Project/Site: ACP	City/County: Halifor	<	_ Sampling Date: 10/22/15
Applicant/Owner: Domini VC		State: NC	Sampling Point: Whip OULF_W
Investigator(s): EST-J. Harbour, 15. murphrey	Section, Township, Range:	NA	
Landform (hillslope, terrace, etc.): drainage	Local relief (concave, conver	x, none): COOCI	AVE Slope (%): 0-2
Landform (hillslope, terrace, etc.): drainage Subregion (LRR or MLRA): LRR P Lat: 36.7	57074 Long:	-77,606	10 Datum: W65 84
Soil Map Unit Name: Chastain + Bibb 50:15, 0-1901 Fr			
Are climatic / hydrologic conditions on the site typical for this time of ye		1	
Are Vegetation, Soil, or Hydrology significantly			
Are Vegetation, Soil, or Hydrology naturally prospective SUMMARY OF FINDINGS - Attach site map showing			
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area		
Wetland Hydrology Present? Yes No	within a Wetland?	Yes	No
Remarks:			
No. Mart Harts and Exact			
NCWAM: Headwater forest			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil	
Surface Water (A1) Aquatic Fauna (B1			getated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15			atterns (B10)
	eres along Living Roots (C3)	Moss Trim L	Water Table (C2)
Sediment Deposits (B2) Presence of Reduc		Crayfish Bu	
Drift Deposits (B3) Recent Iron Reduc			/isible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface		Geomorphic	
Iron Deposits (B5) Other (Explain in R	emarks)	Shallow Aqu	itard (D3)
Inundation Visible on Aerial Imagery (B7)		K FAC-Neutra	
Water-Stained Leaves (B9) Field Observations:		Sphagnum r	noss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches)	ANA		
Water Table Present? Yes No Depth (inches)	720		
Saturation Present? Yes No Depth (inches)		Hydrology Prese	nt? Yes No
(includes capillary fringe)			
Describe Recorded Data (stream gauge, monitoring well, aerial photo	es, previous inspections), if av	ailable:	
Remarks:			

ree Stratum (Plot size: 30F+ X 30F)		Dominant		Sampling Point:
A cert (Aloritano)	<u>% Cover</u>	Species?		Number of Dominant Species
Acer Vubrum			FAC	That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant
				Species Across All Strata: D (B)
				Percent of Dominant Species 7 5 %
				Percent of Dominant Species 75% (A/B)
				Prevalence Index worksheet:
				Total % Cover of:Multiply by:
	10	= Total Cov	rer	OBL species x 1 =
50% of total cover:5	20% of	total cover	2	FACW species x 2 =
apling/Shrub Stratum (Plot size: 30Ft X 30Ft)				FAC species x 3 =
Ligustium sinease	25	Y	FAC	FACU species x 4 =
ACEY VUBRUM	20	Ý	FAC	UPL species x 5 =
ALAUS SEVVILOTO	E			Column Totals: (A) (B)
	20	-0	FACW	
Liviodendrun tulipirera			FACH	Prevalence Index = B/A =
TIPX OPOLA		<u>N</u>	FAC	Hydrophytic Vegetation Indicators:
				1 Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
	75 .	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 37.	5 20% of	total cover:	15	
erb Stratum (Plot size: 3081 X 30 +)				
Wodwardia areolata	20	Y	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
ParatheylPteris noveburacensis		Ň	FAC	Definitions of Four Vegetation Strata:
Arundinaria gigentea	10		FACW	Deminions 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.
				neight.
				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.
	35.	= Total Cov		
50% of total cover: 17				
oody Vine Stratum (Plot size: 3054 X 3064)	20%0	total cover.		
	5	Y	FACH	
		1/	TAC	
Smilox ruturdibulio	2	7	PAC	
				Hydrophytic
	(0)	Total Cov	er	Vegetation
50% of total cover:		total cover:	2	Present? Yes No

US Army Corps of Engineers

SOIL	whipDDIf_w Sampling Point:
Profile Description: (Describe to the depth needed to document the indicator or confirm	
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type ¹ Loc ²	Texture Remarks
0-2 104R3/1 100	SL
2-20 104R4/2 92 104R 4/6 8 C M	SL
1 1	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Solls ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U)	-
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) UPpleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	(MLRA 153B) Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, 1	
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)	unless disturbed or problematic.
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149	9A)
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA	
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Type:	
Depth (inches):	Hydric Soll Present? Yes No
Remarks:	
9	

Environmental Field Surveys Wetland Photo Page



Wetland data point whlp001f_w facing south.



Wetland data point whlp001f_w facing west.

Photo Sheet 1 of 2

Applicant/Owner: Dominion Investigator(s): ESI-J. HarbourY, K. MarPhrtey Se Landform (hillslope, terrace, etc.): <u>hillSlope</u> Lo Subregion (LRR or MLRA): <u>LRKP</u> Lat: <u>36.37</u> Soil Map Unit Name: <u>Chastaint Bibb</u> <u>soils</u> , <u>D-19</u> , <u>Elequid</u> Are climatic / hydrologic conditions on the site typical for this time of year Are Vegetation, Soil, or Hydrology significantly dis Are Vegetation, Soil, or Hydrology naturally problem	cal relief (concave, convex, none): CONVEK Slope (%): 2-4 O77 Long: -77.60922 Datum: N6584 PAH4 FOD4ed NWI classification: NA Yes No (If no, explain in Remarks.) cturbed? Are "Normal Circumstances" present? Yes No
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No Ves	Is the Sampled Area within a Wetland? Yes No
Sediment Deposits (B2) Presence of Reduced Drift Deposits (B3) Recent Iron Reduction Algal Mat or Crust (B4) Thin Muck Surface (C Iron Deposits (B5) Other (Explain in Rem	r (C1) Moss Trim Lines (B16) s along Living Roots (C3) Dry-Season Water Table (C2) lron (C4) Crayfish Burrows (C8) in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) 7) Geomorphic Position (D2) arks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	Vetland Hydrology Present? Yes No

	Absolute	Dominant	Indicator	Sampling Point: <u>wh(p00</u>
ree Stratum (Plot size: 30F4 X 30F4)	% Cover			
Lividenaron tulipitera	10	Y	FACU	Number of Dominant Species S (A)
		-		
				Total Number of Dominant Species Across All Strata: (B)
				Percent of Dominant Species 5096 (A/B
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	10 :	= Total Cov	ver	OBL species x 1 =
50% of total cover:				FACW species $15 \times 2 = 30$
pling/Shrub Stratum (Plot size: 30F4 X3054)				FAC species $40 \times 3 = 120$
Ligustrum Sinense	20	Y	FAC	FACU species 35 $x 4 = 140$
Quercus vubra	5	N	FACU	UPL species x 5 =
Lividentrun tulipisera	5	N	FACH	Column Totals: <u>90</u> (A) <u>290</u> (B)
		and the second second second second		3.27
				Prevalence Index = $B/A = 3.22$
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
-				2 - Dominance Test is >50%
	30	= Total Cov		3 - Prevalence Index is ≤3.01
50% of total cover:				Problematic Hydrophytic Vegetation ¹ (Explain)
erb Stratum (Plot size: 30 Ft X 30 Ft	20% 0	total cover.		
Phytolacca americana	5	1	FACU	¹ Indicators of hydric soil and wetland hydrology must
Arundinaria gigonieo	15		FACW	be present, unless disturbed or problematic.
			TAL	Definitions of Four Vegetation Strata:
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) o
				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.
	20 :	= Total Cov	er	
50% of total cover:		total cover:		
oody Vine Stratum (Plot size: 30 Ft X30Ft)				
VITIS rotundisation	15	4	FAC	
LUNILEVA JAPUNICA	10	Ý	FACO	
Smilax rutundisulia	5	N	FAC	
	20	= Total Cov		Hydrophytic Vegetation
			<i>c</i>	Present? Yes No
50% official energy 1.5	2004 -5	total cover:	0	
50% of total cover: 15	20% of			
50% of total cover: <u>15</u> emarks: (If observed, list morphological adaptations belo				

US Army Corps of Engineers

SOIL

Sampling Point: Whip ODI_U

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
0-4 101/R 3/2 100	SL
4-10 104R3/3 100	SL
10-20 104R 4/2 100	LS
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Solls ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O)
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U)	Very Shallow Dark Surface (TF12)
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 Ochild (PTT) (MERA 151) Thick Dark Surface (A12) 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 14)	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):	
Туре:	
Depth (inches):	Hydric Soll Present? Yes No
Remarks:	

Environmental Field Surveys Wetland Photo Page



Upland data point whlp001_u facing north.



Upland data point whlp001_u facing east.

Project/Site: Atlantic Coast Pipeline	City/County: Hali	fax County	Sampling Date: <u>12/10/2015</u>
Applicant/Owner: Dominion		State: NC	_ Sampling Point: <u>whlf007f_w</u>
Investigator(s): SH, AS	Section, Townshi	p, Range: <u>No PLSS in this a</u>	rea
Landform (hillslope, terrace, etc.): Floōdplain			Slope (%): <u>1</u>
Subregion (LRR or MLRA): P	Lat: <u>36.36183583</u>	Long: <u>-77.61957763</u>	Datum: WGS 1984
Soil Map Unit Name: Chastain and Bibb soils, 0 to 1	percent slopes, frequently flooded	NWI classi	fication: PFO1C
Are climatic / hydrologic conditions on the site typical	for this time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances"	" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling po	int locations, transect	ts, important features, etc.
Hydrophytic Vegetation Present? Yes _✔ Hydric Soil Present? Yes _✔	No	npled Area	

Hydric Soil Present? Wetland Hydrology Present?	Yes Yes	No No	within a Wetland?	Yes	~	No
Remarks: ICWAM - Bottomland hardwood forest						

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	Roots (C3) Dry-Season Water Table (C2)
✓ Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils ((C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No <u><</u> Depth (inches): 20	
Saturation Present? Yes Yes No Depth (inches):	Wetland Hydrology Present? Yes <u>V</u> No
Saturation Present? Yes <u>V</u> No Depth (inches): <u>10</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Ves</u> No <u>Depth</u> (inches): <u>(includes capillary fringe</u>)	
Saturation Present? Yes <u>Ves</u> No <u>Depth</u> (inches): <u>(includes capillary fringe</u>)	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
Saturation Present? Yes <u>Yes</u> No Depth (inches): <u>(includes capillary fringe)</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	

Sampling Point: whlf007f_w

Trop Stratum (Plat aiza: 30)	Absolute			Dominance Test worksheet:
Tree Stratum (Plot size:) 1. Quercus phellos	<u>% Cover</u> 40	<u>Species?</u> Yes	<u>Status</u> FACW	Number of Dominant Species That Are OBL EACW or EAC: 7 (A)
Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC: (A)
3. Pinus taeda	10	No	FAC	Total Number of Dominant
 <u>4</u> Fraxinus pennsylvanica 	5	No	FACW	Species Across All Strata: 7 (B)
5. Acer rubrum	5	No	FAC	Percent of Dominant Species
			1710	That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
7 8	·			Total % Cover of: Multiply by:
0	80	= Total Cove	or .	OBL species x 1 =0
50% of total cover: 40		total cover:	16	FACW species <u>80</u> x 2 = <u>160</u>
Sapling/Shrub Stratum (Plot size:15)	2070 01			FAC species 55 x 3 = 165
Fraxinus pennsylvanica	20	Yes	FACW	FACU species x 4 =
2. Carpinus caroliniana	10	Yes	FAC	UPL species $0 \times 5 = 0$
3				Column Totals: (A) (B)
4				Prevalence index = $B/A = 2.4$
5				
6				Hydrophytic Vegetation Indicators:
7				 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
8				\checkmark 2 - Dominance Test is >50% \checkmark 3 - Prevalence Index is $\leq 3.0^1$
	30	= Total Cove	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:15		total cover:	•	
Herb Stratum (Plot size: 5)				¹ Indiastors of hydric soil and watland hydrology must
, Arundinaria gigantea	15	Yes	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Smilax rotundifolia	5	Yes	FAC	Definitions of Four Vegetation Strata:
3				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Conting/Chruch Weady plants avaluding vince loss
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.				lioight.
	20	= Total Cove	er	
50% of total cover: 10		total cover:		
Woody Vine Stratum (Plot size: 30)				
Toxicodendron radicans	5	Yes	FAC	
2				
3				
4 5				
- J		= Total Cove	or	Hydrophytic Vegetation
50% of total cover: 2.5				Present? Yes <u>V</u> No
Remarks: (If observed, list morphological adaptations belo	w).			

	Matrix Color (moist) DYR 3/2 DYR 4/2		Color (moist) 7.5YR 3/4 7.5YR 3/4	<u>x Features</u> 2 7	<u>Type¹</u> C C	Loc ² M	Texture SICL	Remarks
0-9 10			7.5YR 3/4		С		SICL	
9-20 1(DYR 4/2	93	7.5YR 3/4	7	С			
 						М	SIL	
Type: C=Conc	entration, D=Dep	oletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL	=Pore Lining, M=Matrix.
Hydric Soil Indi	icators: (Applic	able to all L	RRs, unless othe	rwise note	ed.)		Indicators for	Problematic Hydric Soils ³ :
5 cm Mucky Muck Prese 1 cm Muck Depleted Be Thick Dark Coast Prairi Sandy Muck Sandy Gley Sandy Redo Stripped Ma Dark Surfac	don (A2) (A3) sulfide (A4) ayers (A5) dies (A6) (LRR P / Mineral (A7) (Ll ence (A8) (LRR P, T) elow Dark Surfac Surface (A12) le Redox (A16) (I ky Mineral (S1) (I ed Matrix (S4) px (S5)	RR P, T, U) J) MLRA 150A) LRR O, S) S, T, U)	Delta Ochric Reduced Ve Piedmont Flo	urface (S9) cy Mineral (ed Matrix (F3) Surface (F rk Surface (F rk Surface essions (F8 _RR U) thric (F11) nese Masse ace (F13) ((F17) (ML rtic (F18) (podplain So	(IRR S, (F1) (LRR F2) (6) (F7) 8) (MLRA 15 (IRR P, T, .RA 151) MLRA 15 oils (F19)	T, U) O) LRR O, P, , U) 0A, 150B) (MLRA 14	 2 cm Mucl Reduced V Piedmont Anomalou (MLRA - Red Parer Very Shall Other (Exp T) ³ Indicator wetland unless 	nt Material (TF2) low Dark Surface (TF12) plain in Remarks) rs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Type:	ei (ii obseiveu)	-						
Depth (inches	s):						Hydric Soil Pre	esent? Yes 🖌 No
Remarks:	,							



Photo 1 Wetland data point whlf007f_w facing northeast



Photo 2 Wetland data point whlf007f_w facing southwest

Project/Site: Atlantic Coast Pipeline	_ City/County: Halifax Co	ounty	_ Sampling Date: 12/1	0/2015
Applicant/Owner: Dominion		State: NC	_ Sampling Point: whife	
Investigator(s): SH, AS	_ Section, Township, Ra	nge: <u>No PLSS in this are</u>	ea	
Landform (hillslope, terrace, etc.): Terrace		onvex, none): <u>convex</u>): <u>0</u>
• · · · · · · · · · · · · · · · · · · ·	181457 L	ong: <u>-77.61945759</u>	Datum:	WGS 1984
Soil Map Unit Name: Chastain and Bibb soils, 0 to 1 percent slopes,	frequently flooded	NWI classifi	cation: None	
Are climatic / hydrologic conditions on the site typical for this time of y	year? Yes 🖌 No	(If no, explain in I	Remarks.)	
Are Vegetation, Soil, or Hydrology significant	ly disturbed? Are "	Normal Circumstances"	present? Yes 🖌	No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic? (If ne	eded, explain any answ	ers in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>v</u> No <u></u> Yes <u>v</u> No <u></u> Yes <u>No v</u>	Is the Sampled Area within a Wetland?	Yes N	o
Remarks:				

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	 Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No ✓ Depth (inches): Water Table Present? Yes No ✓ Depth (inches): Saturation Present? Yes No ✓ Depth (inches): Saturation Present? Yes No ✓ Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Remarks:	

Sampling Point: whif007_u

Trop Stratum (Blat aize: 30)		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:30) 1 Pinus taeda	<u>% Cover</u> 40	<u>Species?</u> Yes	<u>Status</u> FAC	Number of Dominant Species
1. <u>Finas taeua</u> 2 Liquidambar styraciflua	30	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
<u> </u>				Total Number of Dominant
3				Species Across All Strata:5 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6	. <u> </u>			Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	70	= Total Cov		10 00
50% of total cover:35	20% of	total cover:	14	FACTV species $x = 165$
Sapling/Shrub Stratum (Plot size: 15)				FAC species $\frac{155}{5}$ x 3 = $\frac{465}{20}$
1. Liquidambar styraciflua	40	Yes	FAC	FACU species $x 4 = $
2. Acer rubrum	10	No	FAC	UPL species $x 5 = 505$
_{З.} Ilex ораса	10	No	FAC	Column Totals: (A) (B)
4. Carpinus caroliniana	10	No	FAC	Prevalence Index = B/A = 2.97
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
				\checkmark 2 - Dominance Test is >50%
8	70	= Total Cov	or	\checkmark 3 - Prevalence Index is ≤3.0 ¹
50% of total cover:35		total cover:		Problematic Hydrophytic Vegetation ¹ (Explain)
	20 % 01			
Herb Stratum (Plot size: 5) 1. Smilax rotundifolia	15	Yes	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Arundinaria gigantea	10	Yes	FACW	
	5	No	FACU	Definitions of Four Vegetation Strata:
3. Lonicera japonica				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
		= Total Cov	er	
50% of total cover:15	20% of	total cover:	6	
Woody Vine Stratum (Plot size:30)				
1				
2				
3				
4				
5.				I hadron havin
···		= Total Cov	er	Hydrophytic Vegetation
50% of total cover: 0				Present? Yes <u>V</u> No
Remarks: (If observed, list morphological adaptations belo			·	
)vv).			

SOIL

Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-5	10YR 3/2	100					FSL	
5-20	10YR 6/2	95	7.5YR 5/6	5	С	М	SL	
				·				
	Concentration, D=Dep					ains.		PL=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Application	able to all	LRRs, unless other	wise not	ed.)		Indicators	for Problematic Hydric Soils ³ :
Black H Hydrog Stratifie Crganie 5 cm M Muck F 1 cm M Deplete Thick D Coast F Sandy Sandy Sandy Sandy Sandy Dark S	Epipedon (A2) distic (A3) een Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR P , lucky Mineral (A7) (LR Presence (A8) (LRR U) luck (A9) (LRR P, T) ed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) (N Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6) urface (S7) (LRR P, S)	RR P, T, U)) e (A11) MLRA 150A .RR O, S)	 Redox Depres Marl (F10) (L Depleted Ocl Iron-Mangan Umbric Surfa Delta Ochric Reduced Ver Piedmont Flo 	rface (S9) y Mineral ed Matrix (trix (F3) Surface (F k Surface essions (F RR U) nric (F11) ese Mass ace (F13) ((F17) (ML tic (F18) (podplain S) (LRR S, (F1) (LRR F2) 66) (F7) 8) (MLRA 15 (LRR P, T, .RA 151) (MLRA 15) oils (F19)	T, U) O) LRR O, P, ⁻ , U) 0A, 150B) (MLRA 149	2 cm M Reduct Piedm Anoma (MLI Red Pa Very S Other T) ³ Indic wet	Muck (A9) (LRR O) Muck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A,E ont Floodplain Soils (F19) (LRR P, S, T alous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) shallow Dark Surface (TF12) (Explain in Remarks) eators of hydrophytic vegetation and land hydrology must be present, ess disturbed or problematic.
Restrictive Type: Depth (ir	Layer (if observed):						Hydric Soil	Present? Yes 🖌 No
Remarks:							1	



Photo 1 Upland data point whlf007_u facing southeast



Photo 2 Upland data point whlf007_u facing northeast

Project/Site: Atlantic Coast Pipeline	City/County: H	Halifax County		Sampling Date: 1	2/10/201	5
Applicant/Owner: Dominion				Sampling Point: V		
	_ Section, Towr	nship, Range: <u>N</u>	lo PLSS in this area	a		
			, none): <u>concave</u>		e (%): <u>1</u>	
Subregion (LRR or MLRA): P Lat: 36.359	987227	Long: _	77.6207787	Dat	um: WGS	5 1984
Soil Map Unit Name: Altavista fine sandy loam, 0 to 3 percent slopes,	, rarely flooded		NWI classific	ation: None		
Are climatic / hydrologic conditions on the site typical for this time of ye	/ear? Yes	No	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or Hydrology significantly	y disturbed?	Are "Norma	l Circumstances" p	resent? Yes	No	~
Are Vegetation, Soil, or Hydrology naturally pr	roblematic?	(If needed,	explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showing	g sampling	point location	ons, transects	, important fe	atures,	etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u>v</u> No Yes <u>v</u> No Yes <u>v</u> No	Is the Sampled Area within a Wetland? Yes <u></u> No
Remarks: NCWAM - Pine Flat		

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
✓ High Water Table (A2) Marl Deposits (B15) (LRR U)	✓ Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils	(C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u>V</u> No Depth (inches): <u>4</u>	
Saturation Present? Yes <u>Ves</u> No <u>Depth</u> (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>✓</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

Sampling Point: whlf008f_w

Trop Stratum (Plat aiza: 30)	Absolute			Dominance Test worksheet:
		Species?	Status	Number of Dominant Species
1. Pinus taeda	60 20	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Liquidambar styraciflua		Yes	FAC	Total Number of Dominant
3. <u>Acer rubrum</u>	10	No	FAC	Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
0	90	= Total Cove		OBL species x 1 =0
45			19	FACW species 15 x 2 = 30
50% of total cover:45	20% of	total cover:		FAC species 125 x 3 = 375
Sapling/Shrub Stratum (Plot size: 15)	10	N/	54014	FACU species $0 \times 4 = 0$
1. Persea borbonia	10	Yes	FACW	0
2. Liquidambar styraciflua	5	Yes	FAC	UPL species $0 \times 5 = 0$
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =2.89
5				
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7	·	<u> </u>		✓ 2 - Dominance Test is >50%
8	15			\checkmark 3 - Prevalence Index is ≤3.0 ¹
		= Total Cove		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 7.5	20% of	total cover:	3	
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must
1. Smilax rotundifolia	30	Yes	FAC	be present, unless disturbed or problematic.
2. Arundinaria gigantea	5	No	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		<u> </u>		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				We advise All we advising a greater than 2.20 ft in
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
12.	35	- Total Caur		
17 6		= Total Cove		
50% of total cover:	20% of	total cover:		
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				
· · · · · · · · · · · · · · · · · · ·		= Total Cove		Hydrophytic Vegetation
				Present? Yes <u>V</u> No
50% of total cover:0		total cover:	<u> </u>	
Remarks: (If observed, list morphological adaptations belo	w).			

Depth (inches)	Matrix		Redo	x Feature	s					
Inches/	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	R	emarks	
0-3	10YR 3/1	100					SL			
3-20	10YR 5/2	93	7.5YR 4/6	2	С	PL	LS			
			10YR 6/4	5	С	М				
,				<u> </u>						
						·				
	oncentration, D=Dep					ains.	² Location: PL=Po			
	Indicators: (Applic	able to all L					Indicators for Pro		•	Solis :
Histosol	. ,		Polyvalue Be					, .		
	pipedon (A2)		Thin Dark Su				2 cm Muck (A			
	istic (A3)		Loamy Muck			0)		. , .		MLRA 150A,B
	en Sulfide (A4)		Loamy Gleye		(F2)		Piedmont Flo			
	d Layers (A5)		✓ Depleted Ma	. ,	-0)		Anomalous B	-	iy Solis ((F20)
-	Bodies (A6) (LRR P		Redox Dark	`	,		(MLRA 153		-2)	
	ucky Mineral (A7) (Ll resence (A8) (LRR L		Depleted Da				Red Parent N Very Shallow		,	2)
)	Redox Depre	•	0)				•	(2)
	uck (A9) (LRR P, T)	0 (111)	Marl (F10) (L			:4)	Other (Explain	i in Rema	iks)	
	d Below Dark Surfac	e (ATT)	Depleted Oc				T) ³ Indiantara a	fhydroph	tiovogo	tation and
	ark Surface (A12) rairie Redox (A16) (I	MI DA 460A	Iron-Mangan						-	
						, 0)	wetland hy			
-	Aucky Mineral (S1) (LKK (0, 5)	Delta Ochric			0A 450D)	unless dis	urbed of t	lopiema	auc.
-	Gleyed Matrix (S4)		Reduced Ver				0.4.)			
-	Redox (S5)		Piedmont Flo							
	l Matrix (S6) Irface (S7) (LRR P, \$	S. T. U)		Shynt Lua	illy Solis (i		A 149A, 153C, 153D)			
	Layer (if observed)									
Type:									~	NL-
	ches):						Hydric Soil Prese	nt? Yes		No
Remarks:										



Photo 1 Wetland data point whlf008f_w facing west



Photo 2 Wetland data point whlf008f_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: H	alifax County	Sampling Date: 12/10/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: whlf008_u
Investigator(s): SH, AS	Section, Town	ship, Range: <u>No PLSS in this are</u>	
Landform (hillslope, terrace, etc.): Terrace		ncave, convex, none): <u>convex</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P La	t: <u>36.35972874</u>	Long:77.62078675	Datum: WGS 1984
Soil Map Unit Name: Altavista fine sandy loam, 0 to 3 percen	t slopes, rarely flooded	NWI classific	cation: None
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes	No (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology sig	inificantly disturbed?	Are "Normal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology na	turally problematic?	(If needed, explain any answe	ers in Remarks.)

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

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

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils ((C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No 🖌 Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	

Sampling Point: whif008_u

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)	-	Species?		Number of Dominant Species
1. Pinus taeda	75	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2. Fagus grandifolia	5	No	FACU	Total Number of Dominant
3				Species Across All Strata: 4 (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	80			$OBL species \qquad 0 \qquad x \ 1 = 0$
50% of total access 40		= Total Cov	er 16	FACW species $30 \times 2 = 60$
50% of total cover:40	20% of	total cover:	10	120 200
Sapling/Shrub Stratum (Plot size: 15)				FAC species 5 x 3 = 20
1. Liquidambar styraciflua	50	Yes	FAC	FACU species $x 4 = $
2. Persea borbonia	30	Yes	FACW	UPL species $0 \times 5 = 0$
3				Column Totals: (A) (B)
4				Prevalence index = $B/A = 2.84$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 40	20% of	total cover:	16	
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must
1. Smilax rotundifolia	5	Yes	FAC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of 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				We advise All we advising a greater than 2.20 ft in
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight
12.	5	= Total Cov		
50% of total cover:2.5				
	20% of	total cover:		
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	er	Vegetation
50% of total cover:0				Present? Yes Vo No
Remarks: (If observed, list morphological adaptations belo	w).			

	Matrix		Redox	Feature	s			
0-4 10	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
5. 10	YR 5/2	100					LFS	
4-20 10	YR 5/4	75	7.5YR 4/6	5	С	М	LFS	
		· ·	10YR 6/2	20	D	М		
		· ·						
			Reduced Matrix, MS			ains.		PL=Pore Lining, M=Matrix.
Aydric Soil Indi	cators: (Applica	able to all L	RRs, unless other	wise not	ed.)		Indicators	for Problematic Hydric Soils ³ :
5 cm Mucky Muck Preser 1 cm Muck (Depleted Be Thick Dark S Coast Prairie Sandy Muck Sandy Gleye Sandy Redo	(A3) (A3) ulfide (A4) yers (A5) lies (A6) (LRR P , Mineral (A7) (LR nce (A8) (LRR U A9) (LRR P, T) elow Dark Surface Surface (A12) e Redox (A16) (N cy Mineral (S1) (L ed Matrix (S4) ix (S5)	RR P, T, U)) e (A11) MLRA 150A	Delta Ochric (Reduced Verl Piedmont Flo	face (S9) y Mineral d Matrix (rix (F3) Surface (F k Surface ssions (F- RR U) nic (F11) ese Mass- ce (F13) ((F17) (ML tic (F18) (odplain S	(LRR S, (F1) (LRR F2) 6) (F7) 8) (MLRA 15 (LRR P, T (RA 151) (MLRA 15 oils (F19)	T, U) O) LRR O, P, T U) 0A, 150B) (MLRA 149	2 cm M Reduce Piedmo Anoma (MLR Red Pa Very SI Other () ³ Indica wetl unle A)	luck (A9) (LRR O) luck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A,B ont Floodplain Soils (F19) (LRR P, S, T) lous Bright Loamy Soils (F20) RA 153B) arent Material (TF2) hallow Dark Surface (TF12) Explain in Remarks) ators of hydrophytic vegetation and and hydrology must be present, ess disturbed or problematic.
Stripped Mat Dark Surface		. т 11	Anomalous B	right Loar	Thy Solis (I	-20) (MILRA	149A, 153C,	153D)
	e (S7) (LRR P, S er (if observed):	-				<u> </u>		
Type:	. in observed).							
Depth (inches	z).						Hydric Soil	Present? Yes No
Remarks:								



Photo 1 Upland data point whlf008_u facing west



Photo 2 Upland data point whlf008_u facing south

Project/Site: Atlantic Coast Pipeline	City/County: Ha	alifax County	Sampling Date: <u>12/11/2015</u>
Applicant/Owner: Dominion		State: NC	Sampling Point: whlf009f_w
Investigator(s): SH, AS	Section, Towns	hip, Range: <u>No PLSS in this are</u>	
Landform (hillslope, terrace, etc.): Flat	Local relief (cor	ncave, convex, none): <u>none</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): P	Lat: <u>36.35719069</u>	Long: <u>-77.62206931</u>	Datum: WGS 1984
Soil Map Unit Name: Altavista fine sandy loam, 0 to	3 percent slopes, rarely flooded	NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typica	I for this time of year? Yes	_ No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology _	significantly disturbed?	Are "Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology _	naturally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling p	ooint locations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes <u></u>		ampled Area	

Hydric Soil Present? Wetland Hydrology Present?	Yes _ Yes _	マ マ	No No	within a Wetland?	Yes 🖌	No
Remarks: PFO wetland within a pine plantation.						

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
✓ High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living R	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils ((C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u></u> No <u>Depth</u> (inches): <u>4</u>	
Saturation Present? Yes <u>V</u> No Depth (inches): 0 (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Saturation Present? Yes ✓ No Depth (inches): 0 (includes capillary fringe) Mo Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective)	· · ·
(includes capillary fringe)	
(includes capillary fringe)	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	· · ·

Sampling Point: whlf009f_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:30)		Species?	<u>Status</u>	Number of Dominant Species	
1. Pinus taeda	40	Yes	FAC	That Are OBL, FACW, or FAC:5 (A	A)
2. Liquidambar styraciflua	20	Yes	FAC	Total Number of Dominant	
3. Acer rubrum	5	No	FAC		B)
4					
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A	A/B)
					А/Б)
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8	65			OBL species 0 x 1 = 0	
20.5	65	= Total Cove		07	
50% of total cover:32.5	20% of	total cover:	13	FACW species 27 x 2 = 54 110 330	
Sapling/Shrub Stratum (Plot size: 15)				FAC species $x^3 = 0$	
_{1.} Liquidambar styraciflua	30	Yes	FAC	FACU species $x 4 = 0$	
2 Pinus taeda	5	No	FAC	UPL species $0 \times 5 = 0$	
				Column Totals: (A) 384	(B)
3					
4				Prevalence Index = B/A = 2.8	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				✓ 2 - Dominance Test is >50%	
8				\checkmark 3 - Prevalence Index is $\leq 3.0^{1}$	
	25	= Total Cove	⊃r		
50% of total cover: 17.5				Problematic Hydrophytic Vegetation ¹ (Explain)	
	20% 0	total cover.			
	05			¹ Indicators of hydric soil and wetland hydrology mu	st
1. Arundinaria gigantea	25	Yes	FACW	be present, unless disturbed or problematic.	
2. Chasmanthium sessiliflorum	10	Yes	FAC	Definitions of Four Vegetation Strata:	
3. Smilax laurifolia	2	No	FACW	Tree Weeds plants evaluating since 2 in (7.0 and	-)
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardles	
				height.	3 01
5					
6			<u> </u>	Sapling/Shrub – Woody plants, excluding vines, le	ess
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8				Herb – All herbaceous (non-woody) plants, regard	ess
9				of size, and woody plants less than 3.28 ft tall.	
10				Weedy vine All weedy vince greater than 2.29 ft	in
11				Woody vine – All woody vines greater than 3.28 ft height.	In
12.				noight.	
12	37				
19.5		= Total Cove			
50% of total cover: 18.5	20% of	total cover:	7.4		
Woody Vine Stratum (Plot size: 30)					
1					
2					
3					
4					
5			<u> </u>	Hydrophytic	
		= Total Cove		Vegetation	
50% of total cover:0	20% of	total cover:	0	Present? Yes <u>V</u> No	
Remarks: (If observed, list morphological adaptations belo	w).				

Cloid (moist) % Color (moist) % Type ¹ Loc ² Texture Remarks 0-4 10 YR 3/2 100 10 </th <th></th> <th>Matrix</th> <th>Redo</th> <th>x Features</th> <th></th> <th></th> <th></th> <th></th> <th></th>		Matrix	Redo	x Features					
4-20 10 YR 4/1 98 7.5 YR 3/4 2 C PL CL	-4 10 YR 3/2		Color (moist)	%	Type ¹	Loc ²	Texture	Re	marks
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix tydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A9) (LRR S) Black Histic (A3) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Statified Layers (A5) ✓ Depleted Matrix (F3) Anomalous Bright Loamy Soils (F Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Y Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Deleve Orbit (F11) (MLRA 151) Iondicators of hydrophytic veget 1 cm Muck (A9) (LRR P, S) Delate Ochric (F17) (MLRA 151) Iunicators of hydrophytic veget Coast Praine Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Iunica		100					L		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside M Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (Anomalous Bright Loamy Soils (F19) (Anomalous Bright Loamy Soils (F19) (Anomalous Bright Loamy Soils (F12) (MLRA 153B) Stratified Layers (A5) ✓ Depleted Matrix (F3) Anomalous Bright Loamy Soils (F12) (MLRA 153B) Stratified Layers (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Very Shallow Dark Surface (TF12) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Mard (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Inon-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegeta Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problemat Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	-20 10 YR 4/1	98	7.5 YR 3/4	2	С	PL	CL		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside M Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (Anomalous Bright Loamy Soils (F19) (Anomalous Bright Loamy Soils (F19) (Anomalous Bright Loamy Soils (F19) (MLRA 153B) Stratified Layers (A5) ✓ Depleted Matrix (F3) Anomalous Bright Loamy Soils (F12) (MLRA 153B) Stratified Layers (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Very Shallow Dark Surface (TF12) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) Mard (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Inon-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegeta Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problemat Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)				· ·			·		
Tydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside M Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (Anomalous Bright Loamy Soils (F19) (MLRA 153B) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thinck Dark Surface (A12) Inon-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegeta Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) unless disturbed or problemat Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S,									
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric S Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside M Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (Anomalous Bright Loamy Soils (F19) (Anomalous Bright Loamy Soils (F19) (Anomalous Bright Loamy Soils (F19) (MLRA 153B) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Scm 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) Muck (A9) (LRR P, T) Mari (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Inon-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegeta Mark (S1) (LRR O, S) Delta Ochric (F11) (MLRA 151) unless disturbed or problemat Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problemat Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S			- Dadward Matrix M		Danad On		21		N 4 - N 4 - 4 - 4 - 1 - 1
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histoc 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 M Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) ✓ Depleted Matrix (F3) Anomalous Bright Loamy Soils (F19) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) ³ Indicators of hydrophytic vegeta matrix (S4) Delta Ochric (F17) (MLRA 150A, 150B) sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Restrictive Layer (if observed): <						ains.			
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 M Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) Stratified Layers (A5) ✓ Depleted Matrix (F3) Anomalous Bright Loamy Soils (F Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) other (Explain in Remarks) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) alndicators of hydrophytic vegeta Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problemat Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Reduced Vertic (F18) (MLRA 149A) 153C, 153D)						прети			-
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside M Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (Stratified Layers (A5) ✓ Depleted Matrix (F3) Anomalous Bright Loamy Soils (F19) (Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) ************************************					• • •				•
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (Stratified Layers (A5) ✓ Depleted Matrix (F3) Anomalous Bright Loamy Soils (F Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³Indicators of hydrophytic vegeta Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be proventic Sandy Mucky Mineral (S1) (LRR O, S) Deleta Ochric (F17) (MLRA 150A, 150B) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problemat Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A) 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)									
Stratified Layers (A5) ✓ Depleted Matrix (F3) Anomalous Bright Loamy Soils (F Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegeta wetland hydrology must be pro- unless disturbed or problemat Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Sandy Redox (S5) Delta Ochric (F18) (MLRA 150A, 150B) unless disturbed or problemat unless disturbed or problemat Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)		4)				,		• • •	
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegeta Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be provide the provide					_)				
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegeta Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be provided or problemat Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problemat Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)			·)			-	y conc (1 20)
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegeta Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be provided or problemat Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problemat Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Mari (F10) (LRR U)	• • • •	•			,		•		2)
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Inon-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegeta Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be provided or problemat Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problemat Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Figure 1 Figure 2				•	,				
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):	· · ·	• •							
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegeta Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be provide to the providet to the provide to the provide to the provide to the providet to	· / ·				MLRA 1	51)			
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be provided by the provided by th							T) ³ Indica	ators of hvdrophv	tic vegetation and
 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) Restrictive Layer (if observed): 			-						-
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):						, -,			
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):						0A. 150B)		p	
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):							ĐA)		
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):								153D)	
Restrictive Layer (if observed):		.RR P, S, T, U)		0		<i>,</i> ,	, ,	,	
		-							
Depth (inches): Yes							Hydric Soil F	Present? Yes	No
	· · · · <u> </u>								
Remarks:	arks:								



Photo 1 Wetland data point whlf009f_w facing south



Photo 2 Wetland data point whlf009f_w facing east

Project/Site: Atlantic Coast Pipeline	City/County: Halifax	County	_ Sampling Date: <u>12/11/2015</u>
Applicant/Owner: Dominion		State: NC	_ Sampling Point: whlf009_u
Investigator(s): SH, AS	Section, Township, R	ange: <u>No PLSS in this are</u>	ea
Landform (hillslope, terrace, etc.): slight rise		convex, none): <u>none</u>	
Subregion (LRR or MLRA): P Lat: 36.35	691794	Long: <u>-77.62202602</u>	Datum: WGS 1984
Soil Map Unit Name: Altavista fine sandy loam, 0 to 3 percent slopes	, rarely flooded	NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🖌 No	(If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology significant	y disturbed? Are	e "Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If	needed, explain any answe	ers in Remarks.)

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

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

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRR U) Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres along Living R Sediment Deposits (B2) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Crayfish Burrows (C8)
Field Observations: Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Image: Comparison of the second s	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective No hydrology present.	ions), if available:
Remarks:	

Sampling Point: whlf009_u

Tree Stratum (Plot size:30)		Dominant Species?		Dominance Test worksheet:
1. Pinus taeda	70	Yes	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
2				Total Number of Dominant
3				Species Across All Strata: <u>3</u> (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>66.666666666</u> (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	70	= Total Cov		OBL species 0 x 1 = 0
50% of total accurate 35			1/	FACW species 20 x 2 = 40
50% of total cover:	20% 01	total cover:		FAC species 95 x 3 = 285
Sapling/Shrub Stratum (Plot size:15) 1 Quercus nigra	20	Yes	FAC	FACU species 20 x 4 = 80
2. Fagus grandifolia	15	Yes	FACU	UPL species $0 \times 5 = 0$
				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =3
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8	05			✓ 3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	_	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:17.5	20% of	total cover:	7	
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must
1. <u>Clethra alnifolia</u>	20	Yes	FACW	be present, unless disturbed or problematic.
2. Pteridium aquilinum	5	No	FACU	Definitions of Four Vegetation Strata:
3. Smilax glauca	5	No	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	30	= Total Cov	er	
50% of total cover:15	20% of	total cover:	6	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5.				
	•	= Total Cov		Hydrophytic Vegetation
50% of total cover: 0				Present? Yes <u>V</u> No
		total cover:		
Remarks: (If observed, list morphological adaptations below	w).			

Profile Desc	ription: (Describe t	o the depth	needed to docum	ent the ind	licator	or confirm	the absence of indicators.)	
Depth	Matrix		Redox	Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-5	10 YR 4/1	100					FSL	
5-10	10 YR 6/2	100					FS	
10-20	10 YR 5/4	100					FS	
	oncentration, D=Deple					ains.	² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil I	ndicators: (Applica	ble to all LR	Rs, unless other	wise noted	.)		Indicators for Problematic Hydric Soils	3:
<u> </u>	(A1)		Polyvalue Be	ow Surface	(S8) (L	RR S, T, U)) 1 cm Muck (A9) (LRR O)	
Histic Ep	pipedon (A2)		Thin Dark Su	face (S9) (I	LRR S,	T, U)	2 cm Muck (A10) (LRR S)	
Black Hi	stic (A3)		Loamy Mucky	Mineral (F	1) (LRR	0)	Reduced Vertic (F18) (outside MLRA	150A,B)
	n Sulfide (A4)		Loamy Gleye				Piedmont Floodplain Soils (F19) (LRF	
	Layers (A5)		Depleted Mat	•	,		Anomalous Bright Loamy Soils (F20)	
	Bodies (A6) (LRR P,	T. U)	Redox Dark S	. ,			(MLRA 153B)	
-	cky Mineral (A7) (LR		Depleted Dar	. ,			Red Parent Material (TF2)	
	esence (A8) (LRR U)		Redox Depre	•	.,		Very Shallow Dark Surface (TF12)	
	ick (A9) (LRR P, T)		Marl (F10) (L	. ,			Other (Explain in Remarks)	
		(11)				· 4 \		
-	Below Dark Surface	(A11)	Depleted Och					
	ark Surface (A12)		Iron-Mangane		· · ·		, , , , , ,	
	rairie Redox (A16) (M		Umbric Surfa	ce (F13) (LF	RR P, T	U)	wetland hydrology must be presen	t,
Sandy M	lucky Mineral (S1) (L	RR O, S)	Delta Ochric	F17) (MLR	A 151)		unless disturbed or problematic.	
Sandy G	leyed Matrix (S4)		Reduced Ver	ic (F18) (M I	LRA 15	0A, 150B)		
Sandy R	edox (S5)		Piedmont Flo	odplain Soil	s (F19)	(MLRA 149	9A)	
	Matrix (S6)			•	. ,	•	Á 149A, 153C, 153D)	
	rface (S7) (LRR P, S,	T. U)					·····, ····, ····,	
	_ayer (if observed):	, -,						
Туре:			_					
Depth (ind	ches):		_				Hydric Soil Present? Yes No	~
Remarks:							·	



Photo 1 Upland data point whlf009_u facing east



Photo 2 Upland data point whlf009_u facing south

WETLAND DETERMINATION DATA FORM -	- Atlantic and Gulf Coastal Plain Region WHLG005F_W							
Project/Site: SE Reliability City/Cour	nty: Halifage Sampling Date: July 8, 2019							
Applicant/Owner: Dominion	State: <u>VC</u> Sampling Date: <u>WHL</u> 6-005-ms							
10.0	Township, Range:							
Landform (hillslope, terrace, etc.): Ford plain Local relief (concave, convex, none): Slope (%): 61%								
Subregion (LRR or MLRA): Lat: 36° 21 / 18	8.476" Long: 77° 37'17.879" Datum:							
	slopeNWI classification:PFO							
Are climatic / hydrologic conditions on the site typical for this time of year? Yes <u></u> No (If no, explain in Remarks.)								
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? YesX_ No								
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)								
SUMMARY OF FINDINGS – Attach site map showing sample	ing point locations, transects, important features, etc.							
Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	the Sampled Area ithin a Wetland? Yes <u> </u>							
Remarks: Bottomland hardwood.								
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) High Water Table (A2) Marl Deposits (B15) (LRR U)	Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10)							
Saturation (A3)								
Water Marks (B1) Qxidized Rhizospheres along	g Living Roots (C3) Dry-Season Water Table (C2)							
Sediment Deposits (B2)								
Drift Deposits (B3)								
Image: Algal Mat or Crust (B4) Image: Thin Muck Surface (C7) Image: Iron Deposits (B5) Other (Explain in Remarks)	Geomorphic Position (D2) Shallow Aquitard (D3)							
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)							
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)							
Field Observations:								
Surface Water Present? Yes No Depth (inches):								
Water Table Present? Yes No Koncerne Depth (inches):								
Saturation Present? Yes No Month Depth (inches):	Wetland Hydrology Present? Yes <u>No</u>							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previou	us inspections), if available:							
Remarks:								
Hydrology present								

Sampling Point: 6005_ W

76		Dominant		Dominance Test worksheet:
1. Lignidanter storacif (a	20	Species?	<u>Status</u> FAC	Number of Dominant Species (A)
2. Acer rubonnon 3. Pinnag trada	20	~~	FAC	Total Number of Dominant 8 (B)
4				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	60	= Total Cov	/er	OBL species x 1 =
50% of total cover: 30	20% of	f total cover	:12	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	1.	/	-	FAC species x 3 =
1. Clether alpetolia	_(0	$\overline{}$	FACW	
2. Liquidantar styracidluca	_20		FAC	UPL species x 5 = (D)
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7	·			2 - Dominance Test is >50%
8	-70			3 - Prevalence Index is ≤3.0 ¹
	30 = Total Cover			Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 15	20% of	f total cover	:	
Herb Stratum (Plot size: 30)	20	\checkmark	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Vitig Cotundifulia	5		FAC	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	25	= Total Co	ver ~	
50% of total cover: 12.	5 20% 01	f total cover	<u> </u>	
Woody Vine Stratum (Plot size:)	~	1		
1. Initax potundi folia	5	\sim	FAC	
2				
3				
4				
5				Hydrophytic
	5	= Total Co	ver i	Vegetation Present? Yes No
50% of total cover: A.S.	20% o	f total cover	: <u> </u>	Present? Yes No No
Remarks: (If observed, list morphological adaptations belo	ow).			

SOIL

Sampling Point

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)									
Depth <u>Matrix</u>		x Features	1 1 2	T 1	Develop				
(inches) Color (moist) %	Color (moist)	%Түре	Loc ²		Remarks				
0-4 2.544/2				[0 an					
4-216 2.546/2 80	254 9/4	5		1000					
		Sector Concerns Sector Concerns							
		· · · · · · · · · · · · · · · · · · ·							
	te a training and a second	-		· · · · · · · · · · · · · · · · · · ·	·······				
				<u></u>					
¹ Type: C=Concentration, D=Depletion, RM=I	Reduced Matrix, MS	S=Masked Sand	Grains.	² Location: PL=	Pore Lining, M=Matrix.				
Hydric Soil Indicators: (Applicable to all L	RRs, unless other	wise noted.)		Indicators for F	Problematic Hydric Soils ³ :				
Histosol (A1)		low Surface (S8)) 🛄 1 cm Muck (A9) (LRR O)					
Histic Epipedon (A2)		Inface (S9) (LRR		2 cm Muck (A10) (LRR S)					
Black Histic (A3)		y Mineral (F1) (L	RR O)		Reduced Vertic (F18) (outside MLRA 150A,B)				
Hydrogen Sulfide (A4) Stratified Layers (A5)		d Matrix (F2)			loodplain Soils (F19) (LRR P, S, T)				
Organic Bodies (A6) (LRR P, T, U)	Depleted Mat Redox Dark			(MLRA 1	Bright Loamy Soils (F20)				
5 cm Mucky Mineral (A7) (LRR P, T, U)	Provide State Stat	rk Surface (F7)			Material (TF2)				
Muck Presence (A8) (LRR U)	Redox Depre	그 가지만 아직 가지 않았다. 말한 것이 나라 다 ㅠ			w Dark Surface (TF12)				
1 cm Muck (A9) (LRR P, T)	Marl (F10) (L	.RR U)		Other (Expl	ain in Remarks)				
Depleted Below Dark Surface (A11)		hric (F11) (MLRA							
Thick Dark Surface (A12)		ese Masses (F12			of hydrophytic vegetation and				
Coast Prairie Redox (A16) (MLRA 150A Sandy Mucky Mineral (S1) (LRR O, S)	June	(F13) (LRR P (F17) (MLRA 15			hydrology must be present, isturbed or problematic.				
Sandy Gleyed Matrix (S4)	The second se	tic (F18) (MLRA 15	- CX		isturbed of problematic.				
Sandy Redox (S5)		odplain Soils (F1							
Stripped Matrix (S6)				A 149A, 153C, 153	D)				
Dark Surface (S7) (LRR P, S, T, U)				neren nationale and an and					
Restrictive Layer (if observed):									
Туре:									
Depth (inches):				Hydric Soil Pres	ent? Yes <u>×</u> No				
Remarks:									
Hydric Soil prese	4								
(1900)									



 $\mathsf{WHLG005F_w}-\mathsf{Facing}\ \mathsf{North}\ \mathsf{Forested}\ \mathsf{Wetland}$



WHLG005F_w – Facing East Forested Wetland

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: SE Reliability City/C	County: <u>Halifar</u> Sampling Date: <u>July 8</u> , 2014 State: <u>NC</u> Sampling Point: <u>WHLGOG</u> J.u
Applicant/Owner: Dominion	State: NC Sampling Point: ///HL/F/RG (
	on, Township, Range: Outlet Outlet
Landform (hillslope terrace etc.): hill slave	relief (concave, convex, none): <u>Slope</u> Slope (%): <u>Z</u>
Subración (I PR or MI PA):	19.140° Long: 77° 37′ 18.116′ Datum:
Soil Map Unit Name: Strate find smally loom 2-	
4	
Are climatic / hydrologic conditions on the site typical for this time of year?	
	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Mixed Piae/Hardwood yplan	Л.
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) Arr Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5)	
Unundation 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):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks	
Remarks: No hydralogy indicators pre	sent.

)

Tree Stratum (Plot size:

1

2

Andreas

6 an 80 5

(A)

(B)

20 FAC ; anidam 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 _____ x 1 = _____ 80 = Total Cover FACW species _____ x 2 = ___ 20% of total cover: 50% of total cover: FAC species _____ x 3 = ____ 50 Sapling/Shrub Stratum (Plot size: FACU species _____ x 4 = _____ 1. Linuidanban styrasiflas UPL species _____ x 5 = _____ 10 2 ler Column Totals: _____ (A) _____ (B) 3. 4. Prevalence Index = B/A = 5. ____ Hydrophytic Vegetation Indicators: 6. 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 7. 3 - Prevalence Index is ≤3.0¹ SO = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 15 50% of total cover: 20% of total cover: 20 Herb Stratum (Plot size: ¹Indicators of hydric soil and wetland hydrology must 1. Br. Fara Pteribum agentiniem be present, unless disturbed or problematic. 10thm alnifoli E 2. / Definitions of Four Vegetation Strata: 3. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of 4 height. 5. Sapling/Shrub - Woody plants, excluding vines, less 6. than 3 in. DBH and greater than 3.28 ft (1 m) tall. 7. 8. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 9. ____ 10._____ Woody vine - All woody vines greater than 3.28 ft in 11. height. 12. 10 = Total Cover 50% of total cover: 20% of total cover: Woody Vine Stratum (Plot size: 30) 1. Sonilan sofundifiels 2. 3. 4 5. Hydrophytic 5 Vegetation = Total Cover No Present? 50% of total cover: 2 * > 20% of total cover: _ Remarks: (If observed, list morphological adaptations below).

Absolute Dominant Indicator

% Cover Species? Status

6

1

20

30

10

FACU

FAC

FAC

Dominance Test worksheet: Number of Dominant Species

That Are OBL, FACW, or FAC:

Total Number of Dominant

Species Across All Strata:

Sampling Point:

C	۰,	^	•	ı	ŧ	
æ	2	L	J	L	L	ì

Sampling Point:	6005 h
Sampling Fornt.	

Profile Descr	iption: (Describe	to the depth	needed to docu	ment the i	indicator	or confirm	the absence of in	ndicators.)	
Depth	Matrix			x Feature				2	3
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc ²	Texture	Remarks	
200-6	2.546/8	(00			. 		luam		
3-216	2.547/4	100					0 600-		
						·····			
				•					
				-					
¹ Type: C=Cor	ncentration, D=Depl	letion, RM=F	Reduced Matrix, M	S=Masked	Sand Gr	ains.		Pore Lining, M=Mati	
Hydric Soil In	idicators: (Application)	able to all L	RRs, unless othe	rwise not	ed.)		Indicators for I	Problematic Hydric	Soils ³ :
Histosol (Polyvalue Be	elow Surfa	ce (S8) (L	.RR S, T, U) 📙 1 cm Muck	(A9) (LRR O)	
	pedon (A2)		Thin Dark St					(A10) (LRR S)	
Black His			Loamy Muck	•		20)		(ertic (F18) (outside	
	l Sulfide (A4) Layers (A5)		Loamy Gley	것이 안 좋겠는 말이 많다. 같은 것	(F2)			Floodplain Soils (F19 Bright Loamy Soils	이 같이 많이 했다.
James	Bodies (A6) (LRR P,	T. U)	Redox Dark		-6)		(MLRA 1		(120)
Treasure and the second	ky Mineral (A7) (LF		Depleted Da	Constraint and some of	1921 (Beerle			t Material (TF2)	
	sence (A8) (LRR U		Redox Depr				Very Shallo	ow Dark Surface (TF	12)
Accession of the second s	ck (A9) (LRR P, T)		Marl (F10) (I				Uther (Exp	lain in Remarks)	
	Below Dark Surface	e (A11)	Depleted Oc						
	'k Surface (A12) airie Redox (A16) (N		Iron-Mangar				. 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이	s of hydrophytic vege hydrology must be p	유민이들은 옷이 안 있는 것이지 않는 것이 같아.
1	ucky Mineral (S1) (L		Umbric Surfa	1	State of the second second	, 0)		disturbed or problem	
	eyed Matrix (S4)		Reduced Ve			0A, 150B)	diness (indubed of problem	
Sandy Re			Piedmont FI				9A)		
Stripped I	Matrix (S6)		Anomalous	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 153	3D)	
the second s	face (S7) (LRR P, S	and the second se		_					
	ayer (if observed):								
Type:		C. C. States and a second of the							N. M
	hes):						Hydric Soil Pres	sent? Yes	NO <u>P</u>
Remarks:	× ,	8							
Hyde	ic soil	not	present.						
	6		/						
	×.								



WHLG005_u – Facing South Adjacent Upland



WHLG005_u – Facing West Adjacent Upland



WHLG005 – Representative Wetland and Upland Soils

	WHLG008F_W
WETLAND DETERMINATION DATA FORM	- Atlantic and Gulf Coastal Plain Region July 2014
Project/Site: SE Reliabs (:1) City/Co	unty: Halifam Sampling Date: WHC6008_w
	State: MC Sampling Point:
Investigator(s): DPWest Section	
	elief (concave, convex, none): Stock Slope (%):
Subregion (LRR or MLRA): Lat: 36° 200's	CCKES "Long: 77"38' 4046025" Datum:
Soil Map Unit Name: Chewaeala + Wehadlee hig's	7.656" 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 Vegetation, Soil, or Hydrology naturally problemati	
SUMMARY OF FINDINGS – Attach site map showing same	
Hydric Soil Present? Yes No	s the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes <u>X</u> No
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	
Saturation (A3)	
Water Marks (B1) Oxidized Rhizospheres alo Sediment Deposits (B2) Presence of Reduced Iron	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Uther (Explain in Remarks	
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):	
Water Table Present? Yes <u>No</u> Depth (inches):	7
Saturation Present? Yes <u>K</u> No Depth (inches): <u>Saturation</u>	Wetland Hydrology Present? Yes <u></u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ	ous inspections), if available:
Remarks:	
Hydrology present.	
0 () ***) 5 **	

Sampling Point: 6.008_w

Tree Stratum (Plot size: <u>30</u>) 1. <u>Acer rubruu</u> 2. <u>Liquidankar straciflua</u> 3. <u>Liciadeudran Tulyifera</u> 4 5 6 7 8 50% of total cover: <u>25</u> <u>Sapling/Shrub Stratum</u> (Plot size: <u>30</u>) 1. <u>Clethra alaibalia</u> 3	<u>% Cover</u> <u>3</u> 8 <u>5</u> <u>16</u> <u>50</u> <u>20% of</u> <u>15</u>	= Total Cov total cover	Status FAC FACU FACU FACU Per FACW FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Council Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: OBL species Number of Dominant Species That Are OBL, FACW, or FAC: OBL species Yervalence Index worksheet: Total % Cover of: Multiply by: OBL species X 1 = FACW species X 2 = FAC species X 3 = FACU species X 4 = UPL species X 5 = Column Totals: (A)
4	<u>30</u> 20% of <u>5</u> 25	Total Cover	/er := (c	Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or 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.
50% of total cover: <u>17.5</u> <u>Woody Vine Stratum</u> (Plot size: <u>30</u>) <u>1. Socilar ortandificta</u> <u>2. Vitis caturalificta</u> <u>3</u> <u>4</u> <u>5</u> Remarks: (If observed, list morphological adaptations below <i>Hydrophytic Vegetation</i>	20% of 5 5 10 20% of w).	total cover	FAC FAC	Hydrophytic Vegetation Present? Yes <u>No</u> No

SOIL

Sampling Point: 6008-10

Profile Desc	ription: (Describe t	o the depth	needed to docun	nent the in	dicator	or confirm	the absence	of indicators.)
Depth (inches)	Matrix Color (moist)	%	Redo: Color (moist)	x Features	Type	Loc ²	Texture	Remarks
0-3	2-5Y3/1				Type		Sand	
3-6	2.54312						Sand	
6-216	2.5Y311	80	2.5461,	20			Sand	
<u></u>			600 C 71	Lon Lot		Ci		
0 -10-20-00-000 0								
-								
¹ Type: C=Co	ncentration, D=Depl	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	² Location:	PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applica	able to all LF	Rs, unless other	wise note	d.)		Indicators	for Problematic Hydric Soils ³ :
Histosol			Polyvalue Be					luck (A9) (LRR O)
Black His	ipedon (A2) stic (A3)		Thin Dark Su					luck (A10) (LRR S) ed Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye			,		ont Floodplain Soils (F19) (LRR P, S, T)
Jamma .	Layers (A5)		Depleted Mat		-			lous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, cky Mineral (A7) (LR		Redox Dark Depleted Dar		Section and the second section of the section o			RA 153B) arent Material (TF2)
Provide State of Stat	esence (A8) (LRR U)		Redox Depre		a			hallow Dark Surface (TF12)
	ck (A9) (LRR P, T)	(644)	Marl (F10) (L			-41	U Other (Explain in Remarks)
antenna .	Below Dark Surface rk Surface (A12)	: (ATT)	Depleted Ocl				T) ³ Indic	ators of hydrophytic vegetation and
	airie Redox (A16) (N	Los el los compositiones de la composition	Umbric Surfa			, U)		land hydrology must be present,
Press of the local division of the local div	lucky Mineral (S1) (L leyed Matrix (S4)	RR O, S)	Delta Ochric Reduced Ver	the second se		04 1508)	unle	ess disturbed or problematic.
presenting .	edox (S5)		Piedmont Flo				9A)	
	Matrix (S6)		Anomalous E	Bright Loam	ny Soils (I	F20) (MLR	A 149A, 153C,	, 153D)
	face (S7) (LRR P, S ayer (if observed):	, T, U)			-			
Type:	ayor (ii observed).							
	ches):						Hydric Soil	Present? Yes <u>>></u> No
Remarks:								
12-	Arie Soi)	1 loos	N					
F . J .	no C 200)	1	98°, T					
			法					



WHLG008F_w – Facing North Forested Wetland



WHLG008F_w – Facing East Forested Wetland

WETLAND DETERMINATION DATA FO	ORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERelishility Ci	ty/County: Halifae Sampling Date: July 9.2014
Applicant/Owner: Dominion	State: NC Sampling Point: WHLG 008_ 0
BN: 1	ection, Township, Range:
Subregion (LRR or MLRA): T Lat: 36°20	Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): 5 Slope (%): 2 Ical relief (concave, convex, none): <t< td=""></t<>
Soil Map Unit Name: Chewacala + Wehadkee 19	1'56.809 NWI classification: NTA
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly dis	
Are Vegetation, Soil, or Hydrology naturally probl	
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No X	Is the Sampled Area within a Wetland? Yes No
Mixed Pine / Hardwood	
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) Saturation (A3) Hydrogen Sulfide Odd	
	es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes No Depth (inches): _	
Water Table Present? Yes No Depth (inches): _	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
No hydrology	

VEGETATION (Four Strata) – Use scienti	lic names of plants	
--	---------------------	--

Sampling Point: 6-808- W

	A1	D	to Parts	Deminere Testwerkeheet
Tree Stratum (Plot size: 3")		Dominant		Dominance Test worksheet:
	diama.	Species?		Number of Dominant Species
1. Pivng tarda	30		FAC	That Are OBL, FACW, or FAC: (A)
2. Acer ruhrum	10		FAC	
3. Liquidantes Styraciflus	18		FAC	Total Number of Dominant Species Across All Strata:
				Species Across All Strata:(B)
4. Lirisdendran tulipifera	12	V	FACU	Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	65	= Total Cov	/or	OBL species x 1 =
27				FACW species x 2 =
50% of total cover: <u>52-5</u>	20% of	total cover	:	
Sapling/Shrub Stratum (Plot size: 30)		1		FAC species x 3 =
1. Vascining Stamiging	5	$\mathcal{O}_{\mathcal{I}}$	FACU	FACU species x 4 =
2. Clethra @laif-lia	70		FACW	UPL species x 5 =
	6			Column Totals: (A) (B)
3. Some Oxiden dron exporter			FACU	
4				Dravalance Index = D/A =
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				. 1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	1-			3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $\cancel{8}.5$	20% of	f total cover	: 5.4	
Herb Stratum (Plot size: 30)				1 - directory of headside and another disader laws much
1. Clethre minifelin	fron .	. /	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Jerhan minikalin		\sim		
2. Vitis patrodifiala	- Maria		FAC	Definitions of Four Vegetation Strata:
3. Arnodiacia giganton	5		FACW	
		-		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11	++ ++			height.
12.				
	17	= Total Co		
50% of total cover:	20% of	f total cover	2.1	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cor	ver	Vegetation Present? Yes No No
50% of total cover:	20% of	f total cover		Present? Yes No No
Remarks: (If observed, list morphological adaptations belo				
Temarka. In observed, nat morphological adaptations beid				

C	0	t	ı	
0	v	ł	L	

Sampling Point: 6008_4

(inches)	Matrix		Redox	Features				
	Color (moist)	%	Color (moist)		_Loc ²		Remarks	
2-9-9-9-00	2.546/2	100				Sand		
4->16	25487	100				Sand		
1-10	_6. J (2/ 3	100				- and		
17 0.0								
	ncentration, D=Depl				ains.		=Pore Lining, M=Matrix	
-	ndicators: (Applica	able to all LF					Problematic Hydric S	ons :
Histosol (·	ow Surface (S8) (I			k (A9) (LRR O)	
hand '	ipedon (A2)			face (S9) (LRR S,			k (A10) (LRR S)	antes entre
Black His	LEVEL CONTRACTOR CONTRACTOR		=	Mineral (F1) (LRI	R O)	2 Contract of the second state	Vertic (F18) (outside M	
<u> </u>	n Sulfide (A4)		Loamy Gleyed				Floodplain Soils (F19)	
	Layers (A5)		Depleted Matr			L Anomalou	is Bright Loamy Soils (F	20)
	Bodies (A6) (LRR P,		Redox Dark S			(MLRA	가슴 가는 것 같아요. 그 나서는 것 것 같아요. 이 나가 가지?	
	cky Mineral (A7) (LR		Depleted Dark				nt Material (TF2)	
Muck Pre	esence (A8) (LRR U))	Redox Depres	ssions (F8)			low Dark Surface (TF12	2)
1 cm Mud	ck (A9) (LRR P, T)		Marl (F10) (LF	RR U)		Uther (Ex	plain in Remarks)	
Depleted	Below Dark Surface	≥ (A11)	Depleted Och	ric (F11) (MLRA 1	51)			
Thick Da	rk Surface (A12)		Iron-Mangane	se Masses (F12)	LRR O, P,	T) ³ Indicato	rs of hydrophytic veget	ation and
Coast Pr	airie Redox (A16) (N	ILRA 150A)	Umbric Surfac	ce (F13) (LRR P, 1	', U)	wetlan	d hydrology must be pre	esent,
Sandy M	ucky Mineral (S1) (L	.RR O, S)	Delta Ochric (F17) (MLRA 151)		unless	disturbed or problemat	ic.
Sandy Gl	leyed Matrix (S4)			ic (F18) (MLRA 1	50A, 150B)			
Sandy Re	edox (S5)		Piedmont Floo	odplain Soils (F19	(MLRA 14	(A9		
Stripped	Matrix (S6)		Anomalous Br	right Loamy Soils	F20) (MLR	A 149A, 153C, 15	53D)	
Dark Sur	face (S7) (LRR P, S	, T, U)						
	ayer (if observed):					1		
Type:								
	hes):						esent? Yes	No X
	nes)					Hydric Soli Fi		NO
Remarks:								
// 1	c 1							
Myd	rie soil	Not	Drosant					
			Prese.					
<i><i>w</i></i>								
0								
v								
v								
v								
v								
v								
v								
v								
v								
v								
v								
v								
υ								
			÷					
υ			÷					
			*					
			*					
			×					
			*					



WHLG008_u – Facing South Adjacent Upland



WHLG008_u – Facing West Adjacent Upland



WHLG008 – Representative Wetland and Upland Soils

WETLAND DETERMINATION DATA FORM	M – Atlantic and Gulf Coastal Plain Region
Project/Site: SE Reliability City/Co	ounty: <u>Halifan</u> Sampling Date: <u>July 9, 2014</u> State: <u>MC</u> Sampling Point: <u>WHLG 0</u> 09 <u>E</u> u
	State: <u>NC</u> Sampling Point: <u>WHLG 0</u> 0 9É u/
	n, Township, Range:
Landform (hillslope, terrace, etc.): Local r	relief (concave, convex, none): <u>(686996</u> Slope (%): <u>()</u>
	57:656 Long: 77° 38' 34.669 Datum:
Soil Map Unit Name: Goldsboro fine sondy lopor	d*
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	
Are Vegetation, Soil, or Hydrology significantly disturb	
Are Vegetation, Soil, or Hydrology naturally problema	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Wetland Hydrology Present? Yes <u>~</u> No	Is the Sampled Area within a Wetland? Yes No
Remarks: Bottomland hardwood	
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) Saturation (A3) Marl Deposits (B15) (LRR	
Water Marks (B1)	
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks	s) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): Output Visual No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes <u></u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	vious inspections), if available:
Remarks: Hydrology preset	

whlg009f_w

e Stratum (Plot size:)	Absolute	Dominant Species?	Indicator	Dominance Test worksheet:
HICC ALLER	<u>% Cover</u>	Species/	<u>Status</u>	Number of Dominant Species
Acer mbrum Liriadendran fulipitara	$\frac{7}{20}$		FACU	That Are OBL, FACW, or FAC:(A)
¢.	eller had		Inco	Total Number of Dominant
	· ·			Species Across All Strata: (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC:
				Prevalence Index worksheet:
	,	••••••		Total % Cover of: Multiply by:
an a	1.0	= Total Cov		OBL species x 1 =
20				FACW species x 2 =
50% of total cover: <u>30</u>	20% of	f total cover		FAC species x 3 =
Ding/Shrub Stratum (Plot size:)	l er	. 1	F -0	
Vaccinium Kalleina	10	$\underline{}$	FACW	
Corymbosum	• ••••••			UPL species x 5 =
	-			Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
	· ····		·······	2 - Dominance Test is >50%
	10	= Total Cov		3 - Prevalence Index is ≤3.0 ¹
				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: $\underline{5}$	20% of	total cover:		
<u>o otratam</u> (r fot size:)	20	. (Eine	¹ Indicators of hydric soil and wetland hydrology must
(lether alastolic	·	<u> </u>	- MACN	1 · · · · · · · · · · · · · · · · · · ·
Weadwardin acreality	10		<u>_0BL</u>	- Definitions of Four Vegetation Strata:
bok unnehre			. <u> </u>	Tree Meedy plants evoluting vince 2 in (7.6 em) er
Boehmeria cylindrica	_2_		FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
l				height.
				Continuity Mandauta and discussions to a
				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.
. (52	= Total Cov	er i	
50% of total cover:	20% of	total cover:	6.4	
· · · · · · · · · · · · · · · · · · ·			•	
ody Vine Stratum (Plot size: 2 2 2)	15		FAC	
Southand (Plot size:)	12			
Soullax pertunditation				
Soullon performade folio	·			
	· · · · · · · · · · · · · · · · · · ·			
Southan patradita	· · · · · · · · · · · · · · · · · · ·			
Socilar perturdet folio	·			Hydrophytic
Southan perturde Folin	·		er	Hydrophytic Vegetation Present? Yes No

SOIL

whlg009f_w Sampling Point: _____

392

Profile Desc	ription: (Describe t	o the dept	h needed to docur	nent the i	ndicator	or confirm	the absence of i	indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	<u>Color (moist)</u>		Color (moist)		<u>Type</u> ¹	_Loc ²		Remarks
2	2.543/2	100	······	<u></u>			10an	
2-16-1	2.544/2	90	7.542 8/6	(0			10 a am	
	, , ,			- <u></u>				
				•				
		<u> </u>			•••••		<u> </u>	
¹ Type: C=Co	oncentration, D=Depl	etion. RM=	Reduced Matrix M	S=Masked	Sand Gra	ains	² Location: PL:	=Pore Lining, M=Matrix.
Hydric Soil	ndicators: (Applica	ble to all L	RRs, unless other	wise note	ed.)			Problematic Hydric Soils ³ :
Histosol			Polyvalue Be		•	RR S. T. U	<u> </u>	< (A9) (LRR O)
	vipedon (A2)		Thin Dark Su					< (A10) (LRR S)
Black Hi			Loamy Muck			0)		Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		F2)		Piedmont I	Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	* • • •	Depleted Ma					s Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, cky Mineral (A7) (LR		Redox Dark					
Muck Pr	esence (A8) (LRR U)	κ Ρ, Ι, Uj	Depleted Dar					nt Material (TF2)
	ck (A9) (LRR P, T)		Marl (F10) (L)			ow Dark Surface (TF12) Ilain in Remarks)
	Below Dark Surface	(A11)	Depleted Oct		(MLRA 15	(1)		dan in riemarks)
Thick Da	irk Surface (A12)		Iron-Mangan				r) ³ Indicator	rs of hydrophytic vegetation and
	airie Redox (A16) (M		Umbric Surfa					I hydrology must be present,
	lucky Mineral (S1) (LI	RR 0, S)	Delta Ochric		•		unless	disturbed or problematic.
	leyed Matrix (S4) edox (S5)		Reduced Ver					
	Matrix (S6)		Piedmont Flo					
	face (S7) (LRR P, S,	T. U)		ngni Loan	ny Sous (F	20) (MLRA	A 149A, 153C, 15	3D)
	ayer (if observed):							
Type:						1		
Depth (inc	:hes):						Hydric Soil Pre	sent? Yes 🔀 No
Remarks:							-	
[]	1.	٩ /						
My	drie sou	il p	resul					
	*	/	45					
L		······		••••				



whlg009f_w – Forested Wetland



whlg009f_w – Forested Wetland

WETLAND DETERMINATION DATA FORM	
Project/Site: <u>SE Keliability</u> City/Cou Applicant/Owner: <u>Pominian</u>	nty: Helifa- Sampling Date WHLG-009_4
Applicant/Owner: Dominian	State: M/ Sampling Date.
Investigator(a): URLagE	
Landform (hillslope, terrace, etc.): <u>Sides [ape</u> Local rel Subregion (LRR or MLRA): <u>Lat: 36° / 9° 5</u>	
Subregion (LRR or MLRA):	Var 809 "Long: 77" 38", 35, 302" Datum:
Soil Map Unit Name: Goldsboro Sine spraly Li	2^{-2} NM/ description:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes	\times No (If no evolution in Remarks)
Are Vegetation, Soil, or Hydrology significantly disturbed	/
Are Vegetation, Soil, or Hydrology naturally problematic	
SUMMARY OF FINDINGS – Attach site map showing sample	
Hydrophytic Vegetation Present? Yes <u>Yes</u> No Is	i the Sampled Area Vithin a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Saturation (A3) Hydrogen Sulfide Odor (C1)	
Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres alon	
Sediment Deposits (B2)	
Drift Deposits (B3)	led Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5) Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No <u></u> _
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	us inspections), if available:
Remarks:	
No hydrology	

Sampling Point: WHL6009_4

Tree Stratum (Plot size: 30)		Dominant		Dominance Test worksheet:
	<u>% Cover</u> <i>て</i> ゅ	Species?		Number of Dominant Species
	30	<u> </u>	FACU	That Are OBL, FACW, or FAC: (A)
2. Liciadendra fulipétera	20	- \/_	FACU	Total Number of Dominant
3. Acer rabreas	70	$\overline{}$	FAC	Species Across All Strata: (B)
4. <u>Prunas secativa</u> 5			FACU	Percent of Dominant Species $625_{(A/B)}$
6				Prevalence Index worksheet:
7				
8	- Jalk -			Total % Cover of: Multiply by: OBL species x 1 =
Lin	<u> </u>	= Total Cov	6.2	FACW species x 2 =
50% of total cover: <u>40</u>	20% of	total cover	16	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30)	1 .	/	FAC	FACU species x3 =
1. Liguidanbar styracitlus		-¥-	FAC	UPL species x 5 =
2. <u>Corga alba</u>	_10		EACU	Column Totals: (A) (B)
3. Vaccinium Steminium			<u>FACU</u>	(A)(b)
4. Tles afaca			FAC	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
(-	<u>_30</u>	= Total Cov	rer	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover:	<u> </u>	
Herb Stratum (Plot size:) 1(lethree a (p. co)/10	40	\checkmark	FACN	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Armadinaria gigantes			FREW	Definitions of Four Vegetation Strata:
				-
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 woody vines greater than 3.28 ft in
11				height.
12				
	<u>–<u>74</u></u>	= Total Cov	er u	· · · · · · · · · · · · · · · · · · ·
50% of total cover:	L 20% of	total cover:	0,1	
	1	/	EAC	
1. <u>Lonicera Japoniea</u>	10	$\rightarrow \rightarrow \rightarrow$	THE	
2 refund, do lin			FAC	
3. Vitis rotunditolia			FHC	
4	······		<u> </u>	
5				Hydrophytic
		= Total Cov	211	Vegetation Present? Yes No
50% of total cover: 8.5		total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			
Hydrophytic Veg. is d.	o in las	, miljerer		
*				

2009_n
£009_1

Depit Matrix Redox Features Inchesis Color (moist) % Type Loc Texture Remarks Inchesis 2,5 Y,3 /2, /0.6 /0.6 /0.6 /0.6 /0.6 Inchesis	Profile Description: (Describe to	the depth needed to doc	ument the indicator or co	nfirm the absence of in	dicators.)
D=3 2,5Y 3/2 0.6 Internation Internation Internation Internation Internation 3-216					
2-2/Lb 4.5.7.7.4/3 1.0.0			<u>% Type' Lo</u>	<u>c² Texture</u>	Remarks
'Type:	0-2 1.27 3/2.	100		/ @ Am	
Image:	3-216 (.54413	100		1000	
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) Histosol (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, E) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Stratified Layers (A6) Mard (F10) (LRR U) Redox Dark Surface (F7) Red Parent Material (TF2) Mucky Mineral (A7) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Depleted Ochric (F13) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Deleted Vertic (F18) (MLRA 150A) Umbric Certic (F18) (MLRA 150A) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A), Anomalous Bright Loamy Soils (F20) (MLRA 149A,				<u></u>	
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) Histosol (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, E) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Stratified Layers (A6) Mard (F10) (LRR U) Redox Dark Surface (F7) Red Parent Material (TF2) Mucky Mineral (A7) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Depleted Ochric (F13) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Deleted Vertic (F18) (MLRA 150A) Umbric Certic (F18) (MLRA 150A) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A), Anomalous Bright Loamy Soils (F20) (MLRA 149A,					
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) Histosol (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, E) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Stratified Layers (A6) Mard (F10) (LRR U) Redox Dark Surface (F7) Red Parent Material (TF2) Mucky Mineral (A7) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Depleted Ochric (F13) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Deleted Vertic (F18) (MLRA 150A) Umbric Certic (F18) (MLRA 150A) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A), Anomalous Bright Loamy Soils (F20) (MLRA 149A,					
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) Histosol (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, E) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Stratified Layers (A6) Mard (F10) (LRR U) Redox Dark Surface (F7) Red Parent Material (TF2) Mucky Mineral (A7) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Depleted Ochric (F13) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Deleted Vertic (F18) (MLRA 150A) Umbric Certic (F18) (MLRA 150A) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A), Anomalous Bright Loamy Soils (F20) (MLRA 149A,					
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) Histosol (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, E) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Stratified Layers (A6) Mard (F10) (LRR U) Redox Dark Surface (F7) Red Parent Material (TF2) Mucky Mineral (A7) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Depleted Ochric (F13) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Deleted Vertic (F18) (MLRA 150A) Umbric Certic (F18) (MLRA 150A) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A), Anomalous Bright Loamy Soils (F20) (MLRA 149A,				······································	
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) Histosol (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, E) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Stratified Layers (A6) Mard (F10) (LRR U) Redox Dark Surface (F7) Red Parent Material (TF2) Mucky Mineral (A7) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Depleted Ochric (F13) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Deleted Vertic (F18) (MLRA 150A) Umbric Certic (F18) (MLRA 150A) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A), Anomalous Bright Loamy Soils (F20) (MLRA 149A,				······································	
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) Histosol (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, E) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Stratified Layers (A6) Mard (F10) (LRR U) Redox Dark Surface (F7) Red Parent Material (TF2) Mucky Mineral (A7) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Depleted Ochric (F13) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Deleted Vertic (F18) (MLRA 150A) Umbric Certic (F18) (MLRA 150A) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A), Anomalous Bright Loamy Soils (F20) (MLRA 149A,					
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) Histosol (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Gleyed Matrix (F2) Reduced Vertic (F18) (outside MLRA 150A, E70) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) S cm Muck (A9) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Red Parent Material (TF2) Muck (A9) (LRR P, T) Marl (F10) (LRR U) Very Shallow Dark Surface (TF12) Depleted Blow Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Sindicators of hydrophytic vegetation and wetland hydrology must be present, Unbric Surface (F13) (LRR P, T, U) Sindicators of hydrophytic vegetation and wetland hydrology must be present, Unbric Surface (S7) (MLRA 150A, 150B) Sindicators of hydrophytic vegetation and wetland hydrology must be present, Unbric Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Marcia (If 10) (MLRA 150A, 150B) Hydric Soil Present? Yes No X Type: <td>Type: C=Concentration, D=Deple</td> <td>tion, RM=Reduced Matrix,</td> <td>MS=Masked Sand Grains.</td> <td>²Location: PL=I</td> <td>Pore Lining, M=Matrix.</td>	Type: C=Concentration, D=Deple	tion, RM=Reduced Matrix,	MS=Masked Sand Grains.	² Location: PL=I	Pore Lining, M=Matrix.
Histic Epipedon (A2) This Dark Surface (S9) (LRR S, T, U) 1 cm Mudck (A9) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR S) 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) Scm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F13) (LRR O, P, T) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Striped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A), 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: No No Type: Depth (inches): Hydric Soi		ole to all LRRs, unless oth	erwise noted.)		
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, E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Mark (F10) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F6) (MLRA 153B) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Very Shallow Dark Surface (TF12) 0 coard praire Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR O, P, T) Other (Explain in Remarks) 0 coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) anomalous Bright Loamy Soils (F20) wetlate dor problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Trype:		Polyvalue I	Below Surface (S8) (LRR S	, T, U) 🔲 1 cm Muck ((A9) (LRR O)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Stratified Layers (A5) Depleted Dark Surface (F7) Redox Dark Surface (F7) Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Redox Dark Surface (F7) Muck Presence (A8) (LRR U) Redox Dark Surface (F7) Redox Dark Surface (F7) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Matrix (S4) Umbric Surface (F13) (LRR P, T, U) Other (Explain in Remarks) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Momalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) No Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A), 153		Thin Dark	Surface (S9) (LRR S, T, U)		
Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) alndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A), Sandy Redox (S5) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:		🔲 Loamy Mu	cky Mineral (F1) (LRR O)		
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Peleted Dark Surface (F7) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:					
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) silndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:			· ·	Anomalous	Bright Loamy Soils (F20)
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) unless disturbed or problematic. Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:			, ,		
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Coast Prairie Redox (A16) (MLRA 150A) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:					
Depleted Below Dark Surface (A11) Thick Dark Surface (A12) Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Detem Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Piedmont Surface (S7) (LRR P, S, T, U) Remarks:					
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes No				Uther (Expla	ain in Remarks)
Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Sandy Redox (S5) Sandy Redox (S5) Delta Ochric (F17) (MLRA 150A, 150B) Sandy Redox (S5) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:					
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:					
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Remarks: No					
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes Remarks: No					sturbed of problematic.
Stripped Matrix (S6) Image: Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Depth (inches): Hydric Soil Present? Yes No Remarks: No	Sandy Redox (S5)				
L Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:		Anomalous			וכ
Type:	Dark Surface (S7) (LRR P, S, 1	Γ, U)		,,	,
Depth (inches): Hydric Soil Present? Yes No X Remarks:	Restrictive Layer (if observed):				
Remarks:	Туре:				
Remarks:	Depth (inches):			Hydric Soil Pres	ent? Yes No 🌂
Hydric Soil not present					
	Hydric So	:1 not pre	I a water		



WHLG009_u – Adjacent Upland



WHLG009_u – Adjacent Upland



WHLG009 – Representative Wetland and Upland Soils

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: Hali	fax County	Sampling Date: 8/10/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: WHLB050e_w
Investigator(s): TP, SA	Section, Townsh	ip, Range: <u>No PLSS</u> in this area	1
Landform (hillslope, terrace, etc.): drainage swale		e, convex, none): <u>concave</u>	Slope (%): <u>5</u>
Subregion (LRR or MLRA): P Lat: 36.32	2724303	Long: <u>-77.6470205</u>	Datum: WGS 1984
Soil Map Unit Name: Goldsboro fine sandy loam, 0 to 2 perc	ent slopes	NWI classific	ation: PEM1Fh
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes	No (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology sig	gnificantly disturbed?	Are "Normal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology na	aturally problematic?	(If needed, explain any answe	rs in Remarks.)
			• • • • • •

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes 🖌	No No _ No	Is the Sampled Area within a Wetland?	Yes 🖌	No
Remarks:					
PEM wetland in drainage swale between	n cotton fields	. Weak hydrology. Dr	ains into SHLG008		

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)
	Dry-Season Water Table (C2)
Field Observations:	
Surface Water Present? Yes No 🔽 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No Concern Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:
Beeche Recorded Bata (crean gauge, mentering weil, denai protece, provide inopee	

Sampling Point: WHLB050e_w

	Absoluto	Dominant I	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				
				Total Number of Dominant
3				Species Across All Strata: (B)
4		·		Percent of Dominant Species
5		·		That Are OBL, FACW, or FAC: 100 (A/B)
6				Dravalance in day worksheet:
7				Prevalence Index worksheet:
	0	= Total Cove	r	Total % Cover of: Multiply by:
50% of total cover:0	20% of	total cover:	0	OBL species 40 x 1 = 40
Sapling/Shrub Stratum (Plot size:15)				FACW species 25 x 2 = 50
1				FAC species x 3 = 0
				FACU species0 x 4 =0
2				UPL species $0 x 5 = 0$
3				65 90
4				Column Totals: (A) (B)
5				Prevalence Index = B/A =1.38
6				Hydrophytic Vegetation Indicators:
7				
8				✓ 1 - Rapid Test for Hydrophytic Vegetation
		·		✓ 2 - Dominance Test is >50%
9	0			\checkmark 3 - Prevalence Index is ≤3.0 ¹
50% - () - () - ()		= Total Cove	r 0	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover: 0	20% 01	total cover:		data in Remarks or on a separate sheet)
	00			Problematic Hydrophytic Vegetation ¹ (Explain)
1. Murdannia keisak	20	Yes	OBL	
2. Persicaria bicornis	15	Yes	FACW	
3. Paspalum distichum	10	No	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4. Leersia oryzoides	10	No	OBL	
5. Typha latifolia	10	No	OBL	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
	65	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32.5		total cover:		
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in
<u></u> /				height.
1				
2		·		
3				
4				Hydrophytic
5				Vegetation
	_	= Total Cove	r	Present? Yes V No
50% of total cover: 0		total cover:		
Remarks: (Include photo numbers here or on a separate s				
	sneet.)			

Depth	Matrix			x Feature	4	0			
(inches)	Color (moist)	%	Color (moist)		Type'	Loc ²	Texture	Remarks	
0-8	10YR 4/1	95	10YR 4/6	5	С	PL	CL		
8-12	2.5Y 5/1	95	2.5Y 5/6	5	C	PL	С		
			·						
			·						
			·						
	Concentration, D=Deple	etion, RN	I=Reduced Matrix, M	S=Maske	d Sand Gra	ains.		PL=Pore Lining, M=Matrix.	
lydric Soi	I Indicators:						Indi	cators for Problematic Hydric Soils ³	
Histoso	()		Dark Surface	. ,				2 cm Muck (A10) (MLRA 147)	
	Epipedon (A2)		Polyvalue Be		· / ·				
	Histic (A3)		Thin Dark Su	•	, .	47, 148)		(MLRA 147, 148)	
	gen Sulfide (A4)		Loamy Gleye		(F2)			Piedmont Floodplain Soils (F19)	
	ed Layers (A5)		Depleted Ma				(MLRA 136, 147) Very Shallow Dark Surface (TF12)		
_	luck (A10) (LRR N)		Kedox Dark		,				
·	ed Below Dark Surface	(A11)	Depleted Date		. ,			Other (Explain in Remarks)	
	Dark Surface (A12)		Redox Depre	`	,				
	Mucky Mineral (S1) (LI	RR N,	Iron-Mangan		es (F12) (I	LRR N,			
	RA 147, 148)		MLRA 13	,					
	Gleyed Matrix (S4)			_ Umbric Surface (F13) (MLRA 136, 122)				ndicators of hydrophytic vegetation and	
	Redox (S5)		Piedmont Floodplain Soils (F19) (MLRA 14			•		vetland hydrology must be present,	
	ed Matrix (S6)		Red Parent N	Aaterial (F	⁻ 21) (MLR	A 127, 147	΄) ι	unless disturbed or problematic.	
Restrictive	e Layer (if observed):								
Туре:									
Depth (ii	nches):						Hydric Sc	oil Present? Yes 🖌 No	
Remarks:							1		



Photo 1 Wetland data point WHLB050e_w facing southwest



Photo 2 Wetland data point WHLB050e_w facing northeast

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: H	alifax County	_ Sampling Date: 8/10/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: WHLB050_u
Investigator(s): TP, SA	Section, Towns	ship, Range: <u>No</u> PLSS in this are	a
Landform (hillslope, terrace, etc.): hill slope		ave, convex, none): <u>none</u>	Slope (%): <u>5</u>
Subregion (LRR or MLRA): P Lat: 36.3272	21203	Long: <u>-77.64695998</u>	Datum: WGS 1984
Soil Map Unit Name: Goldsboro fine sandy loam, 0 to 2 percent	t slopes	NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes 🔽	No (If no, explain in I	Remarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed?	Are "Normal Circumstances"	present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology natur	rally problematic?	(If needed, explain any answ	ers in Remarks.)

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

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No
Remarks:					
Upland point taken adjacent to agricultu	ral field				

HYDROLOGY

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

Sampling Point: WHLB050_u

, , 	<u></u>	-		
		Dominant In		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
3				Species Across All Strata: 2 (B)
	-			
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 50 (A/B)
6				
7.				Prevalence Index worksheet:
/:	0			Total % Cover of: Multiply by:
		= Total Cover	0	OBL species x 1 =
50% of total cover: 0	20% of	f total cover:		15 20
Sapling/Shrub Stratum (Plot size: 15)				FACW species $x = 20$
1				FAC species $x_3 = $
2				FACU species 40 x 4 = 160
				UPL species $0 x 5 = 0$
3				65 220
4				Column Totals: (A) (B)
5				2.20
				Prevalence Index = B/A =3.38
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				
9.	-			2 - Dominance Test is >50%
9	0			3 - Prevalence Index is ≤3.0 ¹
0		= Total Cover	0	4 - Morphological Adaptations ¹ (Provide supporting
50% of total cover:0	20% of	f total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size: 5)				. ,
1. Phleum pratense	25	Yes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
2. Paspalum distichum	15	Yes	FACW	
				¹ Indicators of hydric soil and wetland hydrology must
3. Amaranthus palmeri	10	No	FACU	be present, unless disturbed or problematic.
4. Rumex crispus	10	No	FAC	Definitions of Four Vegetation Strata:
5. Eupatorium capillifolium	5	No	FACU	Deminitions of Four Vegetation Grata.
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6				more in diameter at breast height (DBH), regardless of
7				height.
8				
9.		•		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1
				m) tall.
10				
11				Herb – All herbaceous (non-woody) plants, regardless
	65	= Total Cover		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 32.5		f total cover:		
Woody Vine Stratum (Plot size: 30)				Woody vine – All woody vines greater than 3.28 ft in
(i i i i i i i i i i i i i i i i i i i				height.
1				
2				
3			_	
4				Hydrophytic
5				Vegetation
	0	= Total Cover		Present? Yes No V
50% of total cover:0				
Remarks: (Include photo numbers here or on a separate s	heet.)			

Profile Desc	ription: (Describe to	the dept	n needed to docum	nent the inc	dicator o	or confirm	the absence	of indicato	rs.)	
Depth	Matrix			x Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture		Remarks	
0-12	10YR 4/2	100					CL			
										<u> </u>
¹ Type: $C = C_1$	oncentration, D=Deple	tion RM-F	Reduced Matrix MS	-Masked S	and Gra	ins	² Location: P	– Pore Linir	ng, M=Matrix.	
Hydric Soil									oblematic Hy	dric Soils ³ :
Histosol			Dark Surface	(97)					•	
	bipedon (A2)		Polyvalue Be		(S8) (M	DA 147	2 cm Muck (A10) (MLRA 147) 148) Coast Prairie Redox (A16)			<i>+(</i>)
Black Hi	• • • •		Thin Dark Su				140) <u> </u>	(MLRA 14	· · ·	
	n Sulfide (A4)		Loamy Gleye	+1, 140)	F	•	odplain Soils	(E19)		
	d Layers (A5)		Depleted Mat		(MLRA 136, 147)			(110)		
	ick (A10) (LRR N)		Redox Dark \$. ,			V	•	Dark Surface	(TF12)
	d Below Dark Surface	(A11)	Depleted Dar				n in Remarks)			
	ark Surface (A12)	(,,,,,)	Redox Depre		.,					
	lucky Mineral (S1) (LF		Iron-Mangan	• • •	(F12) (I	RR N				
	A 147, 148)	,	MLRA 13		(•••=) (•	,				
	Bleyed Matrix (S4)		Umbric Surfa		LRA 136	5, 122)	³ Ind	licators of hy	drophytic veg	etation and
	edox (S5)		Piedmont Flo	· /·					ogy must be p	
	Matrix (S6)		Red Parent N	•	. ,	•		•	ed or problem	
	Layer (if observed):				, (,	/ un			
Type:										
	-h).							Dueseuto	Vaa	
Depth (in	unes):						Hydric Soil	Present?	Yes	No
Remarks:										



Photo 1 Upland data point WHLB050_u facing northeast



Photo 2 Upland data point WHLB050_u facing southwest

WHLH010F_W

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SE Rehability City/County: Holitary Sampling Date: 7-9-14
Applicant/Owner: Dom Mon
Investigator(s): DAUEST Section, Township, Range:
Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): Lat: 36°18'51.089' Long: 77°39'11.472 Datum:
Soil Map Unit Name: Chewareach + Wehadkee bran NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area
Hydric Soil Present? Yes No within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks:
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1)
High Water Table (A2) Marl Deposits (B15) (LRR U) Crainage 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)
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)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Hydrology present

Sampling Point: WHLH
Sampling Point: When W

· · · · · · · · · · · · · · · · · · ·	AL	Deriver	1. 1	De la contra de la
Tree Stratum (Plot size:		Dominant Species?		Dominance Test worksheet:
	7º Cover	Species?		Number of Dominant Species
1. Hear rubrum	32		FAC	That Are OBL, FACW, or FAC: (A)
2. I topic ampros styppe itua	20		FAC	
3. Quercus pagoga	15	N	FACW	Total Number of Dominant Species Across All Strata:
				opecies Across Air Strata.
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	70	= Total Cov	/er /	OBL species x 1 =
50% of total cover: 35	200/ -	total annes	14	FACW species x 2 =
	20% 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:	15	/	FILO	
1. Liquidambar Styriciflua	15		FAR	FACU species x 4 =
2. Oburnim nullim	15		NRI	UPL species x 5 =
	10		EAGUL	Column Totals: (A) (B)
3. Magnolia Orginiana	12	$\underline{\nabla}$	FACH	
4. Pener taola 5. Clethra alnidolia	5		FAL	Prevalence Index = B/A =
5 Clething almitolia	~		FACIN	
	\sim			Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	ZC	= Total Cov		=
27	10	= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 27	5 20% of	total cover	: ((
Herb Stratum (Plot size:)	-	/		¹ Indicators of hydric soil and wetland hydrology must
1. SEIFAUS CY DEFINUS	10	1/		be present, unless disturbed or problematic.
2. Billonsbiplinata				
	-d			Definitions of Four Vegetation Strata:
3. Cover infumescons	10	\rightarrow	FACU	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.
				inoight.
12	27			
1.	th	= Total Cov	ver // //	
50% of total cover: / (20% of	total cover	4.4	
Woody Vine Stratum (Plot size:)				
1				
2				
3				
4				
5				Hydrophytic A
		= Total Co	ver	Vegetation
E0% of total access				Present? Yes No
50% of total cover:		total cover	•	
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL	Sampling Point: WHLH V
Profile Description: (Describe to the depth needed to document the indicator or confir	m the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type ¹ Loc ²	Texture Remarks
0-8 WYR 4/2	Loron
8-16+ VYR44 104R416 >2 C M	loom
	· · · · · · · · · · · · · · · · · · ·
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,	
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B)
U Hydrogen Sulfide (A4)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
Image: Muck Presence (A8) (LRR U) Image: Redox Depressions (F8) Image: The Muck (A9) (LRR P, T) Image: Mari (F10) (LRR U)	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)
I cm Muck (A9) (LRR P, T) Image: Mari (F10) (LRR U) Image: Depleted Below Dark Surface (A11) Image: Depleted Ochric (F11) (MLRA 151)	Uner (Explain in Remarks)
Thick Dark Surface (A12)	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)	
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 1 Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (ML	전화 이 가 주요? 지난 그는 것 같은 것 같
Dark Surface (S7) (LRR P, S, T, U)	NA 149A, 1830, 183D)
Restrictive Layer (if observed):	
Туре:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
Depleted matrix w/11 surface	n 10" I soil
Surface	

whlh010f_w



WHLH010F_w – Facing North Forested Wetland



WHLH010F_w – Facing East Forested Wetland

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region $7 - 9 - 14$
	County: HALIFRY Sampling Date: WHLH
Applicant/Owner: Dominicant	State: Sampling Point:
	on, Township, Range: State Sampling Found
	relief (concave, convex, none):
	51.029Long: 77 39 12.064 Datum:
	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS - Attach site map showing sam	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Planted Pine plantatio	\mathcal{T}
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) Saturation (A3) High Water Table (A2) Hydrogen Sulfide Odor (0	
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2)	
Drift Deposits (B3)	-
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remark	ks) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	0
No hydrologe	j present.

VEGET

(EGETATION (Four Strata) – Use scientific na	mes of pl	ants.		Sampling Point:
		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1)		Species?	FAC	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				
7				Prevalence Index worksheet: Total % Cover of:Multiply by:
8	50			OBL species x1 =
		= Total Cov		FACW species x 2 =
50% of total cover: 75	- 20% of	f total cover	: 10	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	5	. /	FIAN	FACU species x 4 =
1. Knustaeda 2. Liquidanbar styracitus	-2-		Tre	UPL species x 5 =
3. The openca	5	\preceq	FAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				☐ 3 - Prevalence Index is ≤3.0 ¹
	_15	= Total Cov	/er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>てい</u>	20% of	f total cover	:3	
Herb Stratum (Plot size:) 1. Altyrium Blix - Simina		\checkmark	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Chaismanthim sessiliflorum		$\overline{\checkmark}$	FAC	Definitions of Four Vegetation Strata:
3. Phys copiling	5			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Rubus argutus	15		DACU	more in diameter at breast height (DBH), regardless of height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				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	HE			height.
12725	1			
50% of total cover:	20% 01	= Total Cov f total cover	100 -	
Woody Vine Stratum (Plot size:)		/		
1. Smilax retunditolia	(0)	V	FAC	
2			-	
3				
4.				
5				Under wheetla
	10	= Total Cov	ver	Hydrophytic Vegetation
50% of total cover: 5	20% 01	- Total cover	~	Present? Yes No

20% of total cover:

Remarks: (If observed, list morphological adaptations below).

50% of total cover:~____

K NO____

WHLHOLD

SOIL

DIL Profile Description: (Describe to the dept	h needed to document the indicator or confirm	Sampling Point: <u><u><u></u></u> <u><u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u></u></u>
Depth Matrix	Redox Features	the absence of indicators.
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture Remarks
Q-11 104R413		LORM
1-10 LOYRER	104R414 2	LOBM
0-17 104R1413		LOXM
		2
Type: C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all I		² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U	—
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T)	Redox Depressions (F8) Marl (F10) (LRR U)	Ury Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	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	
Stripped Matrix (S6)	I Anomalous Bright Loamy Solls (F2U) (MLK)	
Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U)	Anomalous Bright Loamy Soils (F20) (MLR/	(1407, 1000, 1000)
Dark Surface (S7) (LRR P, S, T, U)	Anomaious Bright Loamy Solis (F20) (MLRA	
Dark Surface (S7) (LRR P, S, T, U)		
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):		\sim
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:		Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Destrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Destrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Destrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Exerticative Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Exerticative Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Exerticative Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Destrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Destrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Destrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) strictive Layer (if observed): Type: Depth (inches):	- Noh	Hydric Soil Present? Yes No X

whlh010_u



WHLH010_u – Facing South Adjacent Upland



WHLH010_u – Facing West Adjacent Upland

whlh010



WHLH010 – Representative Wetland and Upland Soils

WETLAND DETERMINATION DATA	FORM – Atlantic and	Gulf Coastal Plain Region
Project/Site $A < P$		
Applicant/Owner_Dominion	City/County	Sampling Date: 9-2-15 State: NC Sampling Point: WHL GD 20 +
Investigator(s)	Section. Township, Range:	State De Sampling Point OFAL GODO T
	Local roliof (concerve, concerve)	V°-
Subregion (LRR or MLRA) Lat: Lat:	3080 Long	x, none): <u>Concrative</u> Slope (%): Datum: <u>()</u> 6520 Datum: <u>()</u> 6584
Soil Map Unit Name. Composed	tong:	<u>NWI classification</u> : PFD
Are climatic / hydrologic conditions on the site typical for this time of ye	ar? Yes X No	
Are Vegetation Soil or Hydrology significantly	/	nal Circumstances" present? Yes No
Are Vegetation Soil or Hydrology naturally pr		explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing		
N		, , , , , , , , , , , , , , , , , , , ,
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No	Is the Sampled Area	
Wetland Hydrology Present? Yes No	within a Wetland?	Yes No
Remarks A OO Linea a	A.	
All three para	veles pres	sent
, , , , , , , , , , , , , , , , , , ,	,	
HYDROLOGY		
Wetland Hydrology Indicators:	· · · · · · · · · · · · · · · · · · ·	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1)	3)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Mart Deposits (B15		Drainage Patterns (B10)
Water Marks (B1)	dor (C1) eres along Living Roots (C3)	Moss Trim Lines (B16)
Sediment Deposits (B2)		Dry-Season Water Table (C2)
Drift Deposits (B3)	ion in Tilled Soils (C6)	Saturation Visible on Aerial Imagery (C9)
Algel Mat er Crust (B4)		Geomorphic Position (D2)
│	emarks)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)		FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present? Yes No Depth (inches)		
Water Table Present? Yes X No Depth (inches)	GA	
Saturation Present? Yes X No Depth (inches)	Sul duceWetland	Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if av	railable:
Remarks		
	0	\sim
Hydr	ology pr	8 A C IN T
$\langle \mathcal{Q} \rangle$	$a \gamma \varphi$	proceed
	\sim	

EGETATION (Four Strata) – Use scientific n	ames of pl	ants.		
ee Stratum (Plot size 30)		Dominant		Dominance Test worksheet:
	$\frac{\% \text{ Cover}}{20}$	Species?		Number of Dominant Species
ter rubrun			FAC	That Are OBL_FACW, or FAC (A)
Salix rigra	75	\sim	<u>GBL</u>	Total Number of Dominant
Fraxinus pensylsomicus	15	\checkmark	FACW	Species Across All Strata (B)
' <u>(</u>				Descent of Descent Courses of
				Percent of Dominant Species (A/B)
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	100	= Total Cov		OBL species x 1 =
50% of total cover				FACW species x 2 =
ing/Shrub Stratum (Plot size <u>SD</u>)	20% 01			FAC species x 3 =
	70		ADI	FACU species x 4 =
gales nym	- 40		OBL	UPL species x 5 =
picer rugnun	- 20		FAC	
in Odendown fulips fora	- 10		FACU	Column Totals: (A) (B)
1guilanlar stymeillua	20		FAC	Prevalence Index = B/A =
Maxinus pensignanice	_20_	\sim	FACW	Hydrophytic Vegetation Indicators:
V U				1 - Rapid Test for Hydrophytic Vegetation
				K =0
				2 - Dominance Test is >50%
	90	= Total Cov	er	3 - Prevalence Index is ≤3.0'
50% of total cover:				Problematic Hydrophytic Vegetation' (Explain)
<u>p Stratum</u> (Plot size:)	20% 01	total cover:		
	15		FACW	¹ Indicators of hydric soil and wetland hydrology must
Suncus effusus			·	
Importients chappenses	- 22		FACM	Definitions of Four Vegetation Strata:
(Awirdama Personk	-22		OBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Sharra Vinconnea	5		FACI	more in diameter at breast height (DBH), regardless of
Cover comosa	\underline{S}	<u> </u>	OBL	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
	-			or size, and woody plants less than 5.20 it tail
				Woody vine - All woody vines greater than 3.28 ft in
				height.
LI :	r	= Total Cov	113	
50% of total cover:	20% of	total cover:	10	
dy Vine Stratum (Plot size:)	1 .			
Loncora laponga	10	$\underline{\vee}$	FAC	
Smilox Astunditolus	-10	\sim	FAC	
Untis retunchifolia	10	./	FAC	
		<u> </u>		the descents of a
	37	Total Cove		Hydrophytic Vegetation
F00/ -(1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1			/	Present? Yes No
50% of total cover: 1		total cover:	<u> </u>	
narks (If observed, list morphological adaptations be	low).			

	ł	\mathcal{P}_{i}	FF.	LG
~				

			4DHLGC
SOIL			Sampling Point:
Profile Description: (Describe to the de Depth Matrix		licator or confirm t	he absence of indicators.)
Depth <u>Matrix</u> (inches) Color (moist) %	Color (moist) %	Type ¹ Loc ²	Texture Remarks
0-3 104R41/3	104R4/6 720	C M	Story open
3-16+ 104R4/1	INYR416 720	(m.PL	Loom
Type C=Concentration, D=Depletion, RM			
Hydric Soil Indicators: (Applicable to a			² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Histoc 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) 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)	Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (M Iron-Manganese Masses OA) Umbric Surface (F13) (LF	RR S, T, U) (LRR O) (LRR 151) (F12) (LRR O, P, T) R P, T, U) A 151) LRA 150A, 150B) s (F19) (MLRA 149/	wetland hydrology must be present unless disturbed or problematic.
Restrictive Layer (if observed): Type.			
Depth (inches):			Hydric Soil Present? Yes No
Remarks	Hydroz	Soi	present

WHLG020F_w



Wetland data point *WHLG020F_w* facing east



Wetland data point *WHLG020F_w* facing south

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Applicant/Owner Domison	county: HALLAX Sampling Date: 9-2-15
	State: <u>NC</u> Sampling Point: <u>DELC</u> 0 ZO
Subregion (LRR or MLRA):	relief (concave, convex, none): \underline{CDNUQX} Slope (%): $\underline{\Delta - 2}$ = $\underline{\Delta 8D}$ Long: 77, 6519 Datum: $\underline{\omega 2} \leq 84$
Soil Map Unit Name Cat Lat Lat	
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation Soil, or Hydrology significantly distur Are Vegetation Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS – Attach site map showing sam	ppling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks 0 0	
Not all three Down	rameters poesalt
R. Ola III	services s present
1 orecl (Existing) obvious	rise in topography from adjacent
wethan	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
U Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LBE	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRF	
Water Marks (B1)	
Sediment Deposits (B2)	
Drift Deposits (B3)	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remark	
Inundation Visible on Aerial Imagery (B7)	s) Shallow Aquitard (D3) FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches)	
Saturation Present? Yes No Depth (inches) (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	vious inspections), if available:
Remarks:	-
/	
	ydrology present

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

ree Stratum (Plot size 30)	Absolute	Dominant, Indicator	Sampling Point Dominance Test worksheet:
and a state of the		Species? Status	Number of Dominant Species
9/			That Are OBL. FACW, or FAC
			Fola Number of Dominant
			Percent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B)
			Prevalence Index worksheet:
			Total % Cover of:Multiply by:
		= Total Cover	OBL species × 1 =
50% of total cover.			FACW species x 2 =
pling/Shrub Stratum (Plot size)			FAC species x 3 =
Khus copalina	15	V UPL	FACU species x 4 =
1			UPL species x 5 =
			Column Totals: (A) (B)
			Prevalence Index = B/A =
	····· ································		Hydrophytic Vegetation Indicators:
			2 - Dominance Test is >50%
			$\square 3 - Prevalence Index is < 3.0^{1}$
	<u>_ (5</u> =	Total Cover 2	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	• <u>5</u> 20% of t	total cover:	
b Stratum (Plot size:)	15	-	¹ Indicators of hydric soil and wetland hydrology must
Cynodon datylon		FACU	be present, unless disturbed or problematic.
Juncus tenuis	- <u>70</u>	- FACU	Definitions of Four Vegetation Strata:
	- 40	V FIAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
Eurotonum capillifolium		FACU	more in diameter at breast height (DBH), regardless of
Holonium amarcum	_ 20_	V FACU	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.
	1075-	Total Cover	
50% of total cover: 👗	20% of to		
dy Vine Stratum (Plot size			
foncera japonica.	(0)	V FAC	
Parthonocissus amanda	lia 5	V FAC	
- •			
			Hydrophytic
	<u></u>	Total Cover	Vegetation X
50% of total cover:	.5 20% of to	otal cover:	Present? Yes No
narks (If observed, list morphological adaptations b			V

US Army Corps of Engineers

SOIL

WHLGO	DZD
Point:	

		Sampling Point:
Profile Description: (Describe to the dep Depth Matrix	th needed to document the indicator or confirm	the absence of indicators.)
Depth <u>Matrix</u> (inches) Color (moist) %	Redox Features	- .
D-16+ 104R413	Color (moist) % Type ¹ Loc ²	Remarks
		Sandy loram

Type C=Concentration D=Depletion DM		
Type C=Concentration, D=Depletion, RM= Hydric Soil Indicators: (Applicable to all I	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Histosol (A1)		Indicators for Problematic Hydric Soils ³ :
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (LRR S, T, U	
Black Histic (A3)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	Depleted Matrix (F3)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F6)	(MLRA 153B)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Red Parent Material (TF2)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, 1	
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	wetland hydrology must be present
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	unless disturbed or problematic.
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	۵۱
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	149A 153C 153D)
Dark Surface (S7) (LRR P, S, T, U)		(1430, 1330, 1330)
estrictive Layer (if observed):		
Туре		. /
Depth (inches):		
emarks		Hydric Soil Present? Yes No
	No hype	
		TC Serel Broxant
		Q - court
		(

WHLG020_U



Upland data point *WHLG020_U* facing east



Upland data point *WHLG020_U* facing south

WHLG020 soils



Wetland/upland soils

WHLH009F_W
WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: <u>SE. Reliability</u> City/County: <u>AANFAY</u> Sampling Date: <u>7-9-14</u> Applicant/Owner: Dominion of City/County: <u>State:</u> NC Sampling Point: NH2 H
Investigator(s): DDUEST Section, Township, Range:
Landform (hillslope, terrace, etc.): <u>Boldow Mand</u> Local relief (concave, convex, none): <u>CONCAVE</u> Slope (%):
Subregion (LRR or MLRA): Lat: 36° 18' D'8.904 Long: 77' 39' 55.365 Datum:
Soil Map Unit Name: Chastorin + B165 \$15015 NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? Yes No within a Wetland? Yes No Wetland Hydrology Present? Yes No No No No No
Remarks: Staturated wetherd edge & larger swamp forest
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 Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)
Drift Deposits (B3)
Image: Algal Mat or Crust (B4) Image: Thin Muck Surface (C7) Image: Crust (B4) Image: Crust (B4) Image: Iron Deposits (B5) Image: Other (Explain in Remarks) Image: Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)
Field Observations:
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Obviores hydric soils

Sampling Point: _____

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

		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Proves tareda	The second		FACIN	That Are OBL, FACW, or FAC: (A)
2. Quercus pagoda	15	$-\psi \neq$	FACI	/ Total Number of Dominant
3. Decorcus michauzi	5		TICK	Species Across All Strata: (B)
4. Liquidambar syme Plua	-12-		FAC	Percent of Dominant Species (777)
5. Hex opaca 1	15	V	FAC	That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7	<u> </u>			o e e sen alesta en alesta en el entre de entre a sen alesta en el entre en el entre en el entre en el entre en
8	-00			Total % Cover of: Multiply by:
	CO	= Total Cov	er , /	OBL species x 1 =
50% of total cover:	20% of	total cover:	16	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		/		FAC species x 3 =
1. Liquidam Orare Stymachtuca	15	N	FAC	FACU species x 4 =
2. Per rubrum	15	1	FAC	UPL species x 5 =
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7				
				2 - Dominance Test is >50%
8	30	= Total Cov	or /	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 15	20%	- Total cover	10	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size:)	20% 0	total cover.	<u> </u>	
1. Houndinesta monton	25	\checkmark	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Woodwardia hereokita	F		10BI	
	<u> </u>		_0.01	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				neight.
6				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	_30	= Total Cov	er A	
50% of total cover: _[5	20% of	f total cover:	10	
Woody Vine Stratum (Plot size:)			4	
1				
2				
3				
4				
5				
		= Total Cov	er	Hydrophytic X
50% of total cover:				Present? Yes No
Remarks: (If observed, list morphological adaptations belo	and the second second		·	

SOIL

S	14	LH	009

Sampling Point:

Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix Redox Features (inches) Color (moist) % Type ¹ Loc ²	Texture Remarks
D-41 104R 3/2	Texture
4-9 10YR #12 10YR 1/6 2	
9-17-104R5/2_104R416715	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	² Location: PL=Pore Lining, M=Matrix. 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) Black Histic (A3) Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20) (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) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U)	Ury Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)	 T) ³Indicators of hydrophytic vegetation and wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):	
Type:	N
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
	\cap
Acadric soil presen	X
	5

whlh009f_w



WHLH009F_w – Facing North Forested Wetland



WHLH009F_w – Facing East Forested Wetland

7-9-2014
WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region WHLH 009
Project/Site: Se Retrabulity City/County: Att FAS Sampling Date:
Applicant/Owner: Dominican State: MC Sampling Point:
Investigator(s):Section, Township, Range:
Landform (hillslope, terrace, etc.):
Subregion (LRR or MLRA): Lat: 3618'08.27Qong: 77° 39'55.73 (batum:
Soil Map Unit Name: Chastain & Bibb soils NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area
Hydric Soil Present? Yes No within a Wetland? Yes No
Wetland Hydrology Present? Yes No
Remarks: $() () () () () () () () () ($
Not all three parameters met.
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) Arr Deposits (B15) (LRR U) Drainage Patterns (B10) Mare Table (A2)
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)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
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? Yes No Depth (inches):
Water Table Present? Yes No X Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
No hydrology indicators present

EGETATION (Four Strata) – Use scientific na	mes of plants.		Sampling Point: WHLA C
	Absolute Dominant Ind	dicator	Dominance Test worksheet:
Tree_Stratum (Plot size:)	% Cover Species?		
1. Pinus taeda		AC	Number of Dominant Species
	22-1-1	-AC	That Are OBL, FACW, or FAC: (A)
2. Querans pagoda	ALS J t	ACW	
3. Linidendrontulipitera	TE	FACIL	Total Number of Dominant
	12	FIAC	Species Across All Strata:(B)
4. Liquidamenter styraciftua	13 V	FAC	Descent of Descinent Creation dia
5. 0 0			Percent of Dominant Species 82 (A/B)
			That Are OBL, FACW, or FAC: (A/B)
6		 	Developed to the back of the
7			Prevalence Index worksheet:
			Total % Cover of: Multiply by:
l.	-07		OBL species x 1 =
110	= Total Cover	1-7	
50% of total cover: -U-	5 20% of total cover:		FACW species x 2 =
			FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	10 10	- 1	
Sassafins a bidum	10 V. F	-ACU	FACU species x 4 =
Quercus niora	5 11	FAL	UPL species x 5 =
	->-4-1	IN	Column Totals: (A) (B)
Querans pagoda	t.	ALW	
DIDKONING INTERNICIMO	ド レ)	FOC	Drevelance laster Diff.
Diospyros virgeniana		FIS	Prevalence Index = B/A =
		T	Hydrophytic Vegetation Indicators:
•			
			1 - Rapid Test for Hydrophytic Vegetation
			2 - Dominance Test is >50%
			3 - Prevalence Index is ≤3.0 ¹
	25 = Total Cover		
17	- Total Cover	di l	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	2	
Herb Stratum (Plot size:)	~ /	-	
	70 - 1	FAX	¹ Indicators of hydric soil and wetland hydrology must
. Khuspalicons		FFL	be present, unless disturbed or problematic.
Arun anora acontea	IS VI	FAL	Definitions of Four Vegetation Strata:
Aruniana gigontea		11	
3			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
ł			more in diameter at breast height (DBH), regardless of
			height.
j			
3			Sapling/Shrub - Woody plants, excluding vines, less
			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
·			
3			Herb – All herbaceous (non-woody) plants, regardless
·			of size, and woody plants less than 3.28 ft tall.
0			Woody vine - All woody vines greater than 3.28 ft in
1			height.
2	7		
	55 = Total Cover	71	
50% of total cover: 7	5 20% of total cover:		
2	<u></u> 20% of total cover	<u> </u>	
Voody Vine Stratum (Plot size:())	1~ /.		
Im lax rotund tile	15 V.1	FAC	
Place di la	4~	FIAC	
. Thus sadicang	10 V	FAC	
·		1	
•			Hydrophytic (
	75		Vegetation
	= Total Cover	5	
50% of total cover:	20% of total cover:	$\mathbf{\mathcal{I}}$	Present? Yes No
	<u> </u>		
Remarks: (If observed, list morphological adaptations belo	w).		

SOIL

	1.14	PUT0
ampling Point:	WHLH	U'

SOIL	Sampling Point: NRLW
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	Remarks
0-2 107R312	Signaly loving
2-5 104R4/3	SL
5-10 IOYR 5/3	SL
10-12-104R5/4 A	
	200
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)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	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) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	(MLRA 153B) Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	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)	
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)	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)	
Dark Surface (S7) (LRR P, S, T, U)	,
Restrictive Layer (if observed):	
Туре:	57
Depth (inches):	Hydric Soil Present? Yes No X
Remarks:	
No hydric soil india	Are proposed
No regarde 200 more	mens provent

whlh009_u



WHLH009_u – Facing South Adjacent Upland



WHLH009_u – Facing West Adjacent Upland

whlh009



WHLH009 – Representative Wetland and Upland Soils

WHLH008F_W
7-9-14
WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: X Keltability City/County: HANTAX Sampling Date:
Applicant/Owner: DOMUNION O State: NC Sampling Point:
Investigator(s): Section, Township, Range:
Landform (hillslope, terrace, etc.): Clepsestion_ Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): Lat: 36°18'02.863 Long; 77°39'53, 404" Datum:
Soil Map Unit Name: Carolas Technologican Comotory Fine NWI classification: PFD
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area
Hydric Soil Present? Yes No within a Wetland? Yes No
Wetland Hydrology Present? Yes No Remarks: 0 0
Dorress wond forested wethend up frequent long
derection ponding
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)
Surface Water (A1)
High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10)
Saturation (A3)
Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Oxidized Rhizospheres along Living Roots (C4) Crayfish Burrows (C8)
Drift Deposits (B3)
Algal Mat or Crust (B4)
Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Hidrology present

Sampling Point: HLH 008

VEGETATION (Four	Strata) -	Use	scientific	names o	f plants.
------------------	-----------	-----	------------	---------	-----------

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Acer rubrum	20	\sim	FAL	That Are OBL, FACW, or FAC: (A)
2 1/1000 Contraction	10		FACH	
2. Ulmus americana			FILM	Total Number of Dominant
3. Liquidambor styraci Stus	[2		FAC	Species Across All Strata: (B)
4. Abraus lauritolia	15	V	FACW	
			TIOC	Percent of Dominant Species // M
5. Paperlus De Herdes			FAC	That Are OBL, FACW, or FAC: _/ OO (A/B)
6. Pines tae da	5		FAI	
				Prevalence Index worksheet:
/				Total % Cover of: Multiply by:
8				
	an.	= Total Cov		OBL species x 1 =
LI	10-		11	FACW species x 2 =
50% of total cover:	20% of	total cover:	10	
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
Sapling/Shrub Stratum (Plot size:) 1. Ouggette Cattor Cattor	10	1	FNU	FACU species x 4 =
	10	<u> </u>	FFRW	UPL species x 5 =
2. Liquidrum for sty paraluc	c 15		FAC	
3. Aco relorum	15	1	FAI	Column Totals: (A) (B)
	10		110	
4				Prevalence Index = B/A =
5	1470			Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				
	110	T 1 1 0		3 - Prevalence Index is ≤3.0 ¹
2.		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 21	20% of	total cover:	B	
Herb Stratum (Plot size:)		/		
	10	. /	OBI	Indicators of hydric soil and wetland hydrology must
1. Woodwardia accolata			and the second se	be present, unless disturbed or problematic.
2. Prundinarra gugantea	20	\checkmark	FACH	Definitions 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			13	height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				783 86 86 96
			10	760 K 2665 K 767 7678 86 960 981
8			13	Herb – All herbaceous (non-woody) plants, regardless
			13	Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				of size, and woody plants less than 3.28 ft tall.
9				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.
9 10 11				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. Woody vine – All woody vines greater than 3.28 ft in
9 10 11 12	35	Total Cov	er	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9 10 11	35	Total Cov	er	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	35	Total Cov	er	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	35	Total Cov	er_7	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	35	Total Cov	er	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	35	Total Cov	er_7	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	35 20% of 5	Total Cov	er_7	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	35 20% of 5	Total Cov	er_7	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	35 20% of	Total Cov	er_7	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
9	35 20% of	Total Cov	er_7	of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
9		= Total Cov total cover:	er Z 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
9	35 20% of 5	Total Cover:	er Z 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
9	35 20% of 5	= Total Cov total cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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
9	35 20% of 5 20% of	Total Cover:	er Z 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

SOIL		Sampling Point: VV HLH
0-3 104R4/3 3-7 104R5/1 10	Redox Features	Texture Remarks Smally forth Share for the state of th
 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) 		wetland hydrology must be present, unless disturbed or problematic.
Restrictive Layer (if observed): Type: Depth (inches):		Hydric Soil Present? Yes No
Remarks: Agent Se	rils present	

whlh008f_w



WHLH008F_w – Facing North Forested Wetland



WHLH008F_w – Facing East Forested Wetland

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Sc. Relichility City/Co	punty: 12A Sampling Date: 7-9-14					
Applicant/Owner: Dominvous	State: NC Sampling Point: WHLH 008					
	n, Township, Range:					
Subsection (I DD or MI DA)	relief (concave, convex, none):					
	1 2 2					
Soil Map Unit Name: 10motley fine standy 1079	-1					
Are climatic / hydrologic conditions on the site typical for this time of year? Ye						
Are Vegetation, Soil, or Hydrology significantly disturb	Ded? Are "Normal Circumstances" present? Yes Are No					
Are Vegetation, Soil, or Hydrology naturally problemation	tic? (If needed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No No	Is the Sampled Area within a Wetland? Yes No					
HYDROLOGY						
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2)						
Saturation (A3) Hydrogen Sulfide Odor (C Water Marks (B1) Oxidized Rhizospheres al						
Sediment Deposits (B2)						
Drift Deposits (B3)						
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)					
Iron Deposits (B5) Dther (Explain in Remarks	s) Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)					
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)					
Field Observations:						
Surface Water Present? Yes No Depth (inches):						
Water Table Present? Yes No Depth (inches):						
Saturation Present? Yes No/ Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	vious inspections), if available:					
Remarks:						
No hydrology in	dicators present					

WHLH 008 Sampling Point:

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Linns toreda	25	\checkmark	FAL	That Are OBL, FACW, or FAC: (A)
2. Acar rubrum	15	V.	FA1	<u> </u>
3. Liquedrambour styraciflue	21	1	FIAN	Total Number of Dominant
s. c. que de angles styl action	<u> </u>		TIC	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:
	70:	= Total Cov	/er í	OBL species x 1 =
50% of total cover:	~ ~ ~		1/ 1	FACW species x 2 =
	207001	total cover	· /	FAC species x 3 =
Sapling/Shrub Stratum, (Plot size:)	10	. 1.	EAL	FACU species x 4 =
1. feer rulrun	10	\rightarrow	1/10	UPL species x 5 =
2. Lipin Damber Styraciflue	15	<u>_/\</u>	FAC	Column Totals: (A) (B)
3. Uthus ameri early			FACW	
4. Quercus Jauri Folice	_5			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 $\leq 3.0^1$
	45	= Total Cov	ver A	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	Do For of	total cover	19	
Herb Stratum (Plot size:)	_ 3.00	lotal solution	74	
1. Rhus maliconso.	60	\checkmark	FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Smlax rotured. John	K		4 Pac	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				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				A CONTRACTOR A CONTRACTOR A
	65:	= Total Cov	/er	
50% of total cover: 72	and the second s	total cover	10	
Woody Vine Stratum (Plot size:		/		
1 Smilar stunditile	5		FAC	
2 Rhun Forducing	ID	1	FAL	
	-44			
3				
4				
5	-10-			Hydrophytic 1/
7/	-10:	= Total Cov	ver 7	Vegetation Present? Yes No
50% of total cover:	20% of	total cover	<u>د_</u> :	
Remarks: (If observed, list morphological adaptations below	ow).			

Profile Description: (Describe to the dep	th needed to document the indicator or confirm t	the absence of indica	tors.)
Depth <u>Matrix</u>	Redox Features		
(inches) Color (moist) %	Color (moist) % Type ¹ Loc ²	Texture	Remarks
0-1-10-11-13		Shadyh	ORM
7-12104144		SANDENC	nan
12-18-104R 3/2		SCL	
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 Probl	ematic Hydric Soi
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	
Black Histic (A3)	Loamy Mucky Mineral (F1) (LRR O)		(F18) (outside MLI
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)		plain Soils (F19) (L l
Stratified Layers (A5)	Depleted Matrix (F3)		ht 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 Mate	
Muck Presence (A8) (LRR U)	Redox Depressions (F8)		ark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A11)	Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151)	Uther (Explain in	i Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of h	ydrophytic vegetati
Coast Prairie Redox (A16) (MLRA 150/			ology must be pres
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)		bed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)		
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	A)	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA		
Dark Surface (S7) (LRR P, S, T, U)			
Restrictive Layer (if observed):		2 49500 - 12 - Calma - 1494594	
Туре:			
Depth (inches):		Hydric Soil Present?	Yes 1
Remarks:			
A 2 - /			
NOL	yoriz sol ind	hoft.	
10	Lour son wa	colors	prese
	0		(

SOIL

WHL 00 Sampling Point:

²Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils³:

Reduced Vertic (F18) (outside MLRA 150A,B)

Piedmont Floodplain Soils (F19) (LRR P, S, T)

³Indicators of hydrophytic vegetation and

wetland hydrology must be present, unless disturbed or problematic.

No

whlh008_u



WHLH008_u – Facing South Adjacent Upland



WHLH008_u – Facing West Adjacent Upland

whlh008



WHLH008 – Representative Wetland and Upland Soils

WH160122-W

WETLAND DETERMINATION DATA FO	DRM – Atlantic and Gulf Coastal Plain Region $-\gamma Z$
Project/Site:Ci	ity/County: Hale Ry Sampling Date: 7/00/14
Applicant/Owner: DOMMON	ity/County:
	ection, Township, Range:
Subregion (LRR or MLRA):	State State <th< td=""></th<>
Soil Map Unit Name: Tomothey fine smaly	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year	
	sturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally prob	
SUMMARY OF FINDINGS – Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Port located in cons pasty	L
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Image: Surface Water (A1) Image: Aquatic Fauna (B13) Image: High Water Table (A2) Image: Aquatic Fauna (B13)	
Saturation (A3)	
Water Marks (B1) Oxidized Rhizospher	es along Living Roots (C3)
Sediment Deposits (B2)	
Drift Deposits (B3)	F - X
Algal Mat or Crust (B4) Thin Muck Surface (Inon Deposits (B5) Other (Explain in Ref	
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 <u>No</u> Depth (inches):	amone
Water Table Present? Yes No A Depth (inches):	700 ** Wetland Hydrology Present? Yes X No
Saturation Present? Yes No Monomous Depth (inches): . (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos	
Remarks:	

WHLGORZE-W

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

/EGETATION (Four Strata) – Use scientific names of plants.				Sampling Point:			
		Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:	<u>50</u>)	% Cover					
	·				Number of Dominant Species That Are OBL, FACW, or FAC:(A)		
· · · · · · · · · · · · · · · · · · ·							
2					Total Number of Dominant		
3					Species Across All Strata: (B)		
4					Bereast of Deminant Species		
5					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/I	B)	
6						-,	
					Prevalence Index worksheet:		
7					Total % Cover of: Multiply by:		
8	······				OBL species x 1 =		
		=	= Total Cov	er			
	50% of total cover:	20% of	total cover:		FACW species x 2 =		
Sapling/Shrub Stratum (Plot s	ize: 50)				FAC species x 3 =		
e i					FACU species x 4 =		
	**************************************				UPL species x 5 =		
2					Column Totals: (A) (B	ŧ١	
3	••••••••••••••••••••••••••••••••••••••	<u></u>				·/	
4	······································				Prevalence Index = B/A =		
5					Hydrophytic Vegetation Indicators:	<u> </u>	
6							
7					1 - Rapid Test for Hydrophytic Vegetation		
					2 - Dominance Test is >50%		
8					3 - Prevalence Index is ≤3.0 ¹		
			= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)		
	50% of total cover:	20% of	total cover:	,			
Herb Stratum (Plot size:	<u></u>);				¹ Indicators of hydric soil and wetland hydrology must		
1. Decence Fest	uca privensis	40	\sim	FACE	be present, unless disturbed or problematic.		
	la nounborgen	1520	$\overline{}$	FACW	Definitions of Four Vegetation Strata:		
3. Junais ettosis		20	$\overline{}$	FACW	Bennitono or Four Vogstation ottata.		
C. Distance allow allow	-0.01			and the second se	Tree - Woody plants, excluding vines, 3 in. (7.6 cm)		
4. Dellenas Eupat				FAC	more in diameter at breast height (DBH), regardless of	of	
5. Della Boehr	nora cylinderica			FACE	height.		
6		. <u></u>			Sapling/Shrub - Woody plants, excluding vines, less	3	
7					than 3 in. DBH and greater than 3.28 ft (1 m) tall.		
8							
					Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.	s	
9					or size, and woody plants less than 5.20 it tall.		
10					Woody vine - All woody vines greater than 3.28 ft in	1	
11					height.		
12							
	0	_65_=	= Total Cov	er 🦯			
	50% of total cover: 22	5 20% of	total cover:	13			
Woody Vine Stratum (Plot siz		<u></u> ============					
1. 2000-	-						
······				<u></u>			
2							
3							
4							
5					Hydrophytic		
			= Total Cov	er	Vegetation		
	50% of total cover:				Present? Yes <u>X</u> No		
Demerker (Kataania Kataa			total cover.	·			
Remarks: (If observed, list mo	orphological adaptations belo	w).					

WHLGO122 - W

S	0	I	L

OIL								Sampling Point:
Profile Desc	cription: (Describe	to the dept	h needed to docun	nent the in	dicator	or confirm	the absence o	f indicators.)
Depth	Matrix	•		x Features				
(inches)	Color (moist)	%	Color (moist)		Type ¹	Loc ²	Texture	Remarks
0.8	2.5V 312	100					L	
7- 20	7.812311	90	8 BYR 416	10			Char	
2.10	<u></u>		<u> </u>		<u>(</u>	<u></u>	<u> </u>	· · · · · · · · · · · · · · · · · · ·
	······					- <u></u>	<u></u>	
	······································		·····			- <u></u>	<u></u>	ANANAN''''''''''''''''''''''''''''''''
						<u> </u>		
			······					
Type: C=C	oncentration, D=Depl	lation DM=	Peduced Matrix MS		Sand G	raine	² Location: E	PL=Pore Lining, M=Matrix.
	Indicators: (Applica					1 41115.		or Problematic Hydric Soils ³ :
					•		<u> </u>	
Histosol			Polyvalue Be					
	pipedon (A2) istic (A3)		Thin Dark Su	• •	-			uck (A10) (LRR S) d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleve			K U)	1 3	nt Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat	•	2)			ous Bright Loamy Soils (F20)
1	Bodies (A6) (LRR P,	ттп	Redox Dark S		3			A 153B)
	ucky Mineral (A7) (LF		Depleted Dark	•	,			rent Material (TF2)
	resence (A8) (LRR U		Redox Depre					allow Dark Surface (TF12)
	Jck (A9) (LRR P, T)	,	Marl (F10) (L		,			Explain in Remarks)
	d Below Dark Surface	⊳ (A11)	Depleted Oct			(51)		
=	ark Surface (A12)	- (AAA)	Iron-Mangan	• • •		•	r) ³ Indica	tors of hydrophytic vegetation and
	rairie Redox (A16) (N	AL RA 1504			• •	• • •		and hydrology must be present,
)mmm4	Aucky Mineral (S1) (L		Delta Ochric					ss disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver				unio	
<u> </u>	Redox (S5)		Piedmont Flo				Δ	
	Matrix (S6)						A 149A, 153C,	153D)
= · ·	irface (S7) (LRR P, S	. T. U)		angin Louin	,	(* =0) (***=*0	, ,	,
	Layer (if observed):						[
Type:								
							Hydric Soil F	Present? Yes <u> </u>
	ches):						Hyunc Son F	
Remarks:								

whlg012e_w



Wetland data point whlg012e_w facing east



Wetland data point whlg012e_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: SECA	City/County:	liko	Sa	mpling Date: 7/23/14
Applicant/Owner: Dominum		State:	NC Sar	mpling Point: whig012_u1
· · · · · · · · · · · · · · · · · · ·	Section, Township,			
		•		Slong (%): () = ?
Landform (hillslope, terrace, etc.): Sike Sope Lat: Schere Lat: Schere	17'SA 987	¹ ,	29' < 4 6	Stope (76)
Subregion (LRR or MLRA): Lat: <u>36</u> Soil Map Unit Name:	1 50.101	_ Long: _/	121.0	_/ Datum:
Are climatic / hydrologic conditions on the site typical for this time of ye				
Are Vegetation, Soil, or Hydrology significantly	disturbed? A	re "Normal Circum	stances" prese	ent? Yes <u> </u>
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (l	f needed, explain a	iny answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling poin	t locations, tra	ansects, in	portant features, etc.
Hydrophytic Vegetation Present? Yes No	In the Original	1 1 A		
Hydric Soil Present? Yes No	Is the Samp	led Area	Vaa	No
Wetland Hydrology Present? Yes No	within a we	tland?	Yes	
Remarks: Point 25 looked in con pushi	6°C 0			
HYDROLOGY				<u></u>
Wetland Hydrology Indicators:		Second	lary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		🔲 Sui	rface Soil Crac	жs (B6)
Surface Water (A1)	3)	Spa	arsely Vegetat	ed Concave Surface (B8)
High Water Table (A2)	5) (LRR U)		ainage Pattern	s (B10)
Saturation (A3)			ss Trim Lines	
	eres along Living Ro		/-Season Wate	. ,
Sediment Deposits (B2)			ayfish Burrows	• /
□ Drift Deposits (B3) □ Recent Iron Reduct □ Algal Mat or Crust (B4) □ Thin Muck Surface	tion in Tilled Soils (C	· · · · · · · · · · · · · · · · · · ·	omorphic Pos	e on Aerial Imagery (C9)
Iron Deposits (B5)			allow Aquitard	· ·
Inundation Visible on Aerial Imagery (B7)	,		C-Neutral Tes	
Water-Stained Leaves (B9)		🔲 Spl	hagnum moss	(D8) (LRR T, U)
Field Observations:	Berring			
Surface Water Present? Yes No Depth (inches Water Table Present? Yes No Depth (inches):			
Water Table Present? Yes No Depth (inches):			\checkmark
Saturation Present? Yes No Depth (inches):	Wetland Hydrolog	gy Present?	Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspecti	ons), if available:		
Remarks:				

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

Sampling Point: whig012_u1

	Absolute	Dominant Indica	ator Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Stat	tus Number of Dominant Species
1. <u><u><u>n</u></u><u>M</u><u>(</u></u>		<u> </u>	That Are OBL, FACW, or FAC:(A)
2	<u></u>		Total Number of Dominant
3			
4			
5			Fercent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
7		<u> </u>	Total % Cover of: Multiply by:
8		<u> </u>	OBL species x 1 =
		= Total Cover	EACW/species x2=
50% of total cover:	20% of	f total cover:	
Sapling/Shrub Stratum (Plot size: <u>36</u>)			FAC species x 3 =
1. <u></u>			FACU species x 4 =
2			UPL species x 5 =
3			Column Totals: (A) (B)
4			
5			
6			
7			
8		<u> </u>	3 - Prevalence Index is ≤3.0 ¹
	<u></u>	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	f total cover:	(
Herb Stratum (Plot size:)	1987 B. A.		¹ Indicators of hydric soil and wetland hydrology must
1. Degenero Festuca printensis	80	V FA	CU be present, unless disturbed or problematic.
2. My blaker unencon	Cart	F	ACV Definitions of Four Vegetation Strata:
3. Deckerklupatorium capillifoli	in S	FA	
4. Callo Cnidosculos stimulosos		FA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
			height.
5			·
6			
7			
8		<u> </u>	Herb All herbaceous (non-woody) plants, regardless
9		·····	of size, and woody plants less than 3.28 ft tall.
10			Woody vine – All woody vines greater than 3.28 ft in
11			
12			
9	055	= Total Cover	
50% of total cover: 45	~~~ ·	f total cover:	8
Woody Vine Stratum (Plot size:)	20 /0 0		
1. <u>04/2</u>	······	······	
2			
3		······	
4		<u></u>	
5		<u></u>	— Hydrophytic
		= Total Cover	Vegetation 🖉 🖌
50% of total cover:	20% 0	f total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo			
	•••.		

SOIL

Sampling Point: Whlg012_u1

Profile Desc	ription: (Describe t	to the depth i	needed to docun	nent the i	ndicator	or confirm	the absence of indi	cators.)	
Depth (inchos)	Matrix			< Features		1 2	Tauto	Demo	
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc ²	<u>Texture</u>	Remarks	
p-p-	<u> </u>								
<u>6° 10</u>	1046414		······						
<u></u>						<u></u>			
		<u> </u>		<u></u>	<u></u>				
									
	oncentration, D=Depl					ains.	² Location: PL=Pc		
	Indicators: (Applica	able to all LR					Indicators for Pro		Soils":
	• •		Polyvalue Be						
Black Hi	Dipedon (A2) stic (A3)		Thin Dark Su Loamy Mucky				2 cm Muck (A	tic (F18) (outside	MI RA 150A B)
	n Sulfide (A4)		Loamy Gleye			,		odplain Soils (F19	
	Layers (A5)		Depleted Mat		,			right Loamy Soils	
	Bodies (A6) (LRR P,		Redox Dark S				(MLRA 153	•	
	icky Mineral (A7) (LR		Depleted Dar				Red Parent M		
	esence (A8) (LRR U) ick (A9) (LRR P, T)) .	Redox Depre		8)			Dark Surface (TF n in Remarks)	12)
	Below Dark Surface	(A11)	Depleted Och		(MLRA 1	51)		II III Remains)	
	ark Surface (A12)		Iron-Mangan	• •	•	•	T) ³ Indicators o	of hydrophytic veg	etation and
Coast P	rairie Redox (A16) (N	ILRA 150A)	Umbric Surfa		• • •			drology must be	
	lucky Mineral (S1) (L	.RR 0, S)	Delta Ochric				unless dis	lurbed or problem	atic.
	Bleyed Matrix (S4)		Reduced Ver						
	Redox (S5) Matrix (S6)		Piedmont Flo				9A) A 149A, 153C, 153D	`	
	rface (S7) (LRR P, S	. T. U)		nynt Luar	ny oons (20) (111-10)		,	
	Layer (if observed):				<u> </u>		[
Туре:	-,								\mathbf{Y}
Depth (in	ches):						Hydric Soil Prese	nt? Yes	No
Remarks:									
· ·									

い花

whlg012_u1



Upland data point whlg012_u1 facing east



Upland data point whlg012_u1 facing north

whlg012 soils



Wetland/upland soils

	WALGORE.
Project/Site:	year? Yes No (If no, explain in Remarks.) ly disturbed? Are "Normal Circumstances" present? Yes No problematic? (If needed, explain any answers in Remarks.) ag sampling point locations, transects, important features, etc. Is the Sampled Area
Wetland Hydrology Present? Yes X No Remarks: Jangathe by CODS.	within a Wetland? Yes <u>V</u> No
Sediment Deposits (B2)	313) Sparsely Vegetated Concave Surface (B8) 15) (LRR U) Drainage Patterns (B10) 9 Odor (C1) Moss Trim Lines (B16) 9 odor (C1) Dry-Season Water Table (C2) 9 uced Iron (C4) Crayfish Burrows (C8) 9 uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) 9 ce (C7) Geomorphic Position (D2) 9 Remarks) Shallow Aquitard (D3) 9 FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water Table Present? Yes <u>No</u> Depth (inche Saturation Present? Yes <u>No</u> Depth (inche (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	es): <u>7/</u> Wetland Hydrology Present? Yes <u>X</u> No
Remarks: Hydrohogy pr	esent

WHL6012F-W

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

Sampling Point: _____

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
1. Punus Incele	10	. /	FAC	Number of Dominant Species (A)
				That Are OBL, FACVV, OF FAC: (A)
2. Loro dension palipitera		<u> </u>	FALV	Total Number of Dominant
3. ANN VUDAN	10	\sim	FAC	Species Across All Strata: (B)
4. Leber 1 dawn Jel Strace flat	10	$\overline{\nabla}$	FAC	
4. <u>226414681/22</u> Cy rest 1 400	<u> </u>		110	Percent of Dominant Species
5		<u></u>		That Are OBL, FACW, or FAC:/ (A/B)
6				· · · · ·
				Prevalence Index worksheet:
7		·		Total % Cover of: Multiply by:
8				
	40	= Total Cov	ver "	OBL species x 1 =
50% of total cover: 20	> 200/ 04	total cover	. 8	FACW species x 2 =
	20% 01		· <u> </u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	MILE?		CARI	
1. Quercus of 105	Z	\sim	FACW	FACU species x 4 =
2. Lundaghet structur	C.	$\overline{}$	FAC	UPL species x 5 =
	<u></u>			Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
β.				
0	10	<u> </u>	<u></u>	3 - Prevalence Index is ≤3.0 ¹
L		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:5	20% of	total cover		
Herb Stratum (Plot size:50 *)				
	1 Ber		FAC	¹ Indicators of hydric soil and wetland hydrology must
1. Zulula Vmilla				be present, unless disturbed or problematic.
2. Woodwardig uglada	5		DBL	Definitions of Four Vegetation Strata:
3. Kremma cyclindria		$\overline{}$	FACW	
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				
				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.				-
· L.	//A			
∩ €	<u></u>	= Total Cov	′ ^{er} 🗸	
50% of total cover:	∠_ 20% of	total cover	:	
Woody Vine Stratum (Plot size:		1		
	la		EAI	
	<u></u>		<u>- 1710</u>	
2. Journalism Radians	<u>(0</u>	$\underline{\sim}$	FAC	
3.				
4	<u></u>			
5				Hydrophytic
	20	= Total Cov	ver , ;	Vegetation V
50% of total cover: (D		total cover	6-1	Present? Yes No
			·	
Remarks: (If observed, list morphological adaptations belo	w).			

WHL6012F-W

SOIL								Sampling Point	::
Profile Desc	ription: (Describe	to the depti				or confirm	the absence of ir	ndicators.)	
Depth (inches)	<u>Matrix</u> Color (moist)		Redo Color (moist)	x Features		Loc ²	Touture	Demerica	
Art	1 6 1 1/2.	<u></u>			Type'	LOC	Texture	Remarks	
10-16	10.0 1.11		lon i de 10	· <u> </u>	P	M			**********
	TOTER		101R.5 R		<u> </u>	TOLC .	<u> </u>		
		<u> </u>				······································		······	
		<u> </u>					<u></u>		
<u></u>									
							······································	-	·
			·						
	oncentration, D=Depl					ains.		Pore Lining, M=Mat	
Histosol	ndicators: (Applica	able to all L	Polyvalue Be			DD C T III	<u> </u>	Problematic Hydric (A9) (LRR O)	3015 :
house	bipedon (A2)		Thin Dark Su					(A10) (LRR S)	
Black His			Loamy Muck	y Mineral (F	1) (LRF		Reduced V	ertic (F18) (outside	
	n Sulfide (A4) I Layers (A5)		Loamy Gleye	•	2)		1 1	Floodplain Soils (F19	
	Bodies (A6) (LRR P,	T. U)	Depleted Ma		5)		(MLRA 1	Bright Loamy Soils 53B)	(F20)
	icky Mineral (A7) (LR		Depleted Da	•			Red Paren	t Material (TF2)	
	esence (A8) (LRR U))			w Dark Surface (TF	12)
	ick (A9) (LRR P, T) I Below Dark Surface	e (A11)	Marl (F10) (L	•	MLRA 1	51)	Uther (Exp	lain in Remarks)	
	ark Surface (A12)	- (,	Iron-Mangan				r) ³ Indicator	s of hydrophytic veg	etation and
	airie Redox (A16) (N					, U)		hydrology must be I	
	lucky Mineral (S1) (L ileyed Matrix (S4)	.RR 0, S)	Delta Ochric			0A 150B)	unless c	listurbed or problem	atic.
	edox (S5)		Piedmont Flo)A)		
	Matrix (S6)		Anomalous E	Bright Loam	y Soils (F20) (MLRA	A 149A, 153C, 153	3D)	
	rface (S7) (LRR P, S _ayer (if observed):							- ·	
Type:									
	ches):						Hydric Soil Pre	sent? Yes 📈	No
Remarks:		*****		*					
		1		0		<i>.</i>			
		L.D	nz so-	iln	1.00	an st	*		
	ι	1.200		P	105	en			

whlg012f_w



Wetland data point whlg012f_w facing east



Wetland data point whlg012f_w facing south

WHLGORE 02

WETLAND DETERMINATION DATA	FORM – Atlant	ic and Gulf (Coastal Plain F	Region
Project/Site:	City/County:	lah base	Sam	7-23-014
Applicant/Owner:				ipling Point:
	Section, Township			-
Landform (hillslope, terrace, etc.): <u>Side slope</u> Subregion (LRR or MLRA): <u>Lat: 36°</u>	17'46-440	"Long: 77	39'56 DI	<u>'4</u> Datum:
Soil Map Unit Name: Tomothey Fine Sond	y loom		NWI classification	
Are climatic / hydrologic conditions on the site typical for this time of ye	\rightarrow \sim /			
Are Vegetation, Soil, or Hydrology significantly				
Are Vegetation, Soil, or Hydrology naturally pro			in any answers in I	
SUMMARY OF FINDINGS – Attach site map showing	y sampling poi	nt locations,	transects, im	portant features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sam within a We	pled Area etland?	Yes	NoX
Remarks: Sampling Point located in 10m	s pasture.	8		
HYDROLOGY				
Wetland Hydrology Indicators:		Sec		minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		🗛	Surface Soil Crack	1
Surface Water (A1)				ed Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15		H	Drainage Patterns Moss Trim Lines (
	eres along Living R	loots (C3)	Dry-Season Wate	
Sediment Deposits (B2)	ced Iron (C4)		Crayfish Burrows	(C8)
	tion in Tilled Soils (C6) 📙		on Aerial Imagery (C9)
Algal Mat or Crust (B4)		님	Geomorphic Posit	
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	(emarks)	H	Shallow Aquitard (FAC-Neutral Test	
Water-Stained Leaves (B9)			Sphagnum moss (
Field Observations:	1	<u></u>		
Surface Water Present? Yes No Depth (inches	1000000 OF CO 100			
Water Table Present? Yes No Depth (inches	~			Yes No
Saturation Present? Yes No Depth (inches (includes capillary fringe)	;):(&	Wetland Hydro	ology Present?	Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspect	ions), if availabl	e:	
Remarks:				
No hydrology prese	ent			

WHL6012 F-U2

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

Sampling Point: ____

- 70		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u><u></u>)</u>	% Cover	Species?	Status	Number of Dominant Species
				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3		<u></u>		Species Across All Strata: (B)
4				
5				Percent of Dominant Species (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Cov		FACW species x 2 =
50% of total cover:	20% of	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	anter alle	/		
1. Ligustron Sinsonse		$\underline{}$	FACU	FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4				December of Index - D/A -
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	A \$1000			\square 3 - Prevalence Index is $\leq 3.0^1$
· •		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>10</u>	20% of	total cover	:	
Herb Stratum (Plot size:)	_			¹ Indicators of hydric soil and wetland hydrology must
1. Dese grace Festuca protensis		<u> </u>	FACU	be present, unless disturbed or problematic.
2. Decenaria Chidosculus stimulosis	10		FACU	Definitions of Four Vegetation Strata:
3. Declarge Expectorium capillifolium	10		FACU	
4.	<u></u>			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
			<u> </u>	height.
5				-
6				Sapling/Shrub – Woody plants, excluding vines, less
7		<u></u>		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		<u></u>		Herb – All herbaceous (non-woody) plants, regardless
9	<u> </u>			of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	90	= Total Cov		
50% of total cover: ビイS	200/ of	f total cover	1 1	
	20% 01	IOIAI COVEI	•	
<u>Woody Vine Stratum</u> (Plot size:)				
1. <u>////////////////////////////////////</u>				
2			<u></u>	
3		. <u></u>	. <u></u>	
4			·····	
5				Hydrophytic
		= Total Cov	ver	Vegetation
50% of total cover:	20% of	f total cover		Present? Yes <u>No X</u>
Remarks: (If observed, list morphological adaptations belo				1

WHL6012F= 02

SOIL						Sampling Point:	
Profile Des	cription: (Describe t	to the depth	needed to docume	nt the indicator or confirm	the absence of Indi	cators.)	
Depth	Matrix		Redox	eatures			
(inches)	Color (moist)		Color (moist)	<u>% Type¹ Loc²</u>	Texture	Remarks	
() - &	10 Y & 2/2	100			_ <u></u>		
8-16	TOYR 4/4	100			La		
÷	<u></u>						
			<u> </u>				
*a					<u></u>		
					<u>,</u>		<u></u>
		<u> </u>					
	· ······		<u></u>				
				Masked Sand Grains.		ore Lining, M=Matr	
ydric Soil -	Indicators: (Applica	able to all LF			Indicators for Pro		Soils':
Histoso	· ·		-	w Surface (S8) (LRR S, T, U			
	pipedon (A2)			ace (S9) (LRR S, T, U)	2 cm Muck (A		
221 C	listic (A3)			Mineral (F1) (LRR O)		ic (F18) (outside l	
	en Sulfide (A4)		Loamy Gleyed			odplain Soils (F19)	
	d Layers (A5)	T 10	Depleted Matri Redox Dark Su	• •	Anomaious B	right Loamy Soils ((F20)
-	: Bodies (A6) (LRR P, ucky Mineral (A7) (LR		Depleted Dark	()	Red Parent N	•	
	resence (A8) (LRR U	· · ·	Redox Depress			Dark Surface (TF1	(2)
	uck (A9) (LRR P, T)	,	Marl (F10) (LR			n in Remarks)	
=	d Below Dark Surface	e (A11)		c (F11) (MLRA 151)		,	
Thick D	ark Surface (A12)	. ,	Iron-Manganes	e Masses (F12) (LRR O, P,	T) ³ Indicators o	f hydrophytic vege	tation and
Coast F	Prairie Redox (A16) (N	ILRA 150A)	Umbric Surface	e (F13) (LRR P, T, U)	wetland hy	drology must be p	resent,
	Mucky Mineral (S1) (L	.RR O, S)		17) (MLRA 151)		lurbed or problema	atic.
-	Gleyed Matrix (S4)			(F18) (MLRA 150A, 150B)			
	Redox (S5)			dplain Soils (F19) (MLRA 14			
	d Matrix (S6)	T 10	Anomalous Bri	ght Loamy Soils (F20) (MLR.	A 149A, 153C, 153D)	
	urface (S7) (LRR P, S Layer (if observed):			. <u></u>	T		
Type:			_				Χ
	nches):				Hydric Soil Prese	nt? Yes	<u> </u>
lemarks:							

whlg012f_u2



Upland data point whlg012f_u2 facing east



Upland data point whlg012f_u2 facing north

whlg012f soils



Wetland/upland soils

WH160122-W

WETLAND DETERMINATION DATA FO	DRM – Atlantic and Gulf Coastal Plain Region $-\gamma Z$
Project/Site:Ci	ty/County: Haleky Sampling Date: 7/00/14
Applicant/Owner: DONMON	ty/County:
	ection, Township, Range:
Subregion (LRR or MLRA):	bcal relief (concave, convex, none):
Soil Map Unit Name: Tomothey fine spray	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year	
	sturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally probl	
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: Port located in con pashy	1
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
□ Surface Water (A1) □ Aquatic Fauna (B13) □ High Water Table (A2) □ Marl Deposits (B15) (
Saturation (A3)	
Water Marks (B1) Oxidized Rhizospher	es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
Drift Deposits (B3)	5-7
Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface (C	
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 <u>No</u> Depth (inches):	anna the second
Water Table Present? Yes No _A Depth (inches): Saturation Present? Voc No	Wetland Hydrology Present? Yes No
Saturation Present? Yes No Monometry Depth (inches): (includes capillary fringe)	
Remarks:	
Tronging.	

WHLGORZE-W

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

VEGETATION (Four Stra	ata) – Use scientific nai	mes of pla	ants.		Sampling Point:	
		Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size:	<u>50</u>)	% Cover				
	·				Number of Dominant Species	0
· · · · · · · · · · · · · · · · · · ·						·,
2					Total Number of Dominant	
3					Species Across All Strata: (B	3)
4					Barcont of Dominant Species	
5					Percent of Dominant Species (A	VB)
6						,
					Prevalence Index worksheet:	
7					Total % Cover of: Multiply by:	
8					OBL species x 1 =	
		=	= Total Cov	er		
	50% of total cover:	20% of	total cover:		FACW species x 2 =	
Sapling/Shrub Stratum (Plot s	ize: 50)				FAC species x 3 =	
e i					FACU species x 4 =	
	**************************************				UPL species x 5 =	
2					Column Totals: (A) ('B)
3	••••••••••••••••••••••••••••••••••••••	<u></u>		<u></u>		-,
4	······································				Prevalence Index = B/A =	
5					Hydrophytic Vegetation Indicators:	
6						
7					1 - Rapid Test for Hydrophytic Vegetation	
					2 - Dominance Test is >50%	
8					3 - Prevalence Index is ≤3.0 ¹	
			= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)	
	50% of total cover:	20% of	total cover:	·		
Herb Stratum (Plot size:	<u></u>);				¹ Indicators of hydric soil and wetland hydrology mus	t
1. Decensor Fest	uca privensis	40	\sim	FACE	be present, unless disturbed or problematic.	~
	la nounborgen	1520	$\overline{}$	FACW	Definitions of Four Vegetation Strata:	
3. Junais ettosis		20	$\overline{}$	FACW	bennitens of Fear Fogetation et ala.	
C. Distance allow allow	-0.01				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)	
4. Dellenas Eupat				FAC	more in diameter at breast height (DBH), regardless	sof
5. Della Boehr	nora cylinderica			FACK	height.	
6		. <u></u>			Sapling/Shrub - Woody plants, excluding vines, les	ss
7					than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8						
					Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.	ess
9					of size, and woody plants less than 5.20 it tall.	
10					Woody vine - All woody vines greater than 3.28 ft i	n
11				<u> </u>	height.	
12				` 		
	0	=	= Total Cov	er 1		
	50% of total cover: 22	5 20% of	total cover:	13		
Woody Vine Stratum (Plot siz						
1. 2000-	-					
······						
2						
3			<u>,</u>			
4						
5					Hydrophytic	
			= Total Cov	er	Vegetation	
	50% of total cover:				Present? Yes X No	
Demerker (Kataania Kataa			total cover.	·	L	
Remarks: (If observed, list mo	orphological adaptations belo	w).				

WHLGO122 - W

S	0	I	L

OIL								Sampling Point:
Profile Desc	cription: (Describe	to the dept	h needed to docun	nent the in	dicator	or confirm	the absence o	f indicators.)
Depth	Matrix	•		x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0.8	2.5V 312	100					L	
7 - 31	7.812311	90	804A46	10			Char	
2.10	<u></u>		<u> </u>		<u> </u>	<u></u>	<u> </u>	····
	······					- <u></u>	<u></u>	
	······································		·····			- <u></u>	<u></u>	analasina
		·				<u> </u>		
			······	· · · · · · · · · · · · · · · · · · ·				
Type: C=C	oncentration, D=Depl	lation DM-	Peduced Matrix MS	-Macked	Sand G	raine	² Location: E	PL=Pore Lining, M=Matrix.
	Indicators: (Applica					1 41115.		or Problematic Hydric Soils ³ :
					•		<u> </u>	
Histosol			Polyvalue Be					
	pipedon (A2) istic (A3)		Thin Dark Su	• •	•			ick (A10) (LRR S) d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleve			K U)	1 3	t Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Mat	•	2)			bus Bright Loamy Soils (F20)
1	Bodies (A6) (LRR P,	ти	Redox Dark	• •	3)			A 153B)
	ucky Mineral (A7) (LF		Depleted Dark	•				ent Material (TF2)
	resence (A8) (LRR U		Redox Depre					allow Dark Surface (TF12)
	Jck (A9) (LRR P, T)	,	Marl (F10) (L	-	,			xplain in Remarks)
	d Below Dark Surface	⊳ (A11)	Depleted Oct	•		(51)		
=	ark Surface (A12)	- (****)	Iron-Mangan	• • •		•	r) ³ Indica	tors of hydrophytic vegetation and
	rairie Redox (A16) (N	AI RA 1504			• •	• • •		ind hydrology must be present,
)mmm	Aucky Mineral (S1) (L		Delta Ochric					is disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver				unio	
<u> </u>	Redox (S5)		Piedmont Flo				14	
7	Matrix (S6)						A 149A, 153C,	153D)
=	irface (S7) (LRR P, S	. T. U)		angin Louin	.,	(* =0) (***=*0	, ,	,
	Layer (if observed):						[
Type:								
	-h						Hydric Soil F	Present? Yes <u> </u>
	ches):						Hyunc Son F	
Remarks:								

whlg012e_w



Wetland data point whlg012e_w facing east



Wetland data point whlg012e_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: SEA	City/County:	liko	s	Sampling Date:	7/23/14
Applicant/Owner: Dominium		State:	NC s	ampling Point: W	/hlg012_u1
· · · · · · · · · · · · · · · · · · ·	Section, Township,				
		· · · · · · · · · · · · · · · · · · ·		Slong	(94) () - 2
Landform (hillslope, terrace, etc.): <u>Sike Slope</u> Subregion (LRR or MLRA): Lat: <u>Sco</u>	17'SA 987	$(1, 1)^{1}$	29' < 41	Slope	(78).
Subregion (LRR or MLRA): Lat: <u>36</u> Soil Map Unit Name: <u>Tosmotley</u> Jinu Snndy	1 50.101	Long:	21 2 1.4		/m:
Are climatic / hydrologic conditions on the site typical for this time of ye					p
Are Vegetation, Soil, or Hydrology significantly	disturbed? A	re "Normal Circum	istances" pre	esent? Yes 🖄	No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (I	f needed, explain a	any answers	in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling poin	it locations, tr	ansects, i	mportant fea	atures, etc.
Hydrophytic Vegetation Present? Yes No	In the One				
Hydric Soil Present? Yes No	Is the Samp	led Area	Vaa	_ No <u> </u>	
Wetland Hydrology Present? Yes No X	within a we	tland?	res	_ NO <u>/ / </u>	
Remarks: Point 15 looked in cow pushi	CC e				
HYDROLOGY		<u></u>			
Wetland Hydrology Indicators:		Second	dary Indicato	rs (minimum of t	<u>wo required)</u>
Primary Indicators (minimum of one is required; check all that apply)		🛄 Su	urface Soil Cr	acks (B6)	
Surface Water (A1)	3)	🔲 Sp	arsely Veget	tated Concave S	urface (B8)
High Water Table (A2)	i) (LRR U)		ainage Patte	rns (B10)	
Saturation (A3)			oss Trim Line		
	eres along Living Ro		-	ater Table (C2)	
Sediment Deposits (B2)			ayfish Burrov	• •	non: (CO)
□ Drift Deposits (B3) □ Recent Iron Reduct □ Algal Mat or Crust (B4) □ Thin Muck Surface	tion in Tilled Soils (C		eomorphic Po	ble on Aerial Ima	
Iron Deposits (B5)			allow Aquita		
Inundation Visible on Aerial Imagery (B7)	,		C-Neutral Te	· ·	
Water-Stained Leaves (B9)		🗖 Sp	hagnum mos	ss (D8) (LRR T,	U)
Field Observations:	Banyot-servorman.				
Surface Water Present? Yes No Depth (inches) Water Table Present? Yes No Depth (inches)):				
Water Table Present? Yes No Depth (inches)):				
Saturation Present? Yes No Depth (inches)):	Wetland Hydrolog	gy Present?	Yes	No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspecti	ons), if available:			
Remarks:					

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

Sampling Point: whig012_u1

	Absolute	Dominant Indica	ator Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species? Stat	tus Number of Dominant Species
1. <u><u><u>n</u></u><u>M</u><u>(</u></u>		<u> </u>	That Are OBL, FACW, or FAC:(A)
2	<u></u>		Total Number of Dominant
3			
4			
5			Fercent of Dominant Species
			That Are OBL, FACW, or FAC: (A/B)
6			Prevalence Index worksheet:
7		<u> </u>	Total % Cover of: Multiply by:
8		<u> </u>	OBL species x 1 =
		= Total Cover	EACW/species x2=
50% of total cover:	20% of	f total cover:	
Sapling/Shrub Stratum (Plot size: <u>36</u>)			FAC species x 3 =
1. <u></u>			FACU species x 4 =
2			UPL species x 5 =
3			Column Totals: (A) (B)
4			
5			
6			
7			
8		<u> </u>	3 - Prevalence Index is ≤3.0 ¹
	<u></u>	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	f total cover:	(
Herb Stratum (Plot size:)	1987 B. A.		¹ Indicators of hydric soil and wetland hydrology must
1. Degenero Festuca printensis	80	V FA	CU be present, unless disturbed or problematic.
2. My blaker unencon	Cart	F	ACV Definitions of Four Vegetation Strata:
3. Deckerklupatorium capillifoli	in S	FA	
4. Callo Cnidosculos stimulosos		FA	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
			height.
5			·
6			
7			
8		<u> </u>	Herb All herbaceous (non-woody) plants, regardless
9		·····	of size, and woody plants less than 3.28 ft tall.
10			Woody vine – All woody vines greater than 3.28 ft in
11			
12			
9	055	= Total Cover	
50% of total cover: 45	~~~ ·	f total cover:	8
Woody Vine Stratum (Plot size:)	20 /0 0		
1. <u>04/2</u>	······	······	
2			
3		······	
4		<u></u>	
5		<u></u>	— Hydrophytic
		= Total Cover	Vegetation 🖉 🖌
50% of total cover:	20% 0	f total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations belo			
	•••.		

SOIL

Sampling Point: Whlg012_u1

Profile Desc	ription: (Describe t	to the depth i	needed to docun	nent the i	ndicator	or confirm	the absence of indi	cators.)	
Depth (inchos)	Matrix			< Features		1 2	Tauto	Demo	
(inches)	Color (moist)		Color (moist)	%	Type ¹	_Loc ²	<u>Texture</u>	Remarks	
p-p-	<u> </u>								
<u>6° 10</u>	1046414		······						
<u></u>									
	<u></u>	<u> </u>		<u></u>	<u></u>				
									
	oncentration, D=Depl					ains.	² Location: PL=Pc		
	Indicators: (Applica	able to all LR					Indicators for Pro		Soils":
	• •		Polyvalue Be						
Black Hi	Dipedon (A2) stic (A3)		Thin Dark Su Loamy Mucky				2 cm Muck (A	tic (F18) (outside	MI RA 150A B)
	n Sulfide (A4)		Loamy Gleye			,		odplain Soils (F19	
	Layers (A5)		Depleted Mat		,			right Loamy Soils	
	Bodies (A6) (LRR P,		Redox Dark S				(MLRA 153	•	
	icky Mineral (A7) (LR		Depleted Dar				Red Parent M		
	esence (A8) (LRR U) Ick (A9) (LRR P, T)) .	Redox Depre		8)			Dark Surface (TF n in Remarks)	12)
	Below Dark Surface	(A11)	Depleted Och		(MLRA 1	51)		II III Remains)	
	ark Surface (A12)		Iron-Mangan	• •	•	•	T) ³ Indicators o	of hydrophytic veg	etation and
Coast P	rairie Redox (A16) (N	ILRA 150A)	Umbric Surfa		• • •			drology must be	
	lucky Mineral (S1) (L	.RR 0, S)	Delta Ochric				unless dis	lurbed or problem	atic.
	Bleyed Matrix (S4)		Reduced Ver						
	Redox (S5) Matrix (S6)		Piedmont Flo				9A) A 149A, 153C, 153D	,	
	rface (S7) (LRR P, S	. T. U)		nynt Luar	ny oons (20) (111-10)		,	
	Layer (if observed):				<u> </u>		[
Туре:	-,								\mathbf{Y}
Depth (in	ches):						Hydric Soil Prese	nt? Yes	No
Remarks:									
· ·									

い花

whlg012_u1



Upland data point whlg012_u1 facing east



Upland data point whlg012_u1 facing north

whlg012 soils



Wetland/upland soils

	WALGORE.
Project/Site:	year? Yes No (If no, explain in Remarks.) ly disturbed? Are "Normal Circumstances" present? Yes No problematic? (If needed, explain any answers in Remarks.) ag sampling point locations, transects, important features, etc. Is the Sampled Area
Wetland Hydrology Present? Yes X No Remarks: Jangathe by CODS.	within a Wetland? Yes <u>V</u> No
Sediment Deposits (B2)	313) Sparsely Vegetated Concave Surface (B8) 15) (LRR U) Drainage Patterns (B10) 9 Odor (C1) Moss Trim Lines (B16) 9 odor (C1) Dry-Season Water Table (C2) 9 uced Iron (C4) Crayfish Burrows (C8) 9 uction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) 9 ce (C7) Geomorphic Position (D2) 9 Remarks) Shallow Aquitard (D3) 9 FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Water Table Present? Yes <u>No</u> Depth (inche Saturation Present? Yes <u>No</u> Depth (inche (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial pho	es): <u>7/</u> Wetland Hydrology Present? Yes <u>X</u> No
Remarks: Hydrohogy pr	esent

WHL6012F-W

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

Sampling Point: _____

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		
1. Punus Incele	10	. /	FAC	Number of Dominant Species (A)
				That Are OBL, FACVV, OF FAC: (A)
2. Loro dension palipitera		<u> </u>	FALV	Total Number of Dominant
3. ANN VUDAN	10	\sim	FAC	Species Across All Strata: (B)
4. Leber 1 dawn Jel Strace flat	10	$\overline{\nabla}$	FAC	
4. <u>226414681/22</u> Cy rest 1 400	<u> </u>		110	Percent of Dominant Species
5		<u></u>		That Are OBL, FACW, or FAC:/ (A/B)
6				· · · · ·
				Prevalence Index worksheet:
7		·		Total % Cover of: Multiply by:
8				
	40	= Total Cov	ver "	OBL species x 1 =
50% of total cover: 20	> 200/ 04	total cover	. 8	FACW species x 2 =
	20% 01		· <u> </u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	MILE?		CARI	
1. Quercus of 105	Z	\sim	FACW	FACU species x 4 =
2. Lundaghet structur	C.	$\overline{}$	FAC	UPL species x 5 =
	<u></u>			Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
β.				
0	10	<u> </u>	<u></u>	3 - Prevalence Index is ≤3.0 ¹
L		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:5	20% of	total cover		
Herb Stratum (Plot size:50 *)				
	1 Ber		FAC	¹ Indicators of hydric soil and wetland hydrology must
1. Zulula Vmilla				be present, unless disturbed or problematic.
2. Woodwardig uglada	5		DBL	Definitions of Four Vegetation Strata:
3. Kremma cyclindria		$\overline{}$	FACW	
				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				
				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.				-
· L.	//A			
∩ €	<u></u>	= Total Cov	′ ^{er} 🗸	
50% of total cover:	∠ 20% of	total cover	:	
Woody Vine Stratum (Plot size:		1		
	la		EAI	
	<u></u>		<u>- 1710</u>	
2. Journalism Radians	<u>(0</u>	$\underline{\sim}$	FAC	
3.				
4	<u></u>			
5				Hydrophytic
	20	= Total Cov	ver i	Vegetation V
50% of total cover: (D		total cover	6-1	Present? Yes No
			·	
Remarks: (If observed, list morphological adaptations belo	w).			

WHL6012F-W

SOIL								Sampling Point	::
Profile Desc	ription: (Describe	to the depti				or confirm	the absence of ir	ndicators.)	
Depth (inches)	<u>Matrix</u> Color (moist)		Redo Color (moist)	x Features		Loc ²	Touture	Demerica	
Art	1 6 1 1/2.	<u></u>			Type'	LOC	Texture	Remarks	
10-16	10.0 1.11		lon i de 10	· <u> </u>	P	M			**********
	TOTER		101R.5 R		<u> </u>	TOLC .	<u> </u>		
		<u> </u>				······································		······	
		<u> </u>					<u></u>		
<u></u>									
							······································	-	·
			·						
	oncentration, D=Depl					ains.		Pore Lining, M=Mat	
Histosol	ndicators: (Applica	able to all L	Polyvalue Be			DD C T III	_	Problematic Hydric (A9) (LRR O)	3015 :
house	bipedon (A2)		Thin Dark Su					(A10) (LRR S)	
Black His			Loamy Muck	y Mineral (F	1) (LRF		Reduced V	ertic (F18) (outside	
	n Sulfide (A4) I Layers (A5)		Loamy Gleye	•	2)		1 1	Floodplain Soils (F19	
	Bodies (A6) (LRR P,	T. U)	Depleted Ma		5)		(MLRA 1	Bright Loamy Soils 53B)	(F20)
	icky Mineral (A7) (LR		Depleted Da	•			Red Paren	t Material (TF2)	
	esence (A8) (LRR U))			w Dark Surface (TF	12)
	ick (A9) (LRR P, T) I Below Dark Surface	e (A11)	Marl (F10) (L	•	MLRA 1	51)	Uther (Exp	lain in Remarks)	
	ark Surface (A12)	- ()	Iron-Mangan				r) ³ Indicator	s of hydrophytic veg	etation and
	airie Redox (A16) (N					, U)		hydrology must be I	
	lucky Mineral (S1) (L ileyed Matrix (S4)	.RR 0, S)	Delta Ochric			0A 150B)	unless c	listurbed or problem	atic.
	ledox (S5)		Piedmont Flo				A)		
	Matrix (S6)		Anomalous E	Bright Loam	y Soils (F20) (MLRA	A 149A, 153C, 153	3D)	
	rface (S7) (LRR P, S _ayer (if observed):							- ·	
Type:									
	ches):						Hydric Soil Pre	sent? Yes 📈	No
Remarks:		*****		*					
		1		0		<i>^</i>			
		L.D	nz so-	iln	100	an st	**		
	ι	1.200		P	105	en			

whlg012f_w



Wetland data point whlg012f_w facing east



Wetland data point whlg012f_w facing south

WHLGORE 02

WETLAND DETERMINATION DATA	FORM – Atlant	ic and Gulf (Coastal Plain F	Region
Project/Site:	City/County:	lah base	Sam	7-23-014
Applicant/Owner:				ipling Point:
	Section, Township			-
Landform (hillslope, terrace, etc.): <u>Side slope</u> Subregion (LRR or MLRA): <u>Lat: 36°</u>	17'46-440	"Long: 77	39'56 DI	<u>'4</u> Datum:
Soil Map Unit Name: Tomothey Fine Sond	y loom		NWI classification	
Are climatic / hydrologic conditions on the site typical for this time of ye	\rightarrow \sim /			
Are Vegetation, Soil, or Hydrology significantly				
Are Vegetation, Soil, or Hydrology naturally pro			in any answers in I	
SUMMARY OF FINDINGS – Attach site map showing	y sampling poi	nt locations,	transects, im	portant features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sam within a We	pled Area etland?	Yes	NoX
Remarks: Sampling Point located in 10m	s pasture.	8		
HYDROLOGY				
Wetland Hydrology Indicators:		Sec		minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		🗛	Surface Soil Crack	1
Surface Water (A1)				ed Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15		H	Drainage Patterns Moss Trim Lines (
	eres along Living R	loots (C3)	Dry-Season Wate	
Sediment Deposits (B2)	ced Iron (C4)		Crayfish Burrows	(C8)
	tion in Tilled Soils (C6) 📙		on Aerial Imagery (C9)
Algal Mat or Crust (B4)		님	Geomorphic Posit	
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)	(emarks)	H	Shallow Aquitard (FAC-Neutral Test	
Water-Stained Leaves (B9)			Sphagnum moss (
Field Observations:	1	<u></u>		
Surface Water Present? Yes No Depth (inches	1000000 OF CO 100			
Water Table Present? Yes No Depth (inches	~			Yes No
Saturation Present? Yes No Depth (inches (includes capillary fringe)	;):(&	Wetland Hydro	ology Present?	Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	os, previous inspect	ions), if availabl	e:	
Remarks:				
No hydrology prese	ent			

WHL6012 F-U2

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

Sampling Point: ____

- 70		Dominant		Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u><u></u>)</u>	% Cover	Species?	Status	Number of Dominant Species
				That Are OBL, FACW, or FAC: (A)
2				Total Number of Dominant
3		<u></u>		Species Across All Strata: (B)
4				
5				Percent of Dominant Species (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Cov		FACW species x 2 =
50% of total cover:	20% of	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	anter alle	/		
1. Ligustron Sinsonse		$\underline{}$	FACU	FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4				December of Index - D/A -
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	A \$1000			\square 3 - Prevalence Index is $\leq 3.0^1$
· •		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>10</u>	20% of	total cover	:	
Herb Stratum (Plot size:)	_			¹ Indicators of hydric soil and wetland hydrology must
1. Dese grace Festuca protensis		<u> </u>	FACU	be present, unless disturbed or problematic.
2. Decenaria Chidosculus stimulosis	10		FACU	Definitions of Four Vegetation Strata:
3. Declarge Expectorium capillifolium	10		FACU	
4.	<u></u>			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
			<u> </u>	height.
5				-
6				Sapling/Shrub – Woody plants, excluding vines, less
7		<u></u>		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		<u></u>		Herb – All herbaceous (non-woody) plants, regardless
9	<u> </u>			of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	90	= Total Cov		
50% of total cover: ビイS	200/ of	f total cover	1 1	
	20% 01	IOIAI COVEI	•	
<u>Woody Vine Stratum</u> (Plot size:)				
1. <u>////////////////////////////////////</u>				
2			<u></u>	
3		. <u></u>	. <u></u>	
4			·····	
5				Hydrophytic
		= Total Cov	ver	Vegetation
50% of total cover:	20% of	f total cover		Present? Yes <u>No X</u>
Remarks: (If observed, list morphological adaptations belo				1

WHL6012F= 02

SOIL						Sampling Point:	
Profile Des	cription: (Describe t	to the depth	needed to docume	nt the indicator or confirm	the absence of Indi	cators.)	
Depth	Matrix		Redox	eatures			
(inches)	Color (moist)		Color (moist)	<u>% Type¹ Loc²</u>	Texture	Remarks	
() - &	10 Y & 2/2	100			_ <u></u>		
8-16	TOYR 4/4	100			La		
÷	<u></u>						
			<u> </u>				
*a					<u></u>		
					<u>,</u>		<u></u>
		<u> </u>					
	· ······		<u></u>				
				Masked Sand Grains.		ore Lining, M=Matr	
ydric Soil -	Indicators: (Applica	able to all LF			Indicators for Pro		Soils':
Histoso	· ·		-	w Surface (S8) (LRR S, T, U			
	pipedon (A2)			ace (S9) (LRR S, T, U)	2 cm Muck (A		
21 C	listic (A3)			Mineral (F1) (LRR O)		ic (F18) (outside l	
	en Sulfide (A4)		Loamy Gleyed			odplain Soils (F19)	
	d Layers (A5)	T 10	Depleted Matri Redox Dark Su	• •	Anomaious B	right Loamy Soils ((F20)
-	: Bodies (A6) (LRR P, ucky Mineral (A7) (LR		Depleted Dark	()	Red Parent N	•	
	resence (A8) (LRR U	· · ·	Redox Depress			Dark Surface (TF1	(2)
	uck (A9) (LRR P, T)	,	Marl (F10) (LR			n in Remarks)	
=	d Below Dark Surface	e (A11)		c (F11) (MLRA 151)		,	
Thick D	ark Surface (A12)	. ,	Iron-Manganes	e Masses (F12) (LRR O, P,	T) ³ Indicators o	f hydrophytic vege	tation and
Coast F	Prairie Redox (A16) (N	ILRA 150A)	Umbric Surface	e (F13) (LRR P, T, U)	wetland hy	drology must be p	resent,
	Mucky Mineral (S1) (L	.RR O, S)		17) (MLRA 151)		lurbed or problema	atic.
-	Gleyed Matrix (S4)			(F18) (MLRA 150A, 150B)			
	Redox (S5)			dplain Soils (F19) (MLRA 14			
	d Matrix (S6)	T 10	Anomalous Bri	ght Loamy Soils (F20) (MLR.	A 149A, 153C, 153D)	
	urface (S7) (LRR P, S Layer (if observed):			. <u></u>	T		
Type:			_				Χ
	nches):				Hydric Soil Prese	nt? Yes	<u> </u>
lemarks:							

whlg012f_u2



Upland data point whlg012f_u2 facing east



Upland data point whlg012f_u2 facing north

whlg012f soils



Wetland/upland soils

WETLAND DETERMINATION DATA F	ORM – Atlantic and Gulf Coastal Plain Region 🔗 🚽 📖
Project/Site: $SERP$	City/County:
Applicant/Owner: Dominion	State: NY Sampling Date: 1440321
	Section, Township, Range: Sampling human
	Local relief (concave, convex, none): <u>C. 57/C.R. 20</u> Slope (%):
Subregion (LRR or MLRA):	7 /5.325 Long: 77 40 22,739 Datum:
Soil Map Unit Name: Rains	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of yea	
Are Vegetation, Soil, or Hydrology significantly of	
Are Vegetation, Soil, or Hydrology naturally prol	
Sommart of Findings – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Yes No	Is the Sampled Area within a Wetland? Yes <u>No</u>
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15)	
Saturation (A3)	
	res along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	
	on in Tilled Soils (C6)
Algal Mat or Crust (B4) Thin Muck Surface (Inon Deposits (B5) Other (Explain in Re	
Inundation Visible on Aerial Imagery (B7)	marks) A Shallow Aquitard (D3) A FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	s, previous inspections), if available:
Remarks:	\bigcap
L Dorlag.	present
hay a over a	present

WHLH032F Sampling Point: _____

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

Trop Stratum (Dist size)	Absolute			Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1. (nus tasace	% Cover	Species?	<u>Status</u>	Number of Dominant Species
2. Liper am bar styrnci Aluce	10	<u> </u>	FATC	That Are OBL, FACW, or FAC: (A)
3. NUSSA SVIVATICA	40		FAC	Total Number of Dominant
4. Acer EUDRUM	-12-		FAL	Species Across All Strata:(B)
4. <u>74 (6) 6 0 BICOFF (</u> 5.	10		FAC	Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7		<u> </u>		Total % Cover of:Multiply by:
8	97			OBL species x1 =
Lie		= Total Cov	101	1 1
50% of total cover: 10		total cover:	$\underline{(0)}$	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		\mathbf{A}	Eno	FAC species x 3 = FACU species x 4 =
1. Liquidamber Styreselflice		\rightarrow	FAC	UPL species x 4 = UPL species x 5 =
2. Aler rubnen	<u> </u>			Column Totals: (A) (B)
	·			(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	20			3 - Prevalence Index is ≤3.0 ¹
		= Total Cov	^{er} L/	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: / D	20% of	total cover:		
Herb Stratum (Plot size:) 1. OSmunda (confis	\varkappa	1/	r	¹ Indicators of hydric soil and wetland hydrology must
			<u> </u>	be present, unless disturbed or problematic.
				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				
	And Andrewson an	= Total Cov	er	
50% of total cover: 2.5	20% of	total cover:		
Woody Vine Stratum (Plot size:)	<u> </u>	1	T.	
1. Smilar rotundi tolla	2		FAC	
2. DIAB IDTUNCUI PATIA	<u> </u>		FAR	
3				
4		, .		
5	12			Hydrophytic (/
/ ·		Total Cove	er 🔤	Vegetation Present? Yes No
50% of total cover:		total cover:		
Remarks: (If observed, list morphological adaptations below	/).			

WALH032₽_ ____Sampling Point:_____

SOIL							Sampling Point:	
Profile Desc	cription: (Describe to	o the depth n	eeded to docum	ent the indicato	r or confirm	the absence	of indicators.)	
Depth	Matrix			— .	. .			
(inches)	<u>Color (moist)</u>		Color (moist)	<u>%</u> Type		Texture	Remarks	
$\varphi = \varphi_{m}$	FUNIO 21-		54R 4/4		m.	- Stanky	lotam	
6-17	IDYR STL	[0	YK 416	<u>75</u> <u>C</u>	\underline{rn}	SCL		
							····	

	oncentration, D=Deple	tion PM-Por	ducad Matrix MS			² Location:	PL=Pore Lining, M=Matri	~
	Indicators: (Applica		······································		stains.		for Problematic Hydric	
Histosol		۲		ow Surface (S8)	(LRR S. T. U)		Auck (A9) (LRR O)	
1 1 1	pipedon (A2)	Ì		face (S9) (LRR			Auck (A10) (LRR S)	
	istic (A3)	Į		Mineral (F1) (LF	RR O)		ed Vertic (F18) (outside I	
	en Sulfide (A4) d Layers (A5)	Ļ	Loamy Gleyed	• •			ont Floodplain Soils (F19)	• • • •
	Bodies (A6) (LRR P, 1	TUN T	Depleted Matr Redox Dark S	. ,			alous Bright Loamy Soils (RA 153B)	F20)
	ucky Mineral (A7) (LRI		Depleted Dark	• •			arent Material (TF2)	
	resence (A8) (LRR U)		Redox Depres	. ,		Uery S	hallow Dark Surface (TF1	2)
formers .	uck (A9) (LRR P, T)	ļ	Marl (F10) (LF			U Other	(Explain in Remarks)	
	d Below Dark Surface ark Surface (A12)	(A11) [ric (F11) (MLRA se Masses (F12		³ Indic	cators of hydrophytic vege	tation and
	rairie Redox (A16) (M	LRA 150A)		ce (F13) (LRR P,		•	land hydrology must be p	
APP PLIE	Mucky Mineral (S1) (LI			F17) (MLRA 151			ess disturbed or problema	
	Gleyed Matrix (S4)	ļ		ic (F18) (MLRA				
	Redox (S5) d Matrix (S6)	ł		odplain Soils (F1 right Loamy Soils			4620)	
	urface (S7) (LRR P, S ,	T. U)		light Loanty Solis		A 145M, 1550	, 1550)	
	Layer (if observed):	· ,						
Туре:			_					
Depth (in	iches):		_			Hydric Soil	Present? Yes	No
Remarks:						L		
		11	\cap	(1		\bigcap	
		61,0	kinz	Sal		020	entt	
		1 uge		0007				
		\sim			v			

whlh032f_w



Wetland data point whlh032f_w facing east



Wetland data point whlh032f_w facing south

WETLAND DETERMINATION DATA FO	DRM – Atlantic and Gulf Coastal Plain Region						
$\sim \sim \sim \sim$	Elizifiano 8-7-14						
Applicant/Owner: Dominican	ty/County: Sampling Date:						
NY	State: NC Sampling Point 04LH032 5						
	ection, Township, Range: ~ W						
Landform (hillslope, terrace, etc.):	n' 19 Scott - 773 / 10' 70 - 21 Slope (%):						
Subregion (LRR or MLRA): Lat: <u>%</u>	7'19.897 Long: 77° 40' 20,059 Datum:						
Soil Map Unit Name: RAINS	NWI classification:						
Are climatic / hydrologic conditions on the site typical for this time of year							
Are Vegetation, Soil, or Hydrology significantly dis							
Are Vegetation, Soil, or Hydrology naturally problem							
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: Young regenerating (Is the Sampled Area within a Wetland? Yes X No						
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)						
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (I Saturation (A3) Hydrogen Sulfide Odo Water Marks (B1) Oxidized Rhizosphere Sediment Deposits (B2) Presence of Reduced Drift Deposits (B3) Recent Iron Reduction Algal Mat or Crust (B4) Thin Muck Surface (C Iron Deposits (B5) Other (Explain in Rem Nundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Image: Sparsely Vegetated Concave Surface (B8) Image: Drainage Patterns (B10) Image: Sparsely Vegetated Concave Surface (B8) Image: Drainage Patterns (B10) Image: Sparsely Vegetated Concave Surface (B8) Image: Drainage Patterns (B10) Image: Sparsely Vegetated Concave Surface (B8) Image: Drainage Patterns (B10) I						
Field Observations:							
Surface Water Present? Yes No Depth (inches):							
Water Table Present? Yes No Depth (inches):							
Saturation Present? Yes No X Depth (inches): (includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks: Utgordoge	g present						

WHLH032S Sampling Point: _____ W

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

Tree Stratum (Plot size:)			t Indicator	Dominance Test worksheet:
			? <u>Status</u>	Number of Dominant Species
1	•			That Are OBL, FACW, or FAC: (A)
2		·····		Total Number of Dominant
3				Species Across All Strata:(B)
4			•	Percent of Dominant Species
5				That Are OBL, FACW, or FAC:
6			-	
7				Prevalence Index worksheet:
8				Total % Cover of:Multiply by:
		= Total Co	ver	OBL species x 1 =
50% of total cover:				FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1. Pinus taeda	47	$\langle \rangle$	FAC	FACU species x 4 =
2. Overaus nigra	58		TA(UPL species x 5 =
3. Magnolia Virgeniana	77	- \/		Column Totals: (A) (B)
4. Gelegniem confit bosum			EACN	
5. Cyrike Hacomillora	20		EACW	Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				\square 3 - Prevalence Index is ≤3.0 ¹
	100:	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>S</u>	20% of	total cover	:20	
Herb Stratum (Plot size:)				
1. Arundinary a Chanter	RA.		FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Ctethra Almostia	TX		FACIN	-
0	<u> </u>			Definitions of Four Vegetation Strata:
3			*****	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6	······································			Sapling/Shrub – Woody plants, excluding vines, less
7			Married Contractory of Contractory o	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	······			height.
	40=	Total Cov		
50% of total cover: 22				
Woody Vine Stratum (Plot size:	∠ 20% of I	total cover	: <u> </u>	
1 my/mx rotando ha	20	(Fine	
1. AMIME + OHENCADONA	$\underline{-\underline{-}}$.	<u> </u>	FAC	
2.	<u> </u>			
3				
4				
5	<u> </u>			Hydrophytic
	20=	Total Cov	er , ,	Vegetation
50% of total cover:		otal cover:	6	Present? Yes No
Remarks: (If observed, list morphological adaptations below				×
	.,.			

\mathcal{V}	HL	Н	0325
v			-w

301L				Sampling Point:
Profile Description: (Describe to the depth needed to docum	ent the indicator or	r confirm	the absence of ir	ndicators.)
Depth Matrix Redox	Features			
(inches) Color (moist) % Color (moist)	<u>% Type¹</u>	Loc ²	Texture	Remarks
0-5 104R 3/1		lon	m	
5-11 184R 5/2 184R 4/6	72		Stan Q. LOH	۵ <i>/</i>
[1-16+ 104R 5/1 104R 5/6	<u></u>	7	SFILLE IUNI	
1000000000000000000000000000000000000	<u>~</u>		<u>DCL</u>	
	······································			
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS:	Masked Sand Grair	ns.		Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherv	-			Problematic Hydric Soils ³ :
	ow Surface (S8) (LR			(A9) (LRR O)
	ace (S9) (LRR S, T,			(A10) (LRR S)
	Mineral (F1) (LRR C))		ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Stratified Layers (A5) Depleted Matri				loodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)			(MLRA 1	Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark				Material (TF2)
Muck Presence (A8) (LRR U)				w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Marl (F10) (LR				ain in Remarks)
	ic (F11) (MLRA 151			
Thick Dark Surface (A12)	se Masses (F12) (LF	R O, P, 1	F) ³ Indicators	s of hydrophytic vegetation and
	e (F13) (LRR P, T, L	1)		hydrology must be present,
	17) (MLRA 151)		unless d	isturbed or problematic.
	c (F18) (MLRA 150A			
	dplain Soils (F19) (N ght Loamy Soils (F2			
Dark Surface (S7) (LRR P, S, T, U)	grit Luarity Solis (F2		A 149A, 153C, 153	D)
Restrictive Layer (if observed):				
Туре:				\mathbf{N}
Depth (inches):				
Remarks:			Hydric Soil Pres	ent? Yes <u>/ No</u>
				\frown
)	×.	+
Mydric	sod	D	reser	\mathbf{Y}
\mathcal{O}	<u> </u>	(·

Wnah032s_w



Wetland data point wnah032s_w facing east



Wetland data point wnah32s_w facing south

Wnah032s_w soils



Wetland soils