50% of total cover:

50% of total cover:

30

Tree Stratum (Plot size: ___

Sapling/Shrub Stratum (Plot size: 15

1. Pinus taeda

1 Quercus alba

2 Acer rubrum

Herb Stratum (Plot size: _ 1. Smilax rotundifolia

nar	nes of	plants.		Sampling Point: wcmc006_u
	bsolute	Dominant I		Dominance Test worksheet:
	<u>20</u>	Species? Yes	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
 				Total Number of Dominant Species Across All Strata: 6 (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC:50 (A/E
				Prevalence Index worksheet:
	20	Total Cove		Total % Cover of: Multiply by:
) –		total cover:	4	OBL species0 x 1 =0
	20 /0 01	iolai covei		FACW species 0 x 2 = 0
	15	Yes	FACU	FAC species 55 x 3 = 165
	10	Yes	FAC	FACU species 40 x 4 = 160
	10	165	TAC	
				95 325
-				Column Totals: (A) (B
				Prevalence Index = B/A =3.42
-				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
_				2 - Dominance Test is >50%
_				3 - Prevalence Index is ≤3.0 ¹
		Total Cove	r 5	4 - Morphological Adaptations¹ (Provide supporting
5	20% of	total cover:_		data in Remarks or on a separate sheet)
				Problematic Hydrophytic Vegetation ¹ (Explain)
_	25	Yes	FAC	1 residinate riyarepriyae vegetation (Explain)
_	15	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must
	10	Yes	FACU	be present, unless disturbed or problematic.
_				Definitions of Four Vegetation Strata:
 				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height.
 				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
_	50			Herb – All herbaceous (non-woody) plants, regardless
_	=	= Total Cove	r 10	of size, and woody plants less than 3.28 ft tall.
<u>, </u>	_ 20% of	total cover:_	10	Woody vine – All woody vines greater than 3.28 ft in height.
· –				
				Hydrophytic Vegetation
	0 -	Total Cove		Present? Yes No
_		total cover:	0	

Remarks: (Include photo numbers here or on a separate sheet.)

2. Dichanthelium laxiflorum

3. Andropogon virginicus

Woody Vine Stratum (Plot size: ______)

Sampling Point: wcmc006_u

Depth	Matrix		Redox Features		
(inches)	Color (moist)	<u>%</u>	Color (moist) % Type ¹ Loc ²		Remarks
0-8	10 YR 3/2	100		SCL	
8-16	2.5 Y 6/6	100		CL	
				<u> </u>	
			 		
					-
Гуре: С=С	Concentration, D=Dep	oletion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location: F	PL=Pore Lining, M=Matrix.
	Indicators:	·			ators for Problematic Hydric Soils ³ :
Histoso	l (A1)		Dark Surface (S7)	2	2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA 14		Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Surface (S9) (MLRA 147, 148		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	•	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)	\	/ery Shallow Dark Surface (TF12)
Deplete	ed Below Dark Surfac	e (A11)	Depleted Dark Surface (F7)	(Other (Explain in Remarks)
Thick D	ark Surface (A12)		Redox Depressions (F8)		
Sandy I	Mucky Mineral (S1) (LRR N,	Iron-Manganese Masses (F12) (LRR N,		
	A 147, 148)		MLRA 136)		
Sandy (Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122)	³ Inc	dicators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA	148) we	etland hydrology must be present,
Stripped	d Matrix (S6)		Red Parent Material (F21) (MLRA 127, 1	47) ur	nless disturbed or problematic.
Restrictive	Layer (if observed)	:			
Type:			<u> </u>		
Depth (in	nches):		_	Hydric Soi	l Present? Yes No
temarks:					
o hydric soi	il present				
,	•				



Photo 1 Upland data point wcmc006_u facing north



Photo 2 Upland data point wcmc006_u facing west

Project/Site: Atlantic Coast Pipeline	;	City/C	County: Cumberland		Sampling Date: 2/11/2015		
Applicant/Owner: DOMINION				State: NC	Sampling Point: wcmc005f_w		
Investigator(s): Team C			on, Township, Range: No				
Landform (hillslope, terrace, etc.):							
Subregion (LRR or MLRA):							
Soil Map Unit Name: Grantham loa	m			NWI classific	ation: None		
Are climatic / hydrologic conditions	on the site typical	for this time of year? Y	′es <u> / </u>	If no, explain in R	emarks.)		
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	present? Yes V No		
Are Vegetation, Soil							
SUMMARY OF FINDINGS							
Lhydranhytia Vagatatian Dragant?	Vac. V	Ne			· · ·		
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes V	No No	Is the Sampled Area	4			
Wetland Hydrology Present?		No	within a Wetland?	Yes	No		
Remarks:		<u> </u>					
HYDROLOGY							
Wetland Hydrology Indicators:				-	tors (minimum of two required)		
Primary Indicators (minimum of or	-		Surface Soil Cracks (B6)				
Surface Water (A1)			ue Aquatic Plants (B14) Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)		Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)					
Saturation (A3)			wheres on Living Roots (C3) Moss Trim Lines (B16) uced Iron (C4) Dry-Season Water Table (C2)				
Water Marks (B1)		Presence of Reduced Recent Iron Reduction					
Sediment Deposits (B2) Drift Deposits (B3)		Thin Muck Surface (Crayfish Bur	sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	_	Other (Explain in Rer			tressed Plants (D1)		
Iron Deposits (B5)	_	_ Other (Explain in No.	namoj		Position (D2)		
Inundation Visible on Aerial Ir	nagery (B7)			Shallow Aqu			
Water-Stained Leaves (B9)	3 , (,				aphic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral			
Field Observations:							
		Depth (inches):					
Water Table Present? Ye	es <u> </u>	Depth (inches):	5				
Saturation Present? Ye		Depth (inches):	0 Wetland H	ydrology Preser	nt? Yes 🗸 No		
(includes capillary fringe) Describe Recorded Data (stream	gauge monitoring	well aerial photos pre	evious inspections) if avai	lable.			
Describe Necorded Data (stream	gaage, memering	won, dendi priotos, pre	vious inspections), ii uvui	idble.			
Remarks:							
Wetland hydrology present							

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Free Stratum (Plot size: 30) Acer rubrum	30	Species? Yes	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:5 (A)
Pinus taeda	30	Yes	FAC	Total Number of Deminerat
i <u>.</u>				Total Number of Dominant Species Across All Strata: 5 (B)
			· ·	
				Percent of Dominant Species That Are ORL FACW or FAC: 100
		· <u></u>		That Are OBL, FACW, or FAC: (A/B)
,	· 	·		Prevalence Index worksheet:
•	60	T-1-1-0		Total % Cover of: Multiply by:
50% of total cover: 30		= Total Cov total cover:	40	OBL species0 x 1 =0
15	20% 01	iolai cover.		FACW species0
Sapling/Shrub Stratum (Plot size:) Acer rubrum	25	Yes	FAC	FAC species 110 x 3 = 330
*	· 			
Liquidambar styraciflua	15	Yes	FAC	FACU species
Quercus nigra	10	Yes	FAC	UPL species
l				Column Totals: (A) (B)
5	· ·			Prevalence Index = B/A = 3
S				1 Tevalence index = B/A =
				Hydrophytic Vegetation Indicators:
		· <u></u>		1 - Rapid Test for Hydrophytic Vegetation
		· 		2 - Dominance Test is >50%
)	50	T-1-1-0		3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 25		= Total Cov total cover:	40	4 - Morphological Adaptations ¹ (Provide supporting
	20% 01	total cover.		data in Remarks or on a separate sheet)
ierb diracum (i loc size)				Problematic Hydrophytic Vegetation ¹ (Explain)
)				¹ Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
l				Definitions of Four Vegetation Strata:
5				- commons of the area of the a
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
7.				more in diameter at breast height (DBH), regardless of height.
	-			noight.
				Sapling/Shrub - Woody plants, excluding vines, less
)		· 		than 3 in. DBH and greater than or equal to 3.28 ft (1
0		· 		m) tall.
1				Herb - All herbaceous (non-woody) plants, regardless
		= Total Cov		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 0	20% of	total cover:	0	Woody vine – All woody vines greater than 3.28 ft in
Voody Vine Stratum (Plot size:30)				height.
3				
l.		<u> </u>		
5.				Hydrophytic Vegetation
··	0	= Total Cov		Present? Yes No
50% of total cover: 0		total cover:	^	
		total cover.		
Remarks: (Include photo numbers here or on a separate s	sheet.)			

Sampling Point: wcmc005f_w

Profile Des	scription: (Describe t	o the dep	oth needed to docum	ent the	indicator	or confirn	n the ab	osence of indicators.)		
Depth	Matrix			<u>Feature</u>				_		
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²		tture Remarks		
0-8	2.5 Y 5/2	10						<u> </u>		
	10 YR 3/2	90					S	CL		
8-16	2.5 Y 5/2	95	10 YR 5/6	5	С	PL	(<u>C</u>		
-	· ·									
	- <u></u>									
	-				•		·			
	-					· ——				
-	·									
	<u> </u>									
¹ Type: C=0	Concentration, D=Depl	etion, RM	=Reduced Matrix, MS	=Masked	d Sand Gr	ains.	² Loca	tion: PL=Pore Lining, M=Matrix.		
Hydric Soil	Indicators:							Indicators for Problematic Hydric Soils ³ :		
Histoso	ol (A1)		Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)		
	Epipedon (A2)		Polyvalue Bel	ow Surfa	ice (S8) (N	/ILRA 147,	, 148)	Coast Prairie Redox (A16)		
Black H	Histic (A3)		Thin Dark Sur			147, 148)		(MLRA 147, 148)		
	jen Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)		
	ed Layers (A5)		✓ Depleted Mat					(MLRA 136, 147)		
	luck (A10) (LRR N)	(444)	Redox Dark S					Very Shallow Dark Surface (TF12)		
	ed Below Dark Surface Dark Surface (A12)	e (A11)	Depleted Dari					Other (Explain in Remarks)		
	Mucky Mineral (S1) (L	RR N	Iron-Mangane			IRRN				
	(A 147, 148)	,	MLRA 136		(1 12)	,				
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122) 3Indicators of hydrophytic vegetation and							
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be presen							
-	d Matrix (S6)		Red Parent M					unless disturbed or problematic.		
Restrictive	Layer (if observed):							· · · · · · · · · · · · · · · · · · ·		
Type:										
Depth (in	nches):						Hydr	ric Soil Present? Yes No		
Remarks:	, -									
Hydric soil p	resent									
, a										



Photo 1 Wetland data point wcmc005f_w facing east



Photo 2
Wetland data point wcmc005f_w facing north

Project/Site: Atlantic Coast Pipeline	City/C	County: Cumberland		Sampling Date: 2/11/2015		
Applicant/Owner: DOMINION			State: NC	_ Sampling Point: wcmc005_u		
	Section					
Landform (hillslope, terrace, etc.): Flat		lief (concave, convex, none		Slope (%): 0		
Subregion (LRR or MLRA): P		Long: -78.66	6452393	Datum: WGS 1984		
Soil Map Unit Name: Grantham loam			NWI classifica	ntion: None		
Are climatic / hydrologic conditions on the site ty	pical for this time of year?					
Are Vegetation, Soil, or Hydrolo						
Are Vegetation, Soil, or Hydrolo						
SUMMARY OF FINDINGS – Attach						
	No	Is the Sampled Area		,		
	No No	within a Wetland?	Yes	_ No		
Wetland Hydrology Present? Yes Remarks:	NO					
Data point taken within a Loblolly Pine plantation						
HYDROLOGY						
Wetland Hydrology Indicators:		<u>S</u>	Secondary Indicat	ors (minimum of two required)		
Primary Indicators (minimum of one is required	l; check all that apply)		Surface Soil Cracks (B6)			
Surface Water (A1)	True Aquatic Plants ((B14) _	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2)	Hydrogen Sulfide Od		Drainage Patterns (B10)			
Saturation (A3)	Oxidized Rhizospher		Moss Trim Lir			
Water Marks (B1)	Presence of Reduce		Dry-Season Water Table (C2)			
Sediment Deposits (B2)	Recent Iron Reduction		Crayfish Burro			
Drift Deposits (B3)	Thin Muck Surface (0			ible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Other (Explain in Rei	marks) _	 '	essed Plants (D1)		
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		-	Geomorphic F Shallow Aquit			
Water-Stained Leaves (B9)		-		phic Relief (D4)		
Aquatic Fauna (B13)		-	FAC-Neutral			
Field Observations:			_	(()		
	Depth (inches):					
	Depth (inches):					
	Depth (inches):		drology Present	? Yes No		
(includes capillary fringe)	- , , , , ,					
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, pre	evious inspections), if availa	able:			
Remarks:						
No wetland hydrology present						

Sampling	Point: wcmc005_u
Sambilliu	Politi.

00	Absolute	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover 10	Species?	Status FAC	Number of Dominant Species
1. Pinus taeda		Yes	AC	That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
· · ·				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
<i>1</i>	10			Total % Cover of: Multiply by:
5	:	= Total Cove	r 2	OBL species0 x 1 =0
50% of total cover:5	20% of	total cover:_		0
Sapling/Shrub Stratum (Plot size:)	••	.,		FACW species $\frac{0}{95}$ x 2 = $\frac{0}{285}$
1. Pinus taeda	80	Yes	FAC	FAC species x 3 =
2. Liquidambar styraciflua	5	No	FAC	FACU species x 4 =
3				UPL species x 5 =
4				Column Totals:95 (A)(B)
5				2
				Prevalence Index = B/A =3
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0¹
40.5		= Total Cove		4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 42.5	20% of	total cover:_	17	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				Problematic Hydrophytic Vegetation¹ (Explain)
1				Problematic Hydrophytic Vegetation (Explain)
2				4
3				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4.				
5				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				Herb – All herbaceous (non-woody) plants, regardless
	0	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover:0	20% of	total cover:_	0	W 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in height.
1				noight.
2.				
3				
4				Hydrophytic
5				Vegetation
•		= Total Cove		Present? Yes No No
50% of total cover:0	20% of	total cover:_	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			

Sampling Point: wcmc005_u

Profile Des	cription: (Describe	to the dept				or confirm	the abse	nce of indicators.)
Depth	Matrix		Redo	x Feature	s	. 2	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture SICL	
0-8	2.5 Y 3/2	100					-	
8-16	2.5 Y 6/6	100					CL	
	· -							<u> </u>
	· -							<u> </u>
								<u> </u>
	-							
	Concentration, D=Dep	letion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		n: PL=Pore Lining, M=Matrix.
-	Indicators:						In	dicators for Problematic Hydric Soils ³ :
Histoso			Dark Surface				_	_ 2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				148)	_ Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su	. ,	•	147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		F2)		_	_ Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Mat					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S				_	_ Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Dar				_	_ Other (Explain in Remarks)
	Park Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (LRR N,		
	A 147, 148)		MLRA 13	-				3
	Gleyed Matrix (S4)		Umbric Surfa					³ Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	d Matrix (S6)		Red Parent N	faterial (F	21) (MLR	A 127, 147	7)	unless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (ir	nches):						Hydric S	Soil Present? Yes No
Remarks:							-L	
lo hydric so	il present							
-								



Photo 1 Upland data point wcmc005_u facing east



Photo 2
Upland data point wcmc005_u facing north

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Cumberla	Sampling	Date: 9/9/14
Applicant/Owner: Dominion		State: NC Sampling	Point: Wemp 006f-w
Investigator(s): EST Cheoper, R Scho	Saction Township Pange	none	
- 1)	Local relief (concave, convex		
	at: 35,20916 Long:		Datum: <u>WGS84</u>
· · · · · · · · · · · · · · · · · · ·	•		
•		NWI classification:	FIO
Are climatic / hydrologic conditions on the site typical for this			_
Are Vegetation, Soil, or Hydrology si	gnificantly disturbed? Are "Norma	d Circumstances" present?	/es No
Are Vegetation, Soil, or Hydrology na	aturally problematic? (If needed,	explain any answers in Rema	ırks.)
SUMMARY OF FINDINGS – Attach site map s	howing sampling point locati	ons, transects, import	ant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:		Yes No_	
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minir	num of two required)
Primary Indicators (minimum of one is required: check all t	nat apply)	Surface Soil Cracks (B	6)
Surface Water (A1)	-auna (B13)	Sparsely Vegetated Co	
	posits (B15) (LRR U)	Drainage Patterns (B1	1
	n Sulfide Odor (C1)	Moss Trim Lines (B16)	
	Rhizospheres along Living Roots (C3) e of Reduced Iron (C4)	Dry-Season Water Tate Crayfish Burrows (C8)	Ne (C2)
	ron Reduction in Tilled Soils (C6)	Saturation Visible on A	erial Imagery (C9)
	ck Surface (C7)	Geomorphic Position (
☐ Iron Deposits (B5) ☐ Other (E	xplain 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, De			
Water Table Present? Yes No De		Hydrology Present? Yes	. / No
Saturation Present? Yes No Details (includes capillary fringe)	oth (inches): 5/v Wetland	mydrology Present? Tes	<u> </u>
Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspections), if a	vailable:	
Remarks:			
,			
		,	

20 20 64	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30 Ft)		Species?		Number of Dominant Species
1. Acer rubrum	15	 	FAC	That Are OBL, FACW, or FAC: (A)
2 Pinus tarda	15	<u> </u>	PAC	Total Number of Dominant
3. Liquidambar styraciflua	10	<u> </u>	PAC	Species Across All Strata: (B)
4		7		
5				Percent of Dominant Species
l ·				That Are OBL, FACW, or FAC:
6				Prevalence Index worksheet:
7	. ——			Total % Cover of: Multiply by:
8				OBL species x 1 =
	<u> 40</u>	= Total Cov	ver o	
50% of total cover: 20	20% of	total cover	: <u> </u>	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 × 30 ft)				FAC species x3 =
1. Acer rubrum	10	<u> </u>	PHC	FACU species x 4 =
2			-	UPL species x 5 =
3.				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	10	= Total Co	ver _	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	f total cover	<u>. 2</u>	
Herb Stratum (Plot size: 30 × 30, F4.)	_			1 Indicators of budging of land wellowd budgets were
1. Arandinaria gigantea	1	V	FFCU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		-		Definitions of Four Vegetation Strata:
				Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
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.				
11.		-		Woody vine - All woody vines greater than 3.28 ft in
				height.
12	10			
7		= Total Co		
50% of total cover:	<u>></u> 20% o	f total cover	r: _ _	
Woody Vine Stratum (Plot size:)	•		-14	
1. Smilax rotundifolia	15	<u> </u>	174C	
2		·	•	
3.				
4				
j 5,	15-		· ———	Hydrophytic
1	<u> </u>	= Total Co	~2	Vegetation Present? Yes No
50% of total cover:	> 20% o	f total cove	r:	Tresent: Tes No
Remarks: (If observed, list morphological adaptations bel	ow).			
·				

Profile Desc	ription: (Describe t	o the depth no	eeded to docum	nent the in	dicator	or confirm	the absence o	of indicators.)
Depth	Matrix			Features		1 - 2	771	B I
(inches)	Color (moist)		Solor (moist)	%	Type¹	_Loc²	Texture	Remarks
4-10	104(65)		DYK Flu		<u> </u>	PL		
10-20	10465/		JAA MEI	10	<u> </u>		<u> </u>	
112-60	10 18-011	70 10) 1/20/10	30	<u> </u>	<u>M</u>	<u> </u>	
<u> </u>								
	oncentration, D=Depl					ains.		PL=Pore Lining, M=Matrix.
1 <u>~</u>	Indicators: (Applica	able to all LRR			-		_	or Problematic Hydric Soils ³ :
Histosol	(A1) Dipedon (A2)	÷	Polyvalue Be Thin Dark Su					uck (A9) (LRR O) uck (A10) (LRR S)
Black His		<u> </u>	Loamy Mucky		-	-		d Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)	Ī	Loamy Gleye	d Matrix (F		·		nt Floodplain Soils (F19) (LRR P, S, T)
1 1884	Layers (A5)	}	Depleted Mat					ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, icky Mineral (A7) (LR		Redox Dark S Depleted Dar	_	-			A 153B) rent Material (TF2)
	esence (A8) (LRR U)		Redox Depre					tent Material (172) tallow Dark Surface (TF12)
	ick (A9) (LRR P, T)	<u> </u>	Marl (F10) (L		•		_	Explain in Remarks)
	d Below Dark Surface	e (A11)	Depleted Och					
1 =	ark Surface (A12)	L DA 450A) [Iron-Mangan				•	stors of hydrophytic vegetation and
	rairie Redox (A16) (N lucky Mineral (S1) (L	_	Umbric Surfa Delta Ochric			, 0,		and hydrology must be present, ss disturbed or problematic.
· =	Gleyed Matrix (S4)	Ī	Reduced Ver			0A, 150B)		or allowed or production
	tedox (S5)		Piedmont Flo					
	Matrix (S6)		Anomalous B	right Loan	ny Soils (F20) (MLR.	A 149A, 153C,	153D)
	rface (S7) (LRR P, S Layer (if observed):						T	
Type:	-uy 0, (1, 0,500, 70u).							,
1 '' -	ches):		-				Hydric Soil F	Present? Yes V No
Remarks:								
				•				
		Ē						
					-			
								•



Wetland data point wcmp006f_w facing south.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region city/County: <u>Cumberland</u> Project/Site: _ACP Applicant/Owner: Dominion Investigator(s): EST (Lloper, R Surarf) Section, Township, Range: _______ Local relief (concave, convex, none): ______ Landform (hillslope, terrace, etc.): Lat: 35.20905 Long: -78.1 Subregion (LRR or MLRA): Soil Map Unit Name: EXUM NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes _ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes __ Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are Vegetation ____ ___, Soil ______, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: **HYDROLOGY** Secondary Indicators (minimum of two required) Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) High Water Table (A2) Moss Trim Lines (B16) Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Thin Muck Surface (C7) Geomorphic Position (D2) Algal Mat or Crust (B4) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Depth (inches): Surface Water Present? Water Table Present? No V Depth (inches): Wetland Hydrology Present? Yes Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	<u> </u>			
30×30 ft.		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30 ft)		Species?	Status	Number of Dominant Species
1. Quercus nigra	10	Y	FAC	That Are OBL, FACW, or FAC: (A)
	15	7	FAC	
2. Liavidam but styracitla				Total Number of Dominant
3. Pirtus taeda	7.5	7	FAC	Species Across All Strata: (B)
4				(0)
4,				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
1				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				Prevalence Index worksheet:
7				1
				Total % Cover of: Multiply by:
8	<u> </u>			OBL species x 1 =
	<u> </u>	= Total Co	ver	
50% of total cover: 25	20% of	f total cover	1,0	FACW species x 2 =
2/2 hs 20 M		10101 0010	·——	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30 x 30 H)				
1. Varcinium cory bosum	10	Y	FACW	FACU species x 4 =
1 "				UPL species x 5 =
2				
3				Column Totals: (A) (B)
l e e e e e e e e e e e e e e e e e e e				
4		-		Prevalence Index = B/A =
5	<u> </u>			Hydrophytic Vegetation Indicators:
				1
6				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
		•		
8				☐ 3 - Prevalence Index is ≤3.01
	<u> (o </u>	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20% 0	f total cove	. 2_	Troblematio Tryanopriyato Vegetation (Explain)
20 - 20 C4	20%0	i iolai cove	·	
Herb Stratum (Plot size: 30 x 30 P+)				¹ Indicators of hydric soil and wetland hydrology must
1. Clethra ainifolia	10	Y	FACW	be present, unless disturbed or problematic.
	15		FACW	
2. Arundinaria gigantea	<u>. 10</u>		PALW	Definitions of Four Vegetation Strata:
3		,		
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10			- ——	Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.				
12.				
		= Total Co	ver	
50% of total cover:	20% o	f total cove	er: 4	
Woody Vine Stratum (Plot size: 30 × 30 F+.)				
			-10	
1. smilax votundatolia	15	Ч	1-17-	.
2				
3.				
4				
4				·
5				Hydrophytic
		= Total Co		Vegetation
<u> </u>	1.5	= iotal C		Present? Yes No
50% of total cover: 1.3		- of total cove	er:	11030H2 103
50% of total cover: 1.	20% 0		er:	77030H2
50% of total cover: 1.5	20% 0		er:	1103 <u> </u>
	20% 0		er:	1103 <u> </u>
	20% 0		er:	1103 <u> </u>
	20% 0		er:	1103UK1 103 110
	20% 0		er:	1103ml
	20% 0		er:	1103
	20% 0		er:	103 <u> </u>
	20% 0		er: _ _	
	20% 0		er:	103103

Profile Desc	ription: (Describe t	o the dep	th needed to docui	nent the in	dicator	or confirm	n the absence of	f indicators.)	
Depth	Matrix		Redo	x Features	1	1 - 2	~	_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc2	<u>Texture</u>	Remai	KS
12-5		100	1-20 41	7.0			<u> </u>		
5-14		80	107R46	70	<u> </u>	<u>M</u>	_ <u></u>		
14-20	1012 4/2	<u>60</u>	10784/6	40		<u> </u>	_ <u></u>		
	<u>.</u>					***			
17 00			Dadward Maldy 14	C-Maakad			21	N - Dana I inina 188-1	
	oncentration, D=Depl Indicators: (Application					airis.		L=Pore Lining, M=N or Problematic Hyd	
Histosol		2010 to a	Polyvalue Be			RRSTI	_	ick (A9) (LRR O)	
	oipedon (A2)		Thin Dark Su					ick (A10) (LRR S)	
	stic (A3)		Loamy Muck						de MLRA 150A,B)
1	n Sulfide (A4)		Loamy Gleye	•	2)			nt Floodplain Soils (I	
	Layers (A5)		Depleted Ma					ous Bright Loamy So	oils (F20)
	Bodies (A6) (LRR P,		Redox Dark		•			4 153B)	
	icky Mineral (A7) (LR esence (A8) (LRR U		Depleted Da Redox Depre					ent Material (TF2) allow Dark Surface	(TE12)
_	ick (A9) (LRR P, T)	,	Marl (F10) (I		,			xplain in Remarks)	(,, ,,,
	Below Dark Surface	e (A11)	Depleted Oc		MLRA 1	51)	_ `		
	ark Surface (A12)		Iron-Mangar			•	•	tors of hydrophytic v	
	rairie Redox (A16) (M							nd hydrology must l	•
	lucky Mineral (S1) (L Bleyed Matrix (S4)	.RR O, S)	Delta Ochric Reduced Ve					s disturbed or probl	ematic.
	tedox (S5)		Piedmont Flo				-		
	Matrix (S6)						RA 149A, 153C,	153D)	
	rface (S7) (LRR P, S								
1	Layer (if observed):								
Type:			<u> </u>						/
	ches):						Hydric Soil P	resent? Yes	No_ <u></u>
Remarks:									
,									
									i



Upland data point wcmp006_u facing north.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Camber	Clan 2 Sampling	Date: 4/9/14
Applicant/Owner: Dominion		State: NC Sampling	Point: Wcmp 007f-W
Investigator(s): EGT (LRoper, R Scharf)	Section, Township, Range: _	none	
Landform (hillslope, terrace, etc.): drawaye	Local relief (concave, convex	, none): LONLUVU	_ Slope (%): <u>0 -4</u>
Subregion (LRR or MLRA): LRR P U Lat: 351	20697 Long:	<u>-7867217</u>	Datum: <u>W658</u> 4
Soil Map Unit Name: Coxville loam		NWI classification:	PFO
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🎻 No	(If no, explain in Remarks.)	نعد
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" present?	Yes No
Are Vegetation, Soil, or Hydrology naturally pr		explain any answers in Rem	
SUMMARY OF FINDINGS – Attach site map showing	sampling point locati	ons, transects, impor	tant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No No No No No No No	Is the Sampled Area within a Wetland?	Yes No	
rear edge of logged ile	2000		
HYDROLOGY			
Wetland Hydrology Indicators:	" •	Secondary Indicators (mini	
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (E	
Surface Water (A1) High Water Table (A2) Aquatic Fauna (B1) Marl Deposits (B1)	•	Sparsely Vegetated C Drainage Patterns (B1	
Saturation (A3) Hydrogen Sulfide		Moss Trim Lines (B16	· ·
157	neres along Living Roots (C3)		
Sediment Deposits (B2)		Crayfish Burrows (C8)	
	ction in Tilled Soils (C6)	Saturation Visible on A	
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface ☐ Iron Deposits (B5) ☐ Other (Explain in I	• •	Geomorphic Position (Shallow Aquitard (D3)	' '
Injundation Visible on Aerial Imagery (B7)	tornamo,	FAC-Neutral Test (D5	
Water-Stained Leaves (B9)		Sphagnum moss (D8)	(LRR T, U)
Field Observations:	► DA		
Surface Water Present? YesNo Depth (inches			
Water Table Present? Yes No Depth (inches			/ "
Saturation Present? Yes No Depth (inches (includes capillary fringe)	s): vvetiand	Hydrology Present? Yes	NO
Describe Recorded Data (stream gauge, monitoring well, aerial pho	os, previous inspections), if a	vailable:	
Remarks:			
portions of wetland in	induted		
		•	

0:- 0:-0:	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30, Ft.)	% Cover	Species?		Number of Dominant Species
1. Acer rubrum	20	4	PAL	That Are OBL, FACW, or FAC: (A)
2 Pinus taeda	5	\overline{N}	FAL	
3. Liquidambar styratiflua	10	<u>'</u>	FAL	Total Number of Dominant
3. CLANITAMENTON STALANTINE	100		1110	Species Across All Strata: (B)
4V				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8	2/			OBL species x 1 =
	<u></u>	= Total Co	ver	FACW species x 2 =
50% of total cover: 17.	<u>5</u> 20% o	f total cover	r: <u>/</u>	TAC
Sapling/Shrub Stratum (Plot size: 30 × 30 +1.				FAC species x 3 =
1				FACU species x 4 =
				UPL species x 5 =
2				Column Totals: (A) (B)
3				
4			·	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 -Rapid Test for Hydrophytic Vegetation
7				
			. ——	2 - Dominance Test is >50%
8			. ——	☐ 3 - Prevalence Index is ≤3.01
	<u> </u>	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% o	f total cove	r:	
Herb Stratum (Plot size: 30 × 30, ft.)				¹ Indicators of hydric soil and wetland hydrology must
1. Osmundastrum cinnamomeum	119	4	FALW	be present, unless disturbed or problematic.
2 Clethra alnifolia	10	·	FACE	Definitions of Four Vegetation Strata:
	- 10	· - !	FACE	Definitions of Four Vegetation Strata:
3. Arundinaria arguntea	<u> 10</u>	· - y	<u>Priew</u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		. —		more in diameter at breast height (DBH), regardless of
5				height.
6.				Senting/Shouth Micrody plants evaluding vines loss
				Sapling/Shrub Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		• ———		than o in a barrana greater than o.20 it (1 ii) tail.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Meady vine All woods vines greater than 2.39 ft in
11				Woody vine – All woody vines greater than 3.28 ft in height.
				Tiong It.
12	<u>-30</u>			
١		= Total Co		
50% of total cover:	20%	of total cove	er: <u> </u>	<u> </u>
Woody Vine Stratum (Plot size: 30 x 30 ft)				
1. Smilax rotunditolia	10	Y	FPL	,
1. 30011 1000				
Z		-		1
3				
4		_		
5.				Hydrophytic
	10	_ = Total Co		Vegetation
	·	_	~ 3	Present? Yes No
50% of total cover:		of total cove	er:	
Remarks: (If observed, list morphological adaptations be	ow).			
				•

Profile Desc	ription: (Describe t	o the depth	needed to docum	ent the ir	ndicator	or confirm	n the absence	of indicators.)
Depth	Matrix			Features				
(inches)	Color (moist)	<u>%</u> _	Color (moist)	<u>%</u>	Type ¹	_Loc ²	<u>Texture</u>	<u>Remarks</u>
0-11	104/2 2/2	100						
11-20	10466	80	101R 43	70		M	<u> </u>	
								
l								
								
,								
¹ Type: C=C	oncentration, D=Depl	etion RM=R	Reduced Matrix MS:	=Masked	Sand Gr	ains	² l ocation:	PL=Pore Lining, M=Matrix.
	Indicators: (Applica					<u> </u>		for Problematic Hydric Soils ³ :
☐ Histosol			Polyvalue Bel			RR S. T. I		luck (A9) (LRR O)
l 1 22	pipedon (A2)		Thin Dark Sur					luck (A10) (LRR S)
	stic (A3)		Loamy Mucky					ed Vertic (F18) (outside MLRA 150A,B)
. ==	n Sulfide (A4)		Loamy Gleyed			,		ont Floodplain Soils (F19) (LRR P, S, T)
Stratified	l Layers (A5)		Depleted Matr				L Anoma	lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,		Redox Dark S	•	,			RA 153B)
	icky Mineral (A7) (LR		Depleted Dark					arent Material (TF2)
. =	esence (A8) (LRR U)	•	Redox Depres	•	3)			hallow Dark Surface (TF12)
1 == 7	ick (A9) (LRR P, T) d Below Dark Surface	· (A11)	Marl (F10) (LF Depleted Och	•	/MI DA 1	E4\	Utner ((Explain in Remarks)
ı <i>—</i>	ark Surface (A12)	(411)	Iron-Mangane			-	T) 3Indic	ators of hydrophytic vegetation and
_	rairie Redox (A16) (M	ILRA 150A)	=			•		land hydrology must be present,
 	lucky Mineral (S1) (L	•	Delta Ochric (ess disturbed or problematic.
	Sleyed Matrix (S4)		Reduced Vert					·
Sandy F	Redox (S5)		Piedmont Floo	odplain So	oils (F19)	(MLRA 1	49A)	
	Matrix (S6)		Anomalous B	right Loan	ny Soils	(F20) (MLF	RA 149A, 153C,	, 153D)
	rface (S7) (LRR P, S							
1	Layer (if observed):							
Type:								./
Depth (in	ches):						Hydric Soil	Present? Yes V No No
Remarks:								
ļ								
Ì								
					•			
1								



Wetland data point wcmp007f_w facing northeast.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: _ Pr C _____ City/County: Comberland Applicant/Owner: Down NC Sampling Point: WCm Investigator(s): EST (L RODEN. Section, Township, Range: ______ Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): CDN(AVI Slope (%) Long: -78,672.09 Subregion (LRR or MLRA): Soil Map Unit Name: Coxville NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes ___ (If no, explain in Remarks.) Are "Normal Circumstances" present? Yes ____, 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: **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Surface Soil Cracks (B6) Primary Indicators (minimum of one is required; check all that apply) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) Surface Water (A1) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Saturation (A3) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) 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) 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? Water Table Present? Depth (inches): Saturation Present? Wetland Hydrology Present? Yes _____ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

(1000)	Absoluto	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30 ft)			Status	
1. Pinus taeda		\	PAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1. THUS TARA	1 1000	-		I Hat Ale OBL, FACVV, of FAC (A)
2. Acer rubrum	117	!	PAC	Total Number of Dominant
3				Species Across All Strata:(B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				That Are OBE, PACW, OF PAC (AVB)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
_	15	= Total Co	ver _	OBL species x 1 =
50% of total cover:	5 20% of	f total cove	r: 3	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 x 30 Ft)		_		FAC species x 3 =
	12	V	PAC	FACU species x 4 =
1. Ligaridenaber Styrauthua	1()	_!_	170	UPL species x5=
2				
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5.				l
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7		-		2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
•	_ to	= Total Co	over	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% 0	f total cove	r. 2_	Froblematic Hydrophytic vegetation (Explain)
Herb Stratum (Plot size: 30 × 30 ++)	20%0	i total core	,ı. <u></u>	
1. Liandambar straciflua		W	CALL	¹ Indicators of hydric soil and wetland hydrology must
1. Liquidambar Styracition	117	. <u> </u>	V ME	be present, unless disturbed or problematic.
2 Euplatorium capillifolius	<u> </u>	<u> </u>	FACU	Definitions of Four Vegetation Strata:
3		•		The state of the s
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
				or one of the control
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	_			
•	25	= Total C	over	
50% of total cover: 172				
Woody Vine Stratum (Plot size: 30 x 30 ft)	20700	i total covi	<u>حب </u>	j
			mar.	
1. Toxicodendon rudicuns	<u> 10 </u>		- 	
2. Vitis volumbitalia			CVM	<u> </u>
	<u> 10</u>	<u> </u>	_ <u> </u>	. 1
-20	10	- - 1	PAL	
3. Smilax notundifolia	- 	<u> </u>	PAL	
-20	- 	<u> </u>	PAL	
3. Smilax notundifolia	10	y y -	PAL	Hydrophytic
3. Smilax notundifolia	10	= Total C	PAL	Vegetation
3. Smilax votundifolia 4.	30		,	
3. Smilax votadifolia 4. 5. 50% of total cover: 15	30	= Total C	,	Vegetation
3. Smilax votundifolia 4.	30		,	Vegetation
3. Smilax votadifolia 4. 5. 50% of total cover: 15	30		,	Vegetation
3. Smilax votadifolia 4. 5. 50% of total cover: 15	30		,	Vegetation
3. Smilax votadifolia 4. 5. 50% of total cover: 15	30		,	Vegetation
3. Smilax votadifolia 4. 5. 50% of total cover: 15	30		,	Vegetation
3. Smilax votadifolia 4. 5. 50% of total cover: 15	30		,	Vegetation
3. Smilax votadifolia 4. 5. 50% of total cover: 15	30		,	Vegetation

OIL								•	iy Polit	
Profile Desc	ription: (Describe t	o the dept	h needed to docum	ent the i	ndicator	or confirm	the absence o	of indicators.)		
Depth	Matrix _			Features						
(inches)	Color (moist)	%	Color (moist)	%	_Type ¹	Loc2	Texture	Re	marks	
0-5	104/23/2	100					<u></u>			
		<u> </u>		4790						
<u>5-10</u>	101/24/2	50	104R516	<u> 50</u>	<u></u>	<u> </u>	<u> </u>			
	· •		. , . , .							
										
. 								· · · · · · · · · · · · · · · · · · ·		
						·				
			Dadward Matrix MO				21	DI - Dana Lining	14-14-14-1	
	ncentration, D=Depl					ams.	Location:	PL=Pore Lining,	M=Matrix	
ydric Soil	ndicators: (Applica	able to all L						for Problematic	•	olis":
] Histosol	(A1)		Polyvalue Bel	ow Surfa	ce (S8) (L	.RR S, T, l	J) ∐ 1 cm M	uck (A9) (LRR O)}	
Histic Ep	ipedon (A2)		☐ Thin Dark Sur	face (S9)	(LRR S,	T, U)	2 cm M	uck (A10) (LRR:	S)	
Black Hi	•		Loamy Mucky				Reduce	ed Vertic (F18) (c	utside M	LRA 150A.B
_	n Sulfide (A4)		Loamy Gleyer			-,		ont Floodplain So		
	Layers (A5)		Depleted Mate		:,			lous Bright Loam		
=		~			· C\			•	iy oulls (i	20)
	Bodies (A6) (LRR P,		Redox Dark S					(A 153B)		
	icky Mineral (A7) (LF		Depleted Darl					rent Material (TF		
Muck Pr	esence (A8) (LRR U)	Redox Depres	ssions (F	8)			hallow Dark Surfa		2)
📘 1 cm Mu	ick (A9) (LRR P, T)		Mari (F10) (LI	RR U)			U Other (Explain in Rema	rks)	
Depleted	Below Dark Surface	e (A11)	Depleted Och	ric (F11)	(MLRA 1	51)				
= '	ark Surface (A12)		Iron-Mangane		-	-	.T) ³ Indic	ators of hydrophy	rtic vegeta	ation and
	rairie Redox (A16) (N	AI RA 150A						and hydrology m		
			· —			, •,		ess disturbed or p		
=	lucky Mineral (S1) (L	-KK U, S)	Delta Ochric (4505		ss distained of h	nobleman	ic.
	Bleyed Matrix (S4)		Reduced Veri		-	-				
Sandy F	Redox (S5)		Piedmont Flo				•			
Stripped	Matrix (S6)		Anomalous B	right Loai	my Soils (F20) (MLF	RA 149A, 153C,	153D)		
🗍 Dark Su	rface (S7) (LRR P, S	i, T, U)								
_	Layer (if observed):									,
									_	
Туре:									\sim	
Depth (in	ches):						Hydric Soil	Present? Yes	·	No
Remarks:										
			į							
									-	
	•									
			•							



Upland data point wcmp007_u facing south.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Cumberland Sampling Date: 9914 State: NC Sampling Point: wcmp 008f.	
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmp 008 f.	
Investigator(s): EST (L Paper, R Schart)	Section Township Pance: VIDIO	
	Local relief (concave, convex, none): Loncove Slope (%): 0-4	
Landroff (fillistope, terrace, etc.). (37 /2 (1/2)	1.20104 Long: -78.67778 Datum: WGS8	
	NWI classification: PFD	
Are climatic / hydrologic conditions on the site typical for this time of y	•	
Are Vegetation, Soil, or Hydrology significantly	ly disturbed? Are "Normal Circumstances" present? Yes No	
Are Vegetation, Soil, or Hydrology naturally pr	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? Yes No No	- Is the Sampled Area	
Hydric Soil Present? YesNo	within a Wetland? Yes No No	
Wetland Hydrology Present? Yes No	Within a fretianu: 1es <u>▼</u> NO	
Remarks:		
HYDROLOGY		
Wetland Hydrology Indicators: .	Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required: check all that apply)		
Surface Water (A1)		
High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10)		
Saturation (A3) Hydrogen Sulfide		
Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)		
Drift Deposits (B2) 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)	Sphagnum moss (D8) (LRR T, U)	
Field Observations:	n 71A.	
Surface Water Present? Yes No, Depth (inche		
Water Table Present? Yes No Depth (inche		
Saturation Present? Yes No Depth (inche (includes capillary fringe)	es): 770 Wetland Hydrology Present? Yes No	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:	
	_	
Remarks:		
·		

20 - 20 61	Absolute Dominant Indic	
Tree Stratum (Plot size: 30 x 30 ft.)	% Cover Species? Sta	I Number of Dominant Species 11 !
1. Liquidambar styraciflua	15 Y FR	That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		
		reiterit di Dominatti Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet:
7		
8		Total % Cover of: Multiply by:
	15 = Total Cover	OBL species x 1 =
50% of total cover: 7 is	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 × 30 Ff.)	20 /0 0 / (000 00 00 10 1	FAC species x 3 =
SapinityStricto Stratum (Flot size.	30 Y FI	
1. Liquistum sinease	<u> 70 F</u>	UPL species x 5 =
2		
3		Column Totals: (A) (B)
4		Prevalence Index = B/A =
5		
		Hydrophytic Vegetation Indicators:
6		Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8	- 	3 - Prevalence Index is ≤3.0¹
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 15	20% of total cover:	2 - Troblematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30; x 30, F+.)		- ,
	10 Y D	Indicators of hydric soil and wetland hydrology must
1. Woodwardia areolata		
2		Definitions of Four Vegetation Strata:
3		Tree Mondy plants evaluding vince 2 in (7.6 cm) or
4		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5		height.
6		المناه والمستمان الأناء والمستمارة والمالية
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		
10		
11		Woody vine All woody vines greater than 3.28 ft in height.
		neight.
12.		
_	Total Cover	
50% of total cover:	20% of total cover:	<u> </u>
Woody Vine Stratum (Plot size: 30 x 30 CF)		
1. Smilax rotundifolia	10 Y FI	} ∠
	- — — —	
2	- 	
3	-	
4	- 	
5		—— Hydrophytic
	Total Cover	Vagatation
50% of total cover: 5	20% of total cover:	Present? Yes No No
Remarks: (If observed, list morphological adaptations be	low).	
	•	

	cription: (Describe t	to the depth i	needed to docur	nent the indic	ator or con	firm the absence o	of indicators.)
Depth	Matrix			x Features	1 . 2		
(inches) U-Z	Color (moist)	100	Color (moist)	_ <u>%</u> T\	rpe ¹ Loc ²		Remarks
l 	· - /\= - \-	 _	N(1) (1)	4	<u></u>	_ <u>SL</u>	
2-20	10412-	<u>80</u> 11	MK GLI	20_	<u>C M</u>	<u>scl</u>	
						 ,	
	-						
							
	-						
	Concentration, D=Dep Indicators: (Applic				nd Grains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils ³ :
I		able to all LK		·-	CO) (I DD C		·
Histoso	pipedon (A2)			elow Surface (urface (S9) (LF			uck (A9) (LRR O) uck (A10) (LRR S)
	listic (A3)			y Mineral (F1)			ed Vertic (F18) (outside MLRA 150A,E
_	en Sulfide (A4)			ed Matrix (F2)	(—		nt Floodplain Soils (F19) (LRR P, S, T
Stratifie	ed Layers (A5)	'	Depleted Ma			L Anoma	ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P			Surface (F6)			A 153B)
	ucky Mineral (A7) (LF			rk Surface (F7)		rent Material (TF2)
	resence (A8) (LRR U luck (A9) (LRR P, T))	Redox Depro				nallow Dark Surface (TF12) Explain in Remarks)
	ed Below Dark Surfac	e (A11)		chric (F11) (ML	RA 151)	Other (_xpiair in Remarks)
	ark Surface (A12)	• • ,		nese Masses (I		, P, T) ³ Indica	ators of hydrophytic vegetation and
_	Prairie Redox (A16) (I	VLRA 150A)	Umbric Surfa	ace (F13) (LRI	R P, T, U)		and hydrology must be present,
	Mucky Mineral (S1) (I	LRR O, S)		(F17) (MLRA			ss disturbed or problematic.
	Gleyed Matrix (S4)		` 	rtic (F18) (MLI		=	
	Redox (S5)			oodplain Soils Bright Loamus			1E2D)
	d Matrix (S6) urface (S7) (LRR P, S	S T 11)	Anomaious i	ongni Loaniy a	00115 (F20) (A	/ILRA 149A, 153C,	1930)
	Layer (if observed):						
Type:							
Depth (ii	nches):		_			Hydric Soil	Present? Yes V No
Remarks:			,			ı	•
						l l	
,						l	
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						•	



Wetland data point wcmp008_w facing southeast.

Project/Site: ACP	City/County: Cumber	rland s	ampling Date: 9/9/14 ampling Point: Wcmp 008_ u
Applicant/Owner: Dominton	, , ,	State: VC s	ampling Point: Wcmp 008-4
Investigator(s): EST (L Poper, RShwh)	Section Township Range:	NA	-
Landform (hillslope, terrace, etc.):	Local relief (concave, convex	none): (10V(A	VR Slong 1961: 17-4
Catación de Brandi Bay	2011 Long:		
- · · · · · · · · · · · · · · · · · · ·			
Soil Map Unit Name: Wagram learny sand, O-			
Are climatic / hydrologic conditions on the site typical for this time of ye			
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Norma	al Circumstances" pre	sent? Yes V No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed,	explain any answers	in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locati	ons, transects, i	mportant features, etc.
Hydrophytic Vegetation Present? Yes No			
Hydric Soil Present? Yes No	Is the Sampled Area	Yes	
Wetland Hydrology Present? Yes No	within a Wetland?	Yes	_ No <u>V</u> -
Remarks:			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicato	rs (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	 	Surface Soil Cr	acks (B6)
Surface Water (A1) Aquatic Fauna (B1	3)	Sparsely Vege	tated Concave Surface (B8)
High Water Table (A2) Hari Deposits (B1)		Drainage Patte	
Saturation (A3)		Moss Trim Line	
	neres along Living Roots (C3)		ater Table (C2)
Sediment Deposits (B2) Presence of Redu Presence of Redu		Crayfish Burrov	· ·
	ction in Tilled Soils (C6)	_	ble on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface ☐ Iron Deposits (B5) ☐ Other (Explain in I		Geomorphic Po	
Inundation Visible on Aerial Imagery (B7)	temanoj	FAC-Neutral To	` '
Water-Stained Leaves (B9)			ss (D8) (LRR T, U)
Field Observations:	^		
Surface Water Present? Yes NoPoepth (inches	s): <u>NH</u>		
Water Table Present? Yes No Depth (inches	s): >20		
Saturation Present? Yes No Depth (inches	s): 720 Wetland	Hydrology Present?	? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos previous inspections) if a	vailable:	
Describe Necolded Data (Stream gadge, Monitoring Well, aesial pro-	tos, provious inspections), ir a	vallabic.	
Remarks:			
, tomano.			

· · · · · · · · · · · · · · · · · · ·	Abcoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30×30 ft.)	% Cover			
Tiee Stratum (Flot size. 05 7200 KT.)	76 COVEL	Species:	Slalus	Number of Dominant Species
1. Liguidambar Styruiflux	15_		FFC	That Are OBL, FACW, or FAC: (A)
2. Acerrubrum	10	У	FAC	-
				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				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				· · · · · · · · · · · · · · · · · · ·
	25	= Total Co	/Or	OBL species x 1 =
ות	_ 	- Total Co	Y 61	FACW species x 2 =
50% of total cover: 12	<u>'</u> > 20% of	total cover	: <u> 5 </u>	1
Sapling/Shrub Stratum (Plot size: 30 × 30 At.)				FAC species x 3 =
Cha Cha Cha Cha Cha Cha Cha Cha Cha Cha	سسير و	V	C01	FACU species x 4 =
1. Liquetrum sinense	<u> </u>		FAC	
2.		-		UPL species x 5 =
-				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
•	1.5	= Total Co	Ver	
7				Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 71,5	20% of	total cover	- 	
Herb Stratum (Plot size: 30 × 30 f+)				1
Hero Stratum (Plot size.				¹ Indicators of hydric soil and wetland hydrology must
1. None present				be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
2				Definitions of Four Vegetation Strata:
3				Trong Monda plants qualitating visco 2 in (7.6 and as
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
4				
5				more in diameter at breast height (DBH), regardless of height.
4. 5. 6.				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
5				more in diameter at breast height (DBH), regardless of height.
4. 5. 6. 7.				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
4				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
4				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
4				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
4				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4				more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
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4		= Total Co	ver	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
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4		= Total Co	ver	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
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4	0 20% of	= Total Co	ver	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4		= Total Co	ver	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4	0 20% of	= Total Co	ver	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4	0 20% of	= Total Co	ver	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4	0 20% of	= Total Co	ver	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4	0 20% of	= Total Co	ver	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
4	20% of 15	= Total Co f total cove	ver r:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
4	20% of 15	= Total Co	ver r:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4	0 20% of 15 15	= Total Co f total cove Y	ver FAC FAC	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
4	20% of 15 15 20% of 20%	= Total Co f total cove	ver FAC FAC	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4	20% of 15 15 20% of 20%	= Total Co f total cove Y	ver FAC FAC	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4	20% of 15 15 20% of 20%	= Total Co f total cove Y	ver FAC FAC	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
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4	20% of 15 15 20% of 20%	= Total Co f total cove Y	ver FAC FAC	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4	20% of 15 15 20% of 20%	= Total Co f total cove Y	ver FAC FAC	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

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 ¹ Loc ²	Texture Remarks
U-4 104 k3 2 100	<u> </u>
14-12 1092412 100	<u>SL</u>
12-20-104K 4/3 100	<u>st</u>
12 20 10 17 13 100	
	······
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	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)	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,	r) ³ 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 149)	9A)
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):	
Restrictive Layer (if observed):	Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type:	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
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Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No



Upland data point wcmp008_u facing north.

Project/Site: A CP	City/County: Cumberland Sampling Date: 91914
Applicant/Owner: Powinion	State: NC Sampling Point: Wcmp 009 f. u
Investigator(s): ESI (LRayer, & Schart)	
Landform (hillslope, terrace, etc.): dvalvage	Local relief (concave, convex, none): CONCOVC Slope (%): 64
	2009B Long: -78.67819 Datum: WGS84
Soil Map Unit Name: Wagram Loamy sand, 0-69	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pro	
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	Constitution (vision of the province)
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	· · · · · · · · · · · · · · · · · · ·
Surface Water (A1) Aquatic Fauna (B*	
High Water Table (A2) Marl Deposits (B1 Saturation (A3) Hydrogen Sulfide	
	theres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	· · · · · · · · · · · · · · · · · · ·
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfac	
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:	. 110
Surface Water Present? Yes No Depth (inche	es): NP
Water Table Present? Yes No Depth (inche	
Saturation Present? Yes No Depth (inche (includes capillary fringe)	es): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	
·	•
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•	
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	** * * * *	<u> </u>	1 12 1	
Tree Stratum (Piot size: 30 x 30 ft)		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species
1. Acer Rubrum	15		FAC	That Are OBL, FACW, or FAC: (A)
2 Liviodendron tulipitera	15		FACU	
2 CITIONATOR TO TOTAL	19_		17,231	Total Number of Dominant
3				Species Across All Strata: (B)
4				
				Percent of Dominant Species (2) 2 1
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 831 (A/B)
6				
				Prevalence Index worksheet:
7				i
8				Total % Cover of: Multiply by:
·	35			OBL species x 1 =
	_ 30_	= Total Co	ver ,	1
50% of total cover: \5	20% o	f total cover	: b	FACW species x 2 =
Sepling/Shrub Stratum (Plot size: 30 x 30 ft)			·	FAC species x 3 =
		N.	EIA n	FACU species x 4 =
1. Liquictrum sinense	<u> 745 </u>		FF.	• 1
2. Acer rubin	15	V	1-47	UPL species x 5 =
2. Alcer TOUSTON	. 		<u> </u>	Column Totals: (A) (B)
3		·	·	Column Totals
4				Prevalence Index = B/A =
5		. ——		Hydrophytic Vegetation Indicators:
6				1 1
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				
V	11-			3 - Prevalence Index is ≤3.01
		_ = Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: Zot	7 20% d	of total cove	г 17	
Herb Stratum (Plot size: 30 × 30 ft)				
Herb Stratum (Plot size: 30 F 70 (1)				Indicators of hydric soil and wetland hydrology must
1. Clethra alnifolia	18	Y	FACW	be present, unless disturbed or problematic.
		-		Definitions of Four Vegetation Strata:
2				Deminitions of Four Vegetation Strata.
3				Trans Mandy plants evaluding vines 2 in (7 5 cm) or
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
l e				
J			_	height.
5				- -
6.				- Sapting/Shrub - Woody plants, excluding vines, less
6			_	- -
6	<u>. </u>			Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6				Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
6				Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6				Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6				Sapting/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in
6				Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
6. 7. 8. 9. 10. 11, 11, 11				Sapting/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in
6				Sapting/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in
6. 7. 8. 9. 10. 11. 12.	\\	= Total C	over	Sapting/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in
6. 7. 8. 9. 10. 11. 12.	\\	= Total C	over	Sapting/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7	\\	= Total C	over	Sapting/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft)	\ <u>\$</u> 20%	= Total C	over er: 3	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft)	\ <u>\$</u> 20%	= Total C	over er: 3	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotudifolia.	\\	= Total C	over	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft)	\ <u>\$</u> 20%	= Total C	over er: 3	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7: Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotindifolia. 2.	\ <u>\</u>	= Total C	over er: 3	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7: Woody Vine Stratum (Plot size: 30 × 30 ft) 1. Smilax rotudifolia. 2. 3.	\ <u>\</u>	= Total C	over er: 3	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7: Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotindifolia. 2.	\ <u>\</u>	= Total C	over er: 3	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotundifolio. 2. 3. 4.	\ <u>\</u>	= Total C	over er: 3	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7: Woody Vine Stratum (Plot size: 30 × 30 ft) 1. Smilax rotudifolia. 2. 3.	\ <u>\$</u> 20%	= Total C	over er: 3	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. Smilax ristandifolia. 2. 3. 4. 5.	\ <u>\$</u> 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. Smilax ristandifolia. 2. 3. 4. 5.	\ <u>\$</u> 20%	= Total Co	over er: 3 FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotundifolia. 2. 3. 4. 5.	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. Smilax ristandifolia. 2. 3. 4. 5.	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax mathiations 2. 3. 4. 5. 50% of total cover: 7	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotundifolia. 2. 3. 4. 5.	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotundifolia. 2. 3. 4. 5.	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax mathiations 2. 3. 4. 5. 50% of total cover: 7	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax mathiations 2. 3. 4. 5. 50% of total cover: 7	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotundifolia. 2. 3. 4. 5.	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotundifolia. 2. 3. 4. 5.	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
6. 7. 8. 9. 10. 11. 12. 50% of total cover: 7 Woody Vine Stratum (Plot size: 30 × 30 ft) 1. 5m; lax rotundifolia. 2. 3. 4. 5.	\S 20%	= Total Co	over er: 3 FAC	Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic

Depth <u>Matrix</u> Inches) Color (moist)						the absence	,
			x Features	Туре	1.002	Touture	Domortro
	<u> </u>	Color (moist)		1 Ahe	Loc	Texture	Remarks
0-9 1012-11	100_	A 1.1		 .		<u> 54</u>	
9-20 104260	80 ି	1076 6/4	20	<u></u>	M	L5_	gravel
							\mathbf{O}
							
Type: C=Concentration, D=Depl					ins.		PL=Pore Lining, M=Matrix.
lydric Soil Indicators: (Applica	able to all L	RRs, unless othe	rwise noted.	l.)		indicators	for Problematic Hydric Solis ³ :
Histosol (A1)		Polyvalue Be	elow Surface	(S8) (L	RR S, T, U) 1 cm l	Muck (A9) (LRR O)
Histic Epipedon (A2)		Thin Dark St	urface (S9) (I	LRR S,	r, U)	2 cm l	Muck (A10) (LRR S)
Black Histic (A3)		Loamy Much	ty Mineral (F	1) (LRR	O)	Reduc	ed Vertic (F18) (outside MLRA 150
Hydrogen Sulfide (A4)		Loamy Gley	ed Matrix (F2	2)			nont Floodplain Soils (F19) (LRR P, S
Stratified Layers (A5)		Depleted Ma					alous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P,	T, U)	_	Surface (F6)				RA 153B)
5 cm Mucky Mineral (A7) (LR	R P, T, U)		irk Surface (f				arent Material (TF2)
Muck Presence (A8) (LRR U)		essions (F8)				Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)		Marl (F10) (Other	(Explain in Remarks)
🗶 Depleted Below Dark Surface	e (A11)		chric (F11) (N		•	•	
Thick Dark Surface (A12)			nese Masses				cators of hydrophytic vegetation and
Coast Prairie Redox (A16) (N			ace (F13) (L		, บ)		etland hydrology must be present,
Sandy Mucky Mineral (S1) (L	.RR O, S)	_	: (F17) (MLR	,			less disturbed or problematic.
Sandy Gleyed Matrix (S4)		_	ertic (F18) (M				
Sandy Redox (S5)			loodplain Soi				
Stripped Matrix (S6)		Anomalous	Bright Loamy	y Soils (F20) (MLF	RA 149A, 153	C, 153D)
Dark Surface (S7) (LRR P, S							
Restrictive Layer (if observed):	•						
Туре:							
Depth (inches):						Hydric So	il Present? Yes 🔽 No
Remarks:							
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Wetland data point wcmp009_w facing southeast.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region: city/County: Cumberland Project/Site: ACP State: NC Sampling Point: Wemp 009. Applicant/Owner: Dominion Investigator(s): EST (L Roper R Scharf) Section, Township, Range: ________ Landform (hillslope, terrace, etc.): draina ale Local relief (concave, convex, none): Covave Slope (%): 0 Lat: 35, 20103 Long: -78, 678 15 Subregion (LRR or MLRA): _L_L_L Soil Map Unit Name: Wagram loany sand, 0-6% slopes 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 3 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: **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) ___ Surface Soil Cracks (86) Primary Indicators (minimum of one is required; check all that apply) ___ Sparsely Vegetated Concave Surface (B8) ___ Aquatic Fauna (B13) Surface Water (A1) ___ Drainage Patterns (B10) ___ High Water Table (A2) Marl Deposits (B15) (LRR U) ___ Moss Trim Lines (B16) _ Saturation (A3) ___ Hydrogen Sulfide Odor (C1) ___ Dry-Season Water Table (C2) Oxidized Rhizospheres along Living Roots (C3) ___ Water Marks (B1) ___ Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) _ Geomorphic Position (D2) _ Algal Mat or Crust (B4) Thin Muck Surface (C7) ___ Other (Explain in Remarks) Iron Deposits (B5) Shallow Aquitard (D3) ___ FAC-Neutral Test (D5) ___ Inundation Visible on Aerial Imagery (B7) __ Sphagnum moss (D8) (LRR T, U) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Water Table Present? Depth (inches): Wetland Hydrology Present? Yes ... Saturation Present? (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

,	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 × 30 ft)		Species?		
1. Liriodendron tolipitera		1	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
	منقنعي		FAC	ITTAL A C OBL, PACVI, OF PAC.
2. Pinus taeda			TAC	Total Number of Dominant
3				Species Across All Strata:(B)
4				
				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	. ——			
8	_			Total % Cover of:Multiply by:
	40	= Total Co	Ver	OBL species x 1 =
50% of total cover: 2				FACW species x 2 =
	20% 0	total cover	r. <u> </u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30 x 30 Ft)		C)		<u> </u>
1. Liviobendron tulinitera	15	7	FACU	FACU species x 4 =
2. Acer abruma	سح.۱	У	FAC	UPL species x 5 =
2. 1100 OF 100 O	72.5	- 4 -	PAC	Column Totals: (A) (B)
3. Ligostrum sinense				
4. Ilex opaca	<u> </u>		PAC	Prevalence Index = B/A =
5.				Hydrophytic Vegetation indicators:
				1 - 1
6				Rapid Test for Hydrophytic Vegetation
7		. ——		✓2 - Dominance Test is >50%
8	-			3 - Prevalence Index is ≤3.01
	LOO.	= Total Co	wer	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 30				Froblemade riydrophylic Vegetalion (Explain)
30% of total cover. 20	2070 (or total cove	, <u> </u>	
Herb Stretum (Plot size: 30 x 30 ft)				Indicators of hydric soil and wetland hydrology must
1. hone present				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
1				1
3.				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				181
•				 Woody vine – All woody vines greater than 3.28 ft in height.
11				- Height.
12				-
		_ = Total C	over	
50% of total cover:	20%	of total cov	er:	_ [
Woody Vine Stratum (Plot size: 30 x 30 Pf.)				_
1 - 1 - 1	15	7	FAC	,
1. Smilax rotunditolia				-
2				_
3				_
1				_
*-				-
5				- Hydrophytic
	245	= Total (Cover	Vegetation
50% of total cover:	15 20%	of total co	ver3	Present? Yes No
Remarks: (If observed, list morphological adaptations b				
Remarks. (ii opserved, list morphological adaptations b	CIUW).			
l control of the cont				

· · · · · · · · · · · · · · · · · · ·	to the deput.	lecare to account	OHE THE H	uicatoi t	r commi	the absence of	mulators.)
Depth Matrix			Features				ъ.
(inches) Color (moist)		Color (moist)	<u>"</u> "	Type ¹	Loc²	Texture	Remarks
D-10 1011111	100		 .			<u> 5L</u> _	
10-18 104K3/2	90 1	04R413	10	4	M	SL	
18-20-10485	100					4	
10 20 10 10					-		-
	· ·······	**					,
1						21 12 1	N. D I I - I - Adal de la la
¹ Type: C=Concentration, D=Dep					iins.		PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applic	able to all LK						or Problematic Hydric Soils ³ :
Histosol (A1)		Polyvalue Bel				· —	ick (A9) (LRR O)
Histic Epipedon (A2)		Thin Dark Sur		-			ick (A10) (LRR S)
Black Histic (A3)		Loamy Mucky	-		O)		d Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)		Loamy Gleye Depleted Mat		4)			nt Floodplain Soils (F19) (LRR P, S, T) ous Bright Loamy Soils (F20)
Stratified Layers (A5) Organic Bodies (A6) (LRR F	7 IN	Redox Dark 5		6)			A 153B)
5 cm Mucky Mineral (A7) (L		Depleted Dar		,		-	rent Material (TF2)
Muck Presence (A8) (LRR 1		Redox Depre					allow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	-,	Marl (F10) (L		,			Explain in Remarks)
Depleted Below Dark Surface	ce (A11)	Depleted Oct		(MLRA 1	51)		·
Thick Dark Surface (A12)	. ,	Iron-Mangan	ese Massi	es (F12)	LRR O, F	P, T) ³ Indica	ators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surfa	ice (F13) (LRR P, 1	', U)	wett	and hydrology must be present,
Sandy Mucky Mineral (S1)		Delta Ochric	(F17) (ML	.RA 151)		unle	ss disturbed or problematic.
Sandy Gleyed Matrix (S4)		Reduced Ver	rtic (F18) (MLRA 1	0A, 150E	3)	
Sandy Redox (S5)		Piedmont Flo	•			•	
Stripped Matrix (S6)		Anomalous E	Bright Loai	ny Soils	F20) (ML	.RA 149A, 153C,	153D)
Dark Surface (S7) (LRR P,							
Restrictive Layer (if observed):					1	
Туре:							× /
Type:		_				Hydric Soil	Present? Yes <u>X</u> No
•		- 				Hydric Soil	Present? Yes X No
Depth (inches):		-				Hydric Soil	Present? Yes X No
Depth (inches):		- -				Hydric Soil	Present? Yes X No
Depth (inches):						Hydric Soil	Present? Yes X No
Depth (inches):		-				Hydric Soil	Present? Yes X No
Depth (inches):						Hydric Soil	Present? Yes X No
Depth (inches):			<u></u>			Hydric Soil	Present? Yes X No
Depth (inches):			<u></u>			Hydric Soil	Present? Yes <u>X</u> No
Depth (inches):						Hydric Soil	Present? Yes <u>X</u> No
Depth (inches):						Hydric Soil	Present? Yes <u>X</u> No
Depth (inches):		,				Hydric Soil	Present? Yes <u>X</u> No
Depth (inches):		<u> </u>				Hydric Soil	Present? Yes <u>X</u> No
Depth (inches):		<u> </u>				Hydric Soil	Present? Yes <u>X</u> No
Depth (inches):		<u> </u>				Hydric Soil	Present? Yes <u>X</u> No
Depth (inches):		,				Hydric Soil	Present? Yes <u>X</u> No
Depth (inches):						Hydric Soil	Present? Yes X No
Depth (inches):						Hydric Soil	Present? Yes X No
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Depth (inches):						Hydric Soil	Present? Yes X No
Depth (inches):						Hydric Soil	Present? Yes X No
Depth (inches):						Hydric Soil	Present? Yes X No No
Depth (inches):						Hydric Soil	Present? Yes X No



Upland data point wcmp009_u facing northwest.

Project/Site: ACP	City/County: Cumberland sampling Date: 9/10/14
Applicant/Owner: Powinion	State: WC Sampling Point: Wcmp 010 f.
Investigator(s): EST (Lhoper, & Scharf)	Section, Township, Range: NA
	Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRR P Lat: 35.	19534 Long: -78, 682011 Datum: WGS8
Soil Map Unit Name: Johnston Loun	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Is the Sampled Area within a Wetland? Yes No
	·
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2) High Water Table (A2) Arr Deposits (B1) Hydrogen Sulfide	
	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	· · · · · · · · · · · · · · · · · · ·
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surfact ☐ Iron Deposits (B5) ☐ Other (Explain in	
☐ Iron Deposits (B5) ☐ Other (Explain in Inundation Visible on Aerial Imagery (B7)	EAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	. 110
Surface Water Present? Yes NoDepth (inche	\ a \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Water Table Present? Yes No Depth (inche	
Saturation Present? Yes No Depth (inche (includes capillary fringe)	ss): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Remarks:	
	·
· ·	
	·

	About a Province of Acid	T B
Tree Stratum (Plot size: 30 x 30 f+.)	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:	% Cover Species? Status	Number of Dominant Species
1. Acer rubrum	15 Y FAC	That Are OBL, FACW, or FAC: (A)
2	•	
		Total Number of Dominant
3		. Species Across All Strata: (B)
4		
		Percent of Dominant Species
5	· 	That Are OBL, FACW, or FAC:
6		<u> </u>
		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		
	\5 _ = Total Cover	OBL species x 1 =
-		FACW species x 2 =
	20% of total cover: 3	
Sapling/Shrub Stratum (Plot size: 30 x 30.f+)		FAC species x 3 =
Oaphingtoniab Ottatam (Floresiae)	15 Y FACW	FACU species x 4 =
1. Vaccinium coryhosum		
2. Queras miara	10 Y FAC	UPL species x 5 =
()		Column Totals: (A) (B)
3. <u>U</u>		•
4	<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 ≤3.0 ¹
	25 = Total Cover	1 =
10	- Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 14	<u>・ 乞</u> 20% of total cover: 乞 _	_
Herb Stratum (Plot size: 30 x 30 ft)		1
Tiero Stratum (Flot Size.	20 Y OBL	Indicators of hydric soil and wetland hydrology must
1. Woodwardia areolata	LO J OBL	be present, unless disturbed or problematic.
2 Microstegium viminerum	15 Y FAC	Definitions of Four Vegetation Strata:
3		
13.		
·		↑ Tree – Woody plants, eycluding vines, 3 in, (7.6 cm) or
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DRH) regardless of
4		more in diameter at breast height (DBH), regardless of
4. 5.		more in diameter at breast height (DBH), regardless of height.
4. 5. 6.		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
4. 5.		more in diameter at breast height (DBH), regardless of height.
4. 5. 6. 7.		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
4. 5. 6. 7. 8.		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
4		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
4		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
4		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
4		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
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4	= Total Cover	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4		more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4	= Total Cover	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4	= Total Cover	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4	= Total Cover	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: Woody Vine Stratum (Plot size: 30 × 30 Ct) 1. None present	= Total Cover	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: Woody Vine Stratum (Plot size: 30 × 30 Ft) 1. None present 2.	= Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: Woody Vine Stratum (Plot size: 30 × 30 Ct) 1. None present	= Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
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4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: Woody Vine Stratum (Plot size: 30 × 30 ft) 1. None present 2. 3. 4.	= Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
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4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: Woody Vine Stratum (Plot size: 30 × 30 ft) 1. None present 2. 3. 4.	= Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4. 5. 6. 7. 8. 9. 10. 11. 12. 50% of total cover: Woody Vine Stratum (Plot size: 30 × 30 ft) 1. None present 2. 3. 4. 5.	= Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
4. 5. 6. 7. 8. 9. 10. 11. 12. Woody Vine Stratum (Plot size: 30 × 30 Ft) 1. NONE present 2. 3. 4. 5.	= Total Cover 20% of total cover: = Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
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4. 5. 6. 7. 8. 9. 10. 11. 12. Woody Vine Stratum (Plot size: 30 × 30 Ft) 1. NONE present 2. 3. 4. 5.	= Total Cover 20% of total cover: = Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4. 5. 6. 7. 8. 9. 10. 11. 12. Woody Vine Stratum (Plot size: 30 × 30 Ft) 1. NONE present 2. 3. 4. 5.	= Total Cover 20% of total cover: = Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
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4. 5. 6. 7. 8. 9. 10. 11. 12. Woody Vine Stratum (Plot size: 30 × 30 Ft) 1. NONE present 2. 3. 4. 5.	= Total Cover 20% of total cover: = Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
4. 5. 6. 7. 8. 9. 10. 11. 12. Woody Vine Stratum (Plot size: 30 × 30 Ft) 1. NONE present 2. 3. 4. 5.	= Total Cover 20% of total cover: = Total Cover 20% of total cover:	more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
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Profile Description: (Describe to the dept	h needed to docur	nent the inc	dicator o	or confirm	the absence	of indicators.)	
Depth <u>Matrix</u>		x Features					
(inches) Color (moist) %	Color (moist)	. <u> </u>	Type ¹	_Loc ² _	Texture	Remarks	
0-8 104R2/1 100						muck	
18-19 104R5/2 90	104231	10	\mathcal{L}	M			
19-20 104 24/3 100	, , , , , , , , , , , , , , , , , , , ,				SCL		
							
		- 					
¹ Type: C=Concentration, D=Depletion, RM=	Reduced Matrix Ms	S=Masked S	Sand Gra	ins.	2 ocation:	PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to all I						for Problematic Hydric Soils ³ :	
Histosol (A1)	Polyvalue Be		•	RR S. T. L		fuck (A9) (LRR O)	
Histic Epipedon (A2)	Thin Dark Su					luck (A10) (LRR S)	
Black Histic (A3)	Loamy Muck	y Mineral (F	1) (LRR	O)	☐ Reduc	ed Vertic (F18) (outside MLRA 1	50A,B)
Hydrogen Sulfide (A4)	Loamy Gleye	•	2)			ont Floodplain Soils (F19) (LRR P	, S, T)
Stratified Layers (A5)	Depleted Ma					lous Bright Loamy Soils (F20)	
Organic Bodies (A6) (LRR P, T, U)	Redox Dark		-	•		RA 153B)	
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da Redox Depre	•	•			arent Material (TF2) hallow Dark Surface (TF12)	
Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T)	Marl (F10) (I		'			(Explain in Remarks)	
Depleted Below Dark Surface (A11)	Depleted Oc		VILRA 1	51)		(Explain in Fortierio)	ì
Thick Dark Surface (A12)	Iron-Mangan				T) ³ Indic	ators of hydrophytic vegetation ar	nd
Coast Prairie Redox (A16) (MLRA 150A) 🔲 Umbric Surfa	ace (F13) (L	RR P, T	, U)	wet	land hydrology must be present,	
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric					ess disturbed or problematic.	
Sandy Gleyed Matrix (S4)	Reduced Ve						
Sandy Redox (S5)	Piedmont Fig					4500)	
Stripped Matrix (S6)	Anomalous i	Bright Loam	y Soils (-20) (MLR	A 149A, 153C	, 1530)	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):							
Туре:						/	
Depth (inches):					Hydric Soil	Present? Yes No _	
Remarks:					1.3,2		
Nemarks.							
·							
						•	



Wetland data point wcmp010f_w facing southwest.

Project/Site: ACP	City/Coun	nty: Cumbe	rland:	Sampling Date: 91	10/14
Applicant/Owner: Don in ion Investigator(s): EST (L. Koper, R. Sch Landform (hillslope, terrace, etc.): Annuage		s	State: NC	Sampling Point: WC	mp 010-
Investigator(s): EST & Koper, R-Sch	Section.	Township, Range:	NA		•
Landform (hillslope, terrace, etc.):	Local relie	ef (concave, convex, r	none): COM	NVC Slope (%	1: 0-4
Subregion (LRR or MLRA): L PP 0 L	35.195	43 Long: <u>-</u>	78.6819	S Datum:	(1)659
		Long.			
Soil Map Unit Name: Exam loam, 0-2%		<i></i>	NWI classifica		
Are climatic / hydrologic conditions on the site typical for this					
Are Vegetation, Soil, or Hydrology s			Circumstances" pr	esent? Yes	No
Are Vegetation, Soil, or Hydrology r	naturally problematic?	? (If needed, e	xplain any answers	s in Remarks.)	
SUMMARY OF FINDINGS - Attach site map	showing sampl	ing point locatio	ns, transects,	important featu	res, etc.
Hydrophytic Vegetation Present? YesN					
Hydrophytic Vegetation Present? Yes N Hydric Soil Present? Yes N	lo III	the Sampled Area		/	
Wetland Hydrology Present? Yes N		ithin a Wetland?	Yes	No <u></u>	
Remarks:					
				,	
·			ı		
			, , , , , , , , , , , , , , , , , , ,		
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicat	ors (minimum of two	required)
Primary Indicators (minimum of one is required; check all	that apply)	·	Surface Soil C	Cracks (B6)	
Surface Water (A1)	Fauna (B13)		Sparsely Veg	etated Concave Surf	ace (B8)
1 	eposits (B15) (LRR U	·	☐ Drainage Patt		
	en Sulfide Odor (C1)		Moss Trim Lir	, ,	
	d Rhizospheres alon			Vater Table (C2)	
	ce of Reduced Iron (6 Iron Reduction in Til	·	Crayfish Burro	ows (Co) sible on Aerial Image	rv (C9)
 	uck Surface (C7)	ieu dolla (CO)	Geomorphic I		., (03)
	Explain in Remarks)		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 De	· · · · · · ·	<u>18-</u>			
Water Table Present? Yes NoDe		20			
	epth (inches):	Wetland H	lydrology Presen	t? Yes N	01/
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previo	ous inspections), if ava	ilable:		
	•				
Remarks:					
		~			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30 P+)	% Cover			
		<u>Species</u>		Number of Dominant Species That Are OBL FACW or FAC: (A)
1. Pinus taeda	15		FAC	That Are OBL, FACW, or FAC: (A)
2. Quercus alba	15	Y	FACU	
3. Oxydendron a horeym	10	Ý	FACU	Total Number of Dominant
3. AXADELIAN OF ETIM	<u> </u>	$-\!$	THEW	Species Across All Strata: (B)
4				Descent of Deminent Charles
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8.				Total % Cover of: Multiply by:
0	145			OBL species x 1 =
ء ۾	, 40 :	= Total Co	ver 😞	
50% of total cover: 20	20% of	total cove	r: <u>8</u>	
Sapling/Shrub Stratum (Plot size: 30 x 30 ft.)				FAC species 35 x3 = 105
		M	FACU	FACU species 55 x4 = 220
1. Oxyden from arboreum	<u> </u>	-,-		
2. Quercus alba	10	y	FACU	OFL species xo
3.				Column Totals: 120 (A) 385 (B)
				1
4				Prevalence Index = B/A = 3,21
5				
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				l =
·	7/	T		3 - Prevalence Index is ≤3.0¹
		= Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:\C	20% of	total cove	r:	
Herb Stratum (Plot size: 30 x 30 Ct)				1
	اسم ا	N	FACW	Indicators of hydric soil and wetland hydrology must
1. Clethra alnitolia	10			be present, unless disturbed or problematic.
2. Pteridium aguilinum	10	Ŋ	FACU	Definitions of Four Vegetation Strata:
3. Leurothoe fattanesiana	20	Ţ	FACW	
3. FEOLD THUE THE TONK STATION			- 11000	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
				x
6				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				1 ' '
7				
8				Herb – All herbaceous (non-woody) plants, regardless
				1
8 9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				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
8 9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				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
8				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
8	<u>40</u>	= Total C	over	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
8	<u>40</u>		over	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
8	<u>40</u>	= Total C	over	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
89	<u>40</u> 20% of	= Total C	over	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
8	<u>40</u>	= Total C	over	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
89	<u>40</u> 20% of	= Total C	over	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
8	<u>40</u> 20% of	= Total C	over	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
8	<u>40</u> 20% of	= Total C	over	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
8	<u>40</u> 20% of	= Total C	over	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
8	<u>40</u> 20% of	= Total C	over	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.
8	10 10	= Total Co	Over 8 PAC PAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
8	4D 20% of 10 10	= Total Cover	PAC FAC	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.
8	4D 20% of 10 10	= Total Co	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	20% of 100 100 20% of 2	= Total Cover	PAC FAC	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

Profile Desc	ription: (Describe t	o the depti	needed to docur	nent the i	ndicator	or confirm	the absence of in	dicators.)
Depth	Matrix		Redo	x Features	S			
(inches)	Color (moist)	% -	Color (moist)	%	Type	Loc²	Texture	Remarks
0-1	TOYP 2/1	100	. 40 11				<u> </u>	<u> </u>
1-14	104/25/3	70	10YR4/1	70			SCL	
			1018210	10			<u> </u>	· · · · · · · · · · · · · · · · · · ·
14-20	107246	<u>60</u>	10/27/1	<u>40</u>			<u> </u>	
								·
¹Tvpe: C=C	oncentration, D=Depl	etion, RM=I	Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=	Pore Lining, M=Matrix.
	Indicators: (Applica							Problematic Hydric Soils ³ :
☐ Histosol	• •	•	Polyvalue Be					(A9) (LRR O)
	oipedon (A2)		Thin Dark Su					(A10) (LRR S)
_	istic (A3) en Sulfide (A4)		Loamy Muck			(0)		ertic (F18) (outside MLRA 150A, Toodplain Soils (F19) (LRR P, S,
	d Layers (A5)		Depleted Ma		· -/			Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P.		Redox Dark	•	•		(MLRA 1	53B)
	ucky Mineral (A7) (LF		Depleted Da					: Material (TF2) ow Dark Surface (TF12)
	resence (A8) (LRR U uck (A9) (LRR P, T)	,	Redox Depre	•	0)			lain in Remarks)
	d Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)	,,	,
_	ark Surface (A12)		Iron-Mangar					s of hydrophytic vegetation and
	rairie Redox (A16) (M				•	', υ)		hydrology must be present, listurbed or problematic.
	Mucky Mineral (S1) (L Sleyed Matrix (S4)	-RR (), S)	Delta Ochric Reduced Ve			60A, 150B)	unless c	ilsturbed or problematic.
	Redox (S5)		Piedmont Fl				9 A)	
	d Matrix (S6)		Anomalous I	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 153	BD)
	ırface (S7) (LRR P, S						Т	
_	Layer (if observed):							
Type:	iches):						Hydric Soil Pres	sent? Yes No
Remarks:							17,941,10 00 1 10.	
remains.								•
	•							
ĺ								
								•
	•							
			•					
1								
	•							
	•							



Upland data point wcmp010_u facing northeast.

Project/Site: ACP	city/county Cumberland Sampling Date: 91014
Applicant/Owner: Downing my	
and a second of the second of	Section, Township, Range: NOTE
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): NDNL Slope (%): D-Y
Landorm (missope, terrace, etc.).	5,19335 Long: -78.68519 Datum: WGS 84
	19 Car
Soil Map Unit Name: Nahunta loam	
Are climatic / hydrologic conditions on the site typical for this time of	
Are Vegetation, Soil, or Hydrology significan	ntly 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 showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	— Is the Sampled Area
Hydric Soil Present? YesNo	
Wetland Hydrology Present? Yes No	
Remarks:	
	in the second se
	· ·
HANDOLOGA	
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that app	
☐ Surface Water (A1) ☐ Aquatic Fauna	
High Water Table (A2) High Water Table (A2) Mari Deposits (I	
Saturation (A3) Hydrogen Sulfice	
	spheres along Living Roots (C3)
	duced Iron (C4)
Drift Deposits (B3)	duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
☐ Iron Deposits (B5) ☐ Other (Explain i	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (B9) Field Observations:	Spriagrium moss (Db) (LRR 1, 0)
Surface Water Present? Yes No Depth (incl	nes). NA
Water Table Present? Yes No Depth (incl	
Saturation Present? Yes No Depth (incl	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pl	notos, previous inspections), if available:
Remarks:	
•	
· · ·	
,	
,	
"_	,

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 × 30 ft.)		Species?		
1. Liviodendron tulipifera		7	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
Chrose Cd	10			THAT ARE OBL, FACEV, OF FAC(A)
2. Her rubnin			FAC	Total Number of Dominant
3. Pinus tarda	<u></u>		MAC	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:
9	24			OBL species x 1 =
· .	<u>, 30</u>	= Total Co	ver	FACW species x 2 =
50% of total cover: 15	20% o	f total cove	r:_ _Q	l L
Sapling/Shrub Stratum (Plot size: 30 x 30 C+.)				FAC species x 3 =
1. Fagos grandifolia	10	7	FACU	FACU species x 4 =
n. O strain of the				UPL species x 5 =
2. Arer rubrum	. <u> </u>		FHC	
3. Pinus taeda	15	<u> </u>	PAC	Column Totals: (A) (B)
4	**************************************			D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	-			Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
1				
8	110			3 - Prevalence Index is ≤3.0 ³
		= Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 2	⊃ _20% o	f total cove	r: 	
Herb Stratum (Plot size: 30 x 30 ft)				Alaskana af lavelata a sit and souther different months
1. Woodwardin areolata	سسا	V	mey.	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		-		
2				Definitions of Four Vegetation Strata:
3				To a Mile of colored and colored to the CT Complete
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
4				height.
5	. ——			Height.
6		<u> </u>		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				Minedu vine All woods vince greater than 2.29 ft in
11		•		Woody vine - All woody vines greater than 3.28 ft in height.
				neight.
12			- 	
	15			
	<u> </u>	= Fotal Co	ver	
50% of total cover: 71		= Total Co		
50% of total cover: 71				
Woody Vine Stratum (Plot size: 30 x 30 ft.)				
50% of total cover: 71 Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. None present				
Woody Vine Stratum (Plot size: 30 x 30 ft.)				
Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. None present 2	5 20% c			
Woody Vine Stratum 1. None present	5 20% c			
Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. None present 2	5 20% c			
Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. None present 2	5 20% c			Hydrophytic
Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. NONE present 2. 3. 4.	5 20% c	of total cove	3 	Hydrophytic Vegetation
Woody Vine Stratum	5 20% c	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Hydrophytic Vegetation Present? Yes No
Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. NONE present 2. 3. 4.	5 20% c	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation
Woody Vine Stratum	20% 0	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation
Woody Vine Stratum	20% 0	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation
Woody Vine Stratum	20% 0	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation
Woody Vine Stratum	20% 0	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation
Woody Vine Stratum	20% 0	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation
Woody Vine Stratum	20% 0	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation
Woody Vine Stratum	20% 0	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation
Woody Vine Stratum	20% 0	of total cove	20. 20. 20. 20. 20. 20. 20. 20. 20. 20.	Vegetation

Profile Desc	ription: (Describe	to the dept	h needed to docur	nent the i	ndicator	or confirm	the absence of	indicators.)	;
Depth	Matrix			x Features		. , ,			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Remark	<u>s</u>
0-4	10 1 R 2/1	100	- 140 111				<u> </u>		
9-18	10 YR 5/1	<u>95</u>	1046 1/3	<u> </u>	_4_	<u>M</u>	_ لـاککـ		
			•						
-									
				· ——					
									
									_
17			Dadwaad Makin Mi	. ————————————————————————————————————	Cond Co		2l postion. Di	-Dara Linina M-M	-4-2
			Reduced Matrix, MS LRRs, unless other			ams.		=Pore Lining, M=M Problematic Hydr	
l	•	able to all				DD C T !!		-	ic dons .
Histosol	• •		Polyvalue Be					k (A9) (LRR O)	
 	oipedon (A2)		Thin Dark Su Loamy Muck		•	-	77	k (A10) (LRR S) Vertic (F18) (outsic	IA MI DA 150A D)
Black Hi	en Sulfide (A4)		Loamy Gleye			(0)	7 7	Floodplain Soils (F	-
	d Layers (A5)		Depleted Ma		, 2)			ıs Bright Loamy Soi	
1 7	Bodies (A6) (LRR F	2. T. 11)	Redox Dark		6)		(MLRA		13 (1 20)
	icky Mineral (A7) (L	-	Depleted Da	•	•		1 1 '	nt Material (TF2)	
	esence (A8) (LRR I		Redox Depre		. ,			llow Dark Surface (1	F12)
1 cm Mu	ick (A9) (LRR P, T)	•	☐ Marl (F10) (L		•			plain in Remarks)	•
Depleted	d Below Dark Surfac	ce (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)			
Thick Da	ark Surface (A12)		🔲 Iron-Mangan	ese Mass	es (F12)	(LRR O, P,	T) ³ Indicate	rs of hydrophytic ve	getation and
Coast Pi	rairie Redox (A16) (MLRA 150A	🗘 🔲 Umbric Surfa	ice (F13) ((LRR P, 1	r, u)	wetlan	d hydrology must be	e present,
· —	lucky Mineral (S1) (LRR 0, 9)	☐ Delta Ochric					disturbed or proble	matic.
	Bleyed Matrix (S4)		Reduced Ve	, ,	•				
. —	Redox (S5)		Piedmont Flo	-			•		
ı =	I Matrix (S6)		Anomalous E	Bright Loai	my Soils	(F20) (MLR	A 149A, 153C, 1	53D)	
	rface (S7) (LRR P,		·						
	Layer (if observed)):							
Туре:									/
Depth (in	ches):		<u>-</u>				Hydric Soil Pr	esent? Yes 🔽	No
Remarks:			`	,′				_	Ï
1 100	and Quille	d h	ole, con	Mala	-	ann	0.6 6 .6	1 mint	1211
I www	NA JULIA	٠, تبر	المن ر د. د) ICAN	3		201	poor	'0
]								•	
•									
							•	•	



Wetland data point wcmp011f_w facing southwest.

Project/Site: ACP City.	County: Cumberland Sampling Date: 9/10/14
Applicant/Owner: Dominion	State: NC Sampling Point: WCMp6/1-
	tion, Township, Range: NA
Landform (hillslope, terrace, etc.): drawa Local	al relief (concave, convex, none): Concave_ Slope (%): 0-4
	1339 Long: -78, 68511 Datum: W6.566
	⊾ 1 /Λ.
Soil Map Unit Name: Nahunta loam	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly dist	urbed? Are "Normal Circumstances" present? Yes 1
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	is the Sampled Area
Hydric Soil Present? Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	<u> </u>
ronano.	
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	r (C1) Moss Trim Lines (B16)
_ 	s along Living Roots (C3)
Sediment Deposits (B2)	
☐ Drift Deposits (B3) ☐ Recent Iron Reduction	
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7 ☐ Iron Deposits (B5) ☐ Other (Explain in Remains)	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	NA
Water Table Present? Yes No Depth (inches):	770
Saturation Present? Yes NoDepth (inches): _	720 Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, page 1.5)	orevious inspections), if available:
2 Social of 1000 and 2 Sata (Stream gauge) membering work as has proved,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Remarks:	·
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	Al	Daminan	la dia dan	D-win-n Tt-modulet-
Tree Stratum (Plot size: 30 × 30 ft)	Absolute <u>% Cover</u>			Dominance Test worksheet:
	70 COVEI	Openies:	Status	Number of Dominant Species That Are OBL FACW or FAC
1. none present				That Are OBL, FACW, or FAC:(A)
2				T. D. Share Commission
				Total Number of Dominant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
				(15)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
		= Total Co		OBL species x 1 =
				FACW species x 2 =
50% of total cover:	20% of	total cove	r:	
Sapling/Shrub Stratum (Plot size: 30 x 30 ft)				FAC species x 3 =
1. Liquidambar styracifina	70	V	con	FACU species x 4 =
	_ 			UPL species x 5 =
2. Pinus taeda	<u> </u>		<u>rer</u>	· • · · · · · · · · · · · · · · · · · ·
3. Ilex opaca	\$	N	PHC	Column Totals: (A) (B)
l •	<i>.</i>			
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
	40	= Total Co	ver	1 -
	7 200		~~ <i>F</i> R	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 2	20% of	total cove	er:	
Herb Stratum (Plot size: 30 × 30 ++:)			4.4	¹ Indicators of hydric soil and wetland hydrology must
1. Clethra alnitolia	. \b	~	FACW	be present, unless disturbed or problematic.
1 -		- 4		
2				Definitions of Four Vegetation Strata:
3				To the declarate controller of the 17 Combon
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				trans in DBH and greater than o.20 it (1 m) tem
8				Herb - All herbaceous (non-woody) planfs, regardless
9				of size, and woody plants less than 3.28 ft tall.
				• • • • • • • • • • • • • • • • • • •
10			-	Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.				
12	- 10			·
ے		= Total C	_	
50% of total cover:	20% of	f total cove	er: <u> </u>	
Woody Vine Stratum (Plot size: 30 × 30 PL.)				
AND AND AND AND AND AND AND AND AND AND	١.	V	CDA	
1. VITTS VOTUMOLITOLIA	<u> 10</u>		Pric	
2. Smilax Rotunditolia	10	Y	FAC	· ·
3				
4				
5				15.4
0				Hydrophytic
		= Total C	over	Vegetation No. No.
50% of total cover:	20% o	f total cov	er:	Present? Yes V No No
Remarks: (If observed, list morphological adaptations be				
Tremains. (ii observed, list morphological adaptations be				
				•
·				
	•			

Profile Description: (Describe to th	ie aeptii needed to docu	ment the indicato	r or confirm	the absence of i	ndicators.)
Depth Matrix	Redo	ox Features	1 - 2	T	D. worden
	% Color (moist)	%Type ¹	Loc²	Texture	Remarks
 		10			
- 	30 104/24/2	<u> </u>	- 	<u>SL</u> _	
 	10 10/12 4/4	_ <u>10 </u>	- 10	<u> </u>	
15-20 104K712 -	10 101K5/8	<u> </u>	<u> </u>	<u> </u>	
<u> </u>					
•					
		 			
¹ Type: C=Concentration, D=Depletion	n RM=Reduced Matrix M	S=Masked Sand (rains.	² Location: PI	=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable					Problematic Hydric Soils ³ :
Histosol (A1)	☐ Polyvalue B	elow Surface (S8)	(LRR S, T, U) 🔲 1 cm Muci	(A9) (LRR O)
Histic Epipedon (A2)	Thin Dark S	urface (S9) (LRR S	s, T, U)		(A10) (LRR S)
Black Histic (A3)		ky Mineral (F1) (LF	(R O)		/ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	=/ :	ed Matrix (F2)			Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, L	Depleted Ma	Surface (F6)		(MLRA	s Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P	· =	ark Surface (F7)			nt Material (TF2)
Muck Presence (A8) (LRR U)		essions (F8)			ow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)		Other (Ex	olain in Remarks)
Depleted Below Dark Surface (A1		chric (F11) (MLRA		•	
Thick Dark Surface (A12)		nese Masses (F12)			rs of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLR. Sandy Mucky Mineral (S1) (LRR		ace (F13) (LRR P, c (F17) (MLRA 151			f hydrology must be present, disturbed or problematic.
Sandy Midcky Mineral (31) (ERK		ertic (F18) (MLRA		uness	distarbed of problematic.
Sandy Redox (S5)		loodplain Soils (F1		9A) .	
Stripped Matrix (S6)	Anomalous	Bright Loamy Soils	(F20) (MLR	A 149A, 153C, 15	3D)
Dock Curfoso (C7) / DD D C T	IN				
☐ Dark Surface (S7) (LRR P, S, T,	<u> </u>			,	
Restrictive Layer (if observed):	<u> </u>				
Restrictive Layer (if observed): Type:					
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No No
Restrictive Layer (if observed): Type:				Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No No
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):				Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			· •	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			·	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			· \$	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			\$	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			\$	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			· •	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			·	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			§	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			·	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			\$	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			·	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			·	Hydric Soil Pro	esent? Yes No No
Restrictive Layer (if observed): Type: Depth (inches):			·	Hydric Soil Pro	esent? Yes No No



Upland data point wcmp011_u facing northeast.

Project/Site: ACP	City/County: Combenand Sampling Date: 10/16/14
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmp017f-u
Investigator(s): EST (L Rober, P. Turnbull)	
	Local relief (concave, convex, none):Slope (%):
	19463 Long: -78.69917 Datum: W658
Soil Map Unit Name: Wagram loamy sand	
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No No No No No No No	Is the Sampled Área within a Wetland? Yes No
Remarks:	
heavy rain within 24 h	\rs
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B1	
High Water Table (A2) High Water Table (A2) Marl Deposits (B1	
Saturation (A3)	
	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
1 	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5) Under (Explain in I	<u> </u>
Inundation Visible on Aerial Imagery (B7)	FAG-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes NoDepth (inche	s): <u>NA</u>
	· • • • • • • • • • • • • • • • • • • •
Saturation Present? Yes No Depth (inche (includes capillary fringe)	s): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Remarks:	
•	ļ
	•
	·
·	

	Abaaluta	Daminont	Indicator	Daminanas Tast was liebasts
Tree Stratum (Plot size: 36 x 30 H)	Absolute	Dominant		Dominance Test worksheet:
Tiee Stratum (Flot size. 750 / 251)		Species?		Number of Dominant Species ————————————————————————————————————
1. Cyrrla racemifolia	<u>/5</u> _		THUN	That Are OBL, FACW, or FAC:(A)
2. Pinus tapda	10	Y	FHL	,
•				Total Number of Dominant
3	<u> </u>			Species Across All Strata: (B)
4				
				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8				1
	25	= Total Co	ver	OBL species x 1 =
50% of total cover: 12.	5 00% -		5	FACW species x 2 =
	<u></u> 20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30x3017)				
1. Liquidamber Styracitlua	5	V	FAC	FACU species x 4 =
	· ———	-	74.5	UPL species x 5 =
2. Thex opaca	<u> </u>		FITE	
3.		•		Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
				
6				1 Tapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
				1 1
8				3 - Prevalence Index is ≤3.0¹
	_10	= Total Co	ver _	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20% o	f total cove	. _	
	20%0	i total cove		
Herb Stratum (Plot size: 30 x36 P4)			A	¹ Indicators of hydric soil and wetland hydrology must
1. Clethra alnitolia	10	У	FACW	be present, unless disturbed or problematic.
	1	-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	COMM	
2. Avundinavia gigantea			FICH	Definitions of Four Vegetation Strata:
3				T. M
•				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
				A P C A A A A A A A A A
6	- 			Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7	<u> </u>			
				11 of All Frances (non-section)
8				Herb – All herbaceous (non-woody) plants, regardless
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9	<u>- — — — — — — — — — — — — — — — — — — —</u>	·		of size, and woody plants less than 3.28 ft tall.
8				of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9				of size, and woody plants less than 3.28 ft tall.
8				of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8				of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
8	75	= Total Co	over _	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
8	75 15 20% o	= Total Co	pover 5 FAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
8	75 15 20% o	= Total Co	pover 5 FAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
8	75 15 20% c	= Total Co	PAC	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

Profile Desc	cription: (Describe	to the dep	th need	led to docu	ment the	indicator	or confirm	the absence o	f indicators.)
Depth	Matrix	0/			ox Feature	<u>s</u>	. 2	- .	
(inches)	Color (moist)	<u> </u>	Cold	or (moist)	%	Type	_Loc ²	Texture .	Remarks
0-5	107/24/1	100						<u> </u>	
5-20	104/4/	95	10	1R 4/4	5	\mathcal{C}	PL	5	
				•					-
						-			
					_				
,									-
	oncentration, D=Dep						ains.		PL=Pore Lining, M=Matrix.
l	Indicators: (Applic	cable to all						_	or Problematic Hydric Soils ³ :
Histoso				Polyvalue B					uck (A9) (LRR O)
	pipedon (A2)		_	Thin Dark S			-		uck (A10) (LRR S)
_	istic (A3)			Loamy Muc	-		₹ 0)		d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		===	Loamy Gley		(F2)			nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	. .	_	Depleted Ma		-o.			ous Bright Loamy Soils (F20)
1 	: Bodies (A6) (LRR F ucky Mineral (A7) (L		=	Redox Dark		-			A 153B) rent Material (TF2)
	resence (A8) (LRR I	-	_	Depleted Da Redox Depa					nallow Dark Surface (TF12)
	uck (A9) (LRR P, T)		_	Marl (F10) (-	٠,			Explain in Remarks)
	d Below Dark Surface		_	Depleted O		(MLRA 1	51)		- Apidin in recinately
· = ·	ark Surface (A12)	JO (11.1)	_	Iron-Manga				T) ³ Indica	ators of hydrophytic vegetation and
_	rairie Redox (A16) (MLRA 150		Umbric Surl					and hydrology must be present,
	Mucky Mineral (S1) (Delta Ochri		-	-		ss disturbed or problematic.
	Gleyed Matrix (S4)	,.,		Reduced Ve					
Sandy I				Piedmont F					
Strippe	d Matrix (S6)			Anomalous	Bright Loa	my Soils	(F20) (MLR	A 149A, 153C,	153D)
Dark St	urface (S7) (LRRP,	S, T, U)							
Restrictive	Layer (if observed):							
Type:									
Depth (ir	nches):							Hydric Soil	Present? Yes No No
Remarks:									
!									
-									
					•				
						ı			
						•			
1									



Wetland data point wcmp017f_w facing southwest.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: ACP City/County: Comberland Sampling Date: 10 Applicant/Owner: Don Local relief (concave, convex, none): None Subregion (LRR or MLRA): LL % SECONIVI classification: Soil Map Unit Name: Wa aram Are climatic / hydrologic conditions on the site typical for this time of year? Yes __ (If no, explain in Remarks.) Are Vegetation __ _, Soil _____, or Hydrology _ significantly disturbed? Are "Normal Circumstances" present? Yes _ Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? Yes within a Wetland? Wetland Hydrology Present? Yes Remarks: Heavy rain in previous 24 hrs. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Aquatic Fauna (B13) Surface Water (A1) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Saturation Present? Depth (inches): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x30f-f	% Cover			
t O la la la la la la la la la la la la la	1	7	PACU	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
1. Quercus alba	<u> </u>	_4_		That Are OBL, FACW, or FAC:(A)
2. Pinus taeda	<u> 20</u>		HAC	Total Number of Dominant
3				Species Across All Strata: (B)
4				
			1	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	26	= Total Cov		OBL species x1 =
.4				FACW species x 2 =
50% of total cover: \7\	2 0% of	total cover	:	·
Sapling/Shrub Stratum (Plot size: 30 x 30P)				FAC species x 3 =
1. Acer rubrum	10	Y	CAN	FACU species x 4 =
1 1 1 2 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2	- 12 -	—⟨	CIAR	UPL species x 5 =
2. 1 ignaida m har styracitua	_ 		PITC	Column Totals: (A) (B)
3. Oxydendrum alrhoreum	_\$	<u> </u>	<u> FACU</u>	Column rotals (A) (B)
4		•		Prevalence Index = B/A =
1		•		
5				Hydrophytic Vegetation Indicators:
6	. ——			1 - Rapid Test for Hydrophytic Vegetation
7		w.		2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0¹
0	20	= Total Co		1
1,"				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover	r: <u>T</u>	
Herb Stratum (Plot size: 30 x30 f)				Indicators of hydric soil and wetland hydrology must
1. Clethra alnifolia	15	V	FACN	be present, unless disturbed or problematic.
		-	FACU	
2. Avandinaria giganten	<u> 10</u>		PITLIN	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
i e				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
I				of size, and woody plants less than 3.28 ft tall.
9				or size, and moody plants lead than onzo it am
10				Woody vine - All woody vines greater than 3.28 ft in
11				
				height.
l .	- —			, ,
12.	75	- Total Ca		, ,
12.	25	= Total Co	over _	, ,
12	25		over _	, ,
12.	25		over _	, ,
12	25		over _	, ,
12. 50% of total cover: 17 Woody Vine Stratum (Plot size: 30 x30 FT 1. Sm; lax (Otund; folia	<u>25</u> -15 20% o		over _	, ,
12	<u>25</u> -15 20% o		over _	, ,
12. 50% of total cover: 17 Woody Vine Stratum (Plot size: 30 x30 FT 1. Sm; lax (Otund; folia	<u>25</u> -15 20% o		over _	, ,
12	<u>25</u> -15 20% o		over _	, ,
12	<u>25</u> -15 20% o		over _	height.
12	25 15 20% o	f total cove	PAC	height. Hydrophytic
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	height. Hydrophytic
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation
12	25 15 20% o	f total cove	FAC	Hydrophytic Vegetation

Profile Description: (Describ	e to the depth	needed to docum	ent the ir	ndicator	or confirm	the absence of inc	dicators.)
Depth Matrix			<u>Features</u>		1	.	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	- % -	Color (moist)	<u> </u>	Type ¹	<u>Loc²</u>		Remarks
 		<u> </u>				<u>5L</u> _	
2-10 Z,545/3	_ _					<u> </u>	
10-18 2.54 5/2	<u> 100 </u>					_SL	
18-20 10/12/5/2	95	10412416	_5_	_C_	M	SL	

Trunck C-Consentation D-D		Deduced Metalic MC		Cand Ca		21	Donalisian McMalain
Type: C=Concentration, D=Del Hydric Soil Indicators: (Appl					iris.		Problematic Hydric Soils ³ :
Histosol (A1)	.oub.o to all a	Polyvalue Bel		-	RRS T. U		(A9) (LRR O)
Histic Epipedon (A2)		Thin Dark Sui					(A10) (LRR S)
Black Histic (A3)		Loamy Mucky					ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)		Loamy Gleye	•	-2)			loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	D T !!	Depleted Mat		ο.			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR 5 cm Mucky Mineral (A7) (-	Redox Dark S Depleted Dar	•	•		(MLRA 15	Material (TF2)
Muck Presence (A8) (LRR		Redox Depre					w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T		Marl (F10) (L		,	•		ain in Remarks)
Depleted Below Dark Surfa	ace (A11)	Depleted Och		•	-	_	
Thick Dark Surface (A12)	(14) D.A. 4E0.A)	Iron-Mangane					of hydrophytic vegetation and
Coast Prairie Redox (A16) Sandy Mucky Mineral (S1)	•	Umbric Surfa Delta Ochric			, U)		hydrology must be present, isturbed or problematic.
Sandy Gleyed Matrix (S4)	(LICIT 0, 0)	Reduced Ver		-	0A. 150B)	uniess u	istarbed of problematic.
Sandy Redox (S5)		Piedmont Flo				9A)	
Stripped Matrix (S6)		Anomalous B	Bright Loan	ny Soils (F20) (MLR.	A 149A, 153C, 153	D)
Dark Surface (S7) (LRR P							
Restrictive Layer (if observed	3):						<u>/</u>
Type:						Nedeta Call Base	No. No.
Depth (inches):						Hydric Soil Pres	sent? Yes NoV
Remarks:							
			•				
		•					
							!
•							
							•
	·						



Upland data point wcmp017_u facing northeast.

Project/Site: ACP	City/County: Comberland Sampling Date: 10/16/14
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmp 016f_W
Investigator(s): EST (L Roper, P. Turnbull)	Section, Township, Range: none
Landform (hillslope, terrace, etc.): dvarage	Local relief (concave, convex, none): None Slope (%): 0-4
Subregion (LRR or MLRA): LLL P Lat: 35	. 19039 Long: -78.702 68 Datum: WG584
Soil Map Unit Name: Torhunta and Ly	
Are climatic / hydrologic conditions on the site typical for this time of you	
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Is the Sampled Area within a Wetland? Yes No
heavy rain within 24	hrs.
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 (B	
High Water Table (A2) Saturation (A3) Hydrogen Sulfide	
	Odor (C1)
Sediment Deposits (B2) Presence of Redu	
	uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
☐ Iron Deposits (B5) ☐ Other (Explain in	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Water-Stained Leaves (B9)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:	Spriagrum moss (Do) (ERR 1, O)
Surface Water Present? Yes No Depth (inche	s): NA
Water Table Present? Yes No Depth (inche	
Saturation Present? Yes No Depth (inche	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	the province ineportant) if available:
Describe Recorded Data (stream gauge, monitoring well, aenai pro	nos, previous inspections), il avaliable.
Remarks:	
•	
,	
	·

	Absoluto	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30f)		Species?		Dominance Test worksneet:
		<u>Species r</u>	Status	Number of Dominant Species
1. Pinus taeda	<u> 20</u>	<u> </u>	17K	That Are OBL, FACW, or FAC: (A)
2. Liquidambor styraciflua	1 O	7	FA-	
				Total Number of Dominant
3				Species Across All Strata: (B)
4				
			I	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6			i	
				Prevalence Index worksheet:
7				Total O/ Course of Multiple hour
8				Total % Cover of: Multiply by:
	38	= Total Cov		OBL species x 1 =
	, 	- Total Cov	eı ,	FACW species x 2 =
50% of total cover; 15	20% of	total cover:	:6	
Saplino/Shrub Stratum (Plot size: 301304)				FAC species x 3 =
Account (Piot size. 70 kg)	10	V	rive !	FACU species x 4 =
1. Acer rubrum	70		m	· —
2. Oxydendrum arboreum	٦	У	PACU	UPL species x 5 =
			<u> </u>	Column Totals: (A) (B)
3				(-)
4				Dravelence Index - DIA -
				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
	1.3	= Total Cov	ier	l <u>—</u>
ŧ.				Problematic Hydrophytic Vegetation (Explain)
50% of total cover:	. <u>5.</u> 20% of	f total cover	: <u> </u>	
Herb Stratum (Plot size: 30 x 30 f)				14-4-4
(la /la /a	10	\ /	m-0/11	Indicators of hydric soil and wetland hydrology must
1. Clethra alnitolia	· 		FACH	be present, unless disturbed or problematic.
2. Vaccinium corumbosum	10	У	FACW	Definitions of Four Vegetation Strata:
				•
3.				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		-		, ,
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
				' '
10	- —			Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
14.	70			
	10	= Total Co	ver	
50% of total cover:	20% 0	f total cover	4	
	20,00	i total core	· 	
Woody Vine Stratum (Plot size: 30 x 30)				
1. none				
		-		
2			·	
3.				
	<u> </u>			İ
4				
5.				Hydrophytic
	D	= Total Co		Vegetation
		_= 1018160	VEI	Present? Yes No
50% of total cover:	20% c	of total cove	τ:	riesent: res NO
Remarks: (If observed, list morphological adaptations bel	ow)			
i Nemarks. (II observed, list morphological adaptations bei	Ovvj.			

Liouie Dead	uhtiour (nescrine r	to the dept	h needed to docu	ment the it	aicator	ot commun	the absence t	niulcators.)
Depth	Matrix			x Features			_	
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-3	2,543/1	100					<u>SL</u>	
3-10	2.5/5/2	<u>90</u>	104R5/6	(0	<u> </u>	<u>M</u> .	<u>SL</u>	
10-20	Z.5 Y5/1	90	104R516	10	<u> </u>	M	SL	
			•					
								
								
	· · · · · · · · · · · · · · · · · · ·			- —				
	oncentration, D=Depl					ains.		PL=Pore Lining, M=Matrix.
1	Indicators: (Applica	able to all I			•			for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be					uck (A9) (LRR O)
	oipedon (A2)		Thin Dark Si					uck (A10) (LRR S)
Black Hi			Loamy Muck			(0)		ed Vertic (F18) (outside MLRA 150A,B)
1 = ' '	en Sulfide (A4) d Layers (A5)		Loamy Gley Depleted Ma		-2)			ont Floodplain Soils (F19) (LRR P, S, T) lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,	т 10	Redox Dark		3)			A 153B)
1 = -	ucky Mineral (A7) (LR		=	•	•			rent Material (TF2)
_	esence (A8) (LRR U		Redox Depr					hallow Dark Surface (TF12)
_	ack (A9) (LRR P, T)	,	Marl (F10) (1		•			Explain in Remarks)
1 ===	d Below Dark Surface	e (A11)	Depleted Oc	-	MLRA 1	51)		V = V
 	ark Surface (A12)		Iron-Mangar				Γ) ³ Indica	ators of hydrophytic vegetation and
Coast P	rairie Redox (A16) (N	/ILRA 150A	🗘 🔲 Umbric Surf	ace (F13) (LRR P, T	', U)	weti	and hydrology must be present,
	/lucky Mineral (S1) (L	RR O, S)	Delta Ochrid		-		unle	ess disturbed or problematic.
1 =	Gleyed Matrix (S4)		Reduced Ve					
	Redox (S5)		Piedmont FI				•	
	Matrix (S6)			Bright Loar	ny Soils i	F20) (MLR/	A 149A, 153C,	, 153D)
	ırface (S7) (LRR P, S	i, I, U)						
	Lavar /if abaamiad\							
	Layer (if observed):						,,,	
Туре:		1						
Type: Depth (in	Layer (if observed):	1					Hydric Soil	Present? Yes No
Туре:		1				- 11. 11.	Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1		***************************************			Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No
Type: Depth (in		1					Hydric Soil	Present? Yes No



Wetland data point wcmp016f_w facing southwest.

WEILA	ND DETERMINATION DATA FOR	w – Atlantic and G	iuit Coastai Piain	Region
Project/Site: ACP	City/C	County: Comb	erland sa	ampling Date: 10/16/14
Applicant/Owner: Domit	inon.		State: NIC Sa	mpling Point: WCMP Olb-u
Investigator(s): EST (L	Roper, RTurnbull) Section	on, Township, Range: _	none	
Landform (hillslope, terrace, etc.)	: drainage Local	relief (concave, convex	, none): NDNC	Slope (%): <u>D-4</u>
Subregion (LRR or MLRA):	-229 Lat: 35,19	Long:	-78.7026	058 Datum: WGS
	unta and Lynn 1		4	A 1.7k
	ns on the site typical for this time of year? Y		- 450	
	, or Hydrology significantly distur		al Circumstances" pres	
	, or Hydrology naturally problems		explain any answers i	n Remarks.)
SUMMARY OF FINDINGS	S – Attach site map showing san	npling point locati	ions, transects, ir	mportant features, etc.
Hydrophytic Vegetation Present Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No	Is the Sampled Area within a Wetland?	Yes	No
HYDROLOGY				
Wetland Hydrology Indicator			Secondary Indicator	s (minimum of two required)
·	f one is required; check all that apply)		Surface Soil Cra	
Surface Water (A1)	Aquatic Fauna (B13)		Sparsely Veget	ated Concave Surface (B8)
High Water Table (A2)	☐ Marl Deposits (B15) (LR		Drainage Patter	ms (B10)
Saturation (A3)	Hydrogen Sulfide Odor (•	Moss Trim Line	' '
Water Marks (B1)	Oxidized Rhizospheres a		_	
Sediment Deposits (B2)	Presence of Reduced Iro	• •	Crayfish Burrov	· '
Drift Deposits (B3) Algal Mat or Crust (B4)	Recent Iron Reduction ir	• •	Geomorphic Po	ole on Aerial Imagery (C9)
Iron Deposits (B5)	Other (Explain in Remar		Shallow Aquitar	` '
Inundation Visible on Aeria		,,,,	FAC-Neutral Te	
Water-Stained Leaves (B9				ss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes NoDepth (inches):	NA		
Water Table Present?	Yes No Depth (inches):	>20		./
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):	Wetland	d Hydrology Present?	Yes No <u>V</u>
Describe Recorded Data (stream	am gauge, monitoring well, aerial photos, pr	evious inspections), if a	vailable:	
Remarks:				
Transition.				

	Alexaded	Demologrant	landing to a	B
Tree Stratum (Plot size: 36 x 30)		Dominant		Dominance Test worksheet:
		Species?		Number of Dominant Species 7
1. Pinus taeda	<u> 20 </u>	<u> </u>	FAC	That Are OBL, FACW, or FAC: (A)
2. Libridanha strauflua	し	Y	FAL	
				Total Number of Dominant Species Across All Strata: (B)
3/				Species Across All Strata: (B)
4				·
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8		<u> </u>		
	30	= Total Cov	or.	OBL species x 1 =
العيم (- Total Cov	E1 1	FACW species x 2 =
50% of total cover: 15	20% of	f total cover	<u> </u>	
Sapling/Shrub Stratum (Plot size: 30 x30(7)				FAC species x 3 =
Dapingromab Orlation (1 lot size.		7	500	FACU species x 4 =
1. Liquidambar strautiva			FIR	l · · · · · · · · · · · · · · · · · · ·
2. Mienos alla	ID	У	FACU	UPL species x 5 =
-0				Column Totals: (A) (B)
3				. ,
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				
I+				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	1.5	= Total Co	/OT	1
7				Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	<u>-></u> 20% o	f total cover	:	1
Herb Stratum (Plot size: 30 x306)				The disease of the date and an alternative designation of the date.
Mana Ira	_	7	SOLVINI	¹Indicators of hydric soil and wetland hydrology must
1. Magnotta virginiana	- 		PRW	be present, unless disturbed or problematic.
2. Clathra othifolia	ID	У	FACW	Definitions of Four Vegetation Strata:
3. Vaccinium comminarium	$\overline{}$	<u> </u>	CVLAW	1
3. VACCIMIAIN COVERNATION	ىب.	· - -	IFILW	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
V ₁				
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7 8				than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless
7. 8. 9.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7 8				than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25			than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7	25 15 20% o	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
7. 8. 9. 10. 11. 12. 50% of total cover: 17 Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. 5milax potunditolia 2. 3.	25 15 20% o	= Total Co		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height.
7. 8. 9. 10. 11. 12. 50% of total cover: 17 Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. 5milax potunditolia 2. 3.	25 15 20% o	= Total Co	ver r: 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine All woody vines greater than 3.28 ft in height.
7. 8. 9. 10. 11. 12. 50% of total cover: 17 Woody Vine Stratum (Plot size: 30 x 30 ft.) 1. 5milax potunditolia 2. 3.	25 15 20% o	= Total Co	ver r: 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7	25 25 20% c	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine All woody vines greater than 3.28 ft in height.
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
7.	25 15 20% 0 S 5 20% 0	= Total Co f total cove	ver 5	than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb — All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine — All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

	inpuon: (Describe	to the depth i	ieeaea to aocun	terit the indicator of commit t	he absence of indicators.)	
Depth	Matrix			r Features		
(inches)	Color (moist)		Color (moist)	<u>% Type¹ Loc²</u>	Texture Remarks	
<u>0-4</u>	2.5742	100				
4-10	254 5/3	<u> 100 _</u>			SL	
10-70	25154	100			SCL	
						
		• — —			·······	
		·				
¹Type: C=C	oncentration, D=Der	eletion, RM=Re	duced Matrix, MS	=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.	
	Indicators: (Applic				Indicators for Problematic Hydric Soils ³ :	
☐ Histosol	• • •			low Surface (S8) (LRR S, T, U)	r 1	
_	oipedon (A2)	1		rface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)	
·	istic (A3)	1		Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 19	50A.B)
_	en Sulfide (A4)	j	Loamy Gleye		Piedmont Floodplain Soils (F19) (LRR P	
	d Layers (A5)	Ī	Depleted Mat	` ,	Anomalous Bright Loamy Soils (F20)	, -, -,
	Bodies (A6) (LRR P	r, T, U)	Redox Dark		(MLRA 153B)	
	ıcky Mineral (A7) (LI			k Surface (F7)	Red Parent Material (TF2)	
	esence (A8) (LRR U	J)]	Redox Depre	ssions (F8)	Very Shallow Dark Surface (TF12)	
	uck (A9) (LRR P, T)]	Marl (F10) (L		Other (Explain in Remarks)	
	d Below Dark Surfac	e (A11)		nric (F11) (MLRA 151)		
_	ark Surface (A12)	,		ese Masses (F12) (LRR O, P, T		nd
	rairie Redox (A16) (I		_	ce (F13) (LRR P, T, U)	wetland hydrology must be present,	
	lucky Mineral (S1) (I	LRR O, S)	_	(F17) (MLRA 151)	unless disturbed or problematic.	
	Gleyed Matrix (S4)		_	tic (F18) (MLRA 150A, 150B)		
	Redox (S5)	-		odplain Soils (F19) (MLRA 149		
	Matrix (S6)	. T 11)	Anomalous E	right Loamy Soils (F20) (MLRA	149A, 153C, 153D)	
	rface (S7) (LRR P, S Layer (if observed)					
	Layer (ii observed)	•				
Type:						
Depth (in	ches):		-		Hydric Soil Present? Yes No _	<u> </u>
Remarks:				•		
1						
,						
,						
,						
,						



Upland data point wcmp016_u facing northeast.

Project/Site: HCP	City/County: <u>Comber and</u> Sampling Da	
Applicant/Owner Domin ion	State: NC Sampling Po	oint: wcmp015f_v
Investigator(s): EST (LAppen, R. Turn)	Section, Township, Range: None	
Landform (hillslope, terrace, etc.): Walnut	Local relief (concave, convex, none): NOV	Slope (%): <u>O-Y'/</u>
Subregion (LRR or MLRA): LLLP O Lat:	35.18819 Long: -78.70470	_Datum: <u>WG-525</u>
Soil Map Unit Name: Pains sandy loa	MVI classification:	PFO
Are climatic / hydrologic conditions on the site typical for this time	•	,
Are Vegetation, Soil, or Hydrology signifi	antly disturbed? Are "Normal Circumstances" present? Yes	sNo
Are Vegetation, Soil, or Hydrology natura		
SUMMARY OF FINDINGS – Attach site map sho	ving sampling point locations, transects, importar	nt features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Heavy Tain in previous 24 hours.	Is the Sampled Area within a Wetland? Yes No	
HYDROLOGY		
Wetland Hydrology Indicators:	Secondary Indicators (minimul	m of two required)
Primary Indicators (minimum of one is required; check all that a Surface Water (A1) Aquatic Faur		ave Surface (B8)
	(B15) (LRR U) Drainage Patterns (B10)	ave ourrace (EG)
	fide Odor (C1) Moss Trim Lines (B16)	
Water Marks (B1)	cospheres along Living Roots (C3) Dry-Season Water Table	(C2)
	Reduced Iron (C4)	
	teduction in Tilled Soils (C6)	
Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck S Other (Expla	ırface (C7) ☐ Geomorphic Position (D2) n in Remarks) ☐ Shallow Aquitard (D3)	,
Joundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)	
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LF	RR T, U)
Field Observations:	A I IA	
Surface Water Present? Yes No Depth (i	\ <u> </u>	.
Water Table Present? Yes No Depth (i	1 1	/
Saturation Present? Yes No Depth (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aeria		No
Cooling Notice But (chadin gauge, monitoring Non, acris	protos, providad inspessional, a distillusio.	
Remarks:		
	•	
-		<u> </u>

2 m (206)		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30x30+)		Species?		Number of Dominant Species
1. How runn		\overline{A}	CAY.	That Are OBL, FACW, or FAC: (A)
2 Liviodendron tolipitera	_5_	<u> </u>	FACU	Total Number of Dominant
3. Liquidanobur styracitua	\mathcal{O}	Ý	FAC	Species Across All Strata: (B)
4			-	(o)
· ·				Percent of Dominant Species That Are OBL, FACW, or FAC:
5				That Are OBL, FACW, or FAC: 6/9// (A/B)
6				Prevalence Index worksheet:
7				
8	. <u> </u>			Total % Cover of: Multiply by:
	25	= Total Co	ver .	OBL species x 1 =
50% of total cover: 12				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30x30f4)	<u> </u>	1 (0(0) 0010)		FAC species x 3 =
One C State (Flot size. 30 A 30 FF)	· =	N	ENT	FACU species x 4 =
1. Acer rubrum		-	Ch 4:3	UPL species x 5 =
2 Magnolia virginiana	10		FACW	Column Totals: (A) (B)
3				Column rotals(A)(b)
4				Prevalence Index = B/A =
5				
6.				Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	1 200			☐ 3 - Prevalence Index is ≤3.01
	712	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 1	<u>5</u> 20% o	f total cove	<u>د ک</u> :	
Herb Stratum (Plot size: 30 x 30 f)				Indicators of hydric soil and wetland hydrology must
1. Clethra alnifolia	10	M	PACW	be present, unless disturbed or problematic.
2. Hrundinavia gigantea	10	· —	PACW	Definitions of Four Vegetation Strata:
3. Osmundastrum cinnamomeum	1/2	-	FACW	bellillions of Four Vegetation Strata.
		· - , 		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10,		-		Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	_ 30	_= Total Co	ver	
50% of total cover:		- of total cove		
Woody Vine Stratum (Plot size: 30x306)		51 (Old) 0010	<u> </u>	
woody vine stratum (Plot size. SO ACC 179	1.75	M	CA	
1. Smilax rotunditalia	10	- —	1 17C	
2				
3				
4.				
5		_		
0	76	_ = Total Co		Hydrophytic Vegetation
				Present? Yes No
50% of total cover:	20%	of total cove	er: <u> </u>	
Remarks: (If observed, list morphological adaptations be	low).			
'				
·			÷	

Sampling Point: Wenp 615	F	
Sampling Point: WOMPIOTO	<i>•</i>	v

SOIL

Profile Desc	ription: (Describe	to the dept	h needed to docu	ment the	indicator	or confirm	m the absence of indicators.)
Depth	Matrix			x Feature			
(inches)	Color (moist)	%	Color (moist)		_Type ¹ _	Loc²	Texture Remarks
0-5	101K 21	100					<u>muckyloan</u>
5-14	101K31	<u> 109</u> .					<u> </u>
14-70	2574/2	70	2.5 45/2	30	D	M	5
-							
		·					
							
	oncentration, D=Dep					ains.	² Location: PL=Pore Lining, M=Matrix.
I -	Indicators: (Applic	able to all I			-	DD 0 T	Indicators for Problematic Hydric Soils ³ :
Histosol	(A1) pipedon (A2)		Polyvalue Be				U) 1 cm Muck (A9) (LRR O) 2 cm Muck (A10) (LRR S)
Black Hi			Loamy Muck				Reduced Vertic (F18) (outside MLRA 150A,B)
· =	n Sulfide (A4)		Loamy Gley			-,	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	l Layers (A5)		Depleted Ma	٠,			Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P		Redox Dark		•		(MLRA 153B)
	icky Mineral (A7) (LI esence (A8) (LRR U		Depleted Da Redox Depre				☐ Red Parent Material (TF2) ☐ Very Shallow Dark Surface (TF12)
	ick (A9) (LRR P, T)	''	Marl (F10) (I	-	~ <i>)</i>		Other (Explain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Oc		(MLRA 1	51)	
:=	ark Surface (A12)		- 🔲 Iron-Mangar				
: ==	rairie Redox (A16) (I					, U)	wetland hydrology must be present,
	lucky Mineral (S1) (l Bleyed Matrix (S4)	LKK 0, 5) .	Delta Ochric			.na 150B	unless disturbed or problematic.
	Redox (S5)		Piedmont FI				
	Matrix (S6)						RA 149A, 153C, 153D)
	rface (S7) (LRR P, S						
Restrictive I	Layer (if observed)	:	i		•		
Туре:			<u>. </u>				
	ches):						Hydric Soil Present? Yes No
Remarks:							-
	,						
İ	•						
	•						
			•				
	,						
L						<u>-</u> _	



Wetland data point wcmp015f_w facing southwest.

	: Comberland Sampling Date: 10/14
Applicant/Owner: Dominion	State: NC Sampling Point: WCmp015
Investigator(s): EST CLRoper, LTunion Section, To	
Landform (hillslope, terrace, etc.): Local relief	(concave, convex, none): NOVE Slope (%):
	33 Long: <u>-78,76440</u> Datum: WG56
Soil Map Unit Name: Koins Sandy 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	g point locations, transects, important features, etc
Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes No with	ne Sampled Area nin a Wetland? YesNo
heavy rain within 24 hrs.	
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) At all Page 45 (B45) (I BB II)	Sparsely Vegetated Concave Surface (B8)
☐ High Water Table (A2) ☐ Marl Deposits (B15) (LRR U) ☐ Saturation (A3) ☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)☐ Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along	
Sediment Deposits (B2) Presence of Reduced Iron (C4)	i i i i i i i i i i i i i i i i i i i
Drift Deposits (B3)	
Algal Mat or Crust (B4)	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) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches): NA	·
Water Table Present? Yes No Depth (inches): >Z (3
Saturation Present? Yes No Depth (inches): 8	Wetland Hydrology Present? Yes V No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	s inspections), if available:
Remarks:	<u> </u>

20, 20()	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x30+)		Species?	Status	Number of Dominant Species
1. Fagus grandifolia	10	<u> </u>	FALL	That Are OBL, FACW, or FAC: (A)
2. Over CUS alba		<u>N</u>	FACU	Total Number of Dominant
3. Liviadendron tulipitera	10	<u> </u>	FACU	Species Across All Strata: (B)
4. Prunus serotina	<u>_1D_</u>	7	FACU	Description of Description of Operation
5. Carra tomentoera	_5_	_N_	UPL	Percent of Dominant Species That Are OBL, FACW, or FAC: 44 (A/B)
6.	•		,	That we obe, The Tip (TD)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	38	= Total Co		OBL species x 1 =
50% of total cover: 1 9	20% 0	f total cover	7.6	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30x30 Pd)	2070 0	total cover		FAC species x3 =
1. Queus alba	£	✓	FACU	FACU species <u>43</u> x4= <u>172</u>
2. Acer cubrum		-		UPL species5 x5=25
	170	-	COCIN	Column Totals: 88 (A) 297 (B)
3. Magnolia Virginiana	· <u> </u>		THU.	0 275
				Prevalence Index = B/A = 3,373
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
	25	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 17	ه 20% ک ـه	f total cove	<u> </u>	
Herb Stratum (Plot size: 30 x304)				Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	<u> </u>	FACW.	be present, unless disturbed or problematic.
2. Quercus 'albau	5	Y	FACU	Definitions of Four Vegetation Strata:
				1
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
1				
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				litary of the Destruction grounds that to 120 ft (1 m) tall
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				or size, and woody plants less than 3.28 it fall.
10	-			Woody vine - All woody vines greater than 3.28 ft in
11	.	. 	·	height.
12				
_	<u> 15</u>	_= Total Co	ver	
50% of total cover:	5 20% (of total cove	r: <u> </u>	•
Woody Vine Stratum (Plot size: 30 X30 (*)			~ in ^	
1. Smilax rotunditolia	10		- FAC	`
2				
3				
4.	•		- '-	
5				Hydrophytic
	10	= Total Co	wer	Vegetation
50% of total cover:		of total cove		Present? Yes No
		JI IOIAI COVE	··- <u>-</u>	
Remarks: (If observed, list morphological adaptations be	iow).			
i				

Sampling Point: WcmpOl	5-1
Cumping Form.	_

SOIL

Profile Desc	ription: (Describe	to the depth	needed to document	the indicator	or confirm t	the absence of inc	dicators.)
Depth	Matrix		Redox Fe	atures			,
(inches)	Color (moist)	<u> </u>	Color (moist)	%Type ¹	<u>Loc²</u>	Texture	Remarks
<u>U-6</u>		100				<u> 5L</u>	
10-14	<u> </u>	100				<u> 5L</u>	
12-10	25/14	100				SL_	
			·····				
					 -		
			Reduced Matrix, MS=M		ins,		Pore Lining, M=Matrix.
	* * * *	able to all L	RRs, unless otherwis	•		· ·	roblematic Hydric Soils ³ :
Histosol	(A1) ipedon (A2)		Polyvalue Below Thin Dark Surface				(A9) (LRR O) (A10) (LRR S)
Black Hi			Loamy Mucky Mi		-		ertic (F18) (outside MLRA 150A,B)
🔲 Hydroge	n Sulfide (A4)		Loamy Gleyed M		•		loodplain Soils (F19) (LRR P, S, T)
	Layers (A5)		Depleted Matrix (•			Bright Loamy Soils (F20)
	Bodies (A6) (LRR P cky Mineral (A7) (LF		Redox Dark Surfa	• •		(MLRA 15	Material (TF2)
	esence (A8) (LRR U		Redox Depression				w Dark Surface (TF12)
1 cm Mu	ck (A9) (LRR P, T)		Marl (F10) (LRR	U) Ì			ain in Remarks)
	Below Dark Surfac	e (A11)	Depleted Ochric		-	. 3	
	ark Surface (A12) rairie Redox (A16) (f	MI RA 150A	Iron-Manganese Umbric Surface (of hydrophytic vegetation and hydrology must be present,
	lucky Mineral (S1) (I		Delta Ochric (F17		, •,		isturbed or problematic.
	Bleyed Matrix (S4)	•	Reduced Vertic (0A, 150B)		·
	Redox (S5)		Piedmont Floodp		-	-	5.
	Matrix (S6) rface (S7) (LRR P, \$	S T III	Anomalous Brigh	it Loamy Soils (-20) (MLRA	\ 149A, 153C, 153	(טו
	Layer (if observed)						
Type:							/
Depth (in	ches):					Hydric Soil Pres	sent? Yes No
Remarks:							
ļ							
	•						
[



Upland data point wcmp015_u facing northeast.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipel	ine	City/C	County: Cumberland		Sampling Date: 2/10/2015
Applicant/Owner: DOMINION				State: NC	Sampling Point: wcmc002f_w
Investigator(s): Team C		Secti	on, Township, Range: No	PLSS in this area	1
Landform (hillslope, terrace, etc.)					
Subregion (LRR or MLRA): P					
Soil Map Unit Name: Johnston Id	pam			NWI classific	ation: None
Are climatic / hydrologic condition	ns on the site typical	for this time of year? \	∕es ✓ No	 (If no, explain in R	emarks.)
Are Vegetation, Soil					
Are Vegetation, Soil					
					, important features, etc.
				<u>, </u>	, , , , , , , , , , , , , , , , , , ,
Hydrophytic Vegetation Present		No No	Is the Sampled Area		
Hydric Soil Present? Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:	163				
HYDROLOGY					
Wetland Hydrology Indicators					tors (minimum of two required)
Primary Indicators (minimum of	•			Surface Soil	
Surface Water (A1)		_ True Aquatic Plants (getated Concave Surface (B8)
High Water Table (A2)		_ Hydrogen Sulfide Od		Drainage Pa	
Saturation (A3)		Oxidized KnizospherPresence of Reduce	• , ,	Moss Trim Li	Water Table (C2)
Water Marks (B1) Sediment Deposits (B2)		Recent Iron Reduction		Crayfish Bur	
Drift Deposits (B3)		Thin Muck Surface (· ·	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Explain in Rei			tressed Plants (D1)
Iron Deposits (B5)			,		Position (D2)
Inundation Visible on Aeria	I Imagery (B7)			Shallow Aqu	
Water-Stained Leaves (B9)					aphic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:					
Surface Water Present?	Yes No	Depth (inches):			
Water Table Present?	Yes No	Depth (inches):			
	Yes No	Depth (inches):	0 Wetland H	lydrology Preser	nt? Yes <u>/</u> No
(includes capillary fringe) Describe Recorded Data (strea	m gauge monitoring	well aerial photos pre	evious inspections) if ava	ilable:	
Bosonibo Nocordou Bala (siroa	n gaage, memering	won, donar priotos, pre	oviodo inopoditorio), ii dva	nabio.	
Remarks:					
Wetland hydrology present. Cor	ditions at the data sign	te were wetter than nor	mal due to heavy rain.		

r Species? Yes Yes Yes Total Covof total cover: Yes No Total Covof total cover: Yes Yes	er 10 FACU FACW	Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A) Total Number of Dominant Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A) Prevalence Index worksheet:
Yes Total Cover: Yes No Total cover: Yes No Total cover:	er 10 FACU FACW	That Are OBL, FACW, or FAC:3
_ = Total Cover: Yes No _ = Total Cover:	er 10 FACU FACW	Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A) Prevalence Index worksheet: Multiply by: (A) OBL species 0 x 1 = 0 0 FACW species 10 x 2 = 20 0 FAC species 60 x 3 = 180 0 FACU species 70 x 4 = 280 0 UPL species 0 x 5 = 0 0 Column Totals: 140 (A) 480 (B) Prevalence Index = B/A = 3.42 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support)
Total Cover: Yes No Total Cover:	FACU FACW	Species Across All Strata: 4 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A) Prevalence Index worksheet: Multiply by: (A) OBL species 0 x 1 = 0 0 FACW species 10 x 2 = 20 0 FAC species 60 x 3 = 180 0 FACU species 70 x 4 = 280 0 UPL species 0 x 5 = 0 0 Column Totals: 140 (A) 480 (B) Prevalence Index = B/A = 3.42 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support)
Total Cover: Yes No Total Cover:	FACU FACW	Percent of Dominant Species That Are OBL, FACW, or FAC: Total % Cover of: OBL species 10 FACW species 60 FAC species 70 FACU species 70 Column Totals: 140 Prevalence Index = B/A = 3.42 Hydrophytic Vegetation Y 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support)
_ = Total Cov of total cover: Yes No No = Total Cov of total cover:	FACU FACW	That Are OBL, FACW, or FAC: $\frac{75}{}$ (Average Prevalence Index worksheet: $\frac{10}{}$ Cover of: $\frac{10}{}$ Multiply by: OBL species $\frac{0}{}$ $\frac{10}$
_ = Total Cov of total cover: Yes No No = Total Cov of total cover:	FACU FACW	Prevalence Index worksheet:
Yes No No Total cover:	FACU FACW	Total % Cover of:Multiply by:OBL species0x 1 = 0FACW species10x 2 = 20FAC species60x 3 = 180FACU species70x 4 = 280UPL species0x 5 = 0Column Totals:140(A)480Prevalence Index = B/A = 3.42Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation✓ 2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹ (Provide support
Yes No No Total cover:	FACU FACW	Total % Cover of:Multiply by:OBL species0x 1 = 0FACW species10x 2 = 20FAC species60x 3 = 180FACU species70x 4 = 280UPL species0x 5 = 0Column Totals:140(A)480Prevalence Index = B/A = 3.42Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation✓ 2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹ (Provide support
Yes No No Total cover:	FACU FACW	OBL species 0 $x 1 = 0$ FACW species 10 $x 2 = 20$ FAC species 60 $x 3 = 180$ FACU species 70 $x 4 = 280$ UPL species 0 $x 5 = 0$ Column Totals: 140 0 0 0 0 0 0 0 0 0
Yes No Total Cover:	FACU	FACW species 10
No No Total Cover:	FACW	FACW species $\begin{array}{c cccc} & x & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2 & 2$
No No Total Cover:	FACW	FAC species $ 70 $
_ = Total Cov	er	Prevalence Index = B/A = $\frac{3.42}{4.0}$ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support
of total cover:	4.0	Column Totals:
of total cover:	4.0	Column Totals:140(A)480(B Prevalence Index = B/A =3.42 Hydrophytic Vegetation Indicators:1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50%3 - Prevalence Index is ≤3.0¹4 - Morphological Adaptations¹ (Provide support
of total cover:	4.0	Prevalence Index = B/A = 3.42 Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation ✓ 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support
of total cover:	4.0	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support
of total cover:	4.0	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support
of total cover:	4.0	 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support
of total cover:	4.0	 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support
of total cover:	4.0	3 - Prevalence Index is ≤3.0¹ 4 - Morphological Adaptations¹ (Provide support
of total cover:	4.0	4 - Morphological Adaptations ¹ (Provide support
of total cover:	4.0	
Yes		data in Remarks or on a separate sheet)
Yes		Problematic Hydrophytic Vegetation ¹ (Explain)
	FAC	1 Toblematic Trydrophytic Vegetation (Explain)
		4
_		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)
		more in diameter at breast height (DBH), regardless
		height.
		Sapling/Shrub – Woody plants, excluding vines, les than 3 in. DBH and greater than or equal to 3.28 ft (
		m) tall.
		,
		Herb – All herbaceous (non-woody) plants, regardles
	_	of size, and woody plants less than 3.28 ft tall.
of total cover:		Woody vine – All woody vines greater than 3.28 ft in
		height.
		Hydrophytic
		Vegetation
-	_	Present? Yes No
of total cover:	0	
	of total cover:	_ = Total Cover of total cover: 2

Sampling Point: wcmc002f_w

Profile Desc	cription: (Describe to	the depth	needed to docur	nent the in	dicator	or confirm	the ab	sence of indicators.)
Depth	Matrix			x Features				
(inches) 0-14	Color (moist) 2.5 Y 3/2	95 2.	Color (moist) 5 Y 3/6	<u>%</u> 5	Type ¹ C	PL	Text S	ture Remarks SL
								
1							2.	
'Type: C=C Hydric Soil	oncentration, D=Deple	etion, RM=Re	educed Matrix, MS	S=Masked S	Sand Gra	ains.	Locat	tion: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol			Dark Surface	(S7)				2 cm Muck (A10) (MLRA 147)
	oipedon (A2)		Polyvalue Be		e (S8) (N	ILRA 147,	148)	Coast Prairie Redox (A16)
	istic (A3)		 Thin Dark Sເ				,	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	,	2)			Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Ma					(MLRA 136, 147)
	uck (A10) (LRR N)	(011)	✓ Redox Dark	•	•			Very Shallow Dark Surface (TF12)
	d Below Dark Surface ark Surface (A12)	(A11)	Depleted Date Redox Depreted					Other (Explain in Remarks)
	//ucky Mineral (S1) (LF	RR N,	Iron-Mangan			LRR N,		
	A 147, 148)		MLRA 13					
	Bleyed Matrix (S4)		Umbric Surfa					³ Indicators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Flo					wetland hydrology must be present,
	Matrix (S6) Layer (if observed):		Red Parent N	nateriai (FZ	I) (IVILK	A 127, 147	') 	unless disturbed or problematic.
Type:	_ayo. (oboo. roa).							
	ches):		_				Hvdri	ic Soil Present? Yes No
Remarks:							-	
Hydric soil pro	esent							



Photo 1
Wetland data point wcmc002f_w facing south



Photo 2
Wetland data point wcmc002f_w facing west

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	е	City/C	county: Cumberland		Sampling Date: 2/10/2015
Applicant/Owner: DOMINION				State: NC	Sampling Point: wcmc002_u
Investigator(s): Team C		Section	on, Township, Range: No	PLSS in this area	1
Landform (hillslope, terrace, etc.):					
Subregion (LRR or MLRA):	Lat:	35.18326739	Long: -78.7	70988354	Datum: WGS 1984
Soil Map Unit Name: Woodington I	oamy sand			NWI classific	ation: None
Are climatic / hydrologic conditions	on the site typical fo				
Are Vegetation, Soil					
Are Vegetation, Soil					
SUMMARY OF FINDINGS					
Lhydranhytia Vagatatian Dragant?	You W	Ne		·	· · ·
Hydrophytic Vegetation Present? Hydric Soil Present?		No	Is the Sampled Area		🗸
Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:	100				
HYDROLOGY					
Wetland Hydrology Indicators:					tors (minimum of two required)
Primary Indicators (minimum of o	ne is required; check	all that apply)		Surface Soil	
Surface Water (A1)		True Aquatic Plants (Sparsely Veg	getated Concave Surface (B8)
High Water Table (A2)		Hydrogen Sulfide Od		Drainage Pat	
Saturation (A3)			• , ,	Moss Trim Li	
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burn	
Drift Deposits (B3)		Thin Muck Surface (C			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5)	 '	Other (Explain in Rer	ilaiks)	Geomorphic	tressed Plants (D1)
Inundation Visible on Aerial I	magery (B7)			Shallow Aqui	
Water-Stained Leaves (B9)	nagery (Dr)				phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	
Field Observations:					
	es No 🗸	Depth (inches):			
	es No				
	es No No		0 Wetland H	lydrology Presen	t? Yes 🗸 No
(includes capillary fringe)					
Describe Recorded Data (stream	gauge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:					
Hydrology present. Conditions at t	he data site were we	etter than normal due	to heavy rain.		
			•		

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

__)

50% of total cover: ____7.5

50% of total cover: 7.5 20% of total cover: 3

50% of total cover: 32.5 20% of total cover:

30

Sapling/Shrub Stratum (Plot size: 15)

2. Smilax rotundifolia

Tree Stratum (Plot size: _

3. Liquidambar styraciflua

1. Ligustrum sinense

Herb Stratum (Plot size: 1. Lonicera japonica

1. Quercus alba

2. Quercus nigra

mes of p	lants.		Sampling Point: wcmc002_u
Absolute I	Dominant	Indicator	Dominance Test worksheet:
30	Species? Yes	Status FACU	Number of Dominant Species That Are OBL, FACW, or FAC:4 (A)
20 15	Yes Yes	FAC	Total Number of Dominant Species Across All Strata: 6 (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC: 66.66666666 (A/E
			Prevalence Index worksheet:
65			Total % Cover of: Multiply by:
=	Total Covential cover:	er 13	OBL species $0 \times 1 = 0$
_ 20 /6 01 10	Jiai Cover.		FACW species0 x 2 =0
15	Yes	FACU	FAC species 50 x 3 = 150
			FACU species 45 x 4 = 180
			UPL species $0 \times 5 = 0$
-			Column Totals: 95 (A) 330 (B
			Prevalence Index = B/A = 3.47
			Hydrophytic Vegetation Indicators:
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
_	Total Cove	er 3	4 - Morphological Adaptations ¹ (Provide supporting
_ 20% of to	otal cover:		data in Remarks or on a separate sheet)
10	Yes	FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
5	Yes	FAC	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) of more in diameter at breast height (DBH), regardless of height.
			Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.
	Total Cove	2	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
_ 20% of to	otal cover:	3	Woody vine – All woody vines greater than 3.28 ft in height.
0 -	Total Com		Hydrophytic Vegetation Present? Yes ✓ No
· =	Total Cove	1	

Remarks: (Include photo numbers here or on a separate sheet.)

50% of total cover: ___0

Woody Vine Stratum (Plot size: ______)

Sampling Point: wcmc002_u

Depth Matrix Redox Features Color (moist) % Type¹ Loc² Texture Remarks 0-14 2.5 Y 7/3 95 2.5 Y 5/6 5 C PL S Texture Remarks O-14 2.5 Y 7/3 95 2.5 Y 5/6 5 C PL S Total Remarks 1 Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: Indicators for Problematic Hydric Sand Matrix (ACM) Matrix (ACM) Matrix.	
0-14 2.5 Y 7/3 95 2.5 Y 5/6 5 C PL S Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 1-Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. **Hydric Soil Indicators:** C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. C=Concentration: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soil Indicators Indicat	
Hydric Soil Indicators: Indicators for Problematic Hyd	
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Hydric Soil Indicators: Indicators for Problematic Hyd	
	ric Soils ³ :
Histosol (A1) Dark Surface (S7) 2 cm Muck (A10) (MLRA 14)	')
Histic Epipedon (A2) Polyvalue Below Surface (S8) (MLRA 147, 148) Coast Prairie Redox (A16)	
Black Histic (A3) Thin Dark Surface (S9) (MLRA 147, 148) (MLRA 147, 148)	=10)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F	19)
Stratified Layers (A5) Depleted Matrix (F3) (MLRA 136, 147)	TE40)
2 cm Muck (A10) (LRR N) Redox Dark Surface (F6) Very Shallow Dark Surface (Darket Relative Park Surface (A14) Redox Dark Surface (F7) Very Shallow Dark Surface (F7)	TF12)
Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Other (Explain in Remarks)	
Thick Dark Surface (A12) Redox Depressions (F8)	
Sandy Mucky Mineral (S1) (LRR N, Iron-Manganese Masses (F12) (LRR N,	
MLRA 147, 148) MLRA 136)	
Sandy Gleyed Matrix (S4) Umbric Surface (F13) (MLRA 136, 122) 3Indicators of hydrophytic vege	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 148) wetland hydrology must be pr	
Stripped Matrix (S6) Red Parent Material (F21) (MLRA 127, 147) unless disturbed or problemate	ic.
Restrictive Layer (if observed):	
Туре:	
Depth (inches): Hydric Soil Present? Yes	No
Remarks:	
lo hydric soil present	



Photo 1 Upland data point wcmc002_u facing east



Photo 2 Upland data point wcmc002_u facing south

Project/Site: ACP City/C	County: Camberland Sampling Date: 7/6/16
Applicant/Owner: Dominion	State: NC Sampling Point: Wenp050f
Investigator(s): ESI - R. Turnbull Secti	on, Township, Range: NA
Landform (hillslope, terrace, etc.):	relief (concave convex none): concave Slope (%): 4-10%
Subregion (LRR or MLRA): LRR P Lat: 35.182	724 Long: -78.71157 Datum: WG584
Subregion (LRR or MLRA):	NWI classification: PFO
Soil Map Unit Name: Woodington loany sand	14 Al (15 - avalein in Romarks)
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS - Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	
NCWAM Type: Headwater Forest	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LR	사용기 전투
High Water Table (A2) Saturation (A3) Marl Deposits (B15) (LR Hydrogen Sulfide Odor (
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Inc.	on (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2) Shallow Aquitard (D3)
Iron Deposits (B5) Under (Explain in Remar	FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	Consider the second of the sec
Surface Water Present? Yes No Depth (inches):	NA
Water Table Present? Yes No Depth (inches):	2
Water Table 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:
Describe Necolded Edia (Stream gauge, montoling was, 2212) professional	
Remarks:	
Section 1997	

VEGETATION (Four Strata) — 636 Scientific Ha			nt Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft. x 30ft.)			2 Status	Number of Dominant Species
1. Acertubrum			FAC	That Are OBL, FACW, or FAC: (A)
2. Lignidambar styraciffna	50	¥	_	
				1 Otal Hamber of Dominan
3				Species Across All Strata: (B)
4.				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7	NAME OF TAXABLE			Prevalence Index worksheet:
8.				Total % Cover of:Multiply by:
8.	60	= Total Co		OBL species x 1 =
20				FACW species x 2 =
50% of total cover: 30	20% of	f total cove	er: 16	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)		1.4		FACU species x 4 =
1. Acer rubrum	30		FAC	
2. Nusse sulvatica	5	N	FAC	UPL species x5 =
3. Morella cerifera		N	FAC	Column Totals: (A) (B)
4. Almus serrulata		N	FACW	
A STATE OF THE PROPERTY OF THE		1-3-11		Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6.		-		1 - Rapid Test for Hydrophytic Vegetation
7	- H	1 12 m		2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.01
THE STREET WAS COMMENTED BY STREET STREET	55	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: <u>27.</u>	5 20% 0	F total cove	- 11	Ti Problematic Hydrophytic Vegetation (Explain)
30% of total cover. 21.	3 20% 01	total cove		
Herb Stratum (Plot size: 30ft, x 30ft) 1. Leucothoe axillaris		1.4	Carri	¹ Indicators of hydric soil and wetland hydrology must
1. Leucothoe axillaris	20	7	FACW	be present, unless disturbed or problematic.
2. Osmundastrum cinnamemella	10	1	FACH	Definitions of Four Vegetation Strata:
3. Woodwardia areolata	5	N	OBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
4.			the management of the	more in diameter at breast height (DBH), regardless o
The second of the second secon				height.
5.				
6.				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7. <u>1 </u>		1000		than 3 in. DBH and greater than 3.25 it (1 m) tail.
8.				Herb - All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				점 집에 가장 하면 가게 하면 하면 하면 보다면 하는데 하면 되었다. 그는 그는 그는 그는 그는 그는 그는 그는 그는 그는 그는 그는 그는
		Territory (Woody vine – All woody vines greater than 3.28 ft in height.
11. <u></u>	1	NOTE OF STREET		neight.
12,		and the second		
	-	= Total Co		Control and Artificial Control States And Control States and Control S
50% of total cover: 17.	5 20% of	f total cove	er:	
Woody Vine Stratum (Plot size: 30ft. x30ft.)				
 Second to the design of the second sec	-	10 T 10 T	1 11/2	
2.	Na	1 17 200		
3.			-	
4		1122	1 12	
5.			and the same	Hydrophytic
The control of the property of the control of the commence of the control of the	0	= Total Co	over	Vegetation
	AND THE PROPERTY AND			Present? Yes No
50% of total cover:		total cove	er:	A STATE OF THE STA
Remarks: (If observed, list morphological adaptations belo	w).	Control of the Section		
the second secon				
				The second and the second seco

epth	Matrix			x Feature				Remarks
nches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc² _	Texture	Kelligiks
0-5	104R2/1	100					Muckyloan	
5-20	104R2/1	100					5	
Histosol Histosol Histosol Histic Er Black Hi Hydroge Stratified Organic 5 cm Mu Muck Pr 1 cm Mu Depleted Thick Do Coast P Sandy N Sandy F Stripped	Indicators: (Applie (A1) (A1) Dipedon (A2) Stic (A3) En Sulfide (A4) d Layers (A5) Bodies (A6) (LRR I) Dicky Mineral (A7) (Loresence (A8) (LRR P, T) d Below Dark Surfa Cark Surface (A12) rairie Redox (A16) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	P, T, U) RR P, T, U) U) ce (A11) (MLRA 150) (LRR O, S)	Redox Depre	rwise not elow Surface (S9 by Mineral ed Matrix trix (F3) Surface (I rk Surface essions (F LRR U) thric (F11) nese Mass ace (F13) (F17) (M rrtic (F18) codplain \$	red.) ice (S8) (LR) (LRR S, T (F1) (LRR C (F2) F6) e (F7) F8) (MLRA 15: Ses (F12) (L (LRR P, T, LRA 151) (MLRA 150) Soils (F19) (1) RR O, P, T U) MLRA 149	Indicators for P 1 cm Muck (2 cm Muck (Reduced Ve Piedmont FI Anomalous (MLRA 15 Red Parent Very Shallov Other (Explain) 3 Indicators wetland to	A10) (LRR S) rtic (F18) (outside MLRA 150A,B) codplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) 3B) Material (TF2) v Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and hydrology must be present, sturbed or problematic.
Dark Sustrictive Type:	urface (S7) (LRR P, Layer (if observed):					Hydric Soil Pres	sent? Yes V No



Wetland data point wcmp050f_w facing north.



Wetland data point wcmp050f_w facing west.

Project/Site: ACP		City/	County:Cur	mberland	Sam	pling Date: 7/6/16
Applicant/Owner: Dominion		54 TT #		State:	NC Sam	oling Point: WCMp050_U
Investigator(s): EST (R. Tur	nbull)	Sect	tion, Township, R	Range:	/A	
Landform (hillslope, terrace, etc.):	hillslope	Loca	al relief (concave	, convex, none):	Concave	Slope (%): 4-10%
Subregion (LRR or MLRA):	LRRP	Lat: 35.182	21	Long:78	.71156	Datum: WG58°
Soil Map Unit Name: Wooding	on Loamn sand			N	WI classification:	N/A
Are climatic / hydrologic condition	s on the site typical fo	or this time of year?	Yes No	. (If no. e	explain in Remark	ss.)
Are Vegetation, Soil						t? Yes No
Are Vegetation, Soil					any answers in F	
SUMMARY OF FINDINGS						
		_	IIIIIII PAIII			
	Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? Yes No within a Wetland?			ed Area		
Hydric Soil Present?	Yes	No V	within a Wetl	and?	Yes	No
Wetland Hydrology Present? Remarks:	Tes	110				
HYDROLOGÝ						
Wetland Hydrology Indicators	:	A SALES OF THE SAL	Action the same of the same	Secon	ndary Indicators (minimum of two required)
Primary Indicators (minimum of		all that apply)		The same of the sa	urface Soil Crack	회사 자동물이 되었다면 그 아이들이 되는 것이 되었다면 하는데 되었다면 하는데 되었다.
Surface Water (A1)	☐ Aqu	atic Fauna (B13)		- Property		d Concave Surface (B8)
High Water Table (A2)		Deposits (B15) (LF		- Property	rainage Patterns	
Saturation (A3)	2,000 2,000	Irogen Sulfide Odor	A TORRING AND ADDRESS OF A STATE	100	loss Trim Lines (l ry-Season Water	736-140-38-50-110-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
Water Marks (B1)		dized Rhizospheres sence of Reduced Ir			rayfish Burrows (AND THE PROPERTY OF THE PROPER
Sediment Deposits (B2) Drift Deposits (B3)	C. S. C. S.	cent Iron Reduction i				on Aerial Imagery (C9)
Algal Mat or Crust (B4)	- Person - (0.00 p.)	n Muck Surface (C7)	됐다고 뭐 왜 됐다다. 남림은 맛인하네요~~~		eomorphic Posit	ion (D2)
Iron Deposits (B5)	Oth	er (Explain in Rema	rks)	- Page 1935	hallow Aquitard (38000 2 3
Inundation Visible on Aerial	Imagery (B7)			-	AC-Neutral Test	A CLASS
Water-Stained Leaves (B9)		and the second second second	W1	LIS	phagnum moss ((LRK 1, U)
Field Observations:	Yes No	Dooth (inches):	A1/A			
Surface Water Present? Water Table Present?	Yes No	Depth (inches):	>20			
	Yes No			Wetland Hydrol	ogy Present?	Yes No
(includes capillary fringe)			CONTRACTOR OF THE			
Describe Recorded Data (stream	n gauge, monitoring w	vell, aerial photos, pr	revious inspectio	ns), if available:		
Remarks:	And Annual Control Nation					BANK PERSON AND AND AND AND AND AND AND AND AND AN
Nemarks.						
						er Tigania de la composição de la composição de la composição de la composição de la composição de la composição
		the comment of the control of the co	A THE PARTY OF A STATE OF THE PARTY OF THE P			

Tree Stratum (Plot size: 30ft.)			t Indicator Status	Dominance Test worksheet: Number of Dominant Species		
1. Pinus taede	40	Y	FAC	That Are OBL, FACW, or FAC: (A)		
2. Liriodendron talipifera				Total Number of Dominant Species Across All Strata: (B)		
				openies / close / clos		
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)		
5.				Prevalence Index worksheet:		
7				Total % Cover of: Multiply by:		
3	-70			OBL species x 1 =		
25		= Total Co		FACW species x 2 =		
50% of total cover: 35 Sapling/Shrub Stratum (Plot size: 36 ft. × 36 ft.)	20% of	total cove	r: <u>17</u>	FAC species x 3 =		
Liquidambar styracifla	13	V	FAC	FACU species x 4 =		
. Digitalian and Signaciffun				UPL species x 5 =		
				Column Totals: (A) (B)		
				Prevalence Index = B/A =		
The state of the s				Hydrophytic Vegetation Indicators:		
				1 - Rapid Test for Hydrophytic Vegetation		
-				2 - Dominance Test is >50%		
		29(2.9)	-	☐ 3 - Prevalence Index is ≤3.01		
	= Total Cover 20% of total cover: Z			Problematic Hydrophytic Vegetation ¹ (Explain)		
lerb Stratum (Plot size: 30ft. x30ft_)				¹ Indicators of hydric soil and wetland hydrology must		
. Clethra alnifolia	10	- 1	FACW	be present, unless disturbed or problematic.		
Osmundastram cinnamomeum	10	1	FACH	Definitions of Four Vegetation Strata:		
. Pteridium aguilinum	->		FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) o		
				more in diameter at breast height (DBH), regardless of height.		
		- 100 to	1.50 10.75	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
	1		and the same	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
Ô	- 10-1	7		Woody vine – All woody vines greater than 3.28 ft in		
1	1			height.		
2.	25	= Total Co	ver	and a second second second second second second second second second second second second second second second		
50% of total cover: 12.						
Voody Vine Stratum (Plot size: 30 ft. 130 ft.)	30	V	EAC			
Appropriate the analysis of the control of the cont	-		1711			
And the low-resident techniques and the second techniques and the second techniques and the second techniques and the second techniques and the second techniques are second to the second techniques and the second techniques are second to the second techniques and the second techniques are second to the second techniques and the second techniques are second to the second techniques and the second techniques are second to th						
		25 975				
-	Trace of Trace			Hudrophytic		
-	Constitution of the Consti	= Total Co	ver	Hydrophytic Vegetation		
	30	= Total Co				

epth	cription: (Describe Matrix			x Feature	S	The same and a second		
nches)	Color (moist)	_%	Color (moist)	%		_Loc²	<u>Texture</u>	Remarks
0.4	104RZ/2	100					54	
4-10	10484/2	100	ACTOR SECURITION OF THE PROPERTY OF THE PROPER					
10-20	10424/2	90	104R6/6	10	C	M	5	
ydric Soil	oncentration, D=Dep	eletion, RM=	Reduced Matrix, M LRRs, unless other	erwise not	ed.)		Indicators for	=Pore Lining, M=Matrix. Problematic Hydric Soils ³ : k (A9) (LRR 0)
Black H Hydroge Stratified Organic 5 cm Mt Muck Pt 1 cm Mt Deplete Thick Dt Coast P Sandy M Sandy G Stripped Dark St	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR Pucky Mineral (A7) (LI resence (A8) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (Mucky Mineral (S1) (Gleyed Matrix (S4) d Matrix (S6) urface (S7) (LRR P, S	RR P, T, U) (A) (A) (A) (A) (A) (B) (A) (B) (B	Thin Dark S Loamy Mucl Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (Depleted Or Iron-Manga Umbric Surf Reduced Ve Piedmont F	urface (S9 ky Mineral red Matrix atrix (F3) : Surface (I ark Surface ressions (F LRR U) chric (F11) nese Mass face (F13) c (F17) (Mi ertic (F18) loodplain S	(MLRA 1 (LRR 9, T (F2) (F2) (F2) (MLRA 1 (LRR 9, T (LRR 9, T (MLRA 15) (MLRA 15) (MLRA 15) (MLRA 15)	T, U) 51) LRR O, P, , U) 60A, 150B) (MLRA 14	2 cm Muc Reduced \(\) Piedmont Anomalou (MLRA Red Parei Very Shal Other (Ex T) 3Indicato wetlan unless	k (A10) (LRR S) Vertic (F18) (outside MLRA 150. Floodplain Soils (F19) (LRR P, S is Bright Loamy Soils (F20) 153B) Int Material (TF2) Iow Dark Surface (TF12) Iplain in Remarks) Interpretation and the disturbed or problematic.
Type:	Layer (if observed)						Hydric Soil Pr	esent? Yes No
emarks:								
								-



Upland data point wcmp050_u facing east.



Upland data point wcmp050_u facing south.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline		City/C	county: Cumberland		Sampling Date: 2/10/2015		
Applicant/Owner: DOMINION				State: NC	Sampling Point: wcmc003f_w		
Investigator(s): Team C							
Landform (hillslope, terrace, etc.): Flood							
Subregion (LRR or MLRA): P	Lat: (35.18259772	Lona: -78.	71220308	Datum: WGS 1984		
Soil Map Unit Name: Johnston loam				NWI classific	ation: None		
Are climatic / hydrologic conditions on the	e site typical for						
Are Vegetation, Soil, or I							
Are Vegetation, Soil, or I							
SUMMARY OF FINDINGS – At							
Hadambadia Vanatatian Barando	V 4	No		<u> </u>	<u> </u>		
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes V	No No	Is the Sampled Area				
Wetland Hydrology Present?		No	within a Wetland?	Yes	No		
Remarks:	103	110					
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)		
Primary Indicators (minimum of one is	required: check	all that apply)		Surface Soil			
	•		P14)		getated Concave Surface (B8)		
Surface Water (A1) High Water Table (A2)		Frue Aquatic Plants (
Saturation (A3)							
Water Marks (B1)		Water Table (C2)					
Sediment Deposits (B2)	I Iron (C4) n in Tilled Soils (C6)	Crayfish Buri					
Drift Deposits (B3)	27)	-	sible on Aerial Imagery (C9)				
Algal Mat or Crust (B4)	0	Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)		
Iron Deposits (B5)				Geomorphic	Position (D2)		
Inundation Visible on Aerial Image	ry (B7)			Shallow Aqui	itard (D3)		
Water-Stained Leaves (B9)					phic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:	4/						
		Depth (inches):	1				
		Depth (inches):	0	Hadadawa Barawa O. Yan Y			
Saturation Present? Yes (includes capillary fringe)	No	Wetland Hydrology Present? Yes No					
Describe Recorded Data (stream gaug	e, monitoring we	ell, aerial photos, pre	vious inspections), if ava	ilable:			
Remarks:							
Wetland hydrology is present							

1. Acer rubrum 2	30)	Absolute <u>% Cover</u> 50	Dominant Ir Species?		Dominance Test worksheet:
1. Acer rubrum 2				Status	Number of Deminent Chasins
3 4			Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
4	_				Total Number of Dominant
_					Species Across All Strata: 5 (B)
5.					Developt of Deminent Charles
					Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)
6					
7					Prevalence Index worksheet:
		50	= Total Cover		Total % Cover of: Multiply by:
	50% of total cover: 25	20% of	total cover:	10	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size	e:)				FACW species x 2 =
1. Ligustrum sinense		15	Yes	FACU	FAC species65
2. Magnolia virginiana		5	Yes	FACW	FACU species15
3		-			UPL species0 x 5 =0
٥					Column Totals:125 (A)345 (B)
÷		•			
5					Prevalence Index = B/A =2.76
6					Hydrophytic Vegetation Indicators:
7					1 - Rapid Test for Hydrophytic Vegetation
8		•			✓ 2 - Dominance Test is >50%
9		20			✓ 3 - Prevalence Index is ≤3.0 ¹
	10		= Total Cover	4	✓ 4 - Morphological Adaptations¹ (Provide supporting
	50% of total cover:10	20% of	total cover:		data in Remarks or on a separate sheet)
Herb Stratum (Plot size:	5)	40	.,	=	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Arundinaria gigantea		40	Yes	FACW	
2. Lonicera japonica		15	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must
3					be present, unless disturbed or problematic.
4					Definitions of Four Vegetation Strata:
5					_
6					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7					height.
8					One Provide the Manufacture and discussions for
9					Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10.					m) tall.
11.	_				Harb All borbossous (non woods) plants, regardless
		55	= Total Cover		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	50% of total cover: 27.5		total cover:		
Woody Vine Stratum (Plot size:	30				Woody vine – All woody vines greater than 3.28 ft in height.
1	· · · · · · · · · · · · · · · · · · ·				neight.
2					
3					
	·				
4 5.		•			Hydrophytic
5		0	T-1-1-0		Vegetation Present? Yes No
	50% of total cover: 0		= Total Cover total cover:	0	100 <u> </u>
			total cover:		
Remarks: (Include photo numbe Red maple trees were growing in	ers here or on a separate s	heet.)			

Sampling Point: wcmc003f_w

	cription: (Describe t	o the de	•			or confirm	the absence	e of indicators.)
Depth	Matrix	0/	Redo	x Feature		1 - 2	T	Damada
(inches) 0-16	Color (moist) 2.5 Y 4/2	<u>%</u> 90	Color (moist) 5 YR 4/6	<u>%</u> 10	Type ¹ C	Loc ² PL/M	<u>Texture</u> CL	Remarks
0-10	2.5 1 4/2		5 TK 4/0			F L/IVI		· -
			· <u></u>			- ——	-	
	·							
								-
			·					
			·				-	· ·
								· -
¹Type: C=C	Concentration, D=Depl	etion RN	M-Reduced Matrix MS	S-Masker	I Sand Gr	ains	² Location: F	PL=Pore Lining, M=Matrix.
	Indicators:	otion, rei	n=readoca Matrix, Me	S-Masket	a Garia Gi	anio.		cators for Problematic Hydric Soils ³ :
-			Dork Surface	(07)				· ·
Histoso			Dark Surface		00 (50) /8	AI DA 447		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				140) (Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su Loamy Gleye			141, 148)	,	(MLRA 147, 148)
	en Sulfide (A4)			,	12)		'	Piedmont Floodplain Soils (F19)
	d Layers (A5)		<u>✓</u> Depleted Ma		-c)		,	(MLRA 136, 147)
	uck (A10) (LRR N)	(044)	Redox Dark	•				Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (ATT)	Depleted Date				_ (Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			I DD N		
	Mucky Mineral (S1) (L	KK N,	Iron-Mangan		es (F12) (LKK N,		
	A 147, 148)		MLRA 13	•	(BAL D.A. 40	١٥ ، ١٥٥١	3, .	Parton of budoubards for a set of a second
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent N	viateriai (F	21) (MLR	A 127, 147	') ur	nless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								,
Depth (ir	nches):						Hydric Soi	I Present? Yes No
Remarks:								
Hydric soil pr	resent							



Photo 1
Wetland data point wcmc003f_w facing south



Photo 2
Wetland data point wcmc003f_w facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Cun	sampling Date: 7/6/16
Applicant/Owner: Dominion		State: NC Sampling Point: WCMC003e
Investigator(s): ESI- R. Turnbull	Section Township Ro	ange: N/A
Landform (hillalana tarraca ata):	Local relief (concave	convex, none): Slope (%): 0-2%
Candiothi (iniisope, tenace, etc.).	12: 35 18149	Long: <u>-78.71345</u> Datum: <u>WG584</u>
Subregion (LRR or MLRA):	Lat	NWI classification: PEM
Soil Map Unit Name: Johnson Joan		
Are climatic / hydrologic conditions on the site typical for t		
Are Vegetation, Soil, or Hydrology		"Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology	_ naturally problematic? (If n	eeded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point	locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes Yes Yes	No Is the Sample No within a Wetla	
Remarks:		A Company of the Comp
HYDROLOGÝ		2 (minimum of two required)
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check a		Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8)
The state of the s	ic Fauna (B13)	Drainage Patterns (B10)
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Deposits (B15) (LRR U) ogen Sulfide Odor (C1)	Moss Trim Lines (B16)
	zed Rhizospheres along Living Root	
	nce of Reduced Iron (C4)	Crayfish Burrows (C8)
	nt Iron Reduction in Tilled Soils (C6)	
	Muck Surface (C7)	Geomorphic Position (D2)
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	(Explain in Remarks)	Shallow Aquitard (D3) FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)		Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (B9) Field Observations:		2 Chinaganan Macanan Ar
	Depth (inches):	
	Depth (inches): surface	
	Depth (inches): Jurface W	/etland Hydrology Present? Yes No
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well	i, aenai priotos, previous inspection	is), ii avaliabie.
Remarks:		
		· · · · · · · · · · · · · · · · · · ·
Company Compan	100 A 100 A	A STATE OF THE RESERVE AND A STATE OF THE RESERV

Absolute	Dominan	Indicator	Dominance Test worksheet:		
	-		Number of Dominant Species That Are OBL, FACW, or FAC: _	2	(A)
			Total Number of Dominant Species Across All Strata:	2	_ (B)
			Percent of Dominant Species That Are OBL, FACW, or FAC:	100	_ (A/B)
			Bravalanca Inday worksheet		
			이 마음스만 화장하다 하나 있는데 보이 하는데 되었다고	Multiply by:	
			70,017,700010		
	= Total Co	ver			
20% of	total cove	r:			
100	. A n				
			Column Totals: (A)	-	(B)
			Providence Index = B/A =		
			그 경기를 들었다. 그들은 사람들은 사람들은 사람들이 되었다면 하면 되었다면 하는데 없다면 되었다.		
			네 [1]	vegetation	
	-				
	T.110		도를 하면 하는데 하는데 하는데 하면 함께 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데		
			Problematic Hydrophytic Vege	etation' (Exp	olain)
20% of	total cove	r:			
,	100		¹ Indicators of hydric soil and wetla	nd hydrolog	y must
_60		GBL	A STATE OF THE PROPERTY OF THE STATE OF THE PROPERTY OF THE PR	4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	kay paretree
30	4	OBL	Definitions of Four Vegetation S	trata:	
			Tree - Woody plants excluding vi	nes. 3 in. (7	.6 cm) or
			more in diameter at breast height	(DBH), rega	rdless of
			height.		
			Santing/Sharb - Woody plants e	veludina vir	es less
			than 3 in. DBH and greater than 3	.28 ft (1 m)	tall.
			Herb – All herbaceous (non-wood	y) plants, re	gardiess
			그 내는 사람들은 사용 바다 내가 있는 것이 되어 하나 하는 것이 하면 다른 것이 살아 있다면 하는 것이 없다면 하는데 되었다.	eater than 3	.28 ft in
		-	height.		
	= Total Co	ver			Tree 1
20% of	total cove	r:			
	W- 16 / 11 C				
	The Proportion In-				
	V (3.8%) *				
			Hydrophytic		
	= Total Co		Hydrophytic Vegetation Present? Yes	No	_
	6 20% of	Cover Species a = Total Co 20% of total cove a = Total Co 20% of total cove a = Total Co 20% of total cove a = Total Co 20% of total cove	Cover Species? Status a = Total Cover 20% of total cover: 20% of total cover: 40 Y GBL 30 Y OBL 6 = Total Cover 20% of total cover:	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: OBL species x 3 FACU species x 4 UPL species x 5 Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicate 1 - Rapid Test for Hydrophytic Vegetation Indicate 1 - Rapid Test for Hydrophytic Vegetation Indicate 1 - Rapid Test for Hydrophytic Vegetation Indicate 1 - Rapid Test for Hydrophytic Vegetation Indicate 1 - Rapid Test for Hydrophytic Vegetation Indicate 1 - Rapid Test for Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Segetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Segetation S - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Segetation S - Prevalence Index is ≤3.0¹ Prevalence Index is ≤3.0¹ Prevalence Index is ≤3.0¹ Prevalence Index is ≤3.0¹ Prevalence Index is ≤3.0¹ Prevalence Index is ≤3.0¹ Prevalence Index is ≤3.0¹ Prevalence Index is ≤3.0¹ Prevalence Index is ≤3.0¹ Prevalence Index is ≤3	Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species 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 x 1 =

Depth	14-1-1-			x Features	ilicator or comm	m the absence of i	
(inches)	Color (moist)	%	Color (moist)		Type Loc2	Texture	Remarks
0-10	10422/1	90	104R3/4	10	C M	5	programmed with a company of
10-20	1642211	100				5	
10-10	10916 41	100					
							-
	4						
Lyne: C=C	oncentration, D=Dep	letion RM=	Reduced Matrix, M	S=Masked S	Sand Grains.	² Location: PL	=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Applic	able to all	LRRs, unless othe	rwise noted	l.)	Indicators for	Problematic Hydric Soils3:
Histoso					(S8) (LRR S, T		k (A9) (LRR O)
Histic E	pipedon (A2)				LRR S, T, U)		k (A10) (LRR S)
	istic (A3)			ky Mineral (F		Reduced	Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)			ed Matrix (F2	2)		Floodplain Soils (F19) (LRR P, S, T) is Bright Loamy Soils (F20)
	d Layers (A5)	T 10	Depleted Ma	Surface (F6)		(MLRA	[20] : [10] [10] [20] [20] [20] [20] [20] [20] [20] [2
	: Bodies (A6) (LRR P ucky Mineral (A7) (LF			ark Surface (F			nt Material (TF2)
	resence (A8) (LRR U		The state of the s	ressions (F8)			low Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) (Other (Ex	plain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted O	chric (F11) (N	/LRA 151)	2 (2) (2)	
	ark Surface (A12)		THE RESERVE OF THE PARTY OF THE		(F12) (LRR O,		rs of hydrophytic vegetation and
- 70 pt 040 - 000 000 000 000	Prairie Redox (A16) (M			ace (F13) (L		wetlan	d hydrology must be present, disturbed or problematic.
	Mucky Mineral (S1) (I	LRR O, S)		(F17) (MLR			disturbed of problematic.
	Gleyed Matrix (S4)				ILRA 150A, 150 Is (F19) (MLRA		
5/18/A/S0/2/C10/S0/4/S	Redox (S5) d Matrix (S6)		Anomalous	Bright Loam	Soils (F20) (MI	LRA 149A, 153C, 1	53D)
	urface (S7) (LRR P, S	s. T. U)	III / Alcincious	Dirgin Louin	, 00.00 (. 10.7)		
	Layer (if observed)			A	Victorian in the second second		
Type:	(1) 25명 1일 4명 및 11일 12일 12일 12일 12일 12일 12일 12일 12일 12일					Language St.	:
The state of the same of the same of the same	nches):					Hydric Soil Pr	esent? Yes No
CCASES Brooks	Septembers, and a second process of the second			the second second	No. 10 (1) (1)	Charles of the second of the second of	A visite and the control of the discount of the first of the control of the contr
Remarks:							
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Environmental Field Surveys Wetland Photo Page



Wetland data point wcmc003e_w facing east.



Wetland data point wcmc003e_w facing south.

WETLA	AND DETERMINATION DATA FO		
Project/Site: ACP	City	County: Cumbe	rland Sampling Date: 7/6/16
Applicant/Owner: Domin	ion		State: N C Sampling Point: WCMc 0035.W
Investigator(s): EST	M. Smith / N. Murphrey) sor	tion Township Range:	NA
Landform (hillslone, toware, etc.	depression in	al relief (concave, convex	x none); Concave Slope (%):
Subregion (LRR or MLRA):	LRR T 1at: 35.19	5 16 9 Long:	- 18. 11145 Datum: WG3 84
Soil Man Unit Name: No	odinaton loamy so	nd	NWI classification: PSS
Are climatic / hydrologic conditi	ons on the site typical for this time of year?	Yes No .	(If no, explain in Remarks.)
	, or Hydrology significantly dist	urbed? Are "Norm	nal Circumstances" present? Yes No
	, or Hydrology naturally proble		, explain any answers in Remarks.)
			ions, transects, important features, etc.
SUMMART OF FINDING			ions, transcoto, imperior
Hydrophytic Vegetation Prese	ent? Yes No No	Is the Sampled Area	
Hydric Soil Present?	Yes No No No	within a Wetland?	Yes No
Wetland Hydrology Present? Remarks:	res No		
	40 POWERLINE ENS	EMENT	
- Note	O POWER INC COS	, emen	
		Caracas III	
HYDROLOGY	and the second of the second o	450 (05)	and the second desired the enterior of the second second second second second
Wetland Hydrology Indicato			Secondary Indicators (minimum of two required)
A POWNER TO A PROSENT A PROPERTY OF THE SECRET ASSOCIATION OF THE SECR	of one is required; check all that apply)	ment of the establishment of t	Surface Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13)	No. 20 Let	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
High Water Table (A2)	Marl Deposits (B15) (L		Moss Trim Lines (B16)
Saturation (A3)	Hydrogen Sulfide Odor	along Living Roots (C3)	
Water Marks (B1)	Presence of Reduced		Crayfish Burrows (C8)
Sediment Deposits (B2) Drift Deposits (B3)	Recent Iron Reduction		Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7		Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Rema		Shallow Aquitard (D3)
Inundation Visible on Aer	:		FAC-Neutral Test (D5)
Water-Stained Leaves (B			Sphagnum moss (D8) (LRR T, U)
Field Observations:		ALA	
Surface Water Present?	Yes No Depth (inches):	NA	
Water Table Present?	Yes No Depth (inches):	6	No.
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):	Wetland	Hydrology Present? Yes No
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos, p	previous inspections), if a	vailable:
	were a particular than a Second	and the same of th	
Remarks:			

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'x30')			? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				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				Total % Cover of: Multiply by:
8				OBL species x1 =
		= Total Co	-	FACW species x 2 =
50% of total cover:	20% of	total cove	r:	FAC species x3 =
Sapling/Shrub Stratum (Plot size: 30' x 30')		1	-1-	FACU species x4 =
1. Alnus serrulata	20	7	FACW	UPL species x5 =
2. Liriodendron tulipitera	10	N	FACH	Column Totals: (A) (B)
3. Acer rubrum	10	N	FAC	Column rotals(A)(B)
4. Nyssa sylvatica	5	N	FAC	Prevalence Index = B/A =
5. Ilex glabra	10	N	FACW	Hydrophytic Vegetation Indicators:
6.	<u> </u>			1 - Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	55	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 27.	5 20% of	total cove	r:	
Herb Stratum (Plot size: 30'x30')		Transfer Comment	T. Transmitter	¹ Indicators of hydric soil and wetland hydrology must
1. Eupatorium perfoliatum	30	Y	FACW	be present, unless disturbed or problematic.
2 Conoclinium coelectinum	30	Y	FAC	Definitions of Four Vegetation Strata:
3. Rhexia mariana	10	N	FACW	
4. Polyaala lutea		N	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Centella erecta	Emp	14	FACW	height.
6. Rhynchospora inexpansa	10	LA.	FACW	[마켓쥬UNE : : : : : : : : : : : : : : : : : : :
7	100			Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9.		a Contract to	1.2	of size, and woody plants less than 3.28 ft tall.
10	1 000000		20000000	Woody vine - All woody vines greater than 3.28 ft in
11.		11 12 2 37 10		height.
12.				
	90	= Total Co	ver	Transference of the second sec
50% of total cover: 45	20% of	total cove	r. 18	
Woody Vine Stratum (Plot size: 30' x 30')				
1. Smilax rotundifolia	10	Y	FAC	
2. Vitis rotundifolia	20	Y	FAC	
3.	THE RESERVE	- 100 100 100		
4.		on Samuel		
5.				II. Jamela dia
0.	30	= Total Co	WOL	Hydrophytic Vegetation
50% - 54-44 15		total cove	4.000	Present? Yes No
50% of total cover: 13		total cove		
Remarks: (If observed, list morphological adaptations belo	w).			
				St. 122 St. St. St. St. St. St. St. St. St. St.

	Matrix	%	Color (moist)	% Type	Loc ²	Texture	Remarks
nches)	Color (moist)	100	Color (moist)	78 1706	Loc	FSL	
1-12	104R2/1			1 000		saidyloam	
-20	10YR 5/1	90	10484/1	10		2000ALCOL.	
Histosol Histosol Histic E Black H Hydroge Stratifie Organic 5 cm M Muck P 1 cm M Deplete Thick D Coast F Sandy I Sandy I Sandy I	oncentration, D=Dep Indicators: (Applications) (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) e Bodies (A6) (LRR Pucky Mineral (A7) (LR resence (A8) (LRR Unck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (I Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	,T,U) RR P,T,U) e (A11)	RRs, unless othe Polyvalue Be Thin Dark St Loamy Muck Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (I Depleted Oc Iron-Mangar Umbric Surf Reduced Ve Piedmont FI	rwise noted.) elow Surface (S8) urface (S9) (LRR by Mineral (F1) (Led Matrix (F2) etrix (F3) Surface (F6) erk Surface (F7) essions (F8) LRR U) chric (F11) (MLRA esse Masses (F1 ace (F13) (LRR F1 c (F17) (MLRA 15 ertic (F18) (MLRA coodplain Soils (F	(LRR S, T, S, T, U) RR O) A 151) 2) (LRR O, F P, T, U) 51) A 150A, 150E	Indicators for Pour Pour Pour Pour Pour Pour Pour Po	A10) (LRR S) rtic (F18) (outside MLRA 150A,B codplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) 3B) Material (TF2) v Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and nydrology must be present, sturbed or problematic.
Dark Su strictive	uface (S7) (LRR P, S Layer (if observed)					1000	
of Todds All Street	nches):	3				Hydric Soil Pres	ent? Yes No

Environmental Field Surveys Wetland Photo Page



Wetland data point wcmc003s_w facing east.



Wetland data point wcmc003s_w facing west.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline			City/0	County: Cumberland		Sampling Date: 2/10/2015
Applicant/Owner: DOMINION					State: NC	Sampling Point: wcmc003_u
Investigator(s): Team C			Secti	on, Township, Range: N	lo PLSS in this ar	rea
Landform (hillslope, terrace, etc.): Hill						
Subregion (LRR or MLRA): P						
Soil Map Unit Name: Woodington loan	my sand				NWI classi	fication: None
Are climatic / hydrologic conditions on	the site typical fo	or this time of				
Are Vegetation, Soil, c						
Are Vegetation, Soil, c						
SUMMARY OF FINDINGS –						
			<u> </u>		<u> </u>	, .
Hydrio Soil Brosont?	Yes Yes			Is the Sampled Area		
Hydric Soil Present? Wetland Hydrology Present?	Yes		•	within a Wetland?	Yes	No
Remarks:	103	_ 110				
HYDROLOGY					0	
Wetland Hydrology Indicators:						cators (minimum of two required)
Primary Indicators (minimum of one	-			(D.4.4)	Surface So	
Surface Water (A1)		True Aquat				egetated Concave Surface (B8)
High Water Table (A2) Saturation (A3)		Hydrogen S		or (C1) res on Living Roots (C3)	_	Patterns (B10) Lines (B16)
Water Marks (B1)		Presence of				n Water Table (C2)
Sediment Deposits (B2)				on in Tilled Soils (C6)		urrows (C8)
Drift Deposits (B3)		Thin Muck				Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Other (Exp				Stressed Plants (D1)
Iron Deposits (B5)		` '		,	· · · · · · · · · · · · · · · · · · ·	ic Position (D2)
Inundation Visible on Aerial Ima	gery (B7)				Shallow Ad	quitard (D3)
Water-Stained Leaves (B9)					Microtopog	graphic Relief (D4)
Aquatic Fauna (B13)					FAC-Neutr	al Test (D5)
Field Observations:						
	No 🔽					
	No					
Saturation Present? Yes (includes capillary fringe)	No	Depth (inc	ches):	Wetland	Hydrology Pres	ent? Yes No
Describe Recorded Data (stream ga	uge, monitoring v	vell, aerial p	hotos, pre	evious inspections), if av	/ailable:	
Demonto						
Remarks: Conditions at the data site were wette	er than normal du	e to heavy	rain No.	avdrology present		
Conditions at the data site were wette	i man normal du	ic to ricavy	1401	lydrology present.		

_)

50% of total cover: ___ 15

50% of total cover: 2.5

30

Tree Stratum (Plot size:

Sapling/Shrub Stratum (Plot size:__

Herb Stratum (Plot size: ___

1. Lonicera japonica

Pinus taeda

4. Quercus nigra

5. Quercus alba

1. Quercus alba

Quercus falcata 3. Liquidambar styraciflua

Sampling Point: wcmc003_u	
Dominance Test worksheet:	
Number of Dominant Species	

	 (A)
Total Number of Dominant Species Across All Strata: 4	 (B)

Percent of Dominant Species	50	(
That Are OBL, FACW, or FAC:		(A/B)

Prevalence Index worksheet:

Dominant Indicator

FACU

FAC

FAC

FACU

FACU

% Cover Species? Status 25 Yes FAC

15

10

5

5

Yes

Yes

No

No

No

= Total Cover 20% of total cover:_

5 = Total Cover

20% of total cover:___1

5 = Total Cover

0 = Total Cover

20% of total cover:

50% of total cover: 2.5 20% of total cover: 1

5 Yes FAC

Total % Cov	er of:	M	ultiply by:	
OBL species	0	x 1 =	0	_
FACW species	0	x 2 =	0	
FAC species	45	x 3 =	135	_
FACU species	25	x 4 =	100	-
UPL species	0	x 5 =	0	-
Column Totals:	70	(A)	235	(B)
Prevalence	e Index = B/	A =	3.35	_

Hydrophytic Vegetation Indicators:

- ___ 1 Rapid Test for Hydrophytic Vegetation
- ___ 2 Dominance Test is >50%
- __ 3 Prevalence Index is ≤3.0¹
- ___ 4 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- 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 more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?

Yes ____ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

50% of total cover: 0

Woody Vine <u>Stratum</u> (Plot size: ______)

Sampling Point: wcmc003_u

(inches)	Matrix		Redox Features		
inches)	Color (moist)	<u>%</u>	Color (moist) % Type ¹ Loc		Remarks Remarks
0-8	10 YR 2/1	100		S	
8-16	10 YR 5/3	100		S	
	-	- -			
					
Type: C=C	oncentration D=Der	letion RM=Re	educed Matrix, MS=Masked Sand Grains.	² Location:	PL=Pore Lining, M=Matrix.
	Indicators:	nodon, rawi–ra	saucea Matrix, Mc-Maskea Garia Graino.		dicators for Problematic Hydric Soils ³ :
Histosol			Dark Surface (S7)		_ 2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	1/7 1/8\	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9) (MLRA 147, 14		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	+0)	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	d Below Dark Surfac	-ρ (Δ11)	Depleted Dark Surface (F7)	-	Other (Explain in Remarks)
	ark Surface (A12)	(/ (/ / /	Redox Depressions (F8)		_ Guior (Explain in Nomano)
	Mucky Mineral (S1) (LRR N.	Iron-Manganese Masses (F12) (LRR I	J.	
	A 147, 148)		MLRA 136)	-,	
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122	2) ³	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR		wetland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA 127		unless disturbed or problematic.
	Layer (if observed)	<u> </u>		, ,	annos distanzed or prezionidate.
		-			
Type			_	Usalain C	Soil Present? Yes No
Type:	ahaa\.			nyaric s	Soil Present? Yes No
Depth (in	ches):				
Depth (in Remarks:			_		
Depth (in Remarks:			-		
Depth (in Remarks:			=		
Depth (in Remarks:				1	
Depth (in Remarks:			-		
Depth (in Remarks:			-		
Depth (in Remarks:			_		
Depth (in Remarks:					
Depth (in Remarks:					
Depth (in Remarks:					
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Depth (in Remarks:			-		
Depth (in Remarks:			-		
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Depth (in Remarks:					
Depth (in					



Photo 1 Upland data point wcmc003_u facing east



Photo 2 Upland data point wcmc003_u facing north

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/C	county: Cumberland		Sampling Date: 2/10/2015			
				State: NC	Sampling Point: wcmc003f_w		
Investigator(s): Team C							
Landform (hillslope, terrace, etc.): F							
Subregion (LRR or MLRA): P	Lat:	Long: -78.	71220308	Datum: WGS 1984			
Soil Map Unit Name: Johnston loam				NWI classific	ation: None		
Are climatic / hydrologic conditions o	n the site typical fo						
Are Vegetation, Soil,							
Are Vegetation, Soil,							
SUMMARY OF FINDINGS -							
Hadron best're Manustation Brown at 0		No		<u>·</u>	· · · · · · · · · · · · · · · · · · ·		
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes V	No No	Is the Sampled Area	.,			
Wetland Hydrology Present?		No	within a Wetland?	Yes	No		
Remarks:	103						
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)		
Primary Indicators (minimum of one	a is required; shock	all that apply)		Surface Soil			
	•		P14)		getated Concave Surface (B8)		
Surface Water (A1) High Water Table (A2)		True Aquatic Plants (Hydrogen Sulfide Od		<u>✓</u> Drainage Pa			
Saturation (A3)	Moss Trim Li						
Water Marks (B1)	d Iron (C4)		Water Table (C2)				
Sediment Deposits (B2)		Recent Iron Reductio		Crayfish Burrows (C8)			
Drift Deposits (B3)	C7)	Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)		Other (Explain in Rer	narks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)				Geomorphic	Position (D2)		
Inundation Visible on Aerial Im	agery (B7)			Shallow Aqu	itard (D3)		
Water-Stained Leaves (B9)					aphic Relief (D4)		
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)		
Field Observations:		5 4 ()					
	No		1				
	No		0	Hydrology Present? Yes V No No			
Saturation Present? Yes (includes capillary fringe)	s No	Depth (inches):	wetland i	Hydrology Preser	t? Yes No		
Describe Recorded Data (stream g	auge, monitoring w	ell, aerial photos, pre	vious inspections), if ava	ilable:			
Remarks:							
Wetland hydrology is present							

Tree Stratum (Plot size: 1. Acer rubrum	30)	Absolute % Cover	Dominant Ir Species?		Dominance Test worksheet:
		50	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
2					Total Number of Dominant
3					Species Across All Strata: 5 (B)
4					Dersont of Dominant Chasins
5					Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)
6					
7		•	· -	_	Prevalence Index worksheet:
		50	= Total Cover		Total % Cover of: Multiply by:
	50% of total cover:25	20% of	total cover:	10	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot si	ize:)				FACW species x 2 =
1. Ligustrum sinense	,	15	Yes	FACU	FAC species65
2. Magnolia virginiana		5	Yes	FACW	FACU species15
3			·		UPL species0 x 5 =0
J					Column Totals:125 (A)345 (B)
5		· 	<u> </u>		
•					Prevalence Index = B/A =2.76
_			·		Hydrophytic Vegetation Indicators:
			· 		1 - Rapid Test for Hydrophytic Vegetation
8			·		✓ 2 - Dominance Test is >50%
9		20	·		✓ 3 - Prevalence Index is ≤3.0¹
	500/ // 10		= Total Cover	4	✓ 4 - Morphological Adaptations¹ (Provide supporting)
	50% of total cover: 10	20% of	total cover:	<u> </u>	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	40	\/	E A O\A/	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Arundinaria gigantea		· -	Yes	FACW	
2. Lonicera japonica		15	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must
3		· -	·		be present, unless disturbed or problematic.
4					Definitions of Four Vegetation Strata:
5					The Mandage of substitution is a Circ (7.0 cm) on
6					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7					height.
8					Conline/Chrush Woody plants evaluding vines less
9					Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10					m) tall.
11.					Herb – All herbaceous (non-woody) plants, regardless
		55	= Total Cover		of size, and woody plants less than 3.28 ft tall.
	50% of total cover: 27.5	20% of	total cover:	11	W 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Woody Vine Stratum (Plot size	e: 30)				Woody vine – All woody vines greater than 3.28 ft in height.
1.					Holght.
2					
			·		
5.					Hydrophytic
J		0	= Total Cover		Vegetation
	50% of total cover: 0		total cover:	0	
Demonstrate (Include whate more)			total cover		
Remarks: (Include photo number Red maple trees were growing			ressed.		

Sampling Point: wcmc003f_w

	cription: (Describe t	o the de	•			or confirm	the absence	e of indicators.)				
Depth	Matrix	0/	Redo	x Feature		1 - 2	T	Damada				
(inches) 0-16	Color (moist) 2.5 Y 4/2	<u>%</u> 90	Color (moist) 5 YR 4/6	<u>%</u> 10	Type ¹ C	Loc ² PL/M	<u>Texture</u> CL	Remarks				
0-10	2.5 1 4/2		5 TK 4/0			F L/IVI		· -				
			· <u></u>			- ——	-					
	·											
								-				
			·									
			·				-	· ·				
								· -				
¹Type: C=C	Concentration, D=Depl	etion RN	M-Reduced Matrix MS	S-Masker	I Sand Gr	ains	² Location: F	PL=Pore Lining, M=Matrix.				
	Indicators:	otion, rei	n=readoca Matrix, Me	S-Masket	a Garia Gi	anio.		cators for Problematic Hydric Soils ³ :				
-			Dork Surface	(07)				· ·				
Histoso			Dark Surface		00 (50) /8	AI DA 447		2 cm Muck (A10) (MLRA 147)				
	pipedon (A2)		Polyvalue Be				140) (Coast Prairie Redox (A16)				
	listic (A3)		Thin Dark Su Loamy Gleye			141, 148)	,	(MLRA 147, 148)				
	en Sulfide (A4)			,	12)		'	Piedmont Floodplain Soils (F19)				
	d Layers (A5)		<u>✓</u> Depleted Ma		-c)		,	(MLRA 136, 147)				
	uck (A10) (LRR N)	(044)	Redox Dark Surface (F6) Very Shallow Dark Surface (TF12)									
	ed Below Dark Surface	e (ATT)	Depleted Dark Surface (F7) Other (Explain in Remarks)									
	ark Surface (A12)	DD N	Redox Depressions (F8) Iron-Manganese Masses (F12) (LRR N,									
	Mucky Mineral (S1) (L	KK N,			es (F12) (LKK N,						
	A 147, 148)		MLRA 13	•	(BAL D.A. 40	١٥ ، ١٥٥١	3, .	Parton of budoubards for a set of a second				
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and				
	Redox (S5)		Piedmont Flo					etland hydrology must be present,				
	d Matrix (S6)		Red Parent N	viateriai (F	21) (MLR	A 127, 147	') ur	nless disturbed or problematic.				
Restrictive	Layer (if observed):											
Type:								,				
Depth (ir	nches):						Hydric Soi	I Present? Yes No				
Remarks:												
Hydric soil pr	resent											



Photo 1
Wetland data point wcmc003f_w facing south



Photo 2
Wetland data point wcmc003f_w facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Cu	mberland	Sampling Date: 7/6/16
Applicant/Owner: Dominian		State: NC	Sampling Point: Wcmc003e
Investigator(s): ESI- R. Turnbull	Section, Township,	Range: N/A	
Landform (hillslope, terrace, etc.):drame_e	Local relief (concav	e. convex, none):conco	ve Slope (%): 0-2%
Subregion (LRR or MLRA): LRRP LE	35.18149	Long: -78.71345	Datum: WG584
Soil Map Unit Name: John stm. Joan		NIM classific	ation: PEM
Are climatic / hydrologic conditions on the site typical for this		o (ir no, explain in R	emarks.)
Are Vegetation Soil, or Hydrology si			resent? Yes No
Are Vegetation, Soil, or Hydrology na	iturally problematic? (I	f needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach site map s	howing sampling poir	t locations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No Yes No No No No No No No No No No No No No	Is the Samp	led Area	
[2018년 1일 전 19 19 19 19 19 19 19 19 19 19 19 19 19	within a We		No
Wetland Hydrology Present? Yes No Remarks:			
HYDROLOGÝ			
A delicated the representation of the control of th		Secondary Indica	ators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all the	nat annivi	Surface Soil	NAME OF STREET STREET, STREET STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET,
A STATE OF THE PROPERTY OF THE	auna (B13)		getated Concave Surface (B8)
High Water Table (A2) Marl Dep	☐ Drainage Pa		
	Sulfide Odor (C1)	Moss Trim L	F02390 P. GEOGO 4008 C
☐ Water Marks (B1) ☐ Oxidized	Rhizospheres along Living Ro		Water Table (C2)
As a contact thirties and a contact of the contact	of Reduced Iron (C4)	Crayfish Bur	
	on Reduction in Tilled Soils (C	7.6 (1.15 (1	isible on Aerial Imagery (C9) Position (D2)
	k Surface (C7) kplain in Remarks)	Shallow Aqu	
☐ Iron Deposits (B5) ☐ Other (E) ☐ Inundation Visible on Aerial Imagery (B7)	cpiant in Nemarks)	FAC-Neutra	150.021 (46.0 1.7 (46.0 16.0 1
Water-Stained Leaves (B9)			noss (D8) (LRR T, U)
Field Observations:			G. William Sk. Manner and a service of the service of Science of S
Surface Water Present? Yes No Dep	th (inches):		
Water Table Present? Yes No Dep	th (inches): surface		/
Saturation Present? Yes No Dep	th (inches): shrface	Wetland Hydrology Prese	nt? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a	erial photos, previous inspect	ions), if available:	A second
Remarks:			
			8
		And the second s	STANCE THE STANCE OF THE STANC

TOTAL DE LA CONTRACTOR	Absolute	Dominar	nt Indicator	Dominance Test worksheet:				
<u>Tree Stratum</u> (Plot size:	% Cover	Species	? Status	Number of Dominant Species 7	(A)			
3				Total Number of Dominant Species Across All Strata: 2	(B)			
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)			
6.				Prevalence Index worksheet:	_			
7				Total % Cover of: Multiply by:				
8				OBL species x 1 =				
	B	= Total Co	over					
50% of total cover:	20% of	total cove	er:	FACW species x 2 =				
Sapling/Shrub Stratum (Plot size: 30ft. x 30ft.)				FAC species x 3 =				
		Zi m		FACU species x 4 =				
2.				UPL species x 5 =				
3				Column Totals: (A)	- (B)			
4.				Prevalence Index = B/A =				
5				Hydrophytic Vegetation Indicators:				
6				1 - Rapid Test for Hydrophytic Vegetation				
7				이 나를 그들다 이번 그림이 어느 없어 이 없었다면서 하면 하지만 사람이 없었다. 그리고 말이 먹어 보다 보다 없다.				
		-		·				
8.	- 0	- Total Co	21/05	3 - Prevalence Index is ≤3.0¹ Problematic Hydrophytic Vegetation¹ (Explain)				
	= Total Cover 20% of total cover:			TI Problematic Hydrophytic Vegetation (Explain)				
	20% of	total cove	r:					
Herb Stratum (Plot size: 30ft. × 30ft.)	10	1	017/	¹ Indicators of hydric soil and wetland hydrology no be present, unless disturbed or problematic.	nust			
1. Persicaria hydropiperoides	- 60	-	API	A TORNOL TO LEGISLATURE CONTROL OF THE PROPERTY OF THE PROPERT				
2. Myriephyllum agnaticum		<u> </u>	OBL	Definitions of Four Vegetation Strata:				
3are a many to the constraint of the cons				Tree - Woody plants, excluding vines, 3 in. (7.6	cm) or			
4. Constitution of the second				more in diameter at breast height (DBH), regard	ess of			
5. A second contract to the contract of the co				height.				
6.				Sapling/Shrub - Woody plants, excluding vines	, less			
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall				
8.				Herb – All herbaceous (non-woody) plants, rega	rdless			
9.				of size, and woody plants less than 3.28 ft tall.				
				Woody vine - All woody vines greater than 3.28	ft in			
10				height.	, ,, ,,,			
	of the second			110-3-11.				
12.	B	= Total Co		the second secon	S 3			
50% of total cover:	1 404 - 4 - 4 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -			The state of the s				
Woody Vine Stratum (Plot size: 36ft. x 30ft.)	20% 01	total cove						
Control of the Contro								
		1 10 100	,					
2	- 10-10-11-11-11-11-11-11-11-11-11-11-11-1	- hallandar						
3.		The second	-					
4		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1						
5.				Hydrophytic				
	0	= Total Co	over	Vegetation Present? Yes No				
50% of total cover:	20% of	total cove	er:	Present? Yes No No				
Remarks: (If observed, list morphological adaptations be		Constitution of the contract o	AV					
Remarks. (II observed, list morphological adaptations be	.011).							

Depth	14-1-1-			x Features	ilicator or comm	m the absence of i	
(inches)	Color (moist)	%	Color (moist)		Type Loc2	Texture	Remarks
0-10	10422/1	90	104R3/4	10	C M	5	programmed with a company of
10-20	1642211	100				5	
10-10	10916 41	100					
							-
	4						
Lyne: C=C	oncentration, D=Dep	letion RM=	Reduced Matrix, M	S=Masked S	Sand Grains.	² Location: PL	=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Applic	able to all	LRRs, unless othe	rwise noted	l.)	Indicators for	Problematic Hydric Soils3:
Histoso					(S8) (LRR S, T		k (A9) (LRR O)
Histic E	pipedon (A2)				LRR S, T, U)		k (A10) (LRR S)
	istic (A3)			ky Mineral (F		Reduced	Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)			ed Matrix (F2	2)		Floodplain Soils (F19) (LRR P, S, T) is Bright Loamy Soils (F20)
	d Layers (A5)	T 10	Depleted Ma	Surface (F6)		(MLRA	[20] : [10] [10] [20] [20] [20] [20] [20] [20] [20] [2
	: Bodies (A6) (LRR P ucky Mineral (A7) (LF			ark Surface (F			nt Material (TF2)
	resence (A8) (LRR U		The state of the s	ressions (F8)			low Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) (Other (Ex	plain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted O	chric (F11) (N	/LRA 151)	2 (2) (2)	
	ark Surface (A12)		THE RESERVE OF THE PARTY OF THE		(F12) (LRR O,		rs of hydrophytic vegetation and
- 70 pt 040 - 000 000 000 000	Prairie Redox (A16) (M			ace (F13) (L		wetlan	d hydrology must be present, disturbed or problematic.
	Mucky Mineral (S1) (I	LRR O, S)		(F17) (MLR			disturbed of problematic.
	Gleyed Matrix (S4)				ILRA 150A, 150 Is (F19) (MLRA		
5/18/A/S0/2/C10/S0/4/S	Redox (S5) d Matrix (S6)		Anomalous	Bright Loam	Soils (F20) (MI	LRA 149A, 153C, 1	53D)
	urface (S7) (LRR P, S	s. T. U)	III / Alcincious	Dirgin Louin	, 00.00 (. 10.7)		
	Layer (if observed)			A	Victorian in the second second		
Type:	(1) 15명 15명 15명 15명 15명 15명 15명 15명 15명 15명					Language St.	:
The state of the same of the same of the same	nches):					Hydric Soil Pr	esent? Yes No
CCASES Brooks	Septembers, and a second process of the second			The second second	No. 10 (1) (1)	Charles of the second of the second of	A visite and the control of the discount of the first of the control of the contr
Remarks:							
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Environmental Field Surveys Wetland Photo Page



Wetland data point wcmc003e_w facing east.



Wetland data point wcmc003e_w facing south.

WETLAND	DETERMINATION DATA FOR		
Project/Site: ACP	City/0	County: Cumber	Sampling Date: 7/6/16
Applicant/Owner: Dominio	^		State: NC Sampling Point: Wcmc 0035.W
Investigator(a) EST (M.	Smith / N. Murphrey) sortio	on Township Range	NA
Landform (hillalana tarrasa ata):	depression incal	relief (concave convex	none): CONCAVE Slope (%):
Subregion (LRR or MLRA):	RR T Lat 35.18	169 Long:	- 18. 11195 Datum: WG3 89
Soil Man Unit Name: Wood	ington loamy sai	nd	NWI classification: PSS
Are climatic / hydrologic conditions of	on the site typical for this time of year? Y	es No .	(If no. explain in Remarks.)
	or Hydrology significantly distur	bed? Are "Norma	Circumstances" present? Yes No
	or Hydrology naturally problems		explain any answers in Remarks.)
SUMMARY OF FINDINGS –	Attach site map snowing san	ipling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No No No No No No No No No No No No No	Is the Sampled Area within a Wetland?	Yes No
Existing	powerline ense	EMENT	
HYDROLOGÝ			
Wetland Hydrology Indicators:		The state of the s	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of on	e 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	R U)	Drainage Patterns (B10)
Saturation (A3)	Hydrogen Sulfide Odor (Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizospheres a		Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iro		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 Remark	ks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Im	agery (B7)		FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water-Stained Leaves (B9)			Spriagridin moss (Do) (ERR 1, 0)
Field Observations:	Donth (inches):	NA	
Surface Water Present? Ye Water Table Present? Ye	s No Depth (inches): s No Depth (inches):	6	
[CHE] [CHE]	s No Depth (inches):	1 Wetland	Hydrology Present? Yes No
(includes capillary fringe)	gauge, monitoring well, aerial photos, pre	THE RESERVE	
Describe Recorded Data (stream)	lauge, monitoring well, actial priotos, pro	, vious inspectioney, ii a v	
Remarks:	Company of the Compan	March 1990 - Francisco - Franc	A CONTRACTOR OF THE CONTRACTOR
			* v

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'x30')			? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				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				Total % Cover of: Multiply by:
8				OBL species x1 =
		= Total Co	-	FACW species x 2 =
50% of total cover:	20% of	total cove	r:	FAC species x3 =
Sapling/Shrub Stratum (Plot size: 30' x 30')		1	-1-	FACU species x4 =
1. Alnus serrulata	20	7	FACW	UPL species x5 =
2. Liriodendron tulipitera	10	N	FACH	Column Totals: (A) (B)
3. Acer rubrum	10	N	FAC	Column rotals(A)(B)
4. Nyssa sylvatica	5	N	FAC	Prevalence Index = B/A =
5. Ilex glabra	10	N	FACW	Hydrophytic Vegetation Indicators:
6.	<u> </u>			1 - Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	55	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 27.	5 20% of	total cove	r:	
Herb Stratum (Plot size: 30'x30')		The second	T. Transmitter	¹ Indicators of hydric soil and wetland hydrology must
1. Eupatorium perfoliatum	30	Y	FACW	be present, unless disturbed or problematic.
2 Conoclinium coelectinum	30	Y	FAC	Definitions of Four Vegetation Strata:
3. Rhexia mariana	10	N	FACW	
4. Polyaala lutea		N	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Centella erecta	Emp	14	FACW	height.
6. Rhynchospora inexpansa	10	LA.	FACW	[마켓쥬UNE : : : : : : : : : : : : : : : : : : :
7	100			Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9.		a Contract to	1.2	of size, and woody plants less than 3.28 ft tall.
10	1 000000		20000000	Woody vine - All woody vines greater than 3.28 ft in
11.		11 12 2 37 10		height.
12.				
	90	= Total Co	ver	Transference of the second sec
50% of total cover: 45	20% of	total cove	r. 18	
Woody Vine Stratum (Plot size: 30' x 30')				
1. Smilax rotundifolia	10	Y	FAC	
2. Vitis rotundifolia	20	Y	FAC	
3.	THE RESERVE	- 100 100 100		
4.		on Samuel		
5.				II. Jamela dia
0.	30	= Total Co	WOL	Hydrophytic Vegetation
50% - 54-44 15		total cove	4.000	Present? Yes No
50% of total cover: 13		total cove		
Remarks: (If observed, list morphological adaptations belo	w).			
				St. 122 St. St. St. St. St. St. St. St. St. St.

Pype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Yes Ye
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S9) (LRR S, T, U) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Histic Epipedon (A2) Loamy Mucky Mineral (F1) Loamy Mucky Mineral (F1) Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Torm Muck (A9) (LRR P, T, U) Depleted Below Dark Surface (F6) Torm Muck (A9) (LRR P, T, U) Depleted Below Dark Surface (A1) Torm Muck (A9) (LRR P, T, U) Depleted Below Dark Surface (A1) Trinck (A1) Trinck (A3) Trindicators of hy
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S9) (LRR S, T, U) 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 (F0) 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 0, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Delta Ochric (F13) (MLRA 150A) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U) Dark Surface (S7) (LRR P, S, T, U) Dark Surface (S7) (LRR P, S, T, U) Sestrictive Layer (if observed):
yeric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1)

Environmental Field Surveys Wetland Photo Page



Wetland data point wcmc003s_w facing east.



Wetland data point wcmc003s_w facing west.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	tic Coast Pipeline City/County: Cun					Sampling Date: 2/10/2015		
Applicant/Owner: DOMINION					State: NC	Sampling Point: wcmc003_u		
Investigator(s): Team C			Secti	on, Township, Range: N	lo PLSS in this ar	rea		
Landform (hillslope, terrace, etc.): Hill Slope Local relief (concave								
Subregion (LRR or MLRA): P								
Soil Map Unit Name: Woodington loan	my sand				NWI classi	fication: None		
Are climatic / hydrologic conditions on	the site typical fo	or this time of						
Are Vegetation, Soil, c								
Are Vegetation, Soil, c								
SUMMARY OF FINDINGS –								
			<u> </u>		<u> </u>	, .		
Hydrio Soil Brosont?	Yes Yes			Is the Sampled Area				
Hydric Soil Present? Wetland Hydrology Present?	Yes		•	within a Wetland?	Yes	No		
Remarks:	103	_ 110						
HYDROLOGY					0			
Wetland Hydrology Indicators:						cators (minimum of two required)		
Primary Indicators (minimum of one	-			(D.4.4)	Surface So			
Surface Water (A1)		True Aquat				egetated Concave Surface (B8)		
 High Water Table (A2) Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) 					_	Patterns (B10) Lines (B16)		
						n Water Table (C2)		
Sediment Deposits (B2)						urrows (C8)		
Sediment Deposits (B2) Recent Iron Reduction in Tilled S Thin Muck Surface (C7)						Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Exp				Stressed Plants (D1)		
Iron Deposits (B5)		` '		,	Geomorphic Position (D2)			
Inundation Visible on Aerial Ima	gery (B7)				Shallow Ad	quitard (D3)		
Water-Stained Leaves (B9)					Microtopographic Relief (D4)			
Aquatic Fauna (B13)					FAC-Neutr	al Test (D5)		
Field Observations:								
	No 🔽							
	No							
Saturation Present? Yes (includes capillary fringe)	No	Depth (inc	ches):	Wetland	Wetland Hydrology Present? Yes No			
Describe Recorded Data (stream ga	uge, monitoring v	vell, aerial p	hotos, pre	evious inspections), if av	/ailable:			
Demonto								
Remarks: Conditions at the data site were wette	er than normal du	e to heavy	rain No.	avdrology present				
Conditions at the data site were wette	i man normal du	ic to ricavy	1401	lydrology present.				

_)

50% of total cover: ___ 15

50% of total cover: 2.5

30

Tree Stratum (Plot size:

Sapling/Shrub Stratum (Plot size:__

Herb Stratum (Plot size: ___

1. Lonicera japonica

Pinus taeda

4. Quercus nigra

5. Quercus alba

1. Quercus alba

Quercus falcata 3. Liquidambar styraciflua

Sampling Point: wcmc003_u	
Dominance Test worksheet:	
Number of Dominant Species	

That Are OBL, FACW, or FAC:	2	(A)
Total Number of Dominant Species Across All Strata:	4	(B)
•		,

Percent of Dominant Species	50	(
That Are OBL, FACW, or FAC:		(A/B)

Prevalence Index worksheet:

Dominant Indicator

FACU

FAC

FAC

FACU

FACU

% Cover Species? Status 25 Yes FAC

15

10

5

5

Yes

Yes

No

No

No

= Total Cover 20% of total cover:_

5 = Total Cover

20% of total cover:___1

5 = Total Cover

0 = Total Cover

20% of total cover:

50% of total cover: 2.5 20% of total cover: 1

5 Yes FAC

Total % Cov	er of:	M	ultiply by:	
OBL species	0	x 1 =	0	_
FACW species	0	x 2 =	0	
FAC species	45	x 3 =	135	_
FACU species	25	x 4 =	100	-
UPL species	0	x 5 =	0	-
Column Totals:	70	(A)	235	(B)
Prevalence	e Index = B/	A =	3.35	_

Hydrophytic Vegetation Indicators:

- ___ 1 Rapid Test for Hydrophytic Vegetation
- ___ 2 Dominance Test is >50%
- __ 3 Prevalence Index is ≤3.0¹
- ___ 4 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- 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 more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?

Yes ____ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

50% of total cover: 0

Woody Vine <u>Stratum</u> (Plot size: ______)

Sampling Point: wcmc003_u

	<u>Matrix</u>		Redox Features		
inches)	Color (moist)	<u>%</u>	Color (moist) % Type ¹ Lo	oc² Textu	re Remarks
8-0	10 YR 2/1	100		S	
8-16	10 YR 5/3	100		S	
					 -
Type: C=C	Concentration D=Der	oletion RM=Re	educed Matrix, MS=Masked Sand Grains.	² l ocatio	n: PL=Pore Lining, M=Matrix.
	Indicators:	olotion, rawi–ra	eddood Matrix, MO-Mashed Saria Crairis.		ndicators for Problematic Hydric Soils ³ :
Histosol			Dark Surface (S7)		2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	\ 147 148\	Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Surface (S9) (MLRA 147,		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	140)	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)	-	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	-e (Δ11)	Depleted Dark Surface (F7)	-	Other (Explain in Remarks)
	ark Surface (A12)	.5 (7111)	Redox Depressions (F8)	-	
	Mucky Mineral (S1) (LRR N.	Iron-Manganese Masses (F12) (LRR	N.	
	A 147, 148)		MLRA 136)	,	
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 12	22)	³ Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (ML		wetland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA 12		unless disturbed or problematic.
	Layer (if observed)	<u> </u>			anneed dietailed of problemation
		-			
Type:	acha a).			Livelein	Sail Draggmt2 Vag Na V
Type: Depth (in	nches):			Hydric	Soil Present? Yes No
Type: Depth (in Remarks:			-	Hydric	Soil Present? Yes No
Type: Depth (in Remarks:			- 	Hydric	Soil Present? Yes No
Type: Depth (in Remarks:			_	Hydrid	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:			<u>-</u>	Hydric	Soil Present? Yes No
Type: Depth (in Remarks:			<u>-</u>	Hydric	Soil Present? Yes No
Type: Depth (in Remarks:			<u>-</u>	Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in temarks:				Hydric	Soil Present? Yes No
Type: Depth (in temarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Туре:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No
Type: Depth (in Remarks:				Hydric	Soil Present? Yes No



Photo 1 Upland data point wcmc003_u facing east



Photo 2 Upland data point wcmc003_u facing north

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline		City/C	county: Cumberland		Sampling Date: 2/10/2015
Applicant/Owner: DOMINION				State: NC	Sampling Point: wcmc003f_w
Investigator(s): Team C					
Landform (hillslope, terrace, etc.): Flood					
Subregion (LRR or MLRA): P	Lat: (35.18259772	Lona: -78.	71220308	Datum: WGS 1984
Soil Map Unit Name: Johnston loam				NWI classific	ation: None
Are climatic / hydrologic conditions on the	e site typical for				
Are Vegetation, Soil, or I					
Are Vegetation, Soil, or I					
SUMMARY OF FINDINGS – A					
Hadandadia Vanatalia a Bassado	V 4	No		<u> </u>	<u> </u>
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes V	No No	Is the Sampled Area		
Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:	103	110			
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is	required: check	all that apply)		Surface Soil	
	•		P14)		getated Concave Surface (B8)
Surface Water (A1) ✓ High Water Table (A2)		Frue Aquatic Plants (Hydrogen Sulfide Od		<u>✓</u> Drainage Par	
Saturation (A3)			es on Living Roots (C3)		
Water Marks (B1)		Presence of Reduced			Water Table (C2)
Sediment Deposits (B2)			n in Tilled Soils (C6)	Crayfish Buri	
Drift Deposits (B3)		Thin Muck Surface (C		-	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	0	Other (Explain in Ren	narks)	Stunted or S	tressed Plants (D1)
Iron Deposits (B5)				Geomorphic	Position (D2)
Inundation Visible on Aerial Image	ry (B7)			Shallow Aqui	itard (D3)
Water-Stained Leaves (B9)					phic Relief (D4)
Aquatic Fauna (B13)				FAC-Neutral	Test (D5)
Field Observations:	4/				
		Depth (inches):	1		
		Depth (inches):	0		
Saturation Present? Yes (includes capillary fringe)	No	Depth (inches):	Wetland F	Hydrology Presen	t? Yes V No
Describe Recorded Data (stream gaug	e, monitoring we	ell, aerial photos, pre	vious inspections), if ava	ilable:	
Remarks:					
Wetland hydrology is present					

EGETATION (Four Stra			-	.P t	Sampling Point: wcmc003f_w
Tree Stratum (Plot size:	30	Absolute % Cover	Dominant Ir Species?		Dominance Test worksheet:
1. Acer rubrum		50	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
2			. <u></u> .		Total Number of Dominant
3					Species Across All Strata: 5 (B)
4					Develop of Deminent Charles
5					Percent of Dominant Species That Are OBL, FACW, or FAC: 80 (A/B)
6					
7		•			Prevalence Index worksheet:
		50	= Total Cover	,	Total % Cover of: Multiply by:
	50% of total cover:25	20% of	total cover:	10	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot s	ize:)				FACW species x 2 =
1. Ligustrum sinense		15	Yes	FACU	FAC species65
2. Magnolia virginiana		5	Yes	FACW	FACU species15
3.			· ·	-	UPL species0 x 5 =0
J					Column Totals:125
5		· 	· ·		
•			· 		Prevalence Index = B/A = 2.76
_			· ·		Hydrophytic Vegetation Indicators:
			· ·		1 - Rapid Test for Hydrophytic Vegetation
8			· ·		✓ 2 - Dominance Test is >50%
9		20	· <u></u> ·		✓ 3 - Prevalence Index is ≤3.0 ¹
	500/ / 10		= Total Cover	4	✓ 4 - Morphological Adaptations¹ (Provide supporting)
	50% of total cover: 10	20% of	total cover:	.	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:)	40	\/	E 4 0)4/	Problematic Hydrophytic Vegetation ¹ (Explain)
1. Arundinaria gigantea		· -	Yes	FACW	
2. Lonicera japonica		15	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must
3		· -			be present, unless disturbed or problematic.
4					Definitions of Four Vegetation Strata:
5					The Mandage was discounted and the Company
6			. <u></u> .		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
7					height.
8			. <u> </u>		Canling/Chrub Weady plants avaluding vines less
9					Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
10					m) tall.
11.					Herb – All herbaceous (non-woody) plants, regardless
		55	= Total Cover		of size, and woody plants less than 3.28 ft tall.
	50% of total cover: 27.	20% of	total cover:	11	w 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Woody Vine Stratum (Plot size	e: 30)				Woody vine – All woody vines greater than 3.28 ft in height.
1.	,				noight.
2					
			· · · · · · · · · · · · · · · · · · ·		
5.			· ·	-	Hydrophytic Vegetation
o		0	= Total Cover		Present? Yes No
	50% of total cover: 0		total cover:	0	
Demogles, (Include photo num			10101 00 001		
Remarks: (Include photo num Red maple trees were growing			ressed.		
Red maple trees were growing	in a foot of water in parts ar	d were butt	ressed.		

Sampling Point: wcmc003f_w

	cription: (Describe t	o the de				or confirm	the absence	e of indicators.)
Depth	Matrix	0/	Redo	x Feature		1 - 2	T t	Damada
(inches) 0-16	Color (moist) 2.5 Y 4/2	90	Color (moist) 5 YR 4/6	<u>%</u> 10	Type ¹ C	Loc ² PL/M	<u>Texture</u> CL	Remarks
0-10	2.5 1 4/2		J 1K 4/0			F L/IVI		
						- ——	-	
	·							
		-						-
		-	· -				-	-
¹ Type: C=C	Concentration, D=Depl	etion. RM	1=Reduced Matrix, MS	S=Masked	Sand Gr	ains.	² l ocation: F	PL=Pore Lining, M=Matrix.
	Indicators:	<u> </u>		- macros		<u> </u>		cators for Problematic Hydric Soils ³ :
-			Dark Surface	(97)				•
Histoso	pipedon (A2)		Dark Surface Polyvalue Be		ce (SS) /	/II D A 1/17		2 cm Muck (A10) (MLRA 147) Coast Prairie Redox (A16)
	listic (A3)		Polyvalue Be				1+0)	
	en Sulfide (A4)		Inin Dark Su Loamy Gleye			141, 140)		(MLRA 147, 148) Piedmont Floodplain Soils (F19)
	en Suilide (A4) ed Layers (A5)		Loamy Gleye _✓ Depleted Ma	,	1 4)			
	uck (A10) (LRR N)		Redox Dark		. 6)		,	(MLRA 136, 147) Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	(//11)		•				Other (Explain in Remarks)
		(A11)	Depleted Date				<u> </u>	Other (Explain in Remarks)
	ark Surface (A12)	DD N	Redox Depre			I DD N		
	Mucky Mineral (S1) (L	KK N,	Iron-Mangan		es (F12) (LKK N,		
	A 147, 148)		MLRA 13	-	(MIDA 45	oc 400\	310	dicators of hydrophytic vegetation and
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
-	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent N	viateriai (F	(IVILR	A 127, 147) ui	nless disturbed or problematic.
	Layer (if observed):							
Type:								
Depth (ir	nches):						Hydric Soi	il Present? Yes No
Remarks:								
Hydric soil pr	resent							



Photo 1
Wetland data point wcmc003f_w facing south



Photo 2
Wetland data point wcmc003f_w facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County:C	Lumberland		Sampling Date:	7/6/16
Applicant/Owner: Dominion		State	NC	Sampling Point:	Wcmc003e
Investigator(s): EST-R. Turnbull	Section, Townshi	ip, Range:	V/A		
Landform (hillslope, terrace, etc.):	Local relief (conc	ave convex none	i: conca	re Slop	oe (%): 0-2%
Subregion (LRR or MLRA): LRR P	12: 35.18149	Long: -7	8.71345	Da	tum: WG584
Subregion (LRR of MLRA):	Lat	Long	AUA/I classifies	tion: PEM	
Soil Map Unit Name: John str. Joan					
Are climatic / hydrologic conditions on the site typical for the		No (If no	, explain in Re	emarks.)	
Are Vegetation, Soil, or Hydrology		Are "Normal Circ			No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, expla	in any answer	s in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	showing sampling po	oint locations,	transects	important f	eatures, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Yes Yes	No Is the Sar	mpled Area	V /	No	
Wetland Hydrology Present?	No within a V	Wetland?	Yes	00	_
Considerate and Considerate an			1 3 A		
HYDROLOGÝ	to the company to the		epolitica de la composition della composition de	ors (minimum o	f two required)
Wetland Hydrology Indicators:			Surface Soil		two required)
Primary Indicators (minimum of one is required: check all				etated Concave	Surface (B8)
2000 AND AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY ADDRE	e Fauna (B13) eposits (B15) (LRR U)	1	Drainage Pat		,
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	gen Sulfide Odor (C1)		Moss Trim Li		
	ed Rhizospheres along Living	Roots (C3)	Dry-Season \	Vater Table (C2)
	ice of Reduced Iron (C4)		Crayfish Burr		
1. The state of th	Iron Reduction in Tilled Soils			sible on Aerial Ir	nagery (C9)
	uck Surface (C7)	H	Geomorphic Shallow Aqui		
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Explain in Remarks)	片	FAC-Neutral		
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)				loss (D8) (LRR	T, U)
Field Observations:		100		Approximately and the property of the property	
Surface Water Present? Yes No Do	epth (inches): 4				
Water Table Present? Yes No De	epth (inches): surface				_
Saturation Present? Yes No Do	epth (inches): Justace	Wetland Hydr	ology Presen	t? Yes	No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well,	aerial photos, previous inspe	ections) if available	e:	and the second second	
Describe Recorded Data (stream gauge, monitoring wear	acital priotos, previous mope	0.00.00/1 = 1 = 1			
Remarks:	ACCOUNT OF THE PROPERTY OF THE				
nemana.					
			San Street Street	1999	the section is acted

TOTAL DE LA CONTRACTOR	Absolute	Dominar	nt Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30fs. x 30fs.)	% Cover	Species	? Status	Number of Dominant Species That Are OBL, FACW, or FAC:	_ (A)
3				Total Number of Dominant Species Across All Strata: 2	_ (B)
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC:	_ (A/B)
6.				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8				OBL species x1 =	
	_ 3	= Total Co	over		
50% of total cover:	20% of	total cove	er:	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30ft. x 30ft.)				FAC species x 3 =	
		24 m		FACU species x 4 =	
2.				UPL species x 5 =	
3.				Column Totals: (A)	— (B)
4.				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				이 나를 그들다 이번 경험에 가게 되었다면 하는데 하면 보고 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데 하는데	
8		-		3 - Prevalence Index is ≤3.0¹	
8	G.	= Total Co	over	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	lain)
50% of total cover:				Problematic Hydrophytic Vegetation ¹ (Exp	nanny
	20% 01	total cove		I was a second of the second o	
Herb Stratum (Plot size: 30ft. × 30ft.)	10	1	170	¹ Indicators of hydric soil and wetland hydrolog be present, unless disturbed or problematic.	y must
1. Persicaria hydropiperoides	- 60	-	OBL	Definitions of Four Vegetation Strata:	
2. Myriephyllum agnaticum					
3. December 1997 Annual Company of the Company of t	and Market College	4 - 14		Tree - Woody plants, excluding vines, 3 in. (7.	.6 cm) or
4. The fields of the Charles of the		V		more in diameter at breast height (DBH), regard	rdless of
5.				height.	
6.	Contract to the second		. No hade	Sapling/Shrub - Woody plants, excluding vin	es, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) t	all.
8.				Herb - All herbaceous (non-woody) plants, re-	gardless
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.	20 11 111
12.	of the second			11.3	
12.	B	= Total Co	over		t to a
50% of total cover:	7 404 10 414 1750				
Woody Vine Stratum (Plot size: 36ft. x 30ft.)	20% 01	total cove			
Control of the Contro					
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	The second second	E TO THE	7		
2		- 10 000			
3.	-		-		
4					
5				Hydrophytic	
	0	= Total Co	over	Vegetation Present? Yes No	
50% of total cover:	20% of	total cove	er:	Present? Yes No No	-
Remarks: (If observed, list morphological adaptations be					75.22
Nemarks. (II observed, list morphological adaptations be					

Depth	14-1-1-			x Features	ilicator or comm	m the absence of i	
(inches)	Matrix Color (moist)	%	Color (moist)		Type Loc2	Texture	Remarks
0-10	10422/1	90	104R3/4	10	C M	5	programmed with a second second
10-20	1642211	100				5	
10-10	10916 41	100					
							-
	4						
Lyne: C=C	oncentration, D=Dep	letion RM=	Reduced Matrix, M	S=Masked S	Sand Grains.	² Location: PL	=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Applic	able to all	LRRs, unless othe	rwise noted	l.)	Indicators for	Problematic Hydric Soils3:
Histoso					(S8) (LRR S, T		k (A9) (LRR O)
Histic E	pipedon (A2)				LRR S, T, U)		k (A10) (LRR S)
	istic (A3)			ky Mineral (F		Reduced	Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)			ed Matrix (F2	2)		Floodplain Soils (F19) (LRR P, S, T) is Bright Loamy Soils (F20)
	d Layers (A5)	T 10	Depleted Ma	Surface (F6)		(MLRA	[20] : [18] [18] [20] [20] [20] [20] [20] [20] [20] [20
	: Bodies (A6) (LRR P ucky Mineral (A7) (LF			ark Surface (F			nt Material (TF2)
	resence (A8) (LRR U		The state of the s	ressions (F8)			low Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) (Other (Ex	plain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted O	chric (F11) (N	/LRA 151)	2 (2) (2)	
	ark Surface (A12)		THE RESERVE OF THE PARTY OF THE		(F12) (LRR O,		rs of hydrophytic vegetation and
-704 PM-00796-0796	Prairie Redox (A16) (M			ace (F13) (L		wetlan	d hydrology must be present, disturbed or problematic.
	Mucky Mineral (S1) (I	LRR O, S)		(F17) (MLR			disturbed of problematic.
	Gleyed Matrix (S4)				ILRA 150A, 150 Is (F19) (MLRA		
5/18/A/S0/2/C16/S-4/S	Redox (S5) d Matrix (S6)		Anomalous	Bright Loam	Soils (F20) (MI	LRA 149A, 153C, 1	53D)
	urface (S7) (LRR P, S	s. T. U)		Dirgin Louin	, 00.00 (. 10.7)		
	Layer (if observed)			A	Victorian in the second second		
Type:	(1) 25명 21일 1일 1일 1일 12 12 12 12 12 12 12 12 12 12 12 12 12					Language St.	:
The state of the same of the same of the same	nches):					Hydric Soil Pr	esent? Yes No
C.C.A.Min. Betroff L.C.	Septembers, and a second process of the second			the second second	No. 10 (1) (1)	Charles of the second of the second of	A New York of the Control of the Con
Remarks:							
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Remarks:							



Wetland data point wcmc003e_w facing east.



Wetland data point wcmc003e_w facing south.

WETLA	AND DETERMINATION DATA FO		
Project/Site: ACP	City	County: Cumbe	rland Sampling Date: 7/6/16
Applicant/Owner: Domin	ion		State: N C Sampling Point: WCMc 0035.W
Investigator(s): EST	M. Smith / N. Murphrey) sor	tion Township Range:	NA
Landform (hillslone, toware, etc.	depression in	al relief (concave, convex	x none); Concave Slope (%):
Subregion (LRR or MLRA):	LRR T 1at: 35.19	5 16 9 Long:	- 18. 11145 Datum: WG3 84
Soil Man Unit Name: No	odinaton loamy so	nd	NWI classification: PSS
Are climatic / hydrologic conditi	ons on the site typical for this time of year?	Yes No .	(If no, explain in Remarks.)
	, or Hydrology significantly dist	urbed? Are "Norm	nal Circumstances" present? Yes No
	, or Hydrology naturally proble		, explain any answers in Remarks.)
			ions, transects, important features, etc.
SUMMART OF FINDING			ions, transcoto, imperior
Hydrophytic Vegetation Prese	ent? Yes No No	Is the Sampled Area	
Hydric Soil Present?	Yes No No No	within a Wetland?	Yes No
Wetland Hydrology Present? Remarks:	res No		
	40 POWERLINE ENS	EMENT	
- Note	O POWER INC COS	, emen	
		Caracas III	
HYDROLOGY	and the second of the second o	450 (05)	and the second design of the second s
Wetland Hydrology Indicato			Secondary Indicators (minimum of two required)
A POWNER TO A PROSENT A PROPERTY OF THE SECRET ASSOCIATION OF THE SECR	of one is required; check all that apply)	ment of the establishment of t	Surface Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13)	No. 20 Let	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)
High Water Table (A2)	Marl Deposits (B15) (L		Moss Trim Lines (B16)
Saturation (A3)	Hydrogen Sulfide Odor	along Living Roots (C3)	
Water Marks (B1)	Presence of Reduced		Crayfish Burrows (C8)
Sediment Deposits (B2) Drift Deposits (B3)	Recent Iron Reduction		Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C7		Geomorphic Position (D2)
Iron Deposits (B5)	Other (Explain in Rema		Shallow Aquitard (D3)
Inundation Visible on Aer	:		FAC-Neutral Test (D5)
Water-Stained Leaves (B			Sphagnum moss (D8) (LRR T, U)
Field Observations:		ALA	
Surface Water Present?	Yes No Depth (inches):	NA	
Water Table Present?	Yes No Depth (inches):	6	No.
Saturation Present? (includes capillary fringe)	Yes No Depth (inches):	Wetland	Hydrology Present? Yes No
Describe Recorded Data (stre	eam gauge, monitoring well, aerial photos, p	previous inspections), if a	vailable:
	were a particular than a Second	and the same of th	
Remarks:			

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30'x30')			? Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC:
6.				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x1 =
		= Total Co	-	FACW species x 2 =
50% of total cover:	20% of	total cove	r:	FAC species x3 =
Sapling/Shrub Stratum (Plot size: 30' x 30')		1	-1-	FACU species x4 =
1. Alnus serrulata	20	7	FACW	UPL species x5 =
2. Liriodendron tulipitera	10	N	FACH	Column Totals: (A) (B)
3. Acer rubrum	10	N	FAC	Column rotals(A)(B)
4. Nyssa sylvatica	5	N	FAC	Prevalence Index = B/A =
5. Ilex glabra	10	N	FACW	Hydrophytic Vegetation Indicators:
6.	<u> </u>			1 - Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
	55	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 27.	5 20% of	total cove	r:	
Herb Stratum (Plot size: 30'x30')		The second	T. Transmitter	¹ Indicators of hydric soil and wetland hydrology must
1. Eupatorium perfoliatum	30	Y	FACW	be present, unless disturbed or problematic.
2 Conoclinium coelectinum	30	Y	FAC	Definitions of Four Vegetation Strata:
3. Rhexia mariana	10	N	FACW	
4. Polyaala lutea		N	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5. Centella erecta	Emp	14	FACW	height.
6. Rhynchospora inexpansa	10	LA.	FACW	[마켓쥬UNE : : : : : : : : : : : : : : : : : : :
7	100			Sapting/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9.		a Contract to	1.2	of size, and woody plants less than 3.28 ft tall.
10	1 000000		20000000	Woody vine - All woody vines greater than 3.28 ft in
11.		11 12 2 37 10		height.
12.				
	90	= Total Co	ver	Transference of the second sec
50% of total cover: 45	20% of	total cove	r. 18	
Woody Vine Stratum (Plot size: 30' x 30')				
1. Smilax rotundifolia	10	Y	FAC	
2. Vitis rotundifolia	20	Y	FAC	
3.	THE RESERVE	- 100 100 100		
4.		on Samuel		
5.				II. Jamela dia
0.	30	= Total Co	WOL	Hydrophytic Vegetation
50% - 54-44 15		total cove	4.000	Present? Yes No
50% of total cover: 13		total cove		
Remarks: (If observed, list morphological adaptations belo	w).			
				St. 122 St. St. St. St. St. St. St. St. St. St.

	Matrix	%	Color (moist)	% Type	Loc ²	Texture	Remarks
nches)	Color (moist)	100	Color (moist)	78 1706	Loc	FSL	
1-12	104R2/1			1 000		saidyloam	
-20	10YR 5/1	90	10484/1	10		2000ALCOL.	
Histosol Histic E Black H Hydroge Stratifie Organic 5 cm M Muck P 1 cm M Deplete Thick D Coast F Sandy I Sandy I Sandy I	oncentration, D=Dep Indicators: (Applications) (A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) e Bodies (A6) (LRR Pucky Mineral (A7) (LR resence (A8) (LRR Unck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (I Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	,T,U) RR P,T,U) e (A11)	RRs, unless othe Polyvalue Be Thin Dark St Loamy Muck Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (I Depleted Oc Iron-Mangar Umbric Surf Reduced Ve Piedmont FI	rwise noted.) elow Surface (S8) urface (S9) (LRR ty Mineral (F1) (Led Matrix (F2) etrix (F3) Surface (F6) erk Surface (F7) essions (F8) LRR U) chric (F11) (MLRA esse Masses (F1 ace (F13) (LRR F1 c (F17) (MLRA 15 ertic (F18) (MLRA coodplain Soils (F	(LRR S, T, S, T, U) RR O) A 151) 2) (LRR O, F P, T, U) 51) A 150A, 150E	Indicators for Pour Indica	A10) (LRR S) rtic (F18) (outside MLRA 150A,B codplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20) 3B) Material (TF2) v Dark Surface (TF12) ain in Remarks) of hydrophytic vegetation and nydrology must be present, sturbed or problematic.
Dark Su strictive	uface (S7) (LRR P, S Layer (if observed)					1000	
of Todds All Street	nches):	3				Hydric Soil Pres	ent? Yes No



Wetland data point wcmc003s_w facing east.



Wetland data point wcmc003s_w facing west.

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline			City/0	County: Cumberland		Sampling Date: 2/10/2015	
Applicant/Owner: DOMINION		State: NC			Sampling Point: wcmc003_u		
Investigator(s): Team C			Secti	on, Township, Range: N	lo PLSS in this ar	rea	
Landform (hillslope, terrace, etc.): Hill							
Subregion (LRR or MLRA): P							
Soil Map Unit Name: Woodington loan	my sand				NWI classi	fication: None	
Are climatic / hydrologic conditions on	the site typical fo	or this time of					
Are Vegetation, Soil, c							
Are Vegetation, Soil, c							
SUMMARY OF FINDINGS –							
			<u> </u>		<u> </u>	, .	
Hydrio Soil Brosont?	Yes Yes			Is the Sampled Area			
Hydric Soil Present? Wetland Hydrology Present?	Yes		•	within a Wetland?	Yes	No	
Remarks:	103	_ 110					
HYDROLOGY					0		
Wetland Hydrology Indicators:						cators (minimum of two required)	
Primary Indicators (minimum of one	-			(D.4.4)	Surface So		
Surface Water (A1)		True Aquat			Sparsely Vegetated Concave Surface (B8)Drainage Patterns (B10)		
High Water Table (A2) Saturation (A3)		Hydrogen S		or (C1) res on Living Roots (C3)	_	Lines (B16)	
Water Marks (B1)		Presence of				n Water Table (C2)	
Sediment Deposits (B2)				on in Tilled Soils (C6)		urrows (C8)	
Drift Deposits (B3)		Thin Muck				Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Other (Exp				Stressed Plants (D1)	
Iron Deposits (B5)		` '		,	· · · · · · · · · · · · · · · · · · ·	ic Position (D2)	
Inundation Visible on Aerial Ima	gery (B7)				Shallow Ad	quitard (D3)	
Water-Stained Leaves (B9)					Microtopog	graphic Relief (D4)	
Aquatic Fauna (B13)					FAC-Neutr	al Test (D5)	
Field Observations:							
	No 🔽						
	No						
Saturation Present? Yes (includes capillary fringe)	No	Depth (inc	ches):	Wetland	Hydrology Pres	ent? Yes No	
Describe Recorded Data (stream ga	uge, monitoring v	vell, aerial p	hotos, pre	evious inspections), if av	/ailable:		
Demonto							
Remarks: Conditions at the data site were wette	er than normal du	e to heavy	rain No.	avdrology present			
Conditions at the data site were wette	i man normal du	ic to ricavy	1401	lydrology present.			

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

_)

50% of total cover: ___ 15

50% of total cover: 2.5

30

Tree Stratum (Plot size:

Sapling/Shrub Stratum (Plot size:__

Herb Stratum (Plot size: ___

1. Lonicera japonica

Pinus taeda

4. Quercus nigra

5. Quercus alba

1. Quercus alba

Quercus falcata 3. Liquidambar styraciflua

Sampling Point: wcmc003_u	
Dominance Test worksheet:	
Number of Dominant Species	

	 (A)
Total Number of Dominant Species Across All Strata: 4	 (B)

Percent of Dominant Species	50	(
That Are OBL, FACW, or FAC:		(A/B)

Prevalence Index worksheet:

Dominant Indicator

FACU

FAC

FAC

FACU

FACU

% Cover Species? Status 25 Yes FAC

15

10

5

5

Yes

Yes

No

No

No

= Total Cover 20% of total cover:_

5 = Total Cover

20% of total cover:___1

5 = Total Cover

0 = Total Cover

20% of total cover:

50% of total cover: 2.5 20% of total cover: 1

5 Yes FAC

Total % Cov	M			
OBL species	0	x 1 =	0	_
FACW species	0	x 2 =	0	
FAC species	45	x 3 =	135	_
FACU species	25	x 4 =	100	-
UPL species	0	x 5 =	0	-
Column Totals:	70	(A)	235	(B)
Prevalence	A =	3.35	_	

Hydrophytic Vegetation Indicators:

- ___ 1 Rapid Test for Hydrophytic Vegetation
- ___ 2 Dominance Test is >50%
- __ 3 Prevalence Index is ≤3.0¹
- ___ 4 Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
- 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 more in diameter at breast height (DBH), regardless of height.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present?

Yes ____ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

50% of total cover: 0

Woody Vine <u>Stratum</u> (Plot size: ______)

Sampling Point: wcmc003_u

(inches)	Matrix		Redox Features		
inches)	Color (moist)	<u>%</u>	Color (moist) % Type ¹ Loc		Remarks Remarks
0-8	10 YR 2/1	100		S	
8-16	10 YR 5/3	100		S	
	-	- -		<u> </u>	
					
		- 			
Type: C=C	oncentration D=Den	letion RM=Re	educed Matrix, MS=Masked Sand Grains.	² Location:	PL=Pore Lining, M=Matrix.
	Indicators:	nodon, rawi–ra	saucea Matrix, Mc-Maskea Garia Graino.		dicators for Problematic Hydric Soils ³ :
Histosol			Dark Surface (S7)		_ 2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Below Surface (S8) (MLRA	1/7 1/8\	Coast Prairie Redox (A16)
	istic (A3)		Thin Dark Surface (S9) (MLRA 147, 14		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleyed Matrix (F2)	+0)	Piedmont Floodplain Soils (F19)
	d Layers (A5)		Depleted Matrix (F3)		(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark Surface (F6)		Very Shallow Dark Surface (TF12)
	d Below Dark Surfac	-ρ (Δ11)	Depleted Dark Surface (F7)	-	Other (Explain in Remarks)
	ark Surface (A12)	(/ (/ / /	Redox Depressions (F8)		_ Guior (Explain in Nomano)
	Mucky Mineral (S1) (LRR N.	Iron-Manganese Masses (F12) (LRR I	J.	
	A 147, 148)		MLRA 136)	-,	
	Gleyed Matrix (S4)		Umbric Surface (F13) (MLRA 136, 122	2) ³	Indicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR		wetland hydrology must be present,
	d Matrix (S6)		Red Parent Material (F21) (MLRA 127		unless disturbed or problematic.
	Layer (if observed)	<u> </u>		, ,	annos distanzed or prezionidate.
		-			
Type			_	Usalvia C	Soil Present? Yes No
Type:	ahaa\.			nyaric s	Soil Present? Yes No
Depth (in	ches):				
Depth (in Remarks:			_		
Depth (in Remarks:			-		
Depth (in Remarks:			=		
Depth (in Remarks:				1	
Depth (in Remarks:			-		
Depth (in Remarks:			-		
Depth (in Remarks:			_		
Depth (in Remarks:					
Depth (in Remarks:					
Depth (in Remarks:					
Depth (in Remarks:					
Depth (in Remarks:			-		
Depth (in Remarks:			-		
Depth (in Remarks:			-		
Depth (in Remarks:			-		
Depth (in Remarks:					
Depth (in Remarks:					
Depth (in Remarks:					
Depth (in Remarks:					
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Depth (in Remarks:					
Depth (in Remarks:					
Depth (in					



Photo 1 Upland data point wcmc003_u facing east



Photo 2 Upland data point wcmc003_u facing north

Project/Site: Atlantic Coast Pipeline		City/C	ounty: Cumberland		Sampling Date: 2/13/2015
Applicant/Owner: DOMINION				State: NC	Sampling Point: wcmc007f_w
Investigator(s): Team C		Section, Township, Range: No PLSS in this area			
Landform (hillslope, terrace, etc.): Floo					
Subregion (LRR or MLRA): P Soil Map Unit Name: Exum loam, 0 to	2 nercent slones	_ Lat:			
Are climatic / hydrologic conditions on					
Are Vegetation, Soil, o	r Hydrology	significantly distur	bed? Are "Norma	l Circumstances"	present? Yes No
Are Vegetation, Soil, o	r Hydrology	naturally problema	atic? (If needed,	explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS - A	Attach site ma	ap showing sam	pling point location	ons, transects	s, important features, etc.
Hydrophytic Vegetation Present?	Vec V	No			
Hydric Soil Present?		No	Is the Sampled Area		
Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:					
Wetland found in between two agricul	tural fields				
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one i	s required; check	all that apply)		Surface Soil	Cracks (B6)
Surface Water (A1)	Aqua	atic Fauna (B13)		Sparsely Ve	getated Concave Surface (B8)
✓ High Water Table (A2)	Marl	Deposits (B15) (LRF	R U)		atterns (B10)
✓ Saturation (A3)	<u><a> Hydr</u>	rogen Sulfide Odor (C	C1)	Moss Trim L	
Water Marks (B1)	Oxid	lized Rhizospheres a	long Living Roots (C3)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Pres	ence of Reduced Iro	n (C4)	Crayfish Bu	rrows (C8)
Drift Deposits (B3)	Rece	ent Iron Reduction in	Tilled Soils (C6)	Saturation V	isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		Muck Surface (C7)			Position (D2)
<u>✓</u> Iron Deposits (B5)		er (Explain in Remark	ss)	Shallow Aqu	
Inundation Visible on Aerial Imag	jery (B7)			FAC-Neutra	
Water-Stained Leaves (B9)				Sphagnum r	moss (D8) (LRR T, U)
Field Observations:	4	5 4 6 4 2			
		Depth (inches): $\frac{2}{0}$	 -		
Water Table Present? Yes _	No	Depth (inches): 0			
Saturation Present? Yes _ (includes capillary fringe)	✓ No	Depth (inches):	Wetland I	Hydrology Prese	nt? Yes V No
Describe Recorded Data (stream gau	ige, monitoring we	ell, aerial photos, pre	vious inspections), if ava	ailable:	
Remarks:					
Wetland hydrology present					

20	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:)		Species?		Number of Dominant Species	
1. Acer rubrum	50	Yes	FAC	That Are OBL, FACW, or FAC:3 (A))
2				Total Number of Dominant	
3				Species Across All Strata: 4 (B))
4.				(2)	,
				Percent of Dominant Species That Are ORL FACW or FAC: 75	
5				That Are OBL, FACW, or FAC:(A/	/B)
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8				40	
	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:15)				FAC species x 3 =	
/				FACU species2 x 4 =8	
1				UPL species0 x 5 =0	
2				Column Totals: 77 (A) 198 (E	B۱
3				Column Totals (A) (E	رد
4				Prevalence Index = B/A = 2.57	
5				Hydrophytic Vegetation Indicators:	
6.					
				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8	0			3 - Prevalence Index is ≤3.0 ¹	
_		= 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 Persicaria maculosa	15	Yes	FACW	be present, unless disturbed or problematic.	
2. Leersia oryzoides	10	Yes	OBL	Definitions of Four Vegetation Strata:	
				Definitions of Four Vegetation Strata.	
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)	or
4				more in diameter at breast height (DBH), regardless	of
5				height.	
6				Sapling/Shrub – Woody plants, excluding vines, less	s
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	Ü
8				Herb – All herbaceous (non-woody) plants, regardles	SS
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine – All woody vines greater than 3.28 ft in	1
11				height.	
12					
	25	= Total Cov	er		
50% of total cover:12.5		total cover:	_		
	2070 01	total cover.			
Woody Vine Stratum (Plot size:) 1 Lonicera japonica	2	Yes	FACU		
···		165	TACO		
2					
3					
4					
5					
o		= Total Cov		Hydrophytic Vegetation	
1				Present? Yes No	
50% of total cover: 1		total cover:			
Remarks: (If observed, list morphological adaptations below	w).				

SOIL Sampling Point: wcmc007f_w

Depth (inches) 0-6	Matrix		h needed to docun Redo	x Features				-
0-6	Color (moist)	%	Color (moist)	<u>%</u>	_Type ¹	Loc ²	Texture	Remarks
	2.5 Y 4/2	95	10 YR 3/6	5	С	PL	SICL	
6-16	2.5 Y 5/2	95	10 YR 3/6	5	С	PL	SICL	
	-							_
	Concentration, D=Dep					ains.	² Location: PL	.=Pore Lining, M=Matrix.
Black F Hydrog Stratifie Organic 5 cm M Muck P 1 cm M Deplete	Epipedon (A2) Histic (A3) Histic (A3) Hen Sulfide (A4) Hed Layers (A5) He Bodies (A6) (LRR P) Hucky Mineral (A7) (LF Heresence (A8) (LRR U) Huck (A9) (LRR P, T) Hed Below Dark Surface	RR P, T, U)	Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Oct	orface (S9) y Mineral (ed Matrix (trix (F3) Surface (F ek Surface essions (F8 RR U) hric (F11)	(KRR S, (F1) (LRR (F2) (F6) (F7) 8) (MLRA 18	T, U) O)	2 cm Muc Reduced Piedmont Anomalou (MLRA Red Pare Very Shal Other (Ex	ck (A9) (LRR O) ck (A10) (LRR S) Vertic (F18) (outside MLRA 150A,B) Floodplain Soils (F19) (LRR P, S, T) us Bright Loamy Soils (F20) 153B) nt Material (TF2) clow Dark Surface (TF12) plain in Remarks) ors of hydrophytic vegetation and
Coast F	Dark Surface (A12) Prairie Redox (A16) (N Mucky Mineral (S1) (L		Iron-Mangan Umbric Surfa Delta Ochric	ice (F13) (LRR P, T		wetlan	d hydrology must be present, disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver			0A, 150B)		·
-	Redox (S5)		Piedmont Flo					
	d Matrix (S6)		Anomalous B	Bright Loar	my Soils (F20) (MLR	A 149A, 153C, 15	53D)
	urface (S7) (LRR P, S							
	Layer (if observed):							
Type:								
	nches):						Hydric Soil Pr	esent? Yes No
Remarks:								
Hydric soil p	resent							



Photo 1
Wetland data point wcmc007f_w facing north



Photo 2
Wetland data point wcmc007f_w facing west

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland		_ Sampling Date: 2/13/2015
Applicant/Owner: DOMINION	City/County: Cumberland Sampling Date: 2/13/2015 State: NC Sampling Point: wcmc007_u				
Investigator(s): Team C Section, Township, Range: No PLSS in this area					
Landform (hillslope, terrace, etc.): Flat					
Subregion (LRR or MLRA): P					
Soil Map Unit Name: Exum loam, 0 to 2	2 percent slopes	Lat	Long		
Are climatic / hydrologic conditions on the					
• •	• •	•			· ·
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 _l	showing san	npling point location	ons, transects	s, important features, etc.
Lludraphytic Vagatatian Dragant?	Vac	No. V			
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes		Is the Sampled Area		
Wetland Hydrology Present?	Yes	No 🗸	within a Wetland?	Yes	No
Remarks:					
Data point taken at the edge of a corn	field				
HYDROLOGY					
Wetland Hydrology Indicators:				Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is	required; check a	ll that apply)		Surface Soil	l Cracks (B6)
Surface Water (A1)	Aquat	ic Fauna (B13)		Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2)		eposits (B15) (LRI	R U)		atterns (B10)
Saturation (A3)	Hydro	gen Sulfide Odor (C1)	Moss Trim L	ines (B16)
Water Marks (B1)	Oxidiz	ed Rhizospheres a	along Living Roots (C3)	Dry-Season	Water Table (C2)
Sediment Deposits (B2)	Prese	nce of Reduced Iro	on (C4)	Crayfish Bu	rrows (C8)
Drift Deposits (B3)	Recer	nt Iron Reduction in	Tilled Soils (C6)	Saturation V	/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin N	Muck Surface (C7)		Geomorphic	Position (D2)
Iron Deposits (B5)	Other	(Explain in Remark	ks)	Shallow Aqu	uitard (D3)
Inundation Visible on Aerial Image	ery (B7)			FAC-Neutra	ıl Test (D5)
Water-Stained Leaves (B9)				Sphagnum i	moss (D8) (LRR T, U)
Field Observations:					
Surface Water Present? Yes _	No 🖍 D	epth (inches):			
Water Table Present? Yes	No 🖍 D	epth (inches):			
	No 🖍 D	epth (inches):	Wetland H	lydrology Prese	nt? Yes No <u> </u>
(includes capillary fringe) Describe Recorded Data (stream gauge	ne monitoring wel	aerial nhotos, nre	avious inspections) if ava	ilahle:	
Describe Necorded Data (stream gau	ge, monitoring wer	i, aeriai priotos, pre	evious irispections), ii ave	illable.	
Remarks:					
No wetland hydrology present					
, and a second of the second					
T .					

20	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: 0	(A)
2					
3.				Total Number of Dominant Species Across All Strata: 4	(B)
				Species Across Ali Strata.	(D)
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 0	(A/B)
6					
7				Prevalence Index worksheet:	
				Total % Cover of: Multiply by:	_
8	0			OBL species0 x 1 =0	
0		= Total Cov		FACW species $\frac{0}{x^2}$ $x^2 = \frac{0}{x^2}$	_
50% of total cover:0	20% of	f total cover:	0	0	_
Sapling/Shrub Stratum (Plot size:)				FAC species	_
A Rhus dahra	10	Yes		FACU species x 4 =	_
				UPL species0 x 5 =0	
2				Column Totals: 10 (A) 40	(B)
3				Column Totals (A)	_ (D)
4				Prevalence Index = B/A =4	
5				Trevalence mask Birt	
				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		۵۱
50% of total cover:5		f total cover:	_	Problematic Hydrophytic Vegetation ¹ (Explain	11)
F	20% 0	i lulai cuvei.	· ——		
Tierb Stratum (Flot size)				¹ Indicators of hydric soil and wetland hydrology m	nust
1. Poa sp.	10	Yes		be present, unless disturbed or problematic.	
2. Sorghastrum nutans	5	Yes	FACU	Definitions of Four Vegetation Strata:	
3. Lonicera japonica	5	Yes	FACU		
				Tree – Woody plants, excluding vines, 3 in. (7.6 c	
4				more in diameter at breast height (DBH), regardle	ess of
5				height.	
6				Sapling/Shrub – Woody plants, excluding vines,	less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb – All herbaceous (non-woody) plants, regar	dless
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.					
	20	= Total Cov	or		
10					
50% of total cover: 10	20% of	f total cover:			
Woody Vine Stratum (Plot size:)					
1					
2.					
3					
4					
5				Hydrophytic	
		= Total Cov	er	Vegetation	
50% of total cover:		f total cover:	•	Present? Yes No	
50 % of total cover.		i total cover.			
Remarks: (If observed, list morphological adaptations belo	w).				

SOIL Sampling Point: wcmc007_u

	Matrix			x Feature			the absence of i		
Depth (inches)	Color (moist)	%	Color (moist)	% realure	Type ¹	Loc²	Texture	Remarks	
0-12	10 YR 4/3	100	,				SL		
1							2 -		
	oncentration, D=Depl					ains.		=Pore Lining, M=Ma	
Hydric Soil	Indicators: (Applica	able to all Li	RRs, unless othe	rwise not	ed.)		Indicators for	Problematic Hydric	c Soils":
Histoso	I (A1)		Polyvalue Be) 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)		Loamy Gleye		F2)			Floodplain Soils (F1	
	d Layers (A5)		Depleted Ma					s Bright Loamy Soils	s (F20)
_	Bodies (A6) (LRR P,		Redox Dark	•			(MLRA 1		
	ucky Mineral (A7) (LR		Depleted Da		. ,			t Material (TF2)	
	resence (A8) (LRR U))	Redox Depre		8)			ow Dark Surface (TF	F12)
	uck (A9) (LRR P, T)		Marl (F10) (L				Other (Exp	olain in Remarks)	
	d Below Dark Surface	e (A11)	Depleted Oc				3		
	ark Surface (A12)		Iron-Mangan					s of hydrophytic veg	
	Prairie Redox (A16) (N		Umbric Surfa			, U)		I hydrology must be	
-	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric				unless	disturbed or problem	natic.
	Gleyed Matrix (S4)		Reduced Ve						
-	Redox (S5)		Piedmont Flo						
	d Matrix (S6)		Anomalous E	Bright Loar	my Soils (-20) (MLR /	A 149A, 153C, 15	3D)	
	ırface (S7) (LRR P, S	, T, U)					T		
Restrictive	Layer (if observed):								
Type:			_						
Depth (in	ches):						Hydric Soil Pre	sent? Yes	No
Remarks:									
No hydric soi	l present								
, , , , , , , , , , , , , , , , , , ,									



Photo 1 Upland data point wcmc007_u facing north



Photo 2
Upland data point wcmc007_u facing east

Project/Site: ACP	City/	County: CLAM ben	Mana Samplin	g Date: 912114
Appilcant/Owner: Dominic				g Point: Wemp1055
nvestigator(s): E5T (L R		ion, Township, Range:		
\	, 1 · · · ·	I relief (concave, convex, r		Slope (%) 0-47,
andform (hillslope, terrace, etc.):			^	Slope (%)
Subregion (LRR or MLRA):	P 0 Lat: 35.15			
Soil Map Unit Name: Tornumt	a and Lynn	Haven soils	NWI classification:	PFO
Are climatic / hydrologic conditions on the	ne site typical for this time of year?	Yes (lf no, explain in Remarks.)	· isotri
Are Vegetation, Soil, or	Hydrology significantly distu	urbed? Are "Normal	Circumstances* present?	Yes No
Are Vegetation, Soil, or	Hydrology naturally problem	natic? (If needed, e	xplain any answers in Ren	narks.)
SUMMARY OF FINDINGS - A	ttach site map showing sa	mpling point locatio	ns, transects, impo	rtant features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No No No No No	Is the Sampled Area within a Wetland?	Yes No	·
Remarks:				
HYDROLOGY			Consulation to disease (mi	sianum of two required\
Wetland Hydrology Indicators:			Secondary Indicators (mi	1
Primary Indicators (minimum of one i			Surface Soil Cracks	· ·
Surface Water (A1)	Aquatic Fauna (B13)			Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (L		Orainage Patterns (E	· ·
Saturation (A3)	Hydrogen Sulfide Odo		Moss Trim Lines (B1	· 1
Water Marks (B1)		s along Living Roots (C3)	Dry-Season Water T	· · ·
Sediment Deposits (B2)	Presence of Reduced		Crayfish Burrows (C	n Aerial Imagery (C9)
Drift Deposits (B3)	Recent from Reduction		Geomorphic Position	
Algal Mat or Crust (B4)	Thin Muck Surface (C Other (Explain in Rem		Shallow Aquitard (D	į.
Iron Deposits (B5) Inundation Visible on Aerial Ima		dik5)	FAC-Neutral Test (D	· .
Water-Stained Leaves (B9)	gery (D1)		Sphagnum moss (D	
Field Observations:			opriagnom moss (b	0)(2:4(1,0)
, and the second	No Depth (inches): _	NA		
		520		
	NoDepth (inches): _	>26 Wetland	Hydrology Present? You	No.
Saturation Present? Yes (includes capillary fringe)	No Depth (inches): _	wetiand	Hydrology Present?	es
Describe Recorded Data (stream ga	ruge, monitoring well, aerial photos,	previous inspections), if av	railable:	
Remarks:				
Resilaiks.				
1				
				!
1				
1				
1				
1				
<u> </u>				

, , , , , , , , , , , , , , , , , , , ,	Absolute Domin	ant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30×30)	% Cover Speci		Number of Dominant Species
1. Pinus tarda	1500 Y	FAL	That Are OBL, FACW, or FAC: (A)
_			
2			Total Number of Dominant
3		t t	Species Across All Strata: [B]
4		<u> </u>	Percent of Dominant Species
5			That Are OBL, FACW, or FAC: (A/B)
6			
7			Prevalence Index worksheet:
			Total % Cover_of: Multiply by:
8	= Total		OBL species x 1 =
pag	= lotal	Cover	FACW species x 2 =
50% of total cover:	20% of total co	over:	
Sepling/Shrub Stratum (Plot size: 30 x30)			FAC species x 3 =
1. Cyrilla racemiflora	<u> </u>	<u> FACW</u>	FACU species x 4 =
1			UPL species x 5 =
· · · · · · · · · · · · · · · · · · ·			Column Totals: (A) (B)
<u></u>			
4			Prevalence index = B/A =
5,			Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7			2 - Dominance Test is >50%
			1—
8		L Course	3 - Prevalence Index is ≤3.0'
	= ا 🗀 = ا 🖎	Cover	Problematic Hydrophytic Vegetation1 (Explain)
50% of total cover:	115 20% of total o	over.	
Herb Stratum (Plot size: 30 x 30)			¹ Indicators of hydric soil and wetland hydrology must
1. Clethra alnifolia	20 Y	FALM	be present, unless disturbed or problematic.
2. Persea bornonia	<u> </u>	FALW	Definitions of Four Vegetation Strata:
			Sommand of Four Vigoration Interest
3			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4			more in diameter at breast height (DBH), regardless of
5			height.
6			Sapling/Shrub - Woody plants, excluding vines, less
7.			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8			Herb - All herbaceous (non-woody) plants, regardless
9			of size, and woody plants less than 3.28 ft tall.
10			Woody vine - All woody vines greater than 3.28 ft in
11			height.
12.			
12:	35 = Tat	al Corne	
	= 101		
50% of total cover:	17.5 20% of total	cover:	
Woody Vine Stratum (Plot size: 30 x 30)			
1. none present			
\ <u>_</u>			
			•]
3			-
4			-
5			- Hydrophytic
	D _=To	al Cover	Vanatation
EOOL of total course	20% of total		Present? Yes No
			<u> </u>
Remarks: (If observed, list morphological adaptation	s delow).		
1			
1			
			*

Profile Desc	ription: (Describe t	to the depth	needed to docum	nent the i	ndicator	or confirm	the absence of	Indicators.)
Depth	Matrix			x Features		1004	Tarriera	Domostro
(inches)	Color (moist)	<u> </u>	Color (moist)		Type'	Loc2	Texture	Remarks
<u>0-4</u>	TOYR 4.	100	() (1				<u> </u>	
4-14	10124/2	95 1	04R 5/10	_ <u>5_</u>	<u> </u>	1-1_	<u> </u>	
4= (D)	IDAKALI	100					<u>\$</u>	·
	- 1							
	 -							
	-							
		. -						
¹Type: C=C	oncentration, D=Dep	oletion, RM=F	Reduced Matrix, M	S=Masked	d Sand Gr	ains.	² Location: P	L=Pore Lining, M=Matrix.
	Indicators: (Applic							or Problematic Hydric Solls ³ :
Histosol	(A1)		Polyvalue B	elow Surfa	ice (S8) (L	.RR S, T, L	i) 1 cm Mu	ck (A9) (LRR O)
_	pipedon (A2)		Thin Dark S	urface (S9) (LRR S,	T, U)	2 cm Mu	ck (A10) (LRR S)
Black H	istic (A3)		Loamy Much	(y Mineral	(F1) (LRF	R O)		i Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley		(F2)			nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		<u>✓</u> Depleted Ma		FC\		· · · · · · · · · · · · · · · · · · ·	ous Bright Loamy Soils (F20)
,	: Bodies (A6) (LRR F		Redox Dark	-			*	A 153B) rent Material (TF2)
ı 	ucky Mineral (A7) (L resence (A8) (LRR 1		Depleted Da					allow Dark Surface (TF12)
1	resence (A8) (LRR 1 uck (A9) (LRR P, T)	•	Marl (F10) (J,			Explain in Remarks)
	d Below Dark Surface		Depleted O) (MLRA 1	51)		
	ark Surface (A12)	(,	Iron-Manga		•	•	, T) ³ Indica	tors of hydrophytic vegetation and
Coast F	rairie Redox (A16) (MLRA 150A) Umbric Surf	face (F13)	(LRR P,	T, U)	wetla	and hydrology must be present,
Sandy	Mucky Mineral (S1)	(LRR O, S)	Delta Ochri					ss disturbed or problematic.
	Gleyed Matrix (S4)		Reduced V					
I —	Redox (S5)		Piedmont F					452D)
	d Matrix (S6)	O T //\	Anomalous	Bright Los	amy Soils	(F20) (ML	RA 149A, 153C,	1530)
	urface (S7) (LRR P,						1	
1	Layer (If observed	ıy.						
Type:		· · · -					Hydric Soil	Present? Yes / No
	nches):						Hydric Soil	Present? TesNo
Remarks:								
1								
1							•	
ŀ								
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I								
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1								
 								



Wetland data point wcmp005f_w facing southwest.

Project/Site: ACP	City.	County: Combe	cland:	Sampling Date: <u>9/2/14</u>
Applicant/Owner: Dominion				Sampling Point: Wcmp 005-L
Investigator(s): EST (LP		tion, Township, Range:	N 4 A	
Landform (hillslope, terrace, etc.):	3 . *	al relief (concave, convex,		Slope (%): <u>0-41</u>
Subregion (LRR or MLRA): LLQQ	~ /	.	-78.72.60	
		410 D C 5		
Soil Map Unit Name: Condox			NWI classifica	
Are climatic / hydrologic conditions on t			(If no, explain in Re	<i>y</i>
Are Vegetation, Soil, or	· Hydrology significantly dist	turbed? Are "Norma	l Circumstances" pr	esent? Yes No
Are Vegetation, Soil, or	Hydrology naturally proble	matic? (If needed,	explain any answer	s in Remarks.)
SUMMARY OF FINDINGS - A	Attach site map showing sa	ampling point location	ons, transects,	important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No Yes No	Is the Sampled Area	Yes	No _
Wetland Hydrology Present?	Yes No			
HYDROLOGY				-
Wetland Hydrology Indicators:	.			tors (minimum of two required)
Primary Indicators (minimum of one	is required; check all that apply)		Surface Soil	
Surface Water (A1)	Aquatic Fauna (B13)			getated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (I		Drainage Pa	
Saturation (A3) Water Marks (B1)	Hydrogen Sulfide Odd	or (C1) es along Living Roots (C3)	Moss Trim L	Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced		Crayfish Bur	
Drift Deposits (B3)	Recent Iron Reduction			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface (C		Geomorphic	Position (D2)
Iron Deposits (B5)	Other (Explain in Ren	narks)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Ima	gery (B7)		FAC-Neutra	Test (D5)
Water-Stained Leaves (B9)			Sphagnum r	noss (D8) (LRR T, U)
Field Observations:		NIA		,
Surface Water Present? Yes		NA >20		
Water Table Present? Yes				nt? Yes No
Saturation Present? Yes (includes capillary fringe)	No Depth (inches):	vvetiand	d Hydrology Prese	nt? Yes NO
Describe Recorded Data (stream ga	auge, monitoring well, aerial photos	, previous inspections), if a	vailable:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Remarks:				
1				
			•	
	7.7.			

	Absolute Dominant Indicato	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30)	· % Cover Species? Status	
1. Pinus tacka	25 Y FAL	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Quercus nigra	<u>10 y FAC</u>	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		Prevalence Index worksheet:
7		_ i
8		Total % Cover of: Multiply by:
	35 = Total Cover	OBL species x 1 =
F00/ (1.1.)	75 20% of total cover:	FACW species
	20% of total cover:	FAC species 35 x3= 105
Sapling/Shrub Stratum (Plot size: 30 × 30)		
1. Carva tomentosa	10 Y UPL	_
2 avercus alba	5 Y FACU	UPL species 10 x 5 = 50
•		Column Totals: 50 (A) 175 (B)
3		<u> </u>
4		Prevalence index = B/A = 3,5
5		- Hydrophytic Vegetation Indicators:
6		1
		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.01
	\5 = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	5 20% of total cover. 3	Problematic (Tydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30 x 30)	20 70 01 10(2) 00 011	-
Herb Stratum (Plot size:		¹ Indicators of hydric soil and wetland hydrology must
1. none present		be present, unless disturbed or problematic.
2.		Definitions of Four Vegetation Strata:
		_
3		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
5		height.
6		Sapiling/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		Manakardan Alla andara manakardan 200 Sin
		Woody vine.—All w∞dy vines greater than 3.28 ft in height.
11		neight.
12		
	= Total Cover	
50% of total cover:	20% of total cover	
Woody Vine Stratum (Plot size: 30 x 30)		-
woody vine stratum (Plot size.		
1. hone present		
2		
3.		
		-
4		
5		
	D = Total Cover	Vegetation
EON/ of total anyon:	20% of total cover:	Present? Yes No V
		<u> </u>
Remarks: (If observed, list morphological adaptations	below).	
j		
I .		

Profile Description: (Describe to the depth needed to document the indicator or confirm t	the absence o	f Indicators.)
Depth Matrix Redox Features		
(inches) Color (moist) % Color (moist) % Type Loc ²	<u>Texture</u> _	Remarks
0-10 104642	<u> </u>	
10-20 10 YIL 3/2		
		
	 -	
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: F	PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		or Problematic Hydric Soils ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U)) 1 cm Mu	uck (A9) (LRR O)
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	2 cm Mt	uck (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduce	d Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)		nt Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)	_	ous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	-	A 153B) rent Material (TF2)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Redox Depressions (F8)	_	nallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U)		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) ³ Indice	ators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)		and hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)		ess disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14		
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14 Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLR		163D)
Dark Surface (S7) (LRR P, S, T, U)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, 1000,
Restrictive Layer (If observed):		
Type:	İ	ا م
Depth (inches):	Hydric Soil	Present? Yes No
Remarks:		
		İ
!		
		1
ļ		1
		,



Upland data point wcmp005_u facing northeast.

Project/Site: ACP	City/County: Cumberland Sampling Date: 917-114
Applicant/Owner: Dominion	State: NC Sampling Point: Wcmp004f-
Investigator(s): EST CL Roper)	Section, Township, Range: NA
Landform (hillslope, terrace, etc.): _dvoin age	
1	200
	THE GLOSSIFICATION
	ime of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology sign	
Are Vegetation, Soil, or Hydrology nat	lurally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sl	howing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Yes No No No	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all th	at apply) Surface Soil Cracks (B6)
Surface Water (A1) Aquatic F	Fauna (B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Dep	osits (B15) (LRR U) Drainage Patterns (B10)
	n Sulfide Odor (C1) Moss Trim Lines (B16)
1	Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)
	e of Reduced Iron (C4) Crayfish Burrows (C8)
	ron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) ck Surface (C7) Geomorphic Position (D2)
-	xplain 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 Dep	oth (inches); WA
Water Table Present? Yes No Dep	oth (inches):
Saturation Present? Yes No Dep (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, a	
Dood Do Nood Date (chi dani garge, mamaing men)	
Remarks:	
1	

00 20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 x 30)	% Cover	Species?		Number of Dominant Species
1. Arav njonm	70	<u> 7</u>	<u>FAL</u>	That Are OBL, FACW, or FAC:(A)
2. Pinus talda	15	<u> </u>	FAL	Tatal bloods or of Descinent
3. Ligardamber styraciflua	10	7	FAC	Total Number of Dominant Species Across All Strata: (B)
				(S)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: \(\begin{array}{c} \to\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
6				Prevalence index worksheet:
7				Total % Cover of: Multiply by:
8				
		= Total Co		OBL species x1 =
50% of total cover:	5 _ 20% o	f total cover	r. <u>7</u>	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 × 30)				FAC species x 3 =
1. Vaccinium corymbosum	10	Y	PAYLL	FACU species x 4 =
1. do doite to de la constante				UPL species x 5 =
2				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5	. ——			Hydrophytic Vegetation Indicators:
6				1_Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0¹
	10	= Total Co	wer	I
50% of total cover:				Problematic Hydrophytic Vegetation ¹ (Explain)
	<u></u>	or total cove	i	
Herb Stratum (Plot size: 30 × 30)	L			¹ Indicators of hydric soil and wetland hydrology must
1. Persea borbonza			<u> FAW</u>	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Two Miles de plante establishes since 2 in (7 Care) as
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
į.				height.
5				
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tali.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Minody wine All wands single greater then 2.29 ft in
11				Woody vine – All woody vines greater than 3.28 ft in height.
l e				, margina
12	<u> </u>	= Total C		•
50% of total cover:	20%	of total cov	'er:	. <u> </u>
Woody Vine Stratum (Piot size: ろの x 3レ)				
1. Smilax notundifolia	_ 10	Y	- FPC	
2				- [
				-
3			_	-
4				-
5				- Hydrophytic
	<u> 10</u>	= Total (Cover	Vegetation Present? Yes No
50% of total cover:) 20%	of total co	ver:	Present? Yes No
Remarks: (If observed, list morphological adaptations be	elow).			
	•			

	ription: (Describe	to the depth n			r confirm t	he absence	of indicator	s.)	
Depth (inches)	Matrix Color (moist)	%	Redox F Color (moist)	eatures %Type¹	Loc ²	Texture		Remarks	
(inches)	10 Y L 2/1		COIDI (IIIOISI)	70		51_	high	OYGGNIC	
0- 20.	10 ik ii	<u> 100 _</u>				60 hum	YIIGIN	organie	
									
1						2			
	oncentration, D=De				ains.			ning, M=Matrix.	
-	Indicators: (Appli	icable to all LK						natic Hydric So	JUS ;
Histoso		-		w Surface (S8) (L		_	Muck (A9) (L		
	pipedon (A2)	-		ace (S9) (LRR S,		_	Muck (A10) (•	DA 4504 DV
	istic (A3)	-		Mineral (F1) (LRF	(0)			18) (outside Mi	
	en Sulfide (A4)		Loamy Gleyed					in Soils (F19) (Loamy Soils (F	
	d Layers (A5)	D T III	Depleted Matrix Redox Dark Su				RA 153B)	Loamy Soils (F	20)
	: Bodies (A6) (LRR ucky Mineral (A7) (l		Redox Dark St			•	ra 1936) Parent Materi	al (TE2)	
	resence (A8) (LRR		Depicted Dark Redox Depres:			_		ar (152) : Surface (TF12	'
	uck (A9) (LRR P, T	•	Redox Depress Marl (F10) (LR				(Explain in F		,
_	d Below Dark Surfa	•		ic (F11) (MLRA 1	51)		(24)		
	ark Surface (A12)	(,		se Masses (F12)		T) ³ Indi	cators of hyd	rophytic vegets	ation and
. —	Prairie Redox (A16)	(MLRA 150A)	Umbric Surfac					ogy must be pre	
l -	Mucky Mineral (S1)	•		-17) (MLRA 151)		บก	less disturbe	d or problemat	ic.
-	Gleyed Matrix (S4)		Reduced Verti	c (F18) (MLRA 1	50A, 150B)				•
	Redox (S5)		Piedmont Floo	dplain Soils (F19	(MLRA 149	9A)			
Strippe	d Matrix (S6)		Anomalous Br	ight Loamy Soils	(F20) (MLR	A 149A, 1530	C, 153D)		
Dark S	urface (S7) (LRR P	, S, T, U)							
Restrictive	Layer (if observe	d):							
Type:	**		_			ļ		po.	
Depth (i	nches):					Hydric So	II Present?	Yes 🔽	No
Remarks:									
1									
							·		
1									
1									
1									
1									



Wetland data point wcmp004f_w facing north.

Project/Site: ACP	City/County:	nberland Sampling	Date: 9/2/14
Applicant/Owner: Pominion		State: NC Sampling	Point: Wemp 004-1
Investigator(s): EST (L Roper)	Section, Township, I		
Landform (hillslope, terrace, etc.): Avanage		e, convex, none'):	Slope (%): D-41
Subregion (LRR or MLRA): LRR P Lat:		Long: -78.72755	Datum: WSS &
,	•		NA
Soil Map Unit Name: Candor Sund, 1-8	• •	NWI classification:	1717
Are climatic I hydrologic conditions on the site typical for this tir		(If no, explain in Remarks.)	/
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed? A	re "Normal Circumstances" present? `	Yes <u> </u>
Are Vegetation, Soil, or Hydrology natu	rally problematic? (If	ineeded, explain any answers in Rema	arks.)
SUMMARY OF FINDINGS - Attach site map sh	owing sampling poin	t locations, transects, import	tant features, etc.
Hydrophytic Vegetation Present? Yes No _	le the Samr	lod Aron	_
Hydric Soil Present? Yes No	is the Samp		3/
Wetland Hydrology Present? Yes No _	within a vie	dallor resNo	
HYDROLOGY		<u> </u>	
Wetland Hydrology Indicators:		Secondary Indicators (min	
Primary Indicators (minimum of one is required; check all that		Surface Soil Cracks (E	· ·
Surface Water (A1) Aquatic Fa	• •	Sparsely Vegetated C	
	osits (B15) (LRR U) Sulfide Odor (C1)	Drainage Patterns (B1 Moss Trim Lines (B16	
	Sullide Odor (O1) Rhizospheres along Living R		
1 —	of Reduced Iron (C4)	Crayfish Burrows (C8	
	on Reduction in Tilled Soils (l l
	k Surface (C7)	Geomorphic Position	
1 — · · · —	plain in Remarks)	Shallow Aquitard (D3	
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5	5)
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Dept	th (inches):		
110101 10001111 100 1111 110 1111 110 1111 1111	th (inches):		
Saturation Present? Yes No Depi	th (inches):> ZD	Wetland Hydrology Present? Yes	s No
Describe Recorded Data (stream gauge, monitoring well, a	erial photos, previous inspec	ctions), if available:	
Remarks:			
•			
1			

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 36 × 30)		Species?		Number of Dominant Species 2
1. Pinus taeda	20	<u></u>	<u>FAC</u>	That Are OBL, FACW, or FAC: (A)
2. Quercus higha	10	<u></u>	FAC	Total Number of Dominant
3.				Species Across All Strata: (B)
4.			_	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
				That Are OBL, FACW, or FAC: (A/B)
6			 '	Prevalence index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x1 =
		= Total Co		
50% of total cover: _\S	20% of	f total cover	: <u> </u>	FACW species x 2 =
Sepling/Shrub Stratum (Plot size: 30 x 30)				FAC species x 3 =
1. Querina inclinea	OI	Y	UPL	FACU species x 4 =
2 Pinus taeda	- 	V	FAL	UPL species x 5 =
			4-1-1-	Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.01
	20	= Total Co	₩er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	-	_		Problematic Hydrophytic Vegetation (Explain)
	20% 0	n total cove	1. —	·
Herb Stratum (Plot size: 30 x 30)	es r	. ,	che.	Indicators of hydric soil and wetland hydrology must
1. Pteridim aguilinum		- ——	<u>facu</u>	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree Meady plants evaluating vines 2 in (7 6 cm) or
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
1				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				Miles de la companya
				Woody vine - All woody vines greater than 3.28 ft in height.
11				, neight.
12	25		.	•
	<u>্ড</u>	_ = Total C	over	
50% of total cover: 1	<u>/5</u> 20%	of total cov	ег	.
Woody Vine Stratum (Plot size: 35 x 30)			•	
1. none present				
,			_	-
2				-
3				-
4				-
5				- Hydrophytic
	0	= Total (Cover	
50% of total cover:				Vegetation Present? Yes No
				<u> </u>
Remarks: (If observed, list morphological adaptations b	elow).			
				ŧ

Profile Desc	ription: (Describe t	to the depth	needed to docur	nent the indicator	or confirm t	the absence of i	ndicators.)
Depth	Matrix			x Features			•
(inches)	Color (moist)	%	Color (moist)	<u>% Туре¹</u>	Loc ²	<u>Texture</u>	Remarks
0-)0	2,57417.	100					
10-20	2.5/1/3	100				<u> </u>	
10-20	<u>ria i ia</u>	100 _					
	-						
							<u> </u>
1=			3-4 3 fately 3 f	Cultarized Cand C		2l anation: DI	=Pore Lining, M=Matrix.
	oncentration, D=Dep Indicators: (Applic				ialis.		Problematic Hydric Solls ³ :
		anie io an L					•
Histoso				elow Surface (S8) (k (A9) (LRR O)
1	pipedon (A2)			urface (S9) (LRR S			k (A10) (LRR S)
1 —	istic (A3)		_	ky Mineral (F1) (LR	RO)		Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)			red Matrix (F2)		_	Floodplain Soils (F19) (LRR P, S, T)
1 —	d Layers (A5)		Depleted Ma				is Bright Loamy Soils (F20)
ı 	Bodies (A6) (LRR F			Surface (F6)		(MLRA	
	ucky Mineral (A7) (Li			ark Surface (F7)			nt Material (TF2)
1	resence (A8) (LRR l			ressions (F8)			llow Dark Surface (TF12)
	uck (A9) (LRR P, T)		Marl (F10) (Other (Ex	plain in Remarks)
I — ·	d Below Dark Surfac	ce (A11)		chric (F11) (MLRA		3.	
	ark Surface (A12)			nese Masses (F12)			ors of hydrophytic vegetation and
<u> </u>	Prairie Redox (A16) (. —	face (F13) (LRR P,			d hydrology must be present,
	Mucky Mineral (S1) ((LRR O, S)	_	c (F17) (MLRA 151			disturbed or problematic.
	Gleyed Matrix (S4)		_	ertic (F18) (MLRA 1			
1 —	Redox (S5)		_	loodglain Soils (F1			
1	d Matrix (S6)		Anomalous	Bright Loamy Soils	(F20) (MLR	RA 149A, 153C, 1	53D)
	urface (S7) (LRR P,						
Restrictive	Layer (if observed):					
Туре:							/
Depth (i	nches):					Hydric Soil P	resent? Yes No
Remarks:							
Kembiks.							
1							
1							
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l .							
1							



Upland data point wcmp004_u facing south.

Project/Site: ACP	City/County: Cumberland Sampling Date: 9/2/14
oplicant/Owner: Downson	State: NC Sampling Point: WLM 0003F
nvestigator(s): EST (L POPEN/R TURN	
	10.010.0
	Cocarrener (conceave, convex, none).
· · · · · · · · · · · · · · · · · · ·	35117212 Long: -78.73174 Datum: WB5 81
Soil Map Unit Name: Woodington loams	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology signif	ficantly disturbed? Are "Normal Circumstances" present? Yes, No
Are Vegetation, Soil, or Hydrology natur	
·	owing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No No No No No No No No No No No No No	is the Sampled Area
Wetland Hydrology Present? Yes No _	within a Wetland? Yes No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	• • • • • • • • • • • • • • • • • • • •
Surface Water (A1) Aquatic Fau	
<u> </u>	its (B15) (LRR U) Drainage Patterns (B10)
	Sulfide Odor (C1) Moss Trim Lines (B16)
<u> </u>	hizospheres along Living Roots (C3) Dry-Season Water Table (C2)
,	of Reduced Iron (C4) Crayfish Burrows (C8)
	n Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck	Surface (C7) Geomorphic Position (D2) Iain in Remarks) Shallow Aquitard (D3)
Iron Deposits (B5) Other (Exp Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	opringinant tipes (50) (2.111.1) 0)
J	(inches): N H
	(inches): >'20
Saturation Present? Yes No Depth)
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aer	rial photos, previous inspections), if available:
Remarks:	
	•
1	

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30 × 30)		Species?		
1. Liquid ambar styraciflua	16	Y	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:
1. ZIGANOTA PROMI SAGVACITION	13			THAT A GODE, PACAN, OF PAC(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				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x1 =
		= Total Cov		Obligation X1-
50% of total cover: 71	5 20% of	total cover	: 3	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 × 30)				FAC species x 3 =
Saplinty-Snitib Stratum (Plot size)	178	M	FACW	FACU species x 4 =
1. Vaccinium comm bosum	. <u> \ U</u>	<u> </u>	17/00	1
2				UPL species x 5 =
•				Column Totals: (A) (B)
•				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 -Rapid Test for Hydrophytic Vegetation
			· 	
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.01
_	10	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
	20% o	f total cove	г 2	
20.20		, (0,0, 00, 0		1.
Herb Stratum (Plot size: 30 x 30)		.,		Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	. 15	. <u> </u>	FACE	be present, unless disturbed or problematic.
2.	•	•		Definitions of Four Vegetation Strata:
				-
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5			<u> </u>	height.
6.				Parting (Physik 18/2 adv. planta avaluding vines less
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 th, BBI and greater than 5.20 ft (1 ft) 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 w∞dy vines greater than 3.28 ft in
11				height.
12				.
	15	_ = Total C	over	
50% of total cover: 7 kg	5 2006	of total covi	_	
20	20%	or total covi	۳۱. <u>ـ ـ ـ ـ ـ</u>	•]
Woody Vine Stratum (Plot size: 30 x 30)				
1. Smilax motorditalia	10	Y	FAL	_ i
2 Villa phydifolia	10	- - y -	FAL	
		-		*
3				-
4.				_
5.				Hoder-totte
	210			- Hydrophytic Vegetation
		_ = Total C	4 4	Present? Yes No
50% of total cover:	2 0%	of total cov	/er: 1	- 1103CH; 103
Remarks: (If observed, list morphological adaptations be	elow).			
Tremaine. (II obosited in the property of the	,-			
3				

Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence	of Indicato	rs.)
Depth Matrix Redox Features			
(inches) Color (moist) % Color (moist) % Type Loc2	Texture		Remarks
0-8 10 YR2/1 100	<u>L5</u>	high	organit contest
9-20 10 1R4/1 100	5		
			ļ
¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	2) ocation:	PI =Pore I	ining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)			matic Hydric Soils ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U)			- 1
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	_	luck (A10)	
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)			18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedm	ont Floodpl	ain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)		-	Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	-	RA 153B)	
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)		arent Mater	
Muck Presence (A8) (LRR U) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U)			k Surface (TF12)
Land Muck (A9) (LRR P, T) Land Mari (F10) (LRR U) Land Depleted Below Dark Surface (A11) Land Depleted Ochric (F11) (MLRA 151)	Other	(Explain in	Remarks)
Thick Dark Surface (A12) — Iron-Manganese Masses (F12) (LRR O, P,	T) ³ India	eators of hy	drophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)		•	logy must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)			ed 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):	1		
Type:			
Depth (inches):	Hydric Soi	l Present?	Yes No No
Remarks:		<u> </u>	
			ļ
			1
· ·			
			·



Wetland data point wcmp003f_w facing southwest.

A . D	5.11 - 5.15 11 - 5.15 7/15/11
	City/County: CVWbeV14Nd Sampling Date: 7/15/16 State: NC Sampling Point: Wcmp 003f.
Applicant/Owner: POWINION	
Investigator(s): ESI - Roper, Johnson	Section, Township, Range: hone
Landform (hillslope, terrace, etc.): drainage	Local relief (concave, convex, none): Longave Slope (%): 1-31/
Subregion (LRR or MLRA): LPP Lat: 35.	17169 Long: -78.73190 Datum: W1684
Soil Map Unit Name: Woodington loamy 50	nd NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significant	: (1) 10 10 10 10 10 10 10 10 10 10 10 10 10
Are Vegetation, Soil, or Hydrology naturally p	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No No No No No No No N	
NCWAM: Hardwood Flat	
HYDROLOGŸ	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1)	: 1985년 - 1985년 1985년 1987년
High Water Table (A2) Marl Deposits (B1	#####################################
Saturation (A3) Hydrogen Sulfide Water Marks (B1) Oxidized Rhizosp	heres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	
1 The Company of the Control of the	iction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	[18] [18] [18] [18] [18] [18] [18] [18]
Iron Deposits (B5) Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inche	
Water Table Present? Yes No Depth (inche	
Saturation Present? Yes No Depth (inche (includes capillary fringe)	s): <u>SI/VFACL</u> Wetland Hydrology Present? Yes V No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Remarks:	
	And the second s

A STATE OF THE STA	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30F+ x30F+) 1. None.	% Cover	Citative off approximate with recognitions.	NAME OF STREET OF THE PARTY.	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata:
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 80/1 (A/B
6		4/4/2004	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Prevalence Index worksheet:
7.	Table of the second			Total % Cover of: Multiply by:
B		1000		OBL species x1 =
	:	= Total Co	ver	FACW species x 2 =
50% of total cover:	20% of	total cover		FAC species x3 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)				FACU species x4 =
1. none				UPL species x 5 =
2.				Management をはまる。Management (Note that the property of the p
3.				Column Totals: (A) (B)
4.				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6.				A-Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0'
	0	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	CASC SICKLA WARRANT SERVICE.			Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size: 30ff x 30 ff)	20 /8 01	total cover	-	1
1. TUNCUS EFFUSUS	20%	У	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Expatorium compositifolium		V	FAL	Definitions of Four Vegetation Strata:
3. Typha latifolia	10.1.	N	OBL	
	ACCUPATION NAMED IN COLUMN	N/	FACW	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) o
4. Osmundastrum unnamomeum		N	Charles and the Party of the Pa	more in diameter at breast height (DBH), regardless o height.
		- 21	FACULOB	
6. Chasmanthium laxum	15%		FACW	Sapling/Shrub - Woody plants, excluding vines, less
7. Lubus argutus	10 1/1	N	FAC	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
В.				Herb - All herbaceous (non-woody) plants, regardless
9.			2 40 2576	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.				
Sent the second section is record to the second section of the second section of the second section of the second section sect	90:	= Total Co	ver	The Control of the Co
50% of total cover: 45		total cover		
Woody Vine Stratum (Plot size: 30ff x 30ff)				
1. Lonicera japonica	10:1.	Y	FALU	
2. Vitis rotundifolia	5.7	У	FAL	
The control of the co				
	CAN SECURE			
4. The state of th	Sapara and the		A STATE OF THE STA	
	16			Hydrophytic
	Burth to addition and burth to the	= Total Co		Vegetation Present? Yes No
CONTROL OF A CONTR	20% of	total cover		
50% of total cover: 7 . 5				

epth Matrix ches) Color (moist) %	Redo Color (moist)	x Features % Type	Loc²		Remarks
	10YP 4/5	5 C	M	loam_	
rpe: C=Concentration, D=Depletion, RM=dric Soil Indicators: (Applicable to all 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 150. 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) estrictive Layer (if observed): Type: Depth (inches):	Reduced Matrix, Millers, unless othe Polyvalue Beller Thin Dark St. Loamy Muck Loamy Gleyer Depleted Maller Redox Dark Depleted Daller Redox Depreted Daller (F10) (Indicate of the control of the contro	S=Masked Sand rwise noted.) clow Surface (S8) urface (S9) (LRR y Mineral (F1) (Lied Matrix (F2) trix (F3) Surface (F6) rk Surface (F7) cessions (F8) LRR U) hric (F11) (MLRA cese Masses (F12 ace (F13) (LRR F cese (F13) (LRR F cese (F18) (MLRA codplain Soils (F	Grains. (LRR S, T, S, T, U) RR O) (151) (LRR O, I, T, U) 1) 150A, 150I	2Location: PL Indicators for U)	ent Material (TF2) Illow Dark Surface (TF12) Explain in Remarks) ors of hydrophytic vegetation and and hydrology must be present, as disturbed or problematic.
emarks:					



Wetland data point wcmp003f_w2 facing southwest.



Wetland data point wcmp003f_w2 facing northwest.

Project/Site: ACP City/Ci	ounty: Cumpertand Sampling Date: 9/2/14
Applicant/Owner: TSOYMIN 1 DM	State: NC Sampling Point: Wcmp003_
Investigator(s): ESI (L Knger / LTirnholl) Section	no Township Range: NA
Landform (hillslope, terrace, etc.): drawate Local	17 13 Siope (%). 9 11
1 10 1	1213 Long: -78.73.170 Datum: W16584
Soil Map Unit Name: Windington loamy San	
Are climatic I hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soit, or Hydrology significantly disturb	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	ppling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	leate Benede to
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No	within a Wetland? Yes No V
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (
Water Marks (B1) Oxidized Rhizospheres	1
Sediment Deposits (B2) Presence of Reduced In Drift Deposits (B3) 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 Remai	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches);	NA
Water Table Present? Yes No Depth (inches):	>20
Saturation Present? Yes No Depth (inches):	> 20 Wetland Hydrology Present? Yes No 💉
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, principle)	revious inspections), if available:
Remarks:	
· ·	
1	

· · · · · · · · · · · · · · · · · · ·				
Tree Stratum (Plot size: 30 x 30)	Absolute			Dominance Test worksheet:
	1	Species?	Status	Number of Dominant Species 7
1. Limidumber straitly	18	<u> </u>	1116	That Are OBL, FACW, or FAC: (A)
2. PINUS tapped	15	·¥	PHC	
		-/	CACI	Total Number of Dominant
3 Carva tomentosa	<u>_\D</u>		THU	Species Across All Strata: (B)
4.		•		.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 88 % (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	40	= Total Co	ver	OBL species x1 =
2 m				FACW species x 2 =
50% of total cover: 25	<u>′ </u>	f total cover	r. <u> </u>	
Sapling/Shrub Stratum (Plot size: 730)				FAC species x 3 =
1. Symploids timitoria	10	Y	CILE	FACU species x 4 =
1. MINISTOLOS TIMITONIA		· - /	- 	UPL species x 5 =
2. Limitamhar atrraciflia	15	<u> 7.</u>	rHC.	I i
3. Corra tomentosa	هر	N	PANI	Column Totals: (A) (B)
3. CONTRACTOR STORY				
4				Prevalence Index = B/A =
5				
				Hydrophytic Vegetation Indicators:
6				1 Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0¹
		= Total Co		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:\ 🗲	20% c	of total cove		
		51 total 00-0	··· <u> </u>	'
Herb Stratum (Plot size: 30 × 30)	_	. .		¹ Indicators of hydric soil and wetland hydrology must
1. Yucca gloviosa	ΙO	Y	FHC	be present, unless disturbed or problematic.
2. Arundinaria aixantea	15	<u> </u>	CATA	Definitions of Four Vegetation Strata:
2. PHONOLITY OF BLANK 1-2 DE	1,2	- -	11/4	Deminions of Four Vegetation Strata.
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
·4				
ı				more in diameter at breast height (DBH), regardless of
5				height.
5				height.
5 6			<u> </u>	height. Sapling/Shrub – Woody plants, excluding vines, less
5			<u> </u>	height.
5				height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
5				height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless
5				height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
5				height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
5				height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5				height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
5				height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5				height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	25	= Total C	dover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	25	= Total C	dover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	2.5 .5 20%	= Total C	over er: 5	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	2.5 .5 20%	= Total C	over er: 5	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	25	= Total C	dover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	2.5 .5 20%	= Total C	over er: 5	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	2.5 .5 20%	= Total C	over er: 5	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	2.5 .5 20%	= Total C	over er: 5	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	2.5 .5 20%	= Total C	over er: 5	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
5	2.5 .5 20%	= Total C	over er: 5	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5	2.5 5 20%	_ = Total C	cover er: 5	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5	25 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	25 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
5	2.5 5 20%	_ = Total C	Cover	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation

	ription: (Describe	· · · · · · · · · · · · · · · · · · ·	Heeded to docum	Helst the maicato	or comminue	auserice of it	14104101311	
Depth	Matrix			x Features				
(inches)	Color (moist)	<u> </u>	Color (moist)	. <u>% Type</u>	Loc²	<u> exture</u>	Remarks	
D-5	2.57 4/2	100				5		
5-20	2.54513	100				5		
	<u> </u>			- 		 _		
								
			· · · ·	- — —				
				- 				
				<u> </u>				
	-							
¹ Type: C=C	oncentration, D=Dep	letion, RM=R	educed Matrix, M	S=Masked Sand (Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applic	able to all Li	Rs, unless othe	rwise noted.)	1	indicators for	Problematic Hydric So	lis³:
Histoso	l (A1)		Polyvalue Bo	elow Surface (S8)	(LRR S. T. U)	1 cm Muck	(A9) (LRR O)	
	pipedon (A2)			urface (S9) (LRR			(A10) (LRR S)	
	listic (A3)		-	cy Mineral (F1) (LI			/ertic (F18) (outside ML	RA 150A.B)
	en Sulfide (A4)			ed Matrix (F2)	0,		Floodplain Soils (F19) (L	
	d Layers (A5)	T 10	Depleted Ma				s Bright Loamy Solls (F2	.0)
	Bodies (A6) (LRR F			Surface (F6)		(MLRA1	•	
	ucky Mineral (A7) (L			ark Surface (F7)			nt Material (TF2)	
	resence (A8) (LRR 1	•		essions (F8)			ow Dark Surface (TF12)	
	iuck (A9) (LRR P, T)		Marl (F10) (Other (Exp	olain in Remarks)	
	ed Below Dark Surface	ce (A11)		chric (F11) (MLRA		9.		
Thick D	Park Surface (A12)			nese Masses (F12			rs of hydrophytic vegeta	
	Prairie Redox (A16) (Umbric Surf	ace (F13) (LRR P	, T, U)	wetland	d hydrology must be pre	sent,
Sandy	Mucky Mineral (S1)	(LRR O, S)	Delta Ochrid	c (F17) (MLRA 15	1}	unless	disturbed or problematic	. .
Sandy	Gleyed Matrix (S4)		Reduced Ve	ertic (F18) (MLRA	150A, 150B)			
Sandy	Redox (S5)		Piedmont F	loodplain Soils (F1	19) (MLRA 149A)		
Strippe	d Matrix (S6)		Anomalous	Bright Loamy Soil	s (F20) (MLRA 1	149A, 153C, 15	i3D)	
Dark S	urface (S7) (LRR P,	S. T. U)	_				•	
	Layer (if observed		-					
_					İ			
Туре:								
								/
Depth (i	nches):					Hydric Soil Pr	esent? Yes	No 🖊
Depth (i Remarks:						Hydric Soil Pr	esent? Yes	No 🖊
						Hydric Soil Pr	esent? Yes	No 👤
				<u></u>		Hydric Soil Pr	esent? Yes	No 🖊
						Hydric Soil Pr	esent? Yes	No 🖊
						Hydric Soil Pr	esent? Yes	No 🖊
						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No <u> </u>
						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
				,		Hydric Soil Pr	esent? Yes	No 👤
				,		Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
				·		Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
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						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
				,		Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
				,		Hydric Soil Pr	esent? Yes	No 👤
				,		Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤
						Hydric Soil Pr	esent? Yes	No 👤



Upland data point wcmp003_u facing northeast.

Project/Site: ACP	City/County: CVM bevland Sampling Date: 7/15/16
Applicant/Owner: DOVN INI ON	State: NC Sampling Point: Wcmp 003.
lavasticator(s): ESI PODEV TOBUSON	Section Township Range: NOVI
Landform (hillslope terrace etc.): hillslope	Local relief (concave, convex, none): convex Slope (%): 0-3/
Subregion (I RR or MI RA): LFFP Lat: 35.	17169 Long: -78,73190 Datum: W6584
Soil Map Unit Name: Wooding ton loamy Sa	nd NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of ye	
Are Vegetation Soil , or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Cleaveut Within 2 year	Is the Sampled Area within a Wetland? Yes No
HYDROLOGŸ	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1) Aquatic Fauna (B1	D-6 (DO)
High Water Table (A2) High Water Table (A2) Mari Deposits (B15)	
Saturation (A3)	
☐ Water Marks (B1) ☐ Oxidized Rhizosph☐ Sediment Deposits (B2) ☐ Presence of Reduc	
The same and the s	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Under (Explain in F	Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Sphagnum moss (D8) (LRR T, U)
☐ Water-Stained Leaves (B9)	
Surface Water Present? Yes No _X Depth (inches): <u>V/A</u>
Water Table Present? Yes No Depth (inches	s): >20
Saturation Present? Yes No Depth (inches (includes capillary fringe)	S): >20 Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspections), if available:
Remarks:	
	The state of the s

And the second section of the second section is a second section of the section of the se		5	1	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft x 30ft)	A STATE OF THE PARTY OF THE PAR	Dominant Species?		Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant Species Across All Strata: (B)
4. <u> </u>				Percent of Dominant Species That Are OBL, FACW, or FAC:51, (A/B)
6			- 10 To 10 T	Prevalence Index worksheet:
7.		AUTONOMICS TO	100 Ca 10	Total % Cover of: Multiply by:
8.	0	= Total Cov	or.	OBL species x 1 =
50% of total cover:	The resulted believe to the			FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ff x30ff)	20 % 0	i total cover		FAC species x 3 =
1. Liriodendron fulipifera	10%	Y	FACU	FACU species x 4 =
2 Acer Pubrum	15%	1	FAL	UPL species x 5 =
3. Liquidambar styraciflua		Ÿ	FAL	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5.				Hydrophytic Vegetation Indicators:
6.				Rapid Test for Hydrophytic Vegetation
7.				2 - Dominance Test is >50%
8.			Jan Baran	3 - Prevalence Index is ≤3.01
	-	= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 17.	5 20% 0	f total cover	_7_	
Herb Stratum (Plot size: 30ff x 30ff)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10%	1	FACW	be present, unless disturbed or problematic.
2. Eupatorium composititolium	15%	Y	FAC.	Definitions of Four Vegetation Strata:
3. Les pedeza coneata	10%	<u> </u>	FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Rivis copallinum	10.1.	<u>y</u>	UPL	more in diameter at breast height (DBH), regardless of
5. Phytolacca americana	10.1.	<u>y</u>	FACU	height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.	A THE REST			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.
SEAL commence of a series of a consection of the		27 TO 18 10 1		neigh.
12	55	= Total Cov	/er	
50% of total cover: 27				
Woody Vine Stratum (Plot size:)			A CONTRACT	
1. Toxicodendran Fadicans	10%	Y	FAC	
2. VITIS rotundifolia	5%	Y	FAC	
3. Lonicera japonica	5 1/.	Y	FACU	
4		n operant errore. Optablisher utder		
5				Hydrophytic
The second of the second secon	20	= Total Co	/er	Vegetation
50% of total cover: 1 C	County College St. Cartiering and		1.	Present? Yes V No
Remarks: (If observed, list morphological adaptations bel	THE RESERVE OF THE PARTY OF THE	T total cover	Andrew Marie 1999	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
Remarks. (Il observed, list morphological adaptations be-	1 10 1	10	200011	
heavily disturbed	TUE T	000	arcu	

Destile Dest	cription: (Describe t	o the denth	needed to docum	nent the i	ndicator	or confirm	n the absence	of indicators	.)	
	Matrix	o the depth		x Feature						
Depth (inches)	Color (moist)	%	Color (moist)	%	Type'	Loc²	Texture		Remarks	30.00
0-10	10 ur 3/2	100_					sand	>30 V	ncoated	and the second
CONTRACTOR OF THE PARTY		- 100								
		- 100 COUNTY - 100				A STREET, STRE				
2.00						William I	2 10 10 10 10 10 10			overstage for each act 2000 for the con-
Total Services		474 1535 771				The state of the	The total and the Market			
	OL MARKETON TO THE SAME	The second second	Carlo Sala avec College College		70 3 70 V 500	ALCOHOL:				
or a street profession and the								North State of State	ALTONOMICS STATE OF	A ADMINISTRAÇÃO
							and the same			
1Type: C=C	oncentration, D=Depl	etion RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location:	PL=Pore Lin	ing, M=Matrix.	
Hydric Soil	Indicators: (Applica	able to all LI	RRs, unless other	rwise not	ed.)		Indicators	for Problem	atic Hydric So	ils':
☐ Histoso			☐ Polyvalue Be			RR S. T.	U) 1 cm N	luck (A9) (LR	R 0)	
	pipedon (A2)		Thin Dark Su				2 cm N	luck (A10) (L	RRS)	
	listic (A3)		Loamy Muck				Reduc	ed Vertic (F1	8) (outside ML	RA 150A,B)
	en Sulfide (A4)		Loamy Gleye						n Soils (F19) (L	
	d Layers (A5)		☐ Depleted Ma						oamy Soils (F2	20)
	Bodies (A6) (LRR P.	T, U)	Redox Dark					RA 153B)		
	ucky Mineral (A7) (LF		Depleted Da				H Red P	arent Materia	I (IF2)	
	resence (A8) (LRR U)	Redox Depre	44405080808650/60.203	8)				Surface (TF12)	
	uck (A9) (LRR P, T)		Marl (F10) (L				U Other	(Explain in Re	emarks)	
11 Table 1 Tab	ed Below Dark Surface	e (A11)	Depleted Oc				T) 3Indi	ators of buds	ophytic vegeta	tion and
	ark Surface (A12)		Iron-Mangan		MTARDER APRICAPITATION AND A PART				gy must be pre	
	Prairie Redox (A16) (N		Umbric Surfa			, 0,			or problemation	
	Mucky Mineral (S1) (L	.RR U, 3)	Reduced Ve			0A. 150B				
	Gleyed Matrix (S4) Redox (S5)		Piedmont Flo							
	d Matrix (S6)						RA 149A, 1530	, 153D)		
	urface (S7) (LRR P, S	i. T. U)								
	Layer (if observed):									
Type:										/
	nches):						Hydric Soi	Present?	Yes	No A
Remarks:	icirco):					see of the relation				
Kemarks.										
								PROPERTY AND LOSS OF THE	WEST STREET STREET	manufacture of the property of the contract of



Upland data point wcmp003_u2 facing south.



Upland data point wcmp003_u2 facing north.

Project/Site: Atlantic Coast Pipeline	City/County: Cuml	perland	Sampling Date: 3/5/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: wcmb103f_w
	Section, Township		
Landform (hillslope, terrace, etc.): floodplain			
Subregion (LRR or MLRA): P			
Soil Map Unit Name: Roanoke and Wahee loams			
		NWI classifi	
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 ma	p showing sampling poi	nt locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? Yes <u>✓</u>	No Is the Sam		
	No.		
	No within a W	etland? Yes	No
Remarks:			
PFO wetland dominated by water tupelo, red maple, sw Please note, there may be a few upland inclusions alon contains numerous skidder ruts.			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soi	l Cracks (B6)
Surface Water (A1) Aqua	atic Fauna (B13)	Sparsely Ve	egetated Concave Surface (B8)
	Deposits (B15) (LRR U)	✓ Drainage Page	atterns (B10)
	ogen Sulfide Odor (C1)	Moss Trim I	
	ized Rhizospheres along Living R		Water Table (C2)
	ence of Reduced Iron (C4)	Crayfish Bu	
<u> </u>	ent Iron Reduction in Tilled Soils (/isible on Aerial Imagery (C9)
	Muck Surface (C7)		c Position (D2)
Iron Deposits (B5) Othe	r (Explain in Remarks)	Shallow Aqı ✓ FAC-Neutra	
Water-Stained Leaves (B9)		· · · · · · · · · · · · · · · · · · ·	moss (D8) (LRR T, U)
Field Observations:		opnagnam	
Surface Water Present? Yes No	Depth (inches):		
Water Table Present? Yes V No			
Saturation Present? Yes V No	Depth (inches):	Wetland Hydrology Prese	nt? Yes ✔ No
(includes capillary fringe)		,	
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photos, previous inspec	ions), if available:	
Remarks:			
Remarks.			

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	% Cover	Species?		Number of Dominant Species
1. Acer rubrum	20	Yes	FAC	That Are OBL, FACW, or FAC: 8 (A)
2. Nyssa aquatica	20	Yes	OBL	Total Number of Deminent
3. Liriodendron tulipifera	15	Yes	FACU	Total Number of Dominant Species Across All Strata: 9 (B)
4. Liquidambar styraciflua	10	No	FAC	(2)
5.				Percent of Dominant Species That Are ORL FACW or FAC: 88.88888888 (A/R)
				That Are OBL, FACW, or FAC: 88.88888888 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	65			OBL species x 1 = 20
22.5		= Total Cov		FACW species 45 x 2 = 90
50% of total cover: 32.5	20% of	total cover	:	40 120
Sapling/Shrub Stratum (Plot size:)				FAC species $\frac{40}{15}$ $\times 3 = \frac{120}{60}$
1. Magnolia virginiana	10	Yes	FACW	FACU species x 4 =
2. Lyonia lucida	10	Yes	FACW	UPL species $\begin{array}{c} 0 \\ 120 \\ \end{array}$ $\begin{array}{c} x = 0 \\ 290 \\ \end{array}$
3. Acer rubrum	10	Yes	FAC	Column Totals: (A) (B)
4.				Prevalence Index = R/A = 2.41
				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
	30	= Total Cov	_	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 15	20% of	total cover	6	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	10	Yes	FACW	be present, unless disturbed or problematic.
2. Osmundastrum cinnamomeum	10	Yes	FACW	Definitions of Four Vegetation Strata:
3.				
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				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				Meady vine All woody vines greater than 2.29 ft in
11.				Woody vine – All woody vines greater than 3.28 ft in height.
12.				g
12.	20	= Total Cov	·or	
50% of total cover: 10		total cover		
50 % Of total cover.	20% 01	total cover	·	
Woody Vine Stratum (Plot size:30) 1 Smilax laurifolia	5	Yes	FACW	
···		165	FACW	
2				
3				
4				
5.				Hydrophytic
	5	= Total Cov	er	Vegetation
50% of total cover: 2.5				Present? Yes No
Remarks: (If observed, list morphological adaptations below		10101 00 101		
Remarks. (II observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmb103f_w

Depth	cription: (Describe t Matrix			x Feature				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 2/1	100	<u>-</u>				SCL	
					· 			_
-					· 			
				_				
	·			_				
¹ Type: C=C	Concentration, D=Depl	etion RM=Re	educed Matrix M	S=Masker	d Sand Gr	ains	² l ocation: F	PL=Pore Lining, M=Matrix.
	Indicators: (Applica					unio.		or Problematic Hydric Soils ³ :
Histoso			Polyvalue Be			DD S T II		ick (A9) (LRR O)
	pipedon (A2)	-	Tolyvalde Be Thin Dark Su					ick (A10) (LRR S)
	listic (A3)	•	Loamy Muck					d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)	•	Loamy Gleye			. •,		nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	-	Depleted Ma		/			ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,	T. U)	Redox Dark		-6)			A 153B)
-	ucky Mineral (A7) (LR		Depleted Da					ent Material (TF2)
	resence (A8) (LRR U)		Redox Depre					allow Dark Surface (TF12)
	uck (A9) (LRR P, T)	•	 Marl (F10) (L		,			xplain in Remarks)
	ed Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)		,
Thick D	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) (LRR O, P,	T) ³ Indica	tors of hydrophytic vegetation and
Coast F	Prairie Redox (A16) (N	ILRA 150A)	Umbric Surfa	ace (F13) ((LRR P, T	', U)	wetla	nd hydrology must be present,
	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (ML	RA 151)		unles	s disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) ((MLRA 15	0A, 150B)		
Sandy	Redox (S5)	-	Piedmont Flo	oodplain S	oils (F19)	(MLRA 149	9A)	
	d Matrix (S6)		Anomalous E	Bright Loai	my Soils (F20) (MLR	A 149A, 153C, <i>1</i>	153D)
	urface (S7) (LRR P, S	, T, U)						
Restrictive	Layer (if observed):							
Type:			_					
Depth (ir	nches):		<u> </u>				Hydric Soil P	resent? Yes No
Remarks:							1	



Photo 1 Wetland data point wcmb103f_w facing north



Photo 2
Wetland data point wcmb103f_w facing southeast

Project/Site: Atlantic Coast Pipeline		City/C	County: Cumberland		_ Sampling Date: 3/5/2015	
Applicant/Owner: Dominion State: NC Sampling Point: wcmb103_u						
Investigator(s): TP, CR		Section	on Township Range	e: No PLSS in this are		
Landform (hillslope, terrace, etc.): hil						
Subregion (LRR or MLRA): P		25.16648967	,	-78.74841291	Olope (70):	
Soil Map Unit Name: Roanoke and V		_ Lat				
			_	NWI classifi		
Are climatic / hydrologic conditions or						
Are Vegetation, Soil,				ormal Circumstances"	present? Yes No	
Are Vegetation, Soil,	or Hydrology	_ naturally problema	atic? (If need	led, explain any answ	ers in Remarks.)	
SUMMARY OF FINDINGS -	Attach site ma	p showing san	npling point loc	ations, transect	s, important features, etc.	
Hydrophytic Vegetation Present?	Yes 🔽	No				
Hydric Soil Present?	Yes		Is the Sampled A		•	
Wetland Hydrology Present?	Yes	No 🔽	within a Wetland?	? Yes	No	
Western Hydrology Indicators				Cocondon India	atora (minimum of two required)	
Wetland Hydrology Indicators:	in required; check	all that apply)		<u> </u>	ators (minimum of two required)	
Primary Indicators (minimum of one	-			Cracks (B6)		
Surface Water (A1) High Water Table (A2)		itic Fauna (B13) Deposits (B15) (LR I	B 11/		egetated Concave Surface (B8) atterns (B10)	
Saturation (A3)		ogen Sulfide Odor (Moss Trim I		
Water Marks (B1)		=	llong Living Roots (C	·		
Sediment Deposits (B2)		ence of Reduced Iro		Crayfish Burrows (C8)		
Drift Deposits (B3)	Rece	ent 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 Aqu		
Inundation Visible on Aerial Ima	agery (B7)			FAC-Neutra		
Water-Stained Leaves (B9)			1	Sphagnum	moss (D8) (LRR T, U)	
Field Observations: Surface Water Present? Yes	No. V	Depth (inches):				
		Depth (inches):				
		Depth (inches):		Wetland Hydrology Present? Yes No ✔		
(includes capillary fringe)					10310	
Describe Recorded Data (stream ga	auge, monitoring we	ell, aerial photos, pre	evious inspections), i	f available:		
Remarks:						
Remarks.						

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Liquidambar styraciflua	15	Yes	FAC	That Are OBL, FACW, or FAC:3 (A)
2. Quercus nigra	15	Yes	FAC	Total Number of Dominant
3. Fagus grandifolia	5	No	FACU	Species Across All Strata: 5 (B)
4. Prunus serotina	5	No	FACU	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 60 (A/B)
6.				That Are OBL, I AGW, OF I AG.
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8	40			OBL species0 x 1 =0
20		= Total Cov	Ω	FACW species $0 \times 2 = 0$
50% of total cover:	20% of	total cover:		FAC species 40 x 3 = 120
Sapling/Shrub Stratum (Plot size:15)		.,		FACU species 20 x 4 = 80
1. Ilex opaca	10	Yes	FAC	0
2. Vaccinium stamineum	5	Yes	FACU	UPL species $0 \times 5 = 0$
3				Column Totals: (A) (B)
4				Prevalence Index = B/A = 3.33
5.				T Tevalcinec index = B/A =
···				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8	15			3 - Prevalence Index is ≤3.0 ¹
7.5		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 7.5	20% of	total cover:	3	
Herb Stratum (Plot size:)				¹ Indicators of hydric soil and wetland hydrology must
1. Tipularia discolor	5	Yes	FACU	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
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11.				height.
12.				
· -	5	= Total Cov	er	
50% of total cover: 2.5		total cover:	4	
30 /0 OI total cover.	20 /6 01	lulai cuvei.		
(1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
1				
2				
3				
4				
5				Hydrophytic
	0 :	= Total Cov	er	Vegetation
50% of total cover:		total cover:		Present? Yes No No
Remarks: (If observed, list morphological adaptations belo				
Tremarks. (II observed, list morphological adaptations belo	w).			

SOIL Sampling Point: wcmb103_u

Depth	cription: (Describe to Matrix	aopti		x Feature					
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remark	(S
0-3	10YR 2/1	100					SL		
3-12	10YR 3/2	100					SCL		
				-					
	· 				·				_
				<u> </u>					
	-								
1- 0.0							2		
	Concentration, D=Depl Indicators: (Application)					ains.		Pore Lining, M=M Problematic Hyd	
-		able to all L				DD 0 T 11		-	ic soils .
Histoso	` '		Polyvalue Be Thin Dark Su						
	pipedon (A2) listic (A3)		Loamy Muck					(A10) (LRR S) artic (E18) (outsi	de MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye	-		. 0,		. , .	19) (LRR P, S, T)
	ed Layers (A5)		Depleted Ma		(- –)			Bright Loamy So	
	Bodies (A6) (LRR P,	T, U)	Redox Dark		- 6)		(MLRA 15		,
-	ucky Mineral (A7) (LR		Depleted Da					Material (TF2)	
Muck P	resence (A8) (LRR U)	Redox Depre		(8)			w Dark Surface (*	ΓF12)
	uck (A9) (LRR P, T)		Marl (F10) (L				Other (Expla	ain in Remarks)	
	ed Below Dark Surface	e (A11)	Depleted Oc				3		
	erk Surface (A12)	U DA 450A)	Iron-Mangan					of hydrophytic ve	-
	Prairie Redox (A16) (N					, U)		nydrology must b sturbed or proble	
	Mucky Mineral (S1) (L Gleyed Matrix (S4)	.KK U, S)	Delta Ochric Reduced Ve			0A 150R)	uniess ai	sturbed or proble	mauc.
	Redox (S5)		Piedmont Flo				9Δ)		
-	d Matrix (S6)						A 149A, 153C, 153	D)	
	urface (S7) (LRR P, S	, T, U)	_	9	, (- / (, , , , , , , , ,	,	
	Layer (if observed):								
Type:			<u></u>						
Depth (ir	nches):						Hydric Soil Pres	ent? Yes	No
Remarks:			<u></u>				1 -		
	alt/pepper sand								
0-0 11101103, 3	airpepper sand								



Photo 1 Upland data point wcmb103_u facing north



Photo 2
Upland data point wcmb103_u facing northwest



Photo 3
Upland data point wcmb103_u facing south

Project/Site: Atlantic Coast Pipeline	City/County: Cumberland	Sampling Date: 3/4/2015		
Applicant/Owner: Dominion		State: NC Sampling Point: wcmb102f_w		
• •	Section, Township, Range: N			
Landform (hillslope, terrace, etc.): drainage way				
Subregion (LRR or MLRA): P Lat: Soil Map Unit Name: Roanoke and Wahee loams				
		NWI classification: None		
Are climatic / hydrologic conditions on the site typical for this ti				
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed? Are "Norma	l Circumstances" present? Yes No		
Are Vegetation, Soil, or Hydrology nate	rally problematic? (If needed,	explain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map sh	owing sampling point location	ons, transects, important features, etc.		
Hydrophytic Vegetation Present? Yes _ ✔ _ No _				
Hydric Soil Present? Yes V No	is the bampica Area	v v v		
Wetland Hydrology Present? Yes V		Yes No		
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that		Surface Soil Cracks (B6)		
Surface Water (A1) Aquatic Fa		Sparsely Vegetated Concave Surface (B8)		
	sits (B15) (LRR U)	✓ Drainage Patterns (B10)		
	Sulfide Odor (C1)	Moss Trim Lines (B16)		
	hizospheres along Living Roots (C3) of Reduced Iron (C4)	Dry-Season Water Table (C2) Crayfish Burrows (C8)		
	n Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)		
	Surface (C7)	Geomorphic Position (D2)		
	lain 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				
Water Table Present? Yes No Depth	(inches): 11 8			
Saturation Present? Yes No Depth	(inches): Wetland I	Hydrology Present? Yes No		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspections), if ava	ailable:		
Remarks:				

Nyssa aquatica Yes Satura Yes Yes Satura Yes Satura Yes Yes Satura Yes Satura Yes Yes Satura Yes Satura Yes Yes Satura Yes Yes Satura Ye		20	Absolute	Dominant	Indicator	Dominance Test worksheet:
2 Acer rubrum	1. Nyssa aquatica)				Number of Dominant Species
Species Across All Stratus 5 (B)						That Are OBL, FACW, or FAC:5 (A)
3.	2. Acer rubrum		15	Yes	FAC	Total Number of Deminant
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FAC: 100 (Are CBL, FACW, or FACW; or FACW)	3					_
5. Percent of Dominants Speeds 100 (A/IE 100 (A/	4.					
6.						
Total Cover Total Cover	•					That Are OBL, FACW, or FAC: (A/B)
8.						Prevalence Index worksheet:
Sapiling/Shrub Stratum (Plot size: 15 17.5 20% of total cover: 7 7 7 7 7 7 7 7 7			· 			Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15	8		25	-		20
Sapling/Shrub Stratum (Plot size: 15) 5		47.1		= Total Cov		25 70
Sapling/Shrub Stratum (Plot size: 15 15 2 5 Yes FAC Species 0 x 4 0 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 K 180 (B 180 K 180 K 180 K 180 (B 180 K 180 K 180 K 180 (B 180 K 180 K 180 K 180 K 180 (B 180 K 180 K 180 K 180 K 180 K 180 (B 180 K 180 K 180 (B 180 K 180 K 180 K 180 K 180 K 180 (B 180 K 180 K 180 K 180 K 180 K 180 K 180 (B 180 K 180 K 180 K 180 K 180 K 180 (B 180 K 180		50% of total cover:	20% of	total cover:		30 00
1. Acer rubrum						
2.	1. Acer rubrum		5	Yes	FAC	FACU species
3.	2					UPL species x 5 =
4	-					Column Totals:85
5						
6			· 			Prevalence Index = B/A = 2.11
7	5					Hydrophytic Vegetation Indicators:
2 - Dominance Test is >50%	6					1 - Rapid Test for Hydrophytic Vegetation
8	7					
Solition Solition						
Sow of total cover: 2.5 20% of total cover: 1			5	= Total Cov	er	
Herb Stratum (Plot size:5) 1. Arundinaria gigantea		50% of total cover: 2.5			4	Problematic Hydrophytic Vegetation (Explain)
Arundinaria gigantea 30 Yes FACW 5 No FACW Sapuration	Hards Otractions (Diet aires		20 /0 01	total cover.		
2. Osmundastrum cinnamomeum 5 No FACW 3)	30	Vaa	EACW/	¹ Indicators of hydric soil and wetland hydrology must
Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Woody vine – All woody vines greater than 3.28 ft in height.	••		- — —			
4	2. Osmundastrum cinnamome	:um	5	No	FACW	Definitions of Four Vegetation Strata:
4	3					Tree - Woody plants, excluding vines, 3 in (7.6 cm) or
5	4.					
6						
than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Woody vine – All woody vines greater than 3.28 ft in height.						Continue/Charaka Manda and and and and and
8						
9						
10			· ——			Herb – All herbaceous (non-woody) plants, regardless
11	9					of size, and woody plants less than 3.28 ft tall.
11 height. 12 35 = Total Cover	10					Woody vine – All woody vines greater than 3 28 ft in
35 = Total Cover 50% of total cover: 17.5 20% of total cover: 7	11					
35 = Total Cover 50% of total cover: 17.5 20% of total cover: 7	12.					
50% of total cover:7			35	= Total Cov	er	
Woody Vine Stratum (Plot size:)		50% of total cover: 17.5			_	
1100d) 1110 october 1100 october			20 /6 01	lulai cuvei.		
a Smilax folundiidila iu tes fac. I		e:)	10	Vaa	EAC.	
··· ·	···			165	FAC	
2	2					
3	3					
4						
_						Hadranbad's
5 Hydrophytic 10 = Total Cover Vegetation			10	- Total Cav		
- Brocont2 Von No	<u> </u>	5			_	Present? Yes No
50% of total cover: 2 Present? Tes No	0		20% of	total cover:		
Remarks: (If observed, list morphological adaptations below).	o	50% of total cover:				
		30 /0 OI total cover:	ow).			
		30 /0 OI total cover:	ow).			
		30 /0 OI total cover:	ow).			
		30 /0 OI total cover:	ow).			
		30 /0 OI total cover:	ow).			
		30 /0 OI total cover:	ow).			
		30 /0 OI total cover:	ow).			

SOIL Sampling Point: wcmb102f_w

	cription: (Describe	to the depth r				or confirm	the absence o	f indicators.)	
Depth (inches)	Matrix Color (moist)	<u></u> %	Redo Color (moist)	ox Feature: %	SType ¹ _	Loc²	Texture	Remarks	
0-12	10YR 2/1	100	Color (moist)		Type	LUC	SCL	Remarks	
		·			-				
¹ Type: C=C	concentration, D=Dep	letion, RM=Re	duced Matrix, M	S=Masked	Sand Gr	ains.	² Location: F	PL=Pore Lining, M=Matri	x.
Hydric Soil	Indicators: (Applica	able to all LRI	Rs, unless othe	rwise note	ed.)		Indicators for	or Problematic Hydric	Soils³:
Histoso	I (A1)		Polyvalue B	elow Surfa	ce (S8) (L	.RR S. T. U) 1 cm Mu	uck (A9) (LRR O)	
	pipedon (A2)	-	Thin Dark S					uck (A10) (LRR S)	
	istic (A3)	-	Loamy Muck					d Vertic (F18) (outside N	/ILRA 150A.B)
	en Sulfide (A4)	-	Loamy Gley			-,		nt Floodplain Soils (F19)	
	d Layers (A5)	-	Depleted Ma		,			ous Bright Loamy Soils (
	Bodies (A6) (LRR P	. T, U)	Redox Dark		- 6)			A 153B)	,
_	ucky Mineral (A7) (LR		Depleted Da					ent Material (TF2)	
	resence (A8) (LRR U		Redox Depr					allow Dark Surface (TF1	2)
	uck (A9) (LRR P, T)	-	Marl (F10) (I		- /			Explain in Remarks)	,
	d Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)		,	
•	ark Surface (A12)	. , _	 Iron-Mangar				T) ³ Indica	tors of hydrophytic veget	ation and
	Prairie Redox (A16) (N	/ILRA 150A)			, , ,		•	and hydrology must be pr	
	Mucky Mineral (S1) (L		Delta Ochric					ss disturbed or problema	
-	Gleyed Matrix (S4)	. , -	Reduced Ve			0A, 150B)		•	
	Redox (S5)	_	Piedmont Fl				9A)		
-	d Matrix (S6)						A 149A, 153C,	153D)	
	urface (S7) (LRR P, S	i, T, U)		•	,				
	Layer (if observed):								
Type:									
• • •	iches):		_				Hydric Soil P	Present? Yes	No
			_				Tiyane 30ii i	1636111: 163	
Remarks:									



Photo 1
Wetland data point wcmb102f_w facing northeast



Photo 2
Wetland data point wcmb102f_w facing northwest

Project/Site: Atlantic Coast Pipelir	пе	City/Co	ounty: Cumberland		Sampling Date: 3/4/2015	
Applicant/Owner: Dominion			,	State: NC	Sampling Point: wcmb102e_w	
		Section	n, Township, Range: N			
Landform (hillslope, terrace, etc.):						
Subregion (LRR or MLRA): P Soil Map Unit Name: Roanoke an	d Wahee loams	_ Lat:				
Are climatic / hydrologic conditions						
Are Vegetation, Soil	, or Hydrology	significantly disturb	ed? Are "Norma	l Circumstances" p	resent? Yes No	
Are Vegetation, Soil	, or Hydrology	naturally problema	tic? (If needed,	explain any answe	rs in Remarks.)	
SUMMARY OF FINDINGS	 Attach site ma 	ap showing sam	pling point location	ons, transects	, important features, etc.	
Hydrophytic Vegetation Present?	Yes 🗸	No				
Hydric Soil Present?		No	Is the Sampled Area			
Wetland Hydrology Present?		No	within a Wetland?	Yes	No	
Remarks:	<u> </u>					
HYDROLOGY						
Wetland Hydrology Indicators					tors (minimum of two required)	
Primary Indicators (minimum of o				Surface Soil		
Surface Water (A1)		atic Fauna (B13)			getated Concave Surface (B8)	
High Water Table (A2)		Deposits (B15) (LRR		Drainage Pat		
Saturation (A3) Water Marke (B1)	-	rogen Sulfide Odor (C	ong Living Roots (C3)	Moss Trim Li		
Water Marks (B1) Sediment Deposits (B2)		sence of Reduced Iron		Crayfish Burr	Water Table (C2)	
Sediment Deposits (B2) Drift Deposits (B3)		ent Iron Reduction in		-	sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)		Muck Surface (C7)	111100 00110 (00)	Geomorphic		
Iron Deposits (B5)		er (Explain in Remarks	s)	Shallow Aqui		
Inundation Visible on Aerial			,	FAC-Neutral Test (D5)		
Water-Stained Leaves (B9)				Sphagnum m	noss (D8) (LRR T, U)	
Field Observations:						
	∕es <u> </u>					
	/es No					
	res <u>r</u> No	Depth (inches): 0	Wetland I	Hydrology Presen	t? Yes / No	
(includes capillary fringe) Describe Recorded Data (stream	n gauge, monitoring w	ell, aerial photos, prev	vious inspections), if ava	ailable:		
,			. ,			
Remarks:						

		Absolute	Dominant I	ndicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30)		Species?		Number of Dominant Species	
1					That Are OBL, FACW, or FAC:	(A)
2.						` '
					Total Number of Dominant Species Across All Strata: 3	(5)
3					Species Across All Strata:3	(B)
4					Percent of Dominant Species	
5					That Are OBL, FACW, or FAC:	(A/B)
6						
7					Prevalence Index worksheet:	
					Total % Cover of: Multiply by:	_
8		0			OBL species $\frac{25}{0}$ $\times 1 = \frac{25}{0}$	
	0		= Total Cove		FACW species $\begin{array}{c} 0 \\ 0 \\ \end{array}$ $\begin{array}{c} x 2 = \\ 0 \\ \end{array}$	_
	% of total cover:0	20% of	total cover:		FAC species 0 x 3 = 0	
Sapling/Shrub Stratum (Plot size:)					_
1					FACU species	_
2.					UPL species x 5 =	_
						_ (B)
3						
4					Prevalence Index = B/A =1	_
5					Hydrophytic Vegetation Indicators:	
6					✓ 1 - Rapid Test for Hydrophytic Vegetation	
7.						
					2 - Dominance Test is >50%	
8		0			3 - Prevalence Index is ≤3.0 ¹	
	0.5		= Total Cove	4	Problematic Hydrophytic Vegetation ¹ (Explai	n)
509	% of total cover: 2.5	20% of	total cover:	1		
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology n	nust
1 Juncus effusus		10	Yes	OBL	be present, unless disturbed or problematic.	iuot
2 Carex Iupulina		10	Yes	OBL	Definitions of Four Vegetation Strata:	
3. Ludwigia alternifolia		5	Yes	OBL	Definitions of Four Vegetation Strata.	
				ODL	Tree – Woody plants, excluding vines, 3 in. (7.6	cm) or
4					more in diameter at breast height (DBH), regardle	ess of
5					height.	
6					Sapling/Shrub – Woody plants, excluding vines,	less
7.					than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8.					Herb – All herbaceous (non-woody) plants, regar	dless
9					of size, and woody plants less than 3.28 ft tall.	
10					Woody vine – All woody vines greater than 3.28	ft in
11					height.	
12.						
		25	= Total Cove	r		
	12.5			_		
50	% of total cover: 12.5	20% of	total cover:			
Woody Vine Stratum (Plot size:)					
1						
2						
3.						
4						
5					Hydrophytic	
		0	= Total Cove	r	Vegetation	
50°	% of total cover:0	20% of	total cover:	0	Present? Yes No	
Remarks: (If observed, list morphol	ogical adaptations below	w)				
remarks. (II observed, list morphor	ogical adaptations belo	···).				

SOIL Sampling Point: wcmb102e_w

Depth	cription: (Describe t Matrix	•		x Feature				•
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 3/2	97					SCL	
			YR 4/6	3	C	PL		
				- —				_
-	<u> </u>							
¹ Type: C=C	concentration, D=Depl	etion RM=Re	duced Matrix M	S=Masked	d Sand Gr	ains	² Location: Pl	L=Pore Lining, M=Matrix.
	Indicators: (Applica							r Problematic Hydric Soils ³ :
Histoso			Polyvalue Be			RR S. T. U		ck (A9) (LRR O)
	pipedon (A2)	-	Thin Dark Su					ck (A10) (LRR S)
	istic (A3)	-	Loamy Muck					Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)	-	Loamy Gleye			-,		t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	·	Depleted Ma		,			us Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,	T, U)	Redox Dark		- 6)		(MLRA	
_	ucky Mineral (A7) (LR		Depleted Da	rk Surface	· (F7)			ent Material (TF2)
	resence (A8) (LRR U)		Redox Depre	essions (F	8)		Very Sha	illow Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, T)	. -	Marl (F10) (L	RR U)			Other (E)	xplain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)		
Thick D	ark Surface (A12)	-	Iron-Mangan	ese Mass	es (F12) (LRR O, P,	T) ³ Indicate	ors of hydrophytic vegetation and
	Prairie Redox (A16) (N		Umbric Surfa	ace (F13)	(LRR P, T	', U)	wetlar	nd hydrology must be present,
	Mucky Mineral (S1) (L		Delta Ochric				unless	s disturbed or problematic.
	Gleyed Matrix (S4)	-	Reduced Ve					
-	Redox (S5)	-	Piedmont Flo					
	d Matrix (S6)	-	Anomalous E	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 1	53D)
	ırface (S7) (LRR P, S	, T, U)					_	
Restrictive	Layer (if observed):							
Type:			_					
Depth (ir	iches):		_				Hydric Soil Pr	resent? Yes No
Remarks:								



Photo 1
Wetland data point wcmb102e_w facing northwest



Photo 2
Wetland data point wcmb102e_w facing northeast

Project/Site: Atlantic Coast Pipeline	City/County: Cum	berland	Sampling Date: 3/4/2015			
Applicant/Owner: Dominion State: NC Sampling Point: wcmb102_u						
	Section, Township					
Landform (hillslope, terrace, etc.): drainage way						
Subregion (LRR or MLRA): P						
Soil Map Unit Name: Roanoke and Wahee loams		Long NWI classifi				
Are climatic / hydrologic conditions on the site typical fo						
Are Vegetation, Soil, or Hydrology						
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answer	ers in Remarks.)			
SUMMARY OF FINDINGS – Attach site m	ap showing sampling po	int locations, transect	s, important features, etc.			
Hydrophytic Vegetation Present? Yes <u>✓</u>	No Is the San	lad Aa				
	No within a W	npled Area	No 🗸			
Wetland Hydrology Present? Yes	No	venance res	NO			
LIVERGLOOV						
HYDROLOGY Western Hydrology Indicators		Cocondon, India	ators (minimum of two required)			
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check	all that annly)	Secondary made Surface Soi	<u> </u>			
•	atic Fauna (B13)		egetated Concave Surface (B8)			
	I Deposits (B15) (LRR U)		atterns (B10)			
	rogen Sulfide Odor (C1)	Moss Trim I				
	dized Rhizospheres along Living I					
Sediment Deposits (B2) Pres	sence of Reduced Iron (C4)	Crayfish Bu	rrows (C8)			
	ent Iron Reduction in Tilled Soils	(C6) Saturation \	/isible on Aerial Imagery (C9)			
	Muck Surface (C7)		Position (D2)			
	er (Explain in Remarks)	Shallow Aquitard (D3) FAC-Neutral Test (D5)				
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)			moss (D8) (LRR T, U)			
Field Observations:			11033 (DO) (ERR 1, 0)			
	Depth (inches):					
	Depth (inches):					
	Depth (inches):	Wetland Hydrology Present? Yes No _ ✓				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w	roll parial photos, provious inspa	ctions) if available:				
Describe Recorded Data (stream gauge, monitoring w	eii, aeriai priotos, previous irispec	Stioris), ii avaliable.				
Remarks:						

00	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Quercus nigra	15	Yes	FAC	Total Number of Dominant
3. Ostrya virginiana	5	No	FACU	Species Across All Strata: 7 (B)
4.				(2)
				Percent of Dominant Species That Are OBL FACW or FAC: 71.42857142 (A/B)
5				That Are OBL, FACW, or FAC: $\frac{71.42857142}{}$ (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	40	= Total Cov	er	OBL species X I =
50% of total cover: 20	20% of	total cover:	8	FACW species x 2 = 20 135
Sapling/Shrub Stratum (Plot size:15)	_			FAC species x 3 =
1 Fagus grandifolia	5	Yes	FACU	FACU species15 x 4 =60
2. Aralia spinosa		Yes		UPL species 0 x 5 = 0
			FAC	70 215
3. Ilex opaca	5	Yes	FAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =3.07
5				Trevalence index Birt
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	15	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 7.5	20% of	total cover:	3	1 Toblematic Tryatophytic Vegetation (Explain)
-				1
Herb Stratum (Plot size:) 1 Arundinaria gigantea	10	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must
•				be present, unless disturbed or problematic.
2. Tipularia discolor	5	Yes	FACU	Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
				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				
		= Total Cov	er	
50% of total cover: 7.5	20% of	total cover:	3	
Woody Vine Stratum (Plot size: 30)				
/ / / / / / / / / / / / / / / / / / /				
1				
2				
3				
4				
5				Lludrombusio
		= Total Cov		Hydrophytic Vegetation
				Present? Yes No
50% of total cover:0	20% of	total cover:		
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wcmb102_u

Depth	cription: (Describe t Matrix	 		x Feature				···· - ,
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 2/2	100					SL	
3-12	10YR 4/2	95	10YR 4/6	5	С	M	SCL	
	<u> </u>							
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	I (A1)		Polyvalue Be	low Surfa	ice (S8) (L	.RR S, T, U	I) 1 cm Muc	k (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					k (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)						Reduced Vertic (F18) (outside MLRA 150A,B)		
	en Sulfide (A4)		Loamy Gleye		(F2)			Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Anomalous Bright Loamy Soils (F20)								
-	Bodies (A6) (LRR P,		Redox Dark	•	,		(MLRA	
	ucky Mineral (A7) (LR		Depleted Date				Red Parent Material (TF2)	
Muck Presence (A8) (LRR U) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U)						Very Shallow Dark Surface (TF12) Other (Explain in Remarks)		
	ed Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)	Other (LX)	piani in Nemarks)
	ark Surface (A12)	(,	Iron-Mangan				T) ³ Indicato	rs of hydrophytic vegetation and
	Prairie Redox (A16) (N	ILRA 150A	_					d hydrology must be present,
Sandy	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (M L	_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	i3D)
	urface (S7) (LRR P, S	, T, U)					Γ	
	Layer (if observed):							
Type:								
• •	nches):						Hydric Soil Pre	esent? Yes No
Remarks:								
ı								



Photo 1 Upland data point wcmb102_u facing north



Photo 2
Upland data point wcmb102_u facing southwest

Project/Site: Atlantic Coast Pipeline	City/County: Cumberland	Sampling Date: 3/4/2015									
Applicant/Owner: Dominion		State: NC Sampling Point: wcmb102f_w									
Investigator(s): TP, CR Section, Township, Range: No PLSS in this area											
Landform (hillslope, terrace, etc.): drainage way											
Subregion (LRR or MLRA): P Lat: Soil Map Unit Name: Roanoke and Wahee loams											
		NWI classification: None									
Are climatic / hydrologic conditions on the site typical for this ti											
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 sh	owing sampling point location	ons, transects, important features, etc.									
Hydrophytic Vegetation Present? Yes _ ✔ _ No _											
Hydric Soil Present? Yes V No	is the bampica Area	v v v									
Wetland Hydrology Present? Yes V		Yes No									
Remarks:											
HYDROLOGY											
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)									
Primary Indicators (minimum of one is required; check all that		Surface Soil Cracks (B6)									
Surface Water (A1) Aquatic Fa		Sparsely Vegetated Concave Surface (B8)									
	sits (B15) (LRR U)	✓ Drainage Patterns (B10)									
	Sulfide Odor (C1)	Moss Trim Lines (B16)									
	hizospheres along Living Roots (C3) of Reduced Iron (C4)	Dry-Season Water Table (C2) Crayfish Burrows (C8)									
	n Reduction in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)									
	Surface (C7)	Geomorphic Position (D2)									
	lain 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											
Water Table Present? Yes No Depth	(inches): 11 8										
Saturation Present? Yes No Depth	(inches): Wetland I	Hydrology Present? Yes No									
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspections), if ava	ailable:									
Remarks:											

Nyssa apudatica		20	Absolute	Dominant	Indicator	Dominance Test worksheet:
2 Acer rubrum 3 .)				Number of Dominant Species
3						That Are OBL, FACW, or FAC: (A)
Species Across All Strate: 5 (B)	2. Acer rubrum		15	Yes	FAC	Total Number of Deminant
Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (Art of Date of Da	3					
Fercent of Dominant Speaces 100 (A/E	4.					
Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species 20	•					That Are OBL, FACW, or FAC: (A/B)
Some of total cover						Prevalence Index worksheet:
Sapiling/Shrub Stratum (Plot size: 15 17.5 20% of total cover: 7 7 7 7 7 7 7 7 7 7						Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 15 15 20% of total cover: 7 7 7 7 7 7 7 7 7 7	8		25	-		20
Sapiling/Shrub Stratum (Plot size: 15 15 7 18 180		47.5		= Total Cov		25 70
Sapling/Shruto Stratum (Plot size: 15		50% of total cover:	20% of	total cover:		30 00
1. Acer rubrum						0
2.	1. Acer rubrum		5	Yes	FAC	FACU species x 4 =
3	2					UPL species
4	-					Column Totals:85 (A)180 (B)
Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation						
Total Cover						Prevalence Index = B/A = 2.11
7	5					Hydrophytic Vegetation Indicators:
7.	6					1 - Rapid Test for Hydrophytic Vegetation
8	7					
Solition Solition						
Sow of total cover: 2.5 20% of total cover: 1			5	= Total Cov	er	
Herb Stratum (Plot size: 5) 30 Yes FACW		50% of total cover: 2.5			4	Problematic Hydrophytic Vegetation (Explain)
Arundinaria gigantea 30 Yes FACW 5 No FACW 5	Harla Otratana (Diataia)		20 /0 01	total cover.		
2. Osmundastrum cinnamomeum 5 No FACW 3. Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of height. 5. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. 8. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft in height.)	30	Vaa	EACW/	¹ Indicators of hydric soil and wetland hydrology must
3	••					
4	2. Osmundastrum cınnamomet	ım	5	No	FACW	Definitions of Four Vegetation Strata:
4	3					Tree – Woody plants, excluding vines, 3 in (7.6 cm) or
5. 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. 10. Woody vine – All woody vines greater than 3.28 ft in height. 12. 35 = Total Cover 20% of total cover: 7 Woody Vine Stratum (Plot size: 30) 1. Smilax rotundifolia 10 Yes FAC 10 Yes Yes FAC 10 Yes FAC 10 Yes FAC 10 Yes FAC 10 Yes Yes FAC 10 Yes Yes FAC 10 Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes	4.					
6						
7						Continui Charle Mande plants avaluding vince less
8						
9						
10						Herb – All herbaceous (non-woody) plants, regardless
11	9					of size, and woody plants less than 3.28 ft tall.
11	10					Woody vine – All woody vines greater than 3 28 ft in
35 = Total Cover 50% of total cover: 17.5 20% of total cover: 7	11					
35 = Total Cover 50% of total cover: 17.5 20% of total cover: 7	12.					
50% of total cover:			35	= Total Cov	er	
Woody Vine Stratum (Plot size:30) 1. Smilax rotundifolia		50% of total cover: 17.5			_	
1. Smilax rotundifolia 10 Yes FAC 2.	W 1 W 01 1 (D) 1 :		20 /6 01	lulai cuvei.		
2		:)	10	Vaa	FAC	
	•••			165	FAC	
	2					
3	3					
4						
_						
	5		10			
- Broont? Von No		5			_	Present? Yes No
50% of total cover:5 20% of total cover:2 Present? No		50% of total cover:	20% of	total cover:		
Remarks: (If observed, list morphological adaptations below).		phological adaptations belo	w).			
	Remarks: (If observed, list mor					
	Remarks: (If observed, list mor					
	Remarks: (If observed, list more					
	Remarks: (If observed, list more					
	Remarks: (If observed, list more					
	Remarks: (If observed, list more					
	Remarks: (If observed, list mo					

SOIL Sampling Point: wcmb102f_w

			needed to docu			01 001111111	the absence	or maroators.,
Depth (inches)	Matrix Color (moist)	%	Rede Color (moist)	ox Feature %	s Type ¹	Loc²	Texture	Remarks
0-12	10YR 2/1	100	Color (moist)		туре	LUC	SCL	Nemarks
					· 			
					· 			
								-
¹ Type: C=C	oncentration, D=Dep	letion, RM=R	Reduced Matrix, M	IS=Masked	d Sand Gr	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Application	able to all Li	RRs, unless othe	erwise not	ed.)		Indicators	for Problematic Hydric Soils ³ :
Histosol	I (A1)		Polyvalue B	elow Surfa	ce (S8) (L	RR S. T. U	1 cm M	fluck (A9) (LRR O)
	pipedon (A2)		Thin Dark S					fuck (A10) (LRR S)
	istic (A3)		Loamy Mucl					ed Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley			-,		ont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma		,			llous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U)	Redox Dark		-6)			RA 153B)
	ucky Mineral (A7) (LR		Depleted Da					arent Material (TF2)
	resence (A8) (LRR U		Redox Depr					hallow Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) (-,			Explain in Remarks)
	d Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)		,
	ark Surface (A12)	,	Iron-Mangai				T) ³ Indic	ators of hydrophytic vegetation and
	rairie Redox (A16) (N	/ILRA 150A)			. , .		•	land hydrology must be present,
	Mucky Mineral (S1) (L		Delta Ochrid					ess disturbed or problematic.
-	Gleyed Matrix (S4)	. ,	Reduced Ve			0A, 150B)		·
	Redox (S5)		Piedmont FI					
-	d Matrix (S6)						A 149A, 153C,	, 153D)
				5	, (- / (- ,	, ,
	ırface (S7) (LRR P, S	i, T, U)						
Dark Su	rface (S7) (LRR P, S Layer (if observed):							
Dark Su	Layer (if observed):	-						
Dark Su Restrictive Type:	Layer (if observed):	-	_				Hudria Sail	Brocont? Voc. ✓ No.
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type:	Layer (if observed):	-	_				Hydric Soil	Present? Yes No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No
Dark Su Restrictive Type: Depth (in	Layer (if observed):	-					Hydric Soil	Present? Yes V No No



Photo 1
Wetland data point wcmb102f_w facing northeast



Photo 2
Wetland data point wcmb102f_w facing northwest

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipelin	ne	City/Co	ounty: Cumberland		Sampling Date: 3/4/2015
Applicant/Owner: Dominion			,	State: NC	Sampling Point: wcmb102e_w
		Sectio	n, Township, Range: N		
Landform (hillslope, terrace, etc.):					
Subregion (LRR or MLRA): P Soil Map Unit Name: Roanoke an		Lat:			
Are climatic / hydrologic condition					
Are Vegetation, Soil	, or Hydrology	significantly disturb	ed? Are "Norma	I Circumstances" p	resent? Yes No
Are Vegetation, Soil	, or Hydrology	naturally problema	tic? (If needed,	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS	- Attach site m	nap showing sam	pling point location	ons, transects	, important features, etc.
Hydrophytic Vegetation Present	? Yes 🗸	No			
Hydric Soil Present?		No	Is the Sampled Area		
Wetland Hydrology Present?		No	within a Wetland?	Yes	No
Remarks:					
HYDROLOGY					
Wetland Hydrology Indicators				-	tors (minimum of two required)
Primary Indicators (minimum of				Surface Soil	
Surface Water (A1)		uatic Fauna (B13)			letated Concave Surface (B8)
High Water Table (A2)		rl Deposits (B15) (LRR		Drainage Pat	
Saturation (A3) Water Marks (B1)	-	drogen Sulfide Odor (C idized Rhizospheres al		Moss Trim Li	Nater Table (C2)
Sediment Deposits (B2)		esence of Reduced Iror		Crayfish Burr	
Drift Deposits (B3)		cent Iron Reduction in			sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)		n Muck Surface (C7)	(3.3)	Geomorphic	
Iron Deposits (B5)		ner (Explain in Remark	3)	Shallow Aqui	
Inundation Visible on Aerial	Imagery (B7)			FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)				Sphagnum m	oss (D8) (LRR T, U)
Field Observations:	_	0			
	Yes V No				
	Yes No				
Saturation Present? (includes capillary fringe)	Yes V No	Depth (inches):	Wetland I	Hydrology Presen	t? Yes No
Describe Recorded Data (stream	n gauge, monitoring v	well, aerial photos, prev	vious inspections), if ava	ailable:	
Remarks:					
1					

30		Dominant I		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1		Species?		Number of Dominant Species That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Dominant
3				Species Across All Strata:3 (B)
4				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				
8				25
		= Total Cove		ODL species X 1 =
50% of total cover:0	20% of	total cover:	0	FACVV species x z =
Sapling/Shrub Stratum (Plot size: 15)				FAC species x 3 = 0
1				FACU species x 4 =
2				UPL species x 5 =
3.				Column Totals:25 (A)25 (B)
4				Prevalence Index = B/A =1
5				Hydrophytic Vegetation Indicators:
6				<u>✓</u> 1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 ¹
		= Total Cove	r	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 2.5	20% of	total cover:	1	
Herb Stratum (Plot size: 5				¹ Indicators of hydric soil and wetland hydrology must
1. Juncus effusus	10	Yes	OBL	be present, unless disturbed or problematic.
2. Carex lupulina	10	Yes	OBL	Definitions of Four Vegetation Strata:
3. Ludwigia alternifolia	5	Yes	OBL	
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.				height.
6.				Continue (Charuta Manda and and and and and and and and and
7.				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				of size, and woody plants less than 5.25 it tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	25			
12.1		= Total Cove	_	
50% of total cover:12.5	20% of	total cover:	5	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
0		= Total Cove		Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	105 NO
Remarks: (If observed, list morphological adaptations belo	w).			
				

SOIL Sampling Point: wcmb102e_w

Depth	cription: (Describe t Matrix	•		x Feature				-
(inches)	Color (moist)		Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-12	10YR 3/2	97					SCL	
			YR 4/6	3	C	PL		
				- —				_
				_				
¹ Type: C=C	concentration, D=Depl	etion RM=Re	duced Matrix M	S=Masked	d Sand Gr	ains	² Location: Pl	L=Pore Lining, M=Matrix.
	Indicators: (Applica							or Problematic Hydric Soils ³ :
Histoso			Polyvalue Be			RR S. T. U		ck (A9) (LRR O)
	pipedon (A2)	-	Thin Dark Su					ck (A10) (LRR S)
	istic (A3)	-	Loamy Muck					Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)	_	Loamy Gleye			-,		t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma		,			us Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,	T, U)	Redox Dark		- 6)		(MLRA	
-	ucky Mineral (A7) (LR		Depleted Da	rk Surface	· (F7)			ent Material (TF2)
	resence (A8) (LRR U)		Redox Depre	essions (F	8)		Very Sha	allow Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, T)	_	Marl (F10) (L	RR U)			Other (E)	xplain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)		
Thick D	ark Surface (A12)	_	Iron-Mangan	ese Mass	es (F12) (LRR O, P,	T) ³ Indicate	ors of hydrophytic vegetation and
	Prairie Redox (A16) (N		Umbric Surfa	ace (F13)	(LRR P, T	', U)	wetlar	nd hydrology must be present,
	Mucky Mineral (S1) (L		Delta Ochric				unless	s disturbed or problematic.
	Gleyed Matrix (S4)	_	Reduced Ve					
-	Redox (S5)	-	Piedmont Flo					
	d Matrix (S6)	-	Anomalous E	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 1	53D)
	ırface (S7) (LRR P, S	, T, U)					_	
Restrictive	Layer (if observed):							
Type:			_					
Depth (ir	iches):		_				Hydric Soil Pr	resent? Yes No
Remarks:								



Photo 1
Wetland data point wcmb102e_w facing northwest



Photo 2
Wetland data point wcmb102e_w facing northeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline	City/County: Cu	umberland	Sampling Date: 3/4/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: wcmb102_u
	Section, Towns		
Landform (hillslope, terrace, etc.): drainage way			
Subregion (LRR or MLRA): P			
Soil Map Unit Name: Roanoke and Wahee loams		NWI cl	
Are climatic / hydrologic conditions on the site typical fo			
Are Vegetation, Soil, or Hydrology			
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any	answers in Remarks.)
SUMMARY OF FINDINGS – Attach site m	ap showing sampling p	oint locations, trans	sects, important features, etc.
Hydrophytic Vegetation Present? Yes <u>✓</u>	No Is the S		
	No.	ampled Area · Wetland? Yes	s No
Wetland Hydrology Present? Yes	No V	r vveudiur res	NO
HYDROLOGY Western Hydrology Indicators		Cocondany	Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check	all that annly)	<u></u>	e Soil Cracks (B6)
•	natic Fauna (B13)		ely Vegetated Concave Surface (B8)
	Deposits (B15) (LRR U)		ge Patterns (B10)
	Irogen Sulfide Odor (C1)		Trim Lines (B16)
	dized Rhizospheres along Livin		eason Water Table (C2)
Sediment Deposits (B2) Pres	sence of Reduced Iron (C4)	Crayfis	sh Burrows (C8)
	ent Iron Reduction in Tilled Soi		tion Visible on Aerial Imagery (C9)
	n Muck Surface (C7)		orphic Position (D2)
	er (Explain in Remarks)		w Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)			leutral Test (D5) num moss (D8) (LRR T, U)
Field Observations:		Opilag	Hulli moss (50) (ERR 1, 0)
	Depth (inches):		
	Depth (inches):		
	Depth (inches):		Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w	voll agrial photos, provious inst	poetions) if available:	
Describe Recorded Data (stream gauge, monitoring w	eli, aeriai priotos, previous irisp	dections), ii avaliable.	
Remarks:			

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	Number of Dominant Species
1. Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Quercus nigra	15	Yes	FAC	Total Number of Dominant
3. Ostrya virginiana	5	No	FACU	Species Across All Strata: 7 (B)
4.				(2)
				Percent of Dominant Species That Are OBL FACW or FAC: 71.42857142 (A/B)
5				That Are OBL, FACW, or FAC:
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				•
	40	= Total Cov	er	OBL species X 1
50% of total cover: 20	20% of	total cover:	8	FACW species x 2 = 20
Sapling/Shrub Stratum (Plot size:15)				FAC species x 3 =
1 Fagus grandifolia	5	Yes	FACU	FACU species15 x 4 =60
2. Aralia spinosa		Yes		UPL species0 x 5 =0
			FAC	70 215
3. Ilex opaca	5	Yes	FAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =3.07
5				Trevalence index B//
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	15	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 7.5	20% of	total cover:	3	1 Toblematic Tryarophytic Vegetation (Explain)
				4
Herb Stratum (Plot size:) 1 Arundinaria gigantea	10	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
2. Tipularia discolor	5	Yes	FACU	Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
				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				
		= Total Cov	er	
50% of total cover: 7.5	20% of	total cover:	3	
Woody Vine Stratum (Plot size: 30)				
,,				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	or	Vegetation
50% of total cover:0				Present? Yes No
2		total cover.		
Remarks: (If observed, list morphological adaptations below	w).			

SOIL Sampling Point: wcmb102_u

Depth	cription: (Describe t Matrix	 		x Feature				··· - ,
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type ¹	Loc ²	Texture	Remarks
0-3	10YR 2/2	100					SL	
3-12	10YR 4/2	95	10YR 4/6	5	С	M	SCL	
	· 							
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	low Surfa	ice (S8) (L	.RR S, T, U	I) 1 cm Muc	k (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					k (A10) (LRR S)
	listic (A3)		Loamy Muck			R O)	Reduced	Vertic (F18) (outside MLRA 150A,B
	en Sulfide (A4)		Loamy Gleye		(F2)			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	
	ucky Mineral (A7) (LR		Depleted Date					nt Material (TF2)
	resence (A8) (LRR U) uck (A9) (LRR P, T))	Redox Depre Marl (F10) (L		0)			low Dark Surface (TF12) plain in Remarks)
	ed Below Dark Surface	e (A11)	Depleted Oc		(MLRA 1	51)	Other (LX)	plant in Nemarks)
	ark Surface (A12)	, (, , , ,	Iron-Mangan				T) ³ Indicato	rs of hydrophytic vegetation and
	Prairie Redox (A16) (N	ILRA 150A	_					d hydrology must be present,
Sandy	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (M L	_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	i3D)
	urface (S7) (LRR P, S	, T, U)					Γ	
	Layer (if observed):							
Type:								
• •	nches):						Hydric Soil Pre	esent? Yes No
Remarks:								



Photo 1 Upland data point wcmb102_u facing north



Photo 2
Upland data point wcmb102_u facing southwest

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: SERP	City/County: Can	lberland sampli	ng Date: 8/87/#
Applicant/Owner: DOM1'nich	On 100 dinty:	State: A/C Sampli	ng Point: Wcmo 009f_
Investigator(s): FSI-J. 604. IS. MCIFE	TAGOLA	Otate. 14 C Sampir	ing r ome.
			pr) = mm)
Landform (hillslope, terrace, etc.): divoringe W			
Subregion (LRR or MLRA): LRK	Lat: 35.15637		Datum: <u>WGS_</u> 81
Soil Map Unit Name: KOa noke and Wa	hee	NWI classification: 🖠	40
Are climatic / hydrologic conditions on the site typical for the	nis time of year? YesNo	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology		*Normal Circumstances" present?	Yes No
Are Vegetation, Soil, or Hydrology		needed, explain any answers in Re	
		•	•
SUMMARY OF FINDINGS – Attach site map	showing sampling point	locations, transects, impo	ortant features, etc.
Hydrophytic Vegetation Present? Yes	No Lui S		
	No Is the Sample	1	
Wetland Hydrology Present?	No within a Wetl	and? Yes N	·
Remarks:	1		<u> </u>
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (m	inimum of two required)
Primary Indicators (minimum of one is required; check a	ıll that apply)	Surface Soil Cracks	(B6)
Surface Water (A1) Aqual	tic Fauna (B13)	Sparsely Vegetated	Concave Surface (B8)
· · · · · · · · · · · · · · · · · · ·	Deposits (B15) (LRR U)	Drainage Patterns (
Saturation (A3) Hydro	ogen Sulfide Odor (C1)	Moss Trim Lines (B	16)
Water Marks (B1) Oxidi	zed Rhizospheres along Living Ro	ots (C3) Dry-Season Water	Table (C2)
Sediment Deposits (B2) Prese	ence of Reduced Iron (C4)	Crayfish Burrows (6	08)
Drift Deposits (B3) Rece	nt Iron Reduction in Tilled Soils (C	6) Saturation Visible o	n Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin	Muck Surface (C7)	Geomorphic Position	on (D2)
	r (Explain in Remarks)	Shallow Aquitard (I	
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (· .
Water-Stained Leaves (B9)		Sphagnum moss (I	08) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No	Depth (inches): NA		
	Depth (inches): 20		
Saturation Present? Yes No (includes capillary fringe)	Depth (inches): 2λ ()	Wetland Hydrology Present?	/es No
Describe Recorded Data (stream gauge, monitoring we	ell, aerial photos, previous inspecti	ons), if available:	
Remarks:			
			ļ
<u> </u>			

ついとつい	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size: 30 × 30)	% Cover	Species?	Status	Number of Dominant Species
1. Liquidambor Styracisteres		//-	P46	That Are OBL, FACW, or FAC: 7 (A)
2. ACENTUORAN	_5	<u>N</u>	FAC	Total Number of Dominant
3				Total Number of Dominant Species Across All Strata: (B)
4				
5				Percent of Dominant Species That Are OBL FACW, or FAC: (A/B)
				That Are OBL, FACW, or FAC: O (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
8				
· _	<u>35</u>	= Total Co	ver	OBL species x 1 =
50% of total cover: 17	· <u>5</u> 20% of	f total cove	r: <u>'+</u>	FACW species x 2 =
Sapling/Shrub Stretum (Plot size: <u>名のなろの</u>)				FAC species x 3 =
1. Aralia sainosa	15	Y	FAC	FACU species x 4 =
2 Sassafras albidum	10	- y	FACU	UPL species x 5 =
3. Liquidambor styracitus			FAC	Column Totals:(A)(B)
3. LIGUIBERTOUR STOTOCIFICA			<u> </u>	
4		-		Prevalence Index = B/A =
5			· 	Hydrophytic Vegetation Indicators:
6				
. 7				2 - Dominance Test is >50%
8.				3 - Prevalence Index is ≤3.0¹
	35	= Total Co	wer	
50% of total cover: 17.5	20% 0	of total cove	- -	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 30 X30)		or total cove	1	
	20	У	FACW	Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigontea	· ~~	/	- —	be present, unless disturbed or problematic.
2 RUBUS Arguitus	<u> </u>		FAC	Definitions of Four Vegetation Strata:
3		- —		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				or size, and woody plants loss than 5.20 it tail.
10				- Woody vine – All w∞dy vines greater than 3.28 ft in
11				height.
12	75			
		_ = Total C	over	'
50% of total cover: 12.5	20%	of total cov	er: <u> </u>	.
Woody Vine Stratum (Plot size: 30 ×30)				
1. Smilax rotuncisolia	10	Y	FAC	
2 Vitis rotundifolia		- <mark>V</mark>	FAC	-
2				-
3				•
4				-
5				- Hydrophytic
	<u> </u>	= Total (Cover	Vegetation No. 1
50% of total cover:	20%	of total co	/er: <u> 5 </u>	Present? Yes No No
Remarks: (If observed, list morphological adaptations be	low).			
·	_			

ofile Desc epth	Matrix			x_Features				
ches)	Color (moist)	%	Color (moist)	%	Туре	_Loc²	<u>Texture</u>	Remarks
7-20	1042211	98	104R5/4	2	C	PL	4	
								
								
								
			=Reduced Matrix, M			ains.		PL=Pore Lining, M=Matrix.
dric Soll	Indicators: (Appli	cable to all	LRRs, unless othe					or Problematic Hydric Solls ³ :
_ Histosol	•		Polyvalue B		,		. —	ick (A9) (LRR O)
	pipedon (A2)		Thin Dark S					ick (A10) (LRR S)
	istic (A3)		Loamy Muc			₹ 0)		d Vertic (F18) (outside MLRA 150A,B
	en Sulfide (A4)		Loamy Gley		2)			nt Floodplain Soils (F19) (LRR P, S, T
_ Stratifie	d Layers (A5)		Depleted M					ous Bright Loamy Soils (F20)
	Bodies (A6) (LRR		Redox Dark				•	A 153B)
_ 5 cm M	ucky Mineral (A7) (I	.RR P, T, U	· 			•		rent Material (TF2)
_ Muck P	resence (A8) (LRR	U)	Redox Dep)		-	allow Dark Surface (TF12)
_	uck (A9) (LRR P, T		Marl (F10) (-			Other (I	Explain in Remarks)
	d Below Dark Surfa	ice (A11)	Depleted O			-	•	
	ark Surface (A12)		Jron-Manga					tors of hydrophytic vegetation and
_ Coast F	rairie Redox (A16)	(MLRA 150	IA) 🔽 Umbric Sur	face (F13) (I	LRR P,	T, U)		and hydrology must be present,
_ Sandy I	Mucky Mineral (S1)	(LRR O, S)						ss disturbed or problematic.
_ Sandy	Gleyed Matrix (S4)		Reduced V					
_ Sandy i	Redox (S5)		Piedmont F	Icodplain So	oils (F19) (MLRA 1	49A)	
O-1								
Strippe	d Matrix (S6)		Anomalous	Bright Loan	ny Soils	(F20) (MLI	RA 149A, 153C,	153D)
_ Dark S	urface (S7) (LRR P		Anomalous	Bright Loan	ny Soils	(F20) (MLI	RA 149A, 153C,	153D)
_ Dark S			Anomalous	Bright Loan	ny Soils	(F20) (MLI	RA 149A, 153C,	153D)
_ Dark S	urface (S7) (LRR P		Anomalous	Bright Loan	ny Soils	(F20) (MLI		
Dark Si estrictive Type:	urface (S7) (LRR P	1):	Anomalous	Bright Loan	ny Soils	(F20) (MLI		153D) Present? Yes
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML)		
Dark Si estrictive Type:	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (MLI		
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (MLI		
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML1		
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML1		
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML1		
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML1		
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML1		
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML1		
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML1		
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (if observed	1):	Anomalous	Bright Loan	ny Soils	(F20) (ML1		
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):	1):		Bright Loan	ny Soils	(F20) (ML1		
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):	1):		Bright Loan	ny Soils	(F20) (ML1		
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):	1):		Bright Loan	ny Soils	(F20) (ML1		
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):	1):		Bright Loan	ny Soils	(F20) (ML1		
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):			Bright Loan	ny Soils	(F20) (ML1		
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):					(F20) (ML1	Hydric Soil	
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	
Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	
_ Dark Si estrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	
_ Dark Siestrictive Type: Depth (ii	urface (S7) (LRR P Layer (If observed nches):						Hydric Soil	Present? Yes No No

Environmental Field Surveys Wetland Photo Page



Wetland data point wcmo009f_w facing southwest.