WETLAND DETERMINATION DATA FOR	RM – Atlantic and Gulf Coastal Plain Region 😞 7-/ 🕹
Project/Site: SERP	County: Hall Hax Sampling Date: 3
Applicant/Owner: DOM (10.157)	Sampling Date: State: Sampling Point:
Investigator(s): DD WEST South	ter Terretic C
Landform (hillslope, terrace, etc.):	I relief (concave, convex, none): Slope (%):    5, 406 Long: 77 40 23, 234 Datum:
Subregion (LRR or MLRA):	16 4/16" 77" 4/17" 77 17"
Soil Map Unit Name:	
	NWI classification:
Are Vegetation Soil or Hydrology and Soil or Hydrology a significantly the	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur  Are Vegetation, Soil, or Hydrology naturally problems	atic? Are "Normal Circumstances" present? Yes No  No  Are "Normal Circumstances" present? Yes No  No
	, and the second
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes X No Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	
Not all three para	meters present
v ·	1
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)  Aquatic Fauna (B13)	Surface Soil Cracks (B6)
High Water Table (A2)  High Water Table (A2)  Marl Deposits (B15) (LRF	Sparsely Vegetated Concave Surface (B8)
Saturation (A3) Hydrogen Sulfide Odor (C	
☐ Water Marks (B1) ☐ Oxidized Rhizospheres al	
Sediment Deposits (B2)  Presence of Reduced Iron	
Drift Deposits (B3)	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surface (C7)	Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in Remark	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
Field Observations:	Sphagnum moss (D8) (LRR T, U)
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, prev	vious inspections), if available:
Remarks:	
1	
No high	rology present

WHLH032 -U

( Tar Tirata) Goo esterialio fiai	nes or p	iarito.		Sampling Point:
T 01 171	Absolute	Dominant	Indicator	Dominance Test worksheet: / /
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Porus tood 70	) RES		FAC	The Are ODI FACIAL FAC
2. Lypin Canber Styraci Plua	33		FAC	That Are OBL, FACW, or FAC: (A)
3.	40		THE	Total Number of Dominant
				Species Across All Strata: (B)
4				(6)
5				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
·-	00			
	70	= Total Cov	er ,	OBL species x 1 =
50% of total cover:	20% of	total cover	18	FACW species x 2 =
Casting/Charle Of the Inc.		/		FAC species x 3 =
1. Applicament Styraciffuce	27	./	FAC	
" LAGINGTON STYMAITING			1-HC	FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4	77.00			, , , , , , , , , , , , , , , , , , , ,
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
Q				2 - Dominance Test is >50%
8	7.6			☐ 3 - Prevalence Index is ≤3.01
1 22	10:	= Total Cove	er , 1	
50% of total cover:	20% of	total cover	4	Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size:	_ 2070 01	total cover.		
	5		FACI	1 Indicators of hydric soil and wetland hydrology must
1. Pteridium aguitinum	<u> </u>		FACI	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Sommans of Four Vegetation Strata.
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				^^
7				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Horb All borbonesses (new section )
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				or size, and woody plants less than 5.26 it tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				NUSCAC NO
	5 -	Total Cove		
50% -(1-1-1			1	
50% of total cover: 4.5	_ 20% of t	otal cover: _		
Woody Vine Stratum (Plot size:	_	/		
1. In lax volunditolia	2		FAC	
2.				
2		-		
3				
4				
5				
	5			Hydrophytic
~ ~ <sup>2</sup>		Total Cover	1	Vegetation
50% of total cover: <u>2 - 5</u>	_ 20% of to	otal cover: _		Present? Yes No No No
Remarks: (If observed, list morphological adaptations below	).			
	(C)			

WHLH032

SOIL

Sampling Point:	

Profile Description: (Describe to the depth	needed to docu	ment the in	ndicator	or confirm	the absence of in	dicators.)	
Depth Matrix	Red	ox Features					
(inches) Color (moist) %	Color (moist)	_ %	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks	
0-6 104R 4/2					SANGLO	Am	
6-16+104R5/3	(C)				SCL'		
							224 234 2
			7				
			W				
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ins.	<sup>2</sup> Location: PL=I	Pore Lining, M=Mat	riv
Hydric Soil Indicators: (Applicable to all Li	RRs, unless othe	rwise note	d.)			roblematic Hydric	
Histosol (A1)	Polyvalue Be	elow Surfac	e (S8) (LI	RR S, T, U	) _ 1 cm Muck	(A9) (LRR O)	
Histic Epipedon (A2)	Thin Dark St	urface (S9)	(LRR S, 1	r, u)		(A10) (LRR S)	
Black Histic (A3)	Loamy Muck			0)	Reduced Ve	ertic (F18) (outside	
Hydrogen Sulfide (A4) Stratified Layers (A5)	Loamy Gley		2)		Piedmont FI	loodplain Soils (F19	) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Depleted Ma		31			Bright Loamy Soils	(F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da				(MLRA 15		
Muck Presence (A8) (LRR U)	Redox Depre					Material (TF2) w Dark Surface (TF	12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (L		,			ain in Remarks)	12)
Depleted Below Dark Surface (A11)	Depleted Oc	hric (F11) (I				an in realitation	
Thick Dark Surface (A12)	Iron-Mangan	ese Masse	s (F12) (L	RR O, P, 1		of hydrophytic vege	
Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S)		ace (F13) (L	RR P, T,	U)		nydrology must be p	
Sandy Gleyed Matrix (S4)	Delta Ochric	(F17) (MLF	RA 151)	4.000	unless di	sturbed or problema	atic.
Sandy Redox (S5)	Reduced Ve						
Stripped Matrix (S6)					A 149A, 153C, 153I	ור	
Dark Surface (S7) (LRR P, S, T, U)			, (.	, (		-,	
Restrictive Layer (if observed):							
Туре:							~/
Depth (inches):	_				Hydric Soil Prese	ent? Yes	No X
Remarks:			7				
	Λ ^	1	27 3	0	1	)	
		O	lue	Soic	- Soil	Mins	1 the
			0		_	Y	ser 4
							1
							4
							1



Upland data point whlh032\_u facing east



Upland data point whlh032\_u facing north

## whlh032 soils



Wetland/upland soils

	FORM - Atlantic and Gulf Coastal Plain Region
Project/Site: SERP	City/County: Sampling Date:
Applicant/Owner: Dominion	State: N Sampling Roll HO32
Investigator(s): Dwest	Section, Township, Range:
Landform (hillslope, terrace, etc.): Depression	Local relief (concave, convex, none): (DNCAVE Slope (%):
Subregion (LRR or MLRA): Lat: 36 /	17 15.325 Long: 77 40 22.739" Datum:
Soil Map Unit Name: Rains	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantl	
Are Vegetation, Soil, or Hydrology naturally p	254, 447-100 MM 247-1
SUMMARY OF FINDINGS - Attach site map showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	Is the Sampled Area
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (B	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Harl Deposits (B1	
Saturation (A3) Hydrogen Sulfide	
	pheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Redu  Recent Iron Redu	
Algal Mat or Crust (B4)  Thin Muck Surface	uction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)  De (C7)  Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inche	
Water Table Present?  Yes No Depth (inche Saturation Present?  Yes No Depth (inche Depth (i	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Remarks:	
Hydrologi	5 present

WHLH032f
Sampling Point: \_\_\_\_

T	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species	2 Status	Number of Dominant Species
1. Pinus tasake	70		FAC	That Are OBL, FACW, or FAC:(A)
2. Liger Oram born Styrner Pluce	20		FAC	T-1-1N
3. NUSSA SYLVATICA	15		M/	Total Number of Dominant Species Across All Strata: (B)
4. Acer Eubrum	15		FAC	Opedies Adoss All Strata.
5.				Percent of Dominant Species
				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8	0			Total % Cover of:Multiply by:
1.7	IU	= Total Co	ver	OBL species x 1 =
50% of total cover:		total cove	100	FACW species x 2 =
0 1 10 1 0 1	15	/		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:	100		FIRE	FACU species x 4 =
1. Liguidamber Styresulfuce	470		PAC	
2. Hear rubnum				NAME OF THE PROPERTY OF THE PR
3				Column Totals: (A) (B)
4				Provelence Index - D/A -
5				Prevalence Index = B/A =
6	Andrew Commence			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	50			☐ 3 - Prevalence Index is ≤3.01
	20	= Total Co	ver / /	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover	: -/	Troblemation yurophytic vegetation (Explain)
Herb Stratum (Plot size:)	_ ,	,		10 10 10 10 10 10 10 10 10 10 10 10 10 1
1. Osmunda regulis	K		1	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				
				Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Carling (Chauth Meadantana L. III
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				than o in. BBT and greater than 3.20 it (1 iii) tail.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	5.	= Total Cov		
50% of total cover: 2.5				
Services of the Company of the Compa	20% of	total cover	:	
Woody Vine Stratum (Plot size:)			r- +	
1. Smilas rothing topia			FAC	
2. VITE TOTUNCI Rolla	_5_		FAC	
3				
4				
5.				
1779	10	T-1-10		Hydrophytic
C		Total Cov	)	Vegetation Present? Yes
50% of total cover:		total cover		100 NO
Remarks: (If observed, list morphological adaptations below	v).			

SOIL

DALHO	328-
0-7.	W
Sampling Point: _	

Profile Description: (Describe to the dep	th needed to document the indicator or confirm	the absence of indicators.)
DepthMatrix	Redox Features	** ***
(inches) Color (moist) %	Color (moist) % Type¹ Loc²	Texture Remarks
0-6,1041472	10484/4 72 CM	Standy lotten
6-14-10423/2	104R 4/6 75 C M	SCL
		· · · · · · · · · · · · · · · · · · ·
¹Type: C=Concentration D=Depletion PM	=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all		Indicators for Problematic Hydric Soils <sup>3</sup> :
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)	
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)	Redox Depressions (F8) Marl (F10) (LRR U)	
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	Cirier (Explain in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	T) <sup>3</sup> Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150		wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150B)	Anna mana
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	20 750
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLR	RA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):	<del>- 10-25</del>	
The state of the s		
Type:		Hydric Soil Present? Yes No
Depth (inches):		Hydric Soil Present? Tes No
Remarks:		<u> </u>
1		
[ct.	years soil p	122ent
0 %		2-0-4

# whlh032f\_w



Wetland data point whlh032f\_w facing east



Wetland data point whlh032f\_w facing south

WEILAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/County: HAITEX Sampling Date:
Applicant/Owner: Dominion State: NC Sampling Point OHLHO2
Investigator(s): Section, Township, Range:
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%):
Subregion (LRR or MLRA): Lat: 36° /7' 19, 897 Long: 77° 4/0' 70,059" Datum:
Soil Map Unit Name: 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 Vegetation, Soil, or Hydrology naturally problematic? ((If needed, explain any answers in Remarks.)
11 16 10 10 10 10 10 10 10 10 10 10 10 10 10
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No
Hydric Soil Present?  Yes No Within a Wetland?  Yes No
Wetland Hydrology Present? Yes No
remarks.
Young regenerating clear cut w/ planted pine
HYDROLOGY
Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Secondary indicators (minimum of two required)  Surface Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B13)  Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)
Saturation (A3)  Hydrogen Sulfide Odor (C1)  Moss Trim Lines (B16)
Water Marks (B1)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)
Drift Deposits (B3)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surface (C7)  Geomorphic Position (D2)
Iron Deposits (B5)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Hydrologic present
17 gordiege present

WHLH 0325 Sampling Point: \_\_\_\_\_ W

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:
2				
3				Total Number of Dominant
4				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:
				OBL species x 1 =
		= Total Co		FACW species x 2 =
50% of total cover:	20% of	total cover	:	FAC and a second
Sapling/Shrub Stratum (Plot size:)	117		1 .	FAC species x 3 =
1. Kinus taeda	40	/	FAC	FACU species x 4 =
2. Queran numa	20	. /	FAC	UPL species x 5 =
3. Magnolia virgeniana	10		FACW	Column Totals: (A) (B)
4. Voccinium corpubosaun	20			,,
5 Carlo Silver Brancosaw	13	$\overline{}$	FACW	Prevalence Index = B/A =
5. Cyrilke VACOMillora				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				
8				2 - Dominance Test is >50%
	100:	- T-4-1 C-		3 - Prevalence Index is ≤3.01
500 - 4. · · · · · · · · · · · · · · · · · ·	100:	= Total Cov	/er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 50%	20% of	total cover	20	E
Herb Stratum (Plot size:)	22	/	72	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Arundinagga Croponter	30	1/	FACW	be present, unless disturbed or problematic.
2. Ctothen Almostia	10	$\overline{}$	FACIN	Definitions of Four Vegetation Strata:
3			And the second second	Definitions of Four Vegetation Strata.
4				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	Silate Arrest Cella Silate			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9				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				57
	40=	Total Cov	er 🗸	
50% of total cover: 2	20% of	total cover:	" >	
Woody Vine Stratum (Plot size:	20 /0 01 1	iotal cover.		
1. Im ylax rotundola	71	1	Fine	
- amina onuavolla	20		PAC	
2				
3				
4				
5.				1 3
	20			Hydrophytic
(2)		Total Cov	<i>-1</i>	Vegetation Present? Yes No
50% of total cover: ( )		otal cover:		rieselltr res No
Remarks: (If observed, list morphological adaptations below	v).	3 1814-0		

SOIL

WHLH 0325 Sampling Point: \_\_\_\_\_\_\_

Profile Des	cription: (Describe to the de	pth needed to docum	ent the i	ndicator	or confirm	the absence of	of indicators.)
Depth (inches)	Matrix Color (moist) %		Features				210 0000
V-C	104R 3/1	Color (moist)	%	Type <sup>1</sup>	_Loc²	Texture	Remarks
2-11		101.0111			104		
71-11	104R 5/2	184R 416	76			sandy lo	AM
(1-16	109K 5/1	104R S/6	75			SCL.	
						· · · · · · · · · · · · · · · · · · ·	- Contraction
¹Type: C=C	oncentration, D=Depletion, RM	I=Reduced Matrix MS:		Sand Gra		2l ocation: I	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applicable to al	LRRs, unless otherv	vise note	ed.)	anto.		for Problematic Hydric Soils <sup>3</sup> :
☐ Histoso	I (A1)	Polyvalue Beld	w Surfac	ce (S8) (L	RR S, T, U		uck (A9) (LRR O)
	pipedon (A2)	Thin Dark Surf	face (S9)	(LRR S,	T, U)	2 cm Mi	uck (A10) (LRR S)
	listic (A3) en Sulfide (A4)	Loamy Mucky Loamy Gleyed			0)		d Vertic (F18) (outside MLRA 150A,B)
	d Layers (A5)	Depleted Matri		-2)		Anomal	nt Floodplain Soils (F19) (LRR P, S, T) ous Bright Loamy Soils (F20)
☐ Organic	Bodies (A6) (LRR P, T, U)	Redox Dark St		6)			A 153B)
	ucky Mineral (A7) (LRR P, T, U					Red Par	rent Material (TF2)
	resence (A8) (LRR U) uck (A9) (LRR P, T)	Redox Depres		3)			allow Dark Surface (TF12)
	d Below Dark Surface (A11)	Marl (F10) (LR Depleted Ochr		MI RA 15	(1)	Uther (E	Explain in Remarks)
Thick D	ark Surface (A12)	☐ Iron-Manganes				T) <sup>3</sup> Indica	tors of hydrophytic vegetation and
	rairie Redox (A16) (MLRA 150	<ul> <li>A)</li></ul>	e (F13) (I	LRR P, T,			and hydrology must be present.
	Mucky Mineral (S1) (LRR O, S) Gleyed Matrix (S4)					unles	ss disturbed or problematic.
	Redox (S5)	Reduced Vertic	c (F18) (I dolaio Sc	VILKA 150	DA, 150B) (MI DA 14)	9.4.\	
☐ Stripped	d Matrix (S6)					A 149A, 153C,	153D)
	rface (S7) (LRR P, S, T, U)						
	Layer (if observed):						\ .
Type:	ches):						X
Remarks:	cries).					Hydric Soil F	Present? Yes /\ No
ixemaiks.							
		11 0		- (			
		Hydric	/	-	() &	10 50	4
		rigaryc	2	CC	N (2	) Clase	
							1

## Wnah032s\_w



Wetland data point wnah032s\_w facing east



Wetland data point wnah32s\_w facing south

# Wnah032s\_w soils



Wetland soils

WETLAND DETERMINATION DATA FOR	RM – Atlantic and Gulf Coastal Plain Region 😞 7-/ 🕹
Project/Site: SERP	County: Hall Hax Sampling Date: 3
Applicant/Owner: DOM (10.157)	Sampling Date: State: Sampling Point:
Investigator(s): DD WEST South	ter Terretic C
Landform (hillslope, terrace, etc.):	I relief (concave, convex, none): Slope (%):    5, 406 Long: 77 40 23, 234 Datum:
Subregion (LRR or MLRA):	16 4/16" 77" 4/17" 77 17"
Soil Map Unit Name:	
	NWI classification:
Are Vegetation Soil or Hydrology and Soil or Hydrology a significantly the	(If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly distur  Are Vegetation, Soil, or Hydrology naturally problems	atic? Are "Normal Circumstances" present? Yes No  No  Are "Normal Circumstances" present? Yes No  No
	, and the second
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes X No Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks:	
Not all three para	meters present
v ·	1
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
Surface Water (A1)  Aquatic Fauna (B13)	Surface Soil Cracks (B6)
High Water Table (A2)  High Water Table (A2)  Marl Deposits (B15) (LRF	Sparsely Vegetated Concave Surface (B8)
Saturation (A3) Hydrogen Sulfide Odor (C	
☐ Water Marks (B1) ☐ Oxidized Rhizospheres al	
Sediment Deposits (B2)  Presence of Reduced Iron	
Drift Deposits (B3)	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surface (C7)	Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in Remark	
☐ Inundation Visible on Aerial Imagery (B7) ☐ Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
Field Observations:	Sphagnum moss (D8) (LRR T, U)
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, prev	vious inspections), if available:
Remarks:	
1	
No high	rology present

WHLH032 -U

( Tar Tirata) Goo esterialio fiai	nes or p	iarito.		Sampling Point:
T 01 171	Absolute	Dominant	Indicator	Dominance Test worksheet: / /
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Porus tood 70	) RES		FAC	The Are ODI FACIAL FAC
2. Lypin Canber Styraci Plua	33		FAC	That Are OBL, FACW, or FAC: (A)
3.	40		THE	Total Number of Dominant
				Species Across All Strata: (B)
4				(6)
5				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
·-	00			
	70	= Total Cov	er ,	OBL species x 1 =
50% of total cover:	20% of	total cover	18	FACW species x 2 =
Casting/Charle Of the Inch		/		FAC species x 3 =
1. Applicament Styraciffuce	27	./	FAC	
" LAGINGTON STYMAITING			1-HC	FACU species x 4 =
2				UPL species x 5 =
3				Column Totals: (A) (B)
4	77.00			, , , , , , , , , , , , , , , , , , , ,
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				
7				1 - Rapid Test for Hydrophytic Vegetation
Q				2 - Dominance Test is >50%
8	7.6			☐ 3 - Prevalence Index is ≤3.01
1 22	10:	= Total Cove	er , 1	
50% of total cover:	20% of	total cover	4	Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size:	_ 2070 01	total cover.		
	5		FACI	1 Indicators of hydric soil and wetland hydrology must
1. Pteridium aguitinum	<u> </u>		FAC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Deminitions of Four Vegetation Strata.
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				^^
7				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Horb All borbonous (non-monda) and man
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				or size, and woody plants less than 5.26 it tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				NUSCAC NO
	5 -	Total Cove		
50% -(1-1-1			1	
50% of total cover: 4.5	_ 20% of t	otal cover: _		
Woody Vine Stratum (Plot size:	_	/		
1. In lax volunditolia	2		FAC	
2.				
2		-		
3				
4				
5				\ /
	5			Hydrophytic
~ ~ <sup>2</sup>		Total Cover	1	Vegetation
50% of total cover: <u>2 - 5</u>	_ 20% of to	otal cover: _		Present? Yes No No No
Remarks: (If observed, list morphological adaptations below	).			
	(C)			

WHLH032

SOIL

Sampling Point:	

Profile Description: (Describe to the depth	needed to docu	ment the in	ndicator	or confirm	the absence of in	dicators.)	
Depth Matrix	Red	ox Features					
(inches) Color (moist) %	Color (moist)	_ %	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks	
0-6 104R 4/2					SANGLO	Am	
6-16+104R5/3	(C)				SCL'		
							224 234 2
			7				
			W				
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ins.	<sup>2</sup> Location: PL=I	Pore Lining, M=Mat	riv
Hydric Soil Indicators: (Applicable to all Li	RRs, unless othe	rwise note	d.)			roblematic Hydric	
Histosol (A1)	Polyvalue Be	elow Surfac	e (S8) (LI	RR S, T, U	) _ 1 cm Muck	(A9) (LRR O)	
Histic Epipedon (A2)	Thin Dark St	urface (S9)	(LRR S, 1	r, u)		(A10) (LRR S)	
Black Histic (A3)	Loamy Muck			0)	Reduced Ve	ertic (F18) (outside	
Hydrogen Sulfide (A4) Stratified Layers (A5)	Loamy Gley		2)		Piedmont FI	loodplain Soils (F19	) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Depleted Ma		31			Bright Loamy Soils	(F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da				(MLRA 15		
Muck Presence (A8) (LRR U)	Redox Depre					Material (TF2) w Dark Surface (TF	12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (L		,			ain in Remarks)	12)
Depleted Below Dark Surface (A11)	Depleted Oc	hric (F11) (I				an in realitation	
Thick Dark Surface (A12)	Iron-Mangan	ese Masse	s (F12) (L	RR O, P, 1		of hydrophytic vege	
Coast Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S)		ace (F13) (L	RR P, T,	U)		nydrology must be p	
Sandy Gleyed Matrix (S4)	Delta Ochric	(F17) (MLF	RA 151)	4.000	unless di	sturbed or problema	atic.
Sandy Redox (S5)	Reduced Ve						
Stripped Matrix (S6)					A 149A, 153C, 153I	ור	
Dark Surface (S7) (LRR P, S, T, U)			, (.	, (		-,	
Restrictive Layer (if observed):							
Туре:							~/
Depth (inches):	_				Hydric Soil Prese	ent? Yes	No X
Remarks:			7				
	Λ ^	1	27 3	0	1	)	
		O	lue	Soic	- Soil	Mins	1 the
			0		_	Y	ser 4
							1
							4
							1



Upland data point whlh032\_u facing east



Upland data point whlh032\_u facing north

## whlh032 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region 7 7 /
Project/Site: SERP City/County: HALTES Sampling Date: 1111
Applicant/Owner:
Investigator(s): Section, Township, Range:
Landform (hillslope, terrace, etc.): de pression Local relief (concave, convex, none): Concave Slope (%):
Subregion (LRR or MLRA): Lat: 36/1 // 634_ Long: (/ 40 28 (6) Datum:
Soil Map Unit Name: 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 Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  Is the Sampled Area within a Wetland?  Yes No
HYDROLOGY
Wolfond Hydrology Indiana
Primary Indicators (minimum of one is required; check all that apply)  Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B13)  Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)
□ Size Size Size Size Size Size Size Size
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) Secomorphic Position (D2)
Iron Deposits (B5)  Other (Explain in Remarks)  Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U)
Field Observations:
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:
Hydrology present

WHLHO31f\_

- Ose scientific ha	mes of pi	ants.		Sampling Point:
Trop Stratum (Diet sing.	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:	% Cover	Species?	Status	Number of Dominant Species
1. DUSSH SYLVATICA	30	11	FAC	That Are OBL, FACW, or FAC:(A)
2. Tarkes tagelos.	30 25	1/	FAC	<u></u>
3. Quercus alpa	25	1	FAXU	Total Number of Dominant
			IFLU	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:
	97			OBL species x 1 =
410		= Total Cov	761	
50% of total cover:	20% of	total cover:	10	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	<b>_</b>	, /		FAC species x 3 =
1. Vaccinius corymosom	15	01	FACE	FACU species x 4 =
2. Liginanter styraciffuc.	15		FAC	UPL species x 5 =
3.	10			Column Totals: (A) (B)
				(5)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6	ver vit reconstit			
7	(c)			1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
0	411			☐ 3 - Prevalence Index is ≤3.01
	70	= Total Cov	er 🗸	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 20	∠ 20% of	total cover:	_0_	
Herb Stratum (Plot size;)		,		, Indicators of hydric soil and wetland hydrology must
Herb Stratum (Plot size;  1. Wesmorth Joxens	10	1	FACU	be present, unless disturbed or problematic.
2. Woodwardie revertato	5	1/	1331	to protein, amost distarbed of problematic.
0			UUL	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.
				The state of the s
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		_		
	05	Total Cov	or .	
50% of total cover: 7.5			3	
A 2014는 그 보고 보다 보다 그 없는 사람들이 되었다. 그 사람들이 되었다면 보다 보다 되었다면 보다 되었다. 그 보다 보다 보다 보다 되었다면 보다 되었다면 보다 되었다.	20% of	total cover:		
Woody Vine Stratum (Plot size:	~	. /	22 -	
1. Vitis is punde tolla			HX	,
2				
3				
4				
-				4. 8
J		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Hydrophytic
	-حـ	Total Cove	er ,	Vegetation
50% of total cover:	20% of	total cover:		Present? Yes No
Remarks: (If observed, list morphological adaptations below	v).			
n den na sen research i référi de misseuré Authentique des records. Petrophologie (Paris Constitution (Par				
				12:

Profile Description: (Describe to the depth needed to document the indicator or co	onfirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type <sup>1</sup> Li	oc² Texture Remarks
<u>  6                                   </u>	8 Bregloun
6-10 104R412 104R414 72C 11	1 Signal loxin
10-16-104R5/2_ 104R5/675 C M	1 501
	<u> </u>
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)  Polyvalue Below Surface (S8) (LRR s	
Histic Epipedon (A2)  Black Histic (A3)  Thin Dark Surface (S9) (LRR S, T, U Loamy Mucky Mineral (F1) (LRR O)	
Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)	Reduced Vertic (F18) (outside MLRA 150A,B) Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	☐ Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	Uther (Explain in Remarks)
Thick Dark Surface (A12)  Iron-Manganese Masses (F12) (LRR	O, P, T) <sup>3</sup> Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 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,	
Sandy Redox (S5)  Piedmont Floodplain Soils (F19) (ML)	
☐ Stripped Matrix (S6) ☐ Anomalous Bright Loamy Soils (F20) ☐ Dark Surface (S7) (LRR P, S, T, U)	(MLRA 149A, 153C, 153D)
Restrictive Layer (if observed):	
Type:	h /
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	Hydric 30ii Fleseiit? Tes 40
Hydric 3	ere present
$\mathcal{O}$	~
Ţ.	

# whlh031f\_w



Wetland data point whlh031f\_w facing east



Wetland data point whlh031f\_w facing south

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
	County: Hall Sampling Date:
	State: Sampling Pdint: 140-31
	ion, Township, Range:
Landform (hillslope, terrace, etc.): hillslope	I,relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): Lat; 36.17	11.361 Long: 7740 29,1/2" Datum:
Soil Map Unit Name: RHINS	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	~ /
Are Vegetation, Soil, or Hydrology significantly distu	_
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sar	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X  No  Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	Willia Wedand
Remarks:	
HYDROLOGY	
	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:  Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)  Surface Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  High Water Table (A2)  Marl Deposits (B15) (LR	
Saturation (A3)  Hydrogen Sulfide Odor (	
Water Marks (B1) Oxidized Rhizospheres	
Sediment Deposits (B2)  Presence of Reduced Inc.	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remar	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
☐ Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	7/A-Call B B - C-1/A-1/A
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	X
Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Perceto	
Remarks:	
No 1	ydrology present
, ,	gr. c reggy / zaszay

WHLHO31

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator **Dominance Test worksheet:** Stratum (Plot size: % Cover Species? Status Number of Dominant Species wercus allon 40 That Are OBL, FACW, or FAC: 2. Fines teacher 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: OBL species = Total Cover \_\_\_\_\_ x 1 = \_\_\_\_ FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_ 50% of total cover: FAC species x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: (A) \_\_\_ Prevalence Index = B/A = \_\_\_ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 (OC) = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 50% of total cover: 20% of total cover: Herb Stratum (Plot size: <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1. Vaccinium Stominium 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. 10. Woody vine - All woody vines greater than 3.28 ft in = Total Cover 50% of total cover: 12. 20% of total cover: Hydrophytic 30 = Total Cover Vegetation Present? 50% of total cover: 20% of total cover: Remarks: (If observed, list morphological adaptations below).

WHLHD31

SOIL						Sampling Point:
		the depth needed to do	cument the	indicator	or confirm	n the absence of indicators.)
Depth (inches)	Matrix Color (moist)	% Color (moist)	edox Featur		12	T
1 5	104R4/Z	76 Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture Remarks
5-11	10110	INIAC	111 -			mucy Loren
16	1071573	104R S1	42	<u> </u>	ill	SANGIJOAN
						7.
		11				
			-			
						Andread Company of the state of
						ACART CO.
Type: C=C	oncentration, D=Depleti	on, RM=Reduced Matrix	. MS=Maske	d Sand Gr	ains	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
ydric Soil	Indicators: (Applicable	le to all LRRs, unless o	therwise no	ted.)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Below Surfa	10.000.00	RR S. T. U	_
	pipedon (A2)		Surface (S			2 cm Muck (A10) (LRR S)
	stic (A3)	Loamy M	ucky Mineral	(F1) (LRF		Reduced Vertic (F18) (outside MLRA 150A,
	en Sulfide (A4)	Loamy G	leyed Matrix	(F2)		Piedmont Floodplain Soils (F19) (LRR P, S,
	d Layers (A5)		Matrix (F3)			Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P, T,	이 - 4명	ark Surface (			(MLRA 153B)
Muck Pr	icky Mineral (A7) (LRR esence (A8) (LRR U)		Dark Surface epressions (F			Red Parent Material (TF2)
	ick (A9) (LRR P, T)		) (LRR U)	-8)		Very Shallow Dark Surface (TF12)
Deplete	Below Dark Surface (A		Ochric (F11)	(MI RA 1	51)	U Other (Explain in Remarks)
	ark Surface (A12)		ganese Mass			T) <sup>3</sup> Indicators of hydrophytic vegetation and
Coast P	rairie Redox (A16) (MLF	RA 150A) I Umbric S	urface (F13)			wetland hydrology must be present,
Sandy N	fucky Mineral (S1) (LRF		nric (F17) (M			unless disturbed or problematic.
	Sleyed Matrix (S4)		Vertic (F18)			
	ledox (S5)		Floodplain 8			
	Matrix (S6) rface (S7) (LRR P, S, T	☐ Anomalo	us Bright Loa	my Soils (I	-20) (MLR	A 149A, 153C, 153D)
	ayer (if observed):	, 0)				
Type:	auyor (ii observeu).					
Depth (inc	phos):					X
	nes).			w week	_	Hydric Soil Present? Yes No
emarks:	- 0	1 0		~	()	$\cap$
	0	s hydi	78 5	Ac	× ~	201045
	/	1 1900	( )		B	Daris
		$\circ$			,	



Upland data point whlh031\_u facing east



Upland data point whlh031\_u facing north

## whlh031 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region 7 – 14
0	Holler
Applicant/Owner: Domicion	State: Nampling Date: Sampling Point:
Investigator(s): DWEST Section	on, Township, Range:
70 11 1 11	relief (concave, convex, none): LONCKUL Slope (%):
	00.835 Long: 77° 10 38. Z17" Datum: -
Soil Map Unit Name: Chasham / Babb	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Y	. /
Are Vegetation, Soil, or Hydrology significantly distur	1
Are Vegetation, Soil, or Hydrology naturally problem.	
SUMMARY OF FINDINGS – Attach site map showing san	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland?
Wetland Hydrology Present? Yes No	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  High Water Table (A2)  Marl Deposits (B15) (LRI	R U) Prainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (	
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2)  Presence of Reduced Iro	
Drift Deposits (B3)  Recent Iron Reduction in	
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7) ☐ Iron Deposits (B5) ☐ Other (Explain in Remark	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 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	
garga, maning man, author photos, pro	noso mopositorioj, il atamasio.
Remarks:	
11 - 1	
A. 200 301	ROSANT
Hydro logy	1- 3319
2	

WHLHO30fw

VEGETATION (Four Strata) – Use scientific na	mes of pl	ants.		Sampling Point:
Trop Stratum (Blat size)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. Ligure Hamber Styrace / log.	% Cover	Species?	20 TO 10 TO	Number of Dominant Species
2. Holo inbrum.	30	$\rightarrow$	FAC	That Are OBL, FACW, or FAC: (A)
3			1 ACC	Total Number of Dominant
(4), ((4)), ((4))				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	1 1			OBL species x 1 =
20	1017	= Total Cov	, 7	FACW species x 2 =
50% of total cover:	20% of	total cover:		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	15	1/	24-1	FACU species x 4 =
1. Magnotic Vivernere	72	-4	FIL	UPL species x5 =
3. Ciberating redian	10		100	/Column Totals: (A) (B)
4. Por rulyzum	150	<del>-/-</del>	FALL	(b)
1-50			FAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	7/-			3 - Prevalence Index is ≤3.01
500 (111 27	15	= Total Cov	er /c-	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 3 7.	20% of	total cover:		34 SAN 150
1. Character (Plot size:)	18	: /	raa.	Indicators of hydric soil and wetland hydrology must
2. Chrex intermescens	10		FACE	be present, unless disturbed or problematic.
	<del></del>		FACIL	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 than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 3 m. DBH and greater than 3.26 it (1 m) tail.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12.	1	T. 1.0		
50% of total cover: 7.5		Total Cov		
Woody Vine Stratum (Plot size:	20% of	total cover:		
1 Sau las a retained Fall	15	. /	SIA	
2 ruses formations			Fric	
2.				
4				4
·	- 16	T-1-1-0		Hydrophytic
50% of total cover: 7.5		Total Cov	I	Vegetation Present? Yes No
		total cover:	_	
Remarks: (If observed, list morphological adaptations below	NJ.			

$\sim$	-			
•	( )	ш		
u	u		_	

WALHOJOF-W

Profile Des	cription: (Describe to the d	epth needed to document to	he indicator or confirm	the absence of indicators.)
Depth	Matrix	Redox Feat		
(inches)	Color (moist) %	Color (moist) %		<u>Texture</u> Remarks
0	104R3/1			SHARL LOWER
7-10	10 VR 5/2			
11 -11	+ INVIR EID	120111111111111111111111111111111111111	7 7 7 7 7	- 5 kars 10 m
10 16	JUNI Y	(DYR 4/67!	> CIN, PL	54
l	·			
25-1				
<del></del>				
¹Type: C=C	oncentration, D=Depletion, R	M=Reduced Matrix, MS=Mas	ked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
		all LRRs, unless otherwise r	noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol		Polyvalue Below Su	ırface (S8) (LRR S, T, U	I) 1 cm Muck (A9) (LRR O)
1	pipedon (A2)	Thin Dark Surface (	S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
	istic (A3)	Loamy Mucky Mine	ral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4) d Layers (A5)	Loamy Gleyed Matr		Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Bodies (A6) (LRR P, T, U)	Depleted Matrix (F3	5	Anomalous Bright Loamy Soils (F20)
5 cm Mu	ucky Mineral (A7) (LRR P, T,	U) Redox Dark Surface U) Depleted Dark Surface		(MLRA 153B)
Muck Pr	resence (A8) (LRR U)	Redox Depressions		Red Parent Material (TF2) Very Shallow Dark Surface (TF12)
1 cm Mu	uck (A9) (LRR P, T)	Marl (F10) (LRR U)		Other (Explain in Remarks)
Deplete	d Below Dark Surface (A11)	Depleted Ochric (F1		Concr (Explain in Nemarks)
	ark Surface (A12)	☐ Iron-Manganese Ma	sses (F12) (LRR O. P.	T) <sup>3</sup> Indicators of hydrophytic vegetation and
Coast P	rairie Redox (A16) (MLRA 15	(F1:	3) (LRR P, T, U)	wetland hydrology must be present,
Sandy N	Mucky Mineral (S1) (LRR O, S			unless disturbed or problematic.
	Gleyed Matrix (S4)		8) (MLRA 150A, 150B)	
	Redox (S5)		n Soils (F19) (MLRA 149	
	Matrix (S6) rface (S7) (LRR P, S, T, U)	Anomalous Bright L	oamy Soils (F20) (MLR)	A 149A, 153C, 153D)
Restrictive	Layer (if observed):			
Type:	aujoi (ii observeu).			
Depth (in	ahaa).			X
	cnes):			Hydric Soil Present? Yes No
Remarks:				
			0	
10		11	( )	
		ayenic	6-1	- 4
		C 19con (C	2001	1200 Der
		)		1

# whlh030f\_w



Wetland data point whlh030f\_w facing east



Wetland data point whlh030f\_w facing south

	ORM – Atlantic and Guff Coastal Plain Region	
Project/Site: SERP	City/County: HNIDAX Sampling Date:  State: PC Sampling Point HLHD	
Applicant/Owner: Domi'n 1051	State: PC Sampling Poin H/H/)=	
	Section, Township, Range:	
1 -11 1		
Subregion (LRR or MLRA): T Lat; Zo /	Local relief (concave, convex, none): Slope (%): 3 - 2	
Soil Map Unit Name: Chastnin Bibb	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 No		
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.		
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Yes X No No No No No No	Is the Sampled Area within a Wetland?  Yes No  White fors proserve	
HYDROLOGY		
Wetland Hydrology Indicators:	Considerable Barbard and Consideration Consi	
Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)	
Surface Water (A1)  Aquatic Fauna (B13)	Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)	
High Water Table (A2)  Marl Deposits (B15)		
Saturation (A3) Hydrogen Sulfide Oc	State	
Water Marks (B1)	res along Living Roots (C3) Dry-Season Water Table (C2)	
Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduce Recent Iron Reduction	= -,	
Algal Mat or Crust (B4)  Recent Iron Reduction  Recent Iron Reduction  Thin Muck Surface (i	on in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)	
Iron Deposits (B5)  Other (Explain in Re		
Inundation Visible on Aerial Imagery (B7)	marks) Shallow Aquitard (D3)  FAC-Neutral Test (D5)	
☐ Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)	
Field Observations:		
Surface Water Present? Yes No Depth (inches):		
Water Table Present? Yes No Depth (inches):		
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No	
Describe Recorded Data (stream gauge, monitoring well, aerial photos	, previous inspections), if available:	
Remarks:		
No hydrola	gy present	

WHLHO30

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator **Dominance Test worksheet:** % Cover Species? Status Number of Dominant Species That Are OBL, FACW, or FAC: **Total Number of Dominant** Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: 6. 7. Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_ 50% of total cover: \_\_\_\_ x 3 = \_\_ FAC species FACU species \_\_\_\_\_ x 4 = \_\_\_\_ UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) Prevalence Index = B/A = \_\_\_ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 50% of total cover: 2 20% of total cover: <sup>1</sup>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 = Total Cover 20% of total cover: Hydrophytic = Total Cover Vegetation Present? 50% of total cover:/ 20% of total cover: Remarks: (If observed, list morphological adaptations below).

WALHD30 Sampling Point: \_\_\_\_

SOIL

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) % Type¹ Loc²		
0-5 104R4/2	SANGLUCIAN	
5-16 104R5/3 104R5/42 C M	3WHO BANN	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)    Histosol (A1)   Polyvalue Below Surface (S8) (LRR S. T.	Indicators for Problematic Hydric Soils <sup>3</sup> :	
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)		
Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S) 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) Muck Presence (A8) (LRR U) Redox Depressions (F8)	Red Parent Material (TF2)	
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)  Redox Depressions (F8)  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	T, T) Indicators of hydrophytic vegetation and	
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,	
Sandy Mucky Mineral (S1) (LRR O, S)  Delta Ochric (F17) (MLRA 151)  Sandy Gleyed Matrix (S4)  Reduced Vertic (F18) (MLRA 150A, 150B	unless disturbed or problematic.	
Sandy Gleyed Matrix (S4)  Sandy Reduced Vertic (F18) (MLRA 150A, 150B  Piedmont Floodplain Soils (F19) (MLRA 1		
Stripped Matrix (S6)  Anomalous Bright Loamy Soils (F20) (MLRA)		
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Type:	<b>√</b> .	
Depth (inches):	Hydric Soil Present? Yes No	
Remarks:		
10		
No hydric soi		
Serve Jon	1 present	



Upland data point whlh030\_u facing east



Upland data point whlh030\_u facing north

### whlh030 soils



Wetland/upland soils

### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline		City/C	County: Halifax		Sampling Date: 2/7/2015		
Applicant/Owner: Dominion				State: NC	Sampling Point: whlb103f_w		
Investigator(s): TP, CR Section, Township, Range: No PLSS in this area							
Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): none Slo							
Subregion (LRR or MLRA): P	Lat	36.28120111	Long: -77.0	67812434	Datum: WGS 1984		
Soil Map Unit Name: Goldsboro fine sa	andy loam, 0 to	2 percent slopes		NWI classific	cation: PFO1C		
Are climatic / hydrologic conditions on	the site typical fo	or this time of year? Y	'es ✓ No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Normal	Circumstances"	present? Yes No		
Are Vegetation, Soil, or							
SUMMARY OF FINDINGS – A							
Hydrophytic Vegetation Present?	Yes ✓	No					
Hydric Soil Present?		No	Is the Sampled Area	V √	No		
Wetland Hydrology Present?		No	within a Wetland?	res	NO		
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:					ators (minimum of two required)		
Primary Indicators (minimum of one is	-			Surface Soil			
✓ 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)							
✓ Saturation (A3)  — Water Marks (B1)		Presence of Reduced		· <del></del>	, ,		
Sediment Deposits (B2)		Recent Iron Reduction		Dry-Season Water Table (C2) Crayfish Burrows (C8)			
Drift Deposits (B3)		Thin Muck Surface (0			isible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)		Other (Explain in Rer		Stunted or Stressed Plants (D1)			
Iron Deposits (B5)			,		Position (D2)		
Inundation Visible on Aerial Imag	jery (B7)			Shallow Aquitard (D3)			
Water-Stained Leaves (B9)				Microtopographic Relief (D4)			
Aquatic Fauna (B13)				✓ FAC-Neutra	l Test (D5)		
Field Observations:							
_		Depth (inches):	1				
		Depth (inches):	0		,		
Saturation Present? Yes_	✓ No	Depth (inches):	0 Wetland F	lydrology Prese	nt? Yes ✓ No		
(includes capillary fringe)  Describe Recorded Data (stream gau	ige, monitoring v	well, aerial photos, pre	vious inspections), if ava	ilable:			
, ,			, ,,				
Remarks:							
Wetland hydrology present							

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

Tree Stratum (Plot size:

Absolute

Dominant Indicator

Sampling Poir	nt: <u>whlb103f_v</u>	V
Dominance Test worksheet:		
Number of Dominant Species That Are OBL, FACW, or FAC:	3	(A

Total Number of Dominant Species Across All Strata:	3	(B)
Percent of Dominant Species	100	/ A /D

# That Are OBL, FACW, or FAC:

#### Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species \_ x 1 = 25 50 x 2 = **FACW** species 35 105 FAC species x 3 = 0 **FACU** species 0 0 **UPL** species x 5 = 60 155 Column Totals:

2.58 Prevalence Index = B/A =

#### **Hydrophytic Vegetation Indicators:**

- \_ 1 Rapid Test for Hydrophytic Vegetation
- ✓ 2 Dominance Test is >50%
- √ 3 Prevalence Index is ≤3.0¹
- 4 Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>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 or equal to 3.28 ft (1 m) tall.

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

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

Hydrophytic Vegetation Present?

Yes \_\_ ✓ No \_\_\_\_

Tree Stratum (Plot size:)			Status
1. Pinus taeda	30	Yes	FAC
2			
3.			
4			
5		-	
6			
7	30		
50% of total cover: 15		= Total Cover	_
15	20% of	total cover:	
Sapling/Shrub Stratum (Plot size:)	15	Yes	
1. Cyrilla racemiflora			FACW
2. Magnolia virginiana		Yes	FACW
3. Quercus nigra	5	No	FAC
4			
5			
6			
7			
8			
9			
	30	= Total Cover	
50% of total cover: 15		total cover:	6
Herb Stratum (Plot size:5 )	<del></del>		
1			
2		-	
3			
4			-
5			
6			
7			
8			
9			
10			
11			
	0	= Total Cover	
50% of total cover:0	20% of	total cover:	0
Woody Vine Stratum (Plot size:)			
1			
2			
3			
4			
5			
o	0 :	= Total Cover	
50% of total cover: 0			0
		iolai cuvei	
Remarks: (Include photo numbers here or on a separate s	neet.)		

Sampling Point: whlb103f\_w

	cription: (Describe t	o tne de				or confirm	the absence	e of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	S Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-12	10 YR 5/1	95	10 YR 5/6	5	C	PL	SC	Kemaks
					-	<del></del>		· -
								-
	· -						•	
								· -
<sup>1</sup> Type: C=C	Concentration, D=Depl	etion. RM	1=Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: F	PL=Pore Lining, M=Matrix.
	Indicators:	<del>5 (1 5 1 )   1   1   1   1   1   1   1   1   1</del>						cators for Problematic Hydric Soils <sup>3</sup> :
-			Dark Surface	(\$7)				· ·
Histoso				. ,	re (SS) /	/II D A 4.47		2 cm Muck (A10) <b>(MLRA 147)</b> Coast Prairie Redox (A16)
	pipedon (A2)		Polyvalue Be				140)	, ,
	listic (A3)		Thin Dark Su			147, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		(۲۷)		'	Piedmont Floodplain Soils (F19)
	ed Layers (A5)		✓ Depleted Mat		-0)		,	(MLRA 136, 147)
	uck (A10) (LRR N)	(0.4.4)	Redox Dark S	,	,			Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	(A11)	Depleted Dar				_ '	Other (Explain in Remarks)
	Park Surface (A12)		Redox Depre			(I DD 11		
	Mucky Mineral (S1) (L	RR N,	Iron-Mangan		es (F12) (	LRK N,		
	A 147, 148)		MLRA 13	•	<b></b>		3.	
	Gleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	d Matrix (S6)		Red Parent N	/laterial (F	21) <b>(MLR</b>	RA 127, 147	<b>7)</b> ui	nless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (ir	nches):						Hydric Soi	il Present? Yes No
Remarks:	,						1 -	
lydric soils p	oreent							
iyunc sons p	Dieseill							



Photo 1
Wetland data point whlb103f\_w facing south



Photo 2
Wetland data point whlb103f\_w facing west

### WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline		City/C	County: Halifax		Sampling Date: 2/7/2015		
Applicant/Owner: Dominion				State: NC	Sampling Point: whlb103_u		
Investigator(s): TP, LE		Section, Township, Range: No PLSS in this area					
Landform (hillslope, terrace, etc.): Slight Slope Local relief (concave, convex, none): none Slope (9							
Subregion (LRR or MLRA): P	Lat:	36.28130958	Long: -77.6	67806254	Datum: WGS 1984		
Subregion (LRR or MLRA): P Lat: 36.28130958 Long: -77.67806254 Datum: Soil Map Unit Name: Goldsboro fine sandy loam, 0 to 2 percent slopes NWI classification: None							
Are climatic / hydrologic conditions on the	ne site typical for	this time of year? Y	'es <u> </u>	(If no, explain in R	emarks.)		
Are Vegetation, Soil, or	Hydrology	significantly distur	bed? Are "Normal	Circumstances" p	resent? Yes No		
Are Vegetation, Soil, or							
SUMMARY OF FINDINGS – A							
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes Yes	No <b>√</b>	Is the Sampled Area within a Wetland?	Vas	No ✓		
Wetland Hydrology Present?		No	within a wetland?	162	NO		
HYDROLOGY							
1				Cocondon, Indica	toro (minimum of two required)		
Wetland Hydrology Indicators:	required: check	all that apply)		<u> </u>	tors (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)  Surface Soil  Surface Water (A1)  True Aquatic Plants (B14)  Sparsely Veg							
Surface Water (A1)							
✓ Saturation (A3)	nes (B16)						
Water Marks (B1)	es on Living Roots (C3) d Iron (C4)		Water Table (C2)				
Sediment Deposits (B2)	F	Recent Iron Reductio	n in Tilled Soils (C6)				
Drift Deposits (B3)	1	Thin Muck Surface (C	C7)	Saturation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	(	Other (Explain in Rer	marks)	Stunted or Stressed Plants (D1)			
Iron Deposits (B5)				Geomorphic Position (D2)			
Inundation Visible on Aerial Image	ery (B7)			Shallow Aqui			
Water-Stained Leaves (B9)					phic Relief (D4)		
Aquatic Fauna (B13)			ľ	FAC-Neutral	Test (D5)		
Field Observations:							
		Depth (inches):	<u></u>				
		Depth (inches):	2				
Saturation Present? Yes (includes capillary fringe)	✓ No	Depth (inches):	Wetland H	lydrology Presen	t? Yes <u></u> No		
Describe Recorded Data (stream gauge	ge, monitoring we	ell, aerial photos, pre	vious inspections), if avai	ilable:			
Remarks: Hydrology is present at the data point							
Trydrology is present at the data point							

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

Sampling Point: whlb103\_u

(A)   (A)
f Dominant All Strata: 5 (B)  sinant Species FACW, or FAC: 20 (A/B)  dex worksheet:  ver of: Multiply by:  0 x 1 = 0  0 x 2 = 0  10 x 3 = 30  40 x 4 = 160  10 x 5 = 50  60 (A) (B)
All Strata:
All Strata:
Species   20
FACW, or FAC: $20$ (A/B)  Hex worksheet: $0$ $x 1 = 0$ $0$ $x 2 = 0$ $10$ $x 3 = 30$ $40$ $x 4 = 160$ $10$ $x 5 = 50$ $60$ (A)
Sex worksheet:   Sex
Outcome of:     Multiply by:       0 $x 1 = 0$ 0 $x 2 = 0$ 10 $x 3 = 30$ 40 $x 4 = 160$ 10 $x 5 = 50$ 60     (A)
Outcome of:     Multiply by:       0 $x 1 = 0$ 0 $x 2 = 0$ 10 $x 3 = 30$ 40 $x 4 = 160$ 10 $x 5 = 50$ 60     (A)
$ \begin{array}{c cccc} 0 & x & 1 & = & 0 \\ \hline 0 & x & 2 & = & 0 \\ \hline 10 & x & 3 & = & 30 \\ \hline 40 & x & 4 & = & 160 \\ \hline 10 & x & 5 & = & 50 \\ \hline 60 & (A) & & 240 \\ \end{array} $ (B)
$ \begin{array}{c cccc} 0 & x & 2 & = & 0 \\ \hline 10 & x & 3 & = & 30 \\ \hline 40 & x & 4 & = & 160 \\ \hline 10 & x & 5 & = & 50 \\ \hline 60 & (A) & & 240 & (B) \end{array} $
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
$ \begin{array}{c cccc}  & \times 3 & = & \\  & 40 & \times 4 & = & 160 \\ \hline  & 10 & \times 5 & = & 50 \\ \hline  & 60 & (A) & 240 & (B) \end{array} $
$ \begin{array}{c cccc}  & x & 4 & = & & \\ \hline  & 10 & & x & 5 & = & 50 \\ \hline  & 60 & & (A) & & 240 & (B) \end{array} $
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
(A)(B)
e Index = B/A = 4
egetation Indicators:
est for Hydrophytic Vegetation
nce Test is >50%
nce Index is ≤3.0 <sup>1</sup>
logical Adaptations <sup>1</sup> (Provide supporting
Remarks or on a separate sheet)
c Hydrophytic Vegetation <sup>1</sup> (Explain)
ydric soil and wetland hydrology must
ess disturbed or problematic.
Four Vegetation Strata:
Pour vegetation Strata.
plants, excluding vines, 3 in. (7.6 cm) or
er at breast height (DBH), regardless of
- Woody plants, excluding vines, less
and greater than or equal to 3.28 ft (1
aceous (non-woody) plants, regardless
ody plants less than 3.28 ft tall.
, , , , , , , , , , , , , , , , , , , ,
All woody vines greater than 3.28 ft in
Yes No _ <u>√</u>
Yes No <u></u> √

Sampling Point: whlb103\_u

	cription: (Describe	to the de				or commi	i the absenc	e of indicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	x Feature %	s _Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10 YR 5/2	90	10 YR 5/6	10	C	M	SL	Kemarks
2.40			40 V/D E/C	45				
3-12	10 YR 6/3	85	10 YR 5/6	15	C	M	SC	
	· -							
	·						-	
	-	-			-		-	
		·						
Type: C-C	Concentration, D=Dep	letion PA	I-Peduced Matrix M	S-Maskar	4 Sand Gr	aine	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
	Indicators:	ietion, Kiv	i=Reduced Matrix, Mi	S=IVIASKEL	Janu Gi	all is.		cators for Problematic Hydric Soils <sup>3</sup> :
Histoso			Dark Surface	(97)				2 cm Muck (A10) (MLRA 147)
	Epipedon (A2)		Polyvalue Be		co (S8) <b>(N</b>	/II D A 1/17		Coast Prairie Redox (A16)
	listic (A3)		Thin Dark Su		. , .		140)	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye			147, 140)		Piedmont Floodplain Soils (F19)
	ed Layers (A5)		Depleted Ma		1 2)		_	(MLRA 136, 147)
	luck (A10) (LRR N)		Redox Dark	. ,	-6)			Very Shallow Dark Surface (TF12)
	ed Below Dark Surface	e (A11)	Depleted Da					Other (Explain in Remarks)
	Park Surface (A12)	0 (/ 1.1 1)	Redox Depre					(2.1p.a r.oao)
	Mucky Mineral (S1) <b>(L</b>	RR N.	Iron-Mangan			LRR N.		
	A 147, 148)	,	MLRA 13		, ,	,		
	Gleyed Matrix (S4)		Umbric Surfa	•	MLRA 13	36, 122)	<sup>3</sup> lr	ndicators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					vetland hydrology must be present,
	d Matrix (S6)		Red Parent I					inless disturbed or problematic.
	Layer (if observed):				, ,		Í	•
Type:								
	nches):						Hydric Sc	oil Present? Yes No
	iciles)						riyuric 30	on Fresent: Tes NO
Remarks:								
lo hydric so	il present							



Photo 1 Upland data point whlb103\_u facing north



Photo 2 Upland data point whlb103\_u facing west

	M – Atlantic and Gulf Coastal Plain Region				
Project/Site: SERIP City/C	County: HALFAX Sampling Date: 8-6-14				
Applicant/Owner: Derwing	State: Sampling Point JHLHO2				
Investigator(s): DUEST Section	on, Township, Range:				
Landform (hillslope, terrace, etc.): Dobression Local	relief (concave, convex, none): Slope (%):				
Subregion (LRR or MLRA): Lat: 36'/6	413.415 Long: 770710'419,566 Datum: -				
/2 /// . //	4 / Franc 0-2 NWI classification: PPO				
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 problems					
SUMMARY OF FINDINGS - Attach site map showing same	ipling point locations, transects, important features, etc.				
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	Is the Sampled Area within a Wetland?  Yes No				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)				
High Water Table (A2)  High Water Table (A2)  Harl Deposits (B15) (LRI					
Saturation (A3) Hydrogen Sulfide Odor (6	5.11 fra a company and a company and a company and a first of the firs				
Water Marks (B1)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)					
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)  Drift Deposits (B3)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)					
Algal Mat or Crust (B4)  Thin Muck Surface (C7)	Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)				
Iron Deposits (B5)  Other (Explain in Remark					
Inundation Visible on Aerial Imagery (B7)					
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)				
Field Observations:					
Surface Water Present? Yes No Depth (inches):					
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	vious inspections), if available:				
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	and the rain of the first of the self-and and all of the self-and and the self-and and and and and and and and and and				
Remarks:					
Aydrology T	nesent				
2					

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

Sampling Point: \_\_\_\_\_

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Ştratum (Plgt size:)		Spegies		
1. N/35A Dit/ora	15	J	(D)71	Number of Dominant Species
Division	12		200	That Are OBL, FACW, or FAC:(A)
2. 19his-beda	10		FAC	Total Number of Dominant
3. Clercus Nellos	20	V	FACILL	1 ~
4. Hear informer.	7/)	1/	FHC	Species Across All Strata: (B)
Eliparthan His Stance (1)	111			Percent of Dominant Species // 177
o. Lighthamen syracitues	10		FAC	That Are OBL, FACW, or FAC: (A/B)
6		V		(10)
7				Prevalence Index worksheet:
8				
	15	= Total Co	ver	OBL species x 1 =
50% of total cover 3 7.4	20% of	total cava	. 15	FACW species x 2 =
	20 /8 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	1 -	/		
1. Her running	10		MC	FACU species x 4 =
2. Dyssa Oztora	5		OBL	UPL species x 5 =
3. Clothin almitalica	10	./.	FACUL	Column Totals: (A) (B)
	13.0	<del></del>	FACW	(0)
4. higewoonless typerathica	10		PAC	Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation - اثر الج
7				2 - Dominance Test is >50%
8				T 3 December 1 to 1 to 2 to 1
	45	= Total Co		3 - Prevalence Index is ≤3.0¹
50% of total cover:22-		- Total Co	Pier	Problematic Hydrophytic Vegetation¹ (Explain)
	≥ 20% of	total cover	·	3 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Herb Stratum (Plot size:)		/	_	Undicators of hydric sail and walland hydral
1. Cover glaucesons	10		17131	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	-15	-T	Edge	1
2. Charmaatha loxum			FACW	Definitions of Four Vegetation Strata:
3				Tree Medicalculate and discussion of the
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or 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				
0				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Manda da Allanda da Landa da Allanda da Alla
11				Woody vine – All woody vines greater than 3.28 ft in
12				height.
12	150			
	10 =	Total Cov	/er —	
50% of total cover:	20% of	total cover	5	
Woody Vine Stratum (Plot size:				
1. Swear With De between	17	. /	V 21 5	
- SINCOX POTENTE JOSES	10		FAC	
2				
3.				
1				
4				
5				Hydrophytic
	ic .	Total Cov	er	Vegetation
50% of total answer			,	Present? Yes X No
50% of total cover:		total cover:		
Remarks: (If observed, list morphological adaptations below	v).			

SOIL

WHLHO278 -W

Profile Description: (Describe to the depth needed to document the indicator or co	nfirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc	
0.5 104R4/2 104R4/6 75 CM	5kh y lown
5-14+ 104R5/2 NUR4/688710 C M	41
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	3,
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Thin Dark Surface (S9) (LRR S, T, U)	" T [1]
Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR 0	3
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR C 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, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 18	50B)
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLR	
Stripped Matrix (S6)  Anomalous Bright Loamy Soils (F20) (I	
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Туре:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
	$\cap$
Hydric Se	
1 2007 Se	TO PARKON T
· · · · · · · · · · · · · · · · · · ·	fit present
	v

# whlh027f\_w



Wetland data point whlh027f\_w facing east



Wetland data point whlh027f\_w facing south

WEILAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: City/C	Sounty: Sampling Date:
Applicant/Owner: Jamenion	State: NC Sampling Part J77LHOZ
Investigator(s): DDINES . Section	on, Township, Range:
Subregion (LRR or MLRA):	relief (concave, convex, none): \$lope (%): 0 - 2  (1.755 Long: 77" 40" 49. /28 Datum:
Soil Map Unit Name: Galsboro Fine 57ml	hy lown NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? You	
Are Vegetation, Soil, or Hydrology significantly disturt	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS - Attach site map showing sam	ipling point locations transects important features etc
Visited the state of the state	pante locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present?  Wetland Hydrology Present?	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Out all three part	ume kez prosent
all the prin	arrier 5 passing
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR	
Saturation (A3) Hydrogen Sulfide Odor (C) Water Marks (B1) Oxidized Rhizospheres al	
Water Marks (B1) ☐ Oxidized Rhizospheres al ☐ Presence of Reduced Iron	16-16-16-16-16-16-16-16-16-16-16-16-16-1
Drift Deposits (B3)  Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5)	
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):	
Surface Water Present? Yes No Depth (inches): Depth (inches): 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, prev	vious inspections), if available:
Remarks:	
Nemarks.	
1 h reid	rology present
/00	0) 1-

WHLHOZT

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: % Cover Species? Status Number of Dominant Species 1. Pines troda That Are OBL, FACW, or FAC: 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: \_\_\_\_\_ x1 = \_\_\_\_ OBL species = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_ 50% of total cover: 20% of total cover: FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_\_ UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) Wes/11/ Prevalence Index = B/A = \_\_\_\_ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 7. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 = Total Cover Problematic Hydrophytic Vegetation (Explain) 50 20% of total cover: 50% of total cover: 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 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 = Total Cover 50% of total cover; 20% of total cover: Woody Vine Stratum (Plot size: 1. Hydrophytic Vegetation = Total Cover Present? 50% of total cover: \_ 20% of total cover: Remarks: (If observed, list morphological adaptations below).

SOIL

Le HLHO Z7
Sampling Point: \_\_\_\_\_\_

Profile Description: (Describe to the depth needed to documen	t the indicator or confirm	the absence of indicators.)
Depth Redox Fe		÷
(inches) Color (moist) % Color (moist)	% Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-5 BYR4/3		SANGERAM
5-151 104R3/3 104R 4/4	2	SCL
	<del></del>	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=N	lasked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwis	se noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
	Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
	ce (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
	ineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Loamy Gleyed M Depleted Matrix		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Constant Con	
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark S		Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depression		Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)		Other (Explain in Remarks)
	(F11) (MLRA 151)	A 50
	Masses (F12) (LRR O, P, T	
	(F13) (LRR P, T, U)	wetland hydrology must be present,
	7) (MLRA 151) (F18) (MLRA 150A, 150B)	unless disturbed or problematic.
	plain Soils (F19) (MLRA 149	ΙΔ)
	nt Loamy Soils (F20) (MLRA	
Dark Surface (S7) (LRR P, S, T, U)	, , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,
Restrictive Layer (if observed):		SHOP SHOW THE SHOP SHOP SHOW THE SHOW THE SHOP SHOW THE SHOP SHOW THE SHOP SHOW THE SHOP SHOW THE SHOW
Туре:		V
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
No hus		4
No Nucl	7C 200	12 Present



Upland data point whlh027\_u facing east



Upland data point whlh027\_u facing north

### whlh027 soils



Wetland/upland soils

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

Project/Site: Atlantic Coast Pipeline	City/Co	ounty: Halifax		Sampling Date: 11/17/2014
Applicant/Owner: DOMINION			State: NC	Sampling Point: whlh027e_w
	n, Township, Range: N			
Landform (hillslope, terrace, etc.): Depression  Subregion (LRR or MLRA): P	Local i	eller (coricave, corivex,	77 67966951	Slope (%)
Subregion (LRR or MLRA):	O to 2 percent sleppes	Long:	77.0700001	Datum: WGG 1004
Soil Map Unit Name: Goldsboro fine sandy loam				
Are climatic / hydrologic conditions on the site type				,
Are Vegetation, Soil, or Hydrolog	y significantly disturb	ed? Are "Normal	l Circumstances" p	present? Yes No
Are Vegetation, Soil, or Hydrolog	y naturally problema	tic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach s	ite map showing sam	pling point location	ons, transects	, important features, etc.
Lhydrophytic Vegetation Present?	/ No			
	·/ No	Is the Sampled Area	,	·
	✓ No	within a Wetland?	Yes <u>√</u>	No
Remarks:				
PEM wetland is located with a maintained powe	mile reav the wettand also in	iolades some planted L	obiony i me decan	ngo. Vogetation to distarbed.
HYDROLOGY				
Wetland Hydrology Indicators:			-	ators (minimum of two required)
Primary Indicators (minimum of one is required			Surface Soil	
	_ Aquatic Fauna (B13)			getated Concave Surface (B8)
	_ Marl Deposits (B15) (LRR		Drainage Par	
	_ Hydrogen Sulfide Odor (C		Moss Trim Li	
	<ul><li>Oxidized Rhizospheres ale</li><li>Presence of Reduced Iron</li></ul>		Crayfish Buri	Water Table (C2)
Sedifficit Deposits (B2)	Recent Iron Reduction in			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_ Thin Muck Surface (C7)	1 11100 00110 (00)	✓ Geomorphic	
	Other (Explain in Remarks	3)	Shallow Aqui	
Inundation Visible on Aerial Imagery (B7)	_ , ,	,	✓ FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)			Sphagnum m	noss (D8) <b>(LRR T, U)</b>
Field Observations:	_			
	Depth (inches):			
	✓ Depth (inches):			_
	✓ Depth (inches):	Wetland H	Hydrology Presen	nt? Yes <u>√</u> No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monite	oring well, aerial photos, prev	ious inspections), if ava	ailable:	
	<b>3</b>	, ,,		
Remarks:				
Wetland hydrology present				

20		Dominant		Dominance Test worksheet:
· /		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:  ORL species 90 y 1 90
		= Total Cove		OBL species X1 = 00
50% of total cover:0	20% of	total cover:	0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1				FACU species x 4 =
2.				UPL species $0 \times 5 = 0$
3.				Column Totals: (A) (B)
4				5 1 1 50 12
				Prevalence Index = B/A = 1.2
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8	0	T-1-1-0		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
500/ 1/11 0		= Total Cove		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:0	20% of	total cover:		
Herb Stratum (Plot size: 5)  1. Rhynchospora capitellata	90	V	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		Yes		be present, unless disturbed or problematic.
2. Dichanthelium dichotomum	5	No No	FAC	Definitions of Four Vegetation Strata:
3. Euthamia caroliniana	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.				
	100	= Total Cove	er	
50% of total cover: 50		total cover:	00	
Woody Vine Stratum (Plot size:30 )	_			
1				
2.				
3				
4				
5	0 .			Hydrophytic
0		= Total Cove		Vegetation Present? Yes ✓ No
		total cover:		
Remarks: (If observed, list morphological adaptations below	v).			
Disturbed due to ROW activities				

SOIL Sampling Point: whlh027e\_w

Depth	cription: (Describe to Matrix			x Feature				<b>,</b>
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10 YR 3/2	100					CL	
3-14	2.5 Y 6/1	90	2.5 Y 6/6	10	С	PL/M	CL	
				-	-			
				-	· <del></del>			
<sup>1</sup> Type: C=C	concentration, D=Dep	etion, RM=	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Application	able to all L	RRs, unless other	wise not	ed.)		Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histoso	I (A1)		Polyvalue Be	low Surfa	ice (S8) <b>(L</b>	RR S, T, U	) 1 cm Muck	(A9) (LRR O)
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)
	istic (A3)		Loamy Mucky			R O)		ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)			Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	T 11\	✓ Depleted Mat		-c)			Bright Loamy Soils (F20)
_	: Bodies (A6) (LRR P, ucky Mineral (A7) (LR		Redox Dark S Depleted Dar				(MLRA 1	t Material (TF2)
	resence (A8) <b>(LRR U</b>		Redox Depre					ow Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) <b>(L</b>		0)			lain in Remarks)
	d Below Dark Surface	e (A11)	Depleted Och		(MLRA 1	51)		,
Thick D	ark Surface (A12)		Iron-Mangane	ese Mass	es (F12) (	LRR O, P,	T) <sup>3</sup> Indicators	s of hydrophytic vegetation and
	Prairie Redox (A16) (N		) Umbric Surfa	ce (F13)	(LRR P, T	', U)	wetland	hydrology must be present,
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric				unless o	disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver					
	Redox (S5)		Piedmont Flo					200
	d Matrix (S6) urface (S7) <b>(LRR P, S</b>	T 11\	Anomalous B	right Loai	my Soils (	F20) (MLR)	A 149A, 153C, 153	30)
	Layer (if observed):	, 1, 0)					I	
Type:								
	rchoc):		<del></del>				Hydric Soil Bro	sent? Yes No
	iches):		<del>_</del>				Hydric Soil Fres	Sent: TesNO
Remarks:								
Hydric soil pr	esent							



Photo 1 Wetland data point WHLH027e\_w facing north



Photo 2
Wetland data point WHLH027e\_w facing west

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

Project/Site: Atlantic Coast Pipeline	City/0	County: Halifax		Sampling Date: 11/17/2014		
Applicant/Owner: DOMINION				Sampling Point: whlh027_u2		
• •	Sect			. •		
	Section, Township, Range: No PLSS in this area  Local relief (concave, convex, none): none Slope (%): 0					
Subregion (LRR or MLRA): P						
		Long	NIVI classifie	Datum		
Soil Map Unit Name: Are climatic / hydrologic conditions on the s						
Are Vegetation, Soil, or Hy						
Are Vegetation, Soil, or Hyd	drology naturally problem	natic? (If needed, e	explain any answe	rs in Remarks.)		
SUMMARY OF FINDINGS - Atta	ach site map showing sar	mpling point location	ons, transects	, important features, etc.		
Lhidranhitia Variation Present?	Vac No /					
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No <u>✓</u> Yes No <u>✓</u>	Is the Sampled Area				
Wetland Hydrology Present?	Yes No <u>✓</u>	within a Wetland?	Yes	No		
Remarks:						
HYDROLOGY						
Wetland Hydrology Indicators:	or for all the form his		-	tors (minimum of two required)		
Primary Indicators (minimum of one is rec			Surface Soil			
Surface Water (A1)	Aquatic Fauna (B13)	ID III		getated Concave Surface (B8)		
High Water Table (A2) Saturation (A3)	Marl Deposits (B15) (LR Hydrogen Sulfide Odor (		Drainage Pat Moss Trim Li			
Water Marks (B1)	Oxidized Rhizospheres			Water Table (C2)		
Sediment Deposits (B2)	Presence of Reduced Ire		Crayfish Burr			
Drift Deposits (B3)	Recent Iron Reduction in			sible on Aerial Imagery (C9)		
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic			
Iron Deposits (B5)	Other (Explain in Remar	·ks)	Shallow Aqui	tard (D3)		
Inundation Visible on Aerial Imagery	(B7)		FAC-Neutral			
Water-Stained Leaves (B9)			Sphagnum m	noss (D8) <b>(LRR T, U)</b>		
Field Observations:						
	_ No _ ✓ Depth (inches):					
·	_ No _ ✓ Depth (inches):					
Saturation Present? Yes (includes capillary fringe)	_ No _ ✓ Depth (inches):	Wetland F	lydrology Presen	t? Yes No <u>√</u>		
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, pre	evious inspections), if ava	ilable:			
Remarks:						
No wetland hydrology present						

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	
1. Quercus rubra	60	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:2 (A)
2. Pinus taeda	20	Yes	FAC	That Ale OBE, I AOW, OF I AO.
3. Vitis sp.	10	No		Total Number of Dominant
				Species Across All Strata:5 (B)
4. Acer rubrum	10	No	FAC	Percent of Dominant Species
5				That Are OBL, FACW, or FAC:  40 (A/B)
6				(775)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	90			OBL species $0 \times 1 = 0$
50	90	= Total Cov		
50% of total cover:50	20% of	total cover:	20	FACW species x 2 = 165
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1. Gaylussacia baccata	30	Yes	FACU	FACU species140
2. Ilex opaca	15	Yes	FAC	UPL species0 x 5 =0
				Column Totals: 195 (A) 725 (B)
3. Rhododendron maximum	10	No	FAC	Column rotals (A) (B)
4				Prevalence Index = B/A =3.71
5				
6.				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	55	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 27.5	20% of	total cover:	11	
Herb Stratum (Plot size: 5 )				1
1 Gaylussacia baccata	50	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
··				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree Woody plants evaluding vines 2 in (7.6 cm) or
4				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	50	= Total Cov	er	
50% of total cover: 25	20% of	total cover:	10	
	,			
/ lot oleon				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	_	Vegetation Present? Yes No ✓
50% of total cover:0	20% of	total cover:	0	rieseitt! ies No
Remarks: (If observed, list morphological adaptations below	w).			
(··	,.			

SOIL Sampling Point: whlh027\_u2

Profile Desc	cription: (Describe t	o the depth	n needed to docun	nent the i	indicator	or confirm	the absence of	indicators.)
Depth	Matrix		Redox	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10 YR 2/1	100					CL	
3-14	2.5 Y 6/3	90	7.5 YR 5/8	10	С	PL/M	CL	
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: Pl	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless other	wise not	ed.)		Indicators fo	r Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	low Surfa	ce (S8) <b>(L</b>	.RR S, T, U	) 1 cm Mu	ck (A9) <b>(LRR O)</b>
	pipedon (A2)		Thin Dark Su					ck (A10) <b>(LRR S)</b>
	istic (A3)		Loamy Mucky					Vertic (F18) (outside MLRA 150A,B)
·	en Sulfide (A4)		Loamy Gleye					t Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Mat	trix (F3)				us Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F	<del>-</del> 6)		(MLRA	153B)
5 cm Mi	ucky Mineral (A7) (LR	R P, T, U)	Depleted Dar	k Surface	e (F7)		Red Pare	ent Material (TF2)
Muck P	resence (A8) (LRR U)	)	Redox Depre	ssions (F	(8)		Very Sha	illow Dark Surface (TF12)
1 cm Mi	uck (A9) (LRR P, T)		Marl (F10) (L	RR U)			Other (Ex	xplain in Remarks)
Deplete	d Below Dark Surface	(A11)	Depleted Och	nric (F11)	(MLRA 1	51)		
	ark Surface (A12)		Iron-Mangane					ors of hydrophytic vegetation and
	rairie Redox (A16) (N					, U)		nd hydrology must be present,
	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric				unless	s disturbed or problematic.
-	Gleyed Matrix (S4)		Reduced Ver					
-	Redox (S5)		Piedmont Flo					
	d Matrix (S6)		Anomalous B	right Loai	my Soils (	F20) <b>(MLR</b> /	A 149A, 153C, 1	53D)
	rface (S7) (LRR P, S	, T, U)					1	
Restrictive	Layer (if observed):							
Type:								,
Depth (in	ches):						Hydric Soil Pr	resent? Yes No
Remarks:							•	
No hydric soi	l present							
	•							



Photo 1 Upland data point whlh027\_u2 facing east



Photo 2 Upland data point whlh027\_u2 facing east



Photo 3
Upland data point whlh027\_u2 facing south



Photo 4 Upland data point whlh027\_u2 facing east



Photo 5
Upland data point whlh027\_u2 facing north

	M – Atlantic and Gulf Coastal Plain Region
Project/Site: SERIP City/C	County: HALFAX Sampling Date: 8-6-14
Applicant/Owner: Derwing	State: Sampling Point JHLHO2
Investigator(s): DUEST Section	on, Township, Range:
Landform (hillslope, terrace, etc.): Dobression Local	relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): Lat: 36'/6	413.415 Long: 770710'419,566 Datum: -
/2 /// . //	4 / Franc 0-2 NWI classification: PPO
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 problems	
SUMMARY OF FINDINGS - Attach site map showing same	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:	Is the Sampled Area within a Wetland?  Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  High Water Table (A2)  Harl Deposits (B15) (LRI	
Saturation (A3) Hydrogen Sulfide Odor (6	5.11 fra a company and a company and a company and a first of the firs
Water Marks (B1)	
Sediment Deposits (B2)  Drift Deposits (B3)  Presence of Reduced Iro  Recent Iron Reduction in	
Algal Mat or Crust (B4)  Thin Muck Surface (C7)	Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)
Iron Deposits (B5)  Other (Explain in Remark	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
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	vious inspections), if available:
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	and the rain of the first of the self-and and all all the self-and and all and and all all and and all all and
Remarks:	
Aydrology T	nesent
2	

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

Sampling Point: \_\_\_\_\_

	Absolute	Dominan	t Indicator	Dominance Test worksheet:
Tree Ştratum (Plgt size:)		Spegies		
1. N/35A Dit/ora	15	J	(D)71	Number of Dominant Species
Division	12		200	That Are OBL, FACW, or FAC:(A)
2. 19his-beda	10		FAC	Total Number of Dominant
3. Clercus Nellos	20	V	FACILL	1 ~
4. Hear informer.	7/)	1/	FHC	Species Across All Strata: (B)
Eliparthan His Stance (1)	111			Percent of Dominant Species // 177
o. Lighthamen syracitues	10		FAC	That Are OBL, FACW, or FAC: (A/B)
6		V		(10)
7				Prevalence Index worksheet:
8				
	15	= Total Co	ver	OBL species x 1 =
50% of total cover 3 7.4	20% of	total cava	. 15	FACW species x 2 =
	20 /8 01	total cover		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	1 -	/		
1. Her running	10		MC	FACU species x 4 =
2. Dyssa Oztora	5		OBL	UPL species x 5 =
3. Clothin almitalica	10	./.	FACUL	Column Totals: (A) (B)
	13.0	<del></del>	FACW	(0)
4. higewoonless typerathica	10		PAC	Prevalence Index = B/A =
5				
6				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation - اثر الج
7				2 - Dominance Test is >50%
8				T 3 Downstown Later is 40 of
	45	= Total Co		3 - Prevalence Index is ≤3.0¹
50% of total cover:22-		- Total Co	Pier	Problematic Hydrophytic Vegetation¹ (Explain)
	≥ 20% of	total cover	·	3 11 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Herb Stratum (Plot size:)		/	_	Undicators of hydric sail and walland hydrid
1. Cover glaucesons	10		17131	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	-15	-T	Edge	1
2. Charmaatha loxum			FACW	Definitions of Four Vegetation Strata:
3				Tree Medicalculate and discussion of the
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or 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				
0				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Manda da Allanda da Landa da Allanda da Alla
11				Woody vine – All woody vines greater than 3.28 ft in
12				height.
12	150			
	10 =	Total Cov	/er —	
50% of total cover:	20% of	total cover	5	
Woody Vine Stratum (Plot size:				
1. Swear With De between	17	. /	V 21 5	
- SINCOX POTENTE JOSES	10		FAC	
2				
3.				
1				
4				
5				Hydrophytic
	ic :	Total Cov	er	Vegetation
50% of total answer			,	Present? Yes X No
50% of total cover:		total cover:		
Remarks: (If observed, list morphological adaptations below	v).			

SOIL

WHLHO278 -W

Profile Description: (Describe to the depth needed to document the indicator or co	nfirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc	
0.5 104R4/2 104R4/6 75 CM	5kh y lown
5-14+ 104R5/2 NUR4/688710 C M	41
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	3,
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Thin Dark Surface (S9) (LRR S, T, U)	1 - T [1]
Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)  Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (LRR 0	3
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR C 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, unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 18	50B)
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLR	
Stripped Matrix (S6)  Anomalous Bright Loamy Soils (F20) (I	
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Туре:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
	$\cap$
Hydric Se	
1 2007 Se	TO PARKON T
· · · · · · · · · · · · · · · · · · ·	fit present
	v

# whlh027f\_w



Wetland data point whlh027f\_w facing east



Wetland data point whlh027f\_w facing south

WEILAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: City/C	Sounty: Sampling Date:
Applicant/Owner: Jamenion	State: NC Sampling Part J77LHOZ
Investigator(s): DDINES . Section	on, Township, Range:
Subregion (LRR or MLRA):	relief (concave, convex, none): \$lope (%): 0 - 2  (1.755 Long: 77" 40" 49. /28 Datum:
Soil Map Unit Name: Galsboro Fine 57ml	hy lown NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? You	
Are Vegetation, Soil, or Hydrology significantly disturt	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS - Attach site map showing sam	ipling point locations transects important features etc
Visited the map of the	pante locations, transects, important leatures, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present?  Wetland Hydrology Present?	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Out all three part	ume kez prosent
all the prin	arrier 5 passing
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR	
Saturation (A3) Hydrogen Sulfide Odor (C) Water Marks (B1) Oxidized Rhizospheres al	
Water Marks (B1) ☐ Oxidized Rhizospheres al ☐ Presence of Reduced Iron	16-16-16-16-16-16-16-16-16-16-16-16-16-1
Drift Deposits (B3)  Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5)	
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):	
Surface Water Present? Yes No Depth (inches): Depth (inches): 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, prev	vious inspections), if available:
Remarks:	
Nemarks.	
1 h reid	rology present
/00	0) 1-

WHLHOZT

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: % Cover Species? Status Number of Dominant Species 1. Pines troda That Are OBL, FACW, or FAC: 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: \_\_\_\_\_ x1 = \_\_\_\_ OBL species = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_ 50% of total cover: 20% of total cover: FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_\_ UPL species \_\_\_\_\_ x 5 = \_\_\_\_ Column Totals: \_\_\_\_\_ (A) \_\_\_\_ (B) Wes/11/ Prevalence Index = B/A = \_\_\_\_ Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 7. 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 = Total Cover Problematic Hydrophytic Vegetation (Explain) 50 20% of total cover: 50% of total cover: 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. **Definitions of Four Vegetation Strata:** Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 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 = Total Cover 50% of total cover; 20% of total cover: Woody Vine Stratum (Plot size: 1. Hydrophytic Vegetation = Total Cover Present? 50% of total cover: \_ 20% of total cover: Remarks: (If observed, list morphological adaptations below).

SOIL

Le HLHO Z7
Sampling Point: \_\_\_\_\_\_

Profile Description: (Describe to the depth needed to documen	t the indicator or confirm	the absence of indicators.)
Depth Redox Fe		÷
(inches) Color (moist) % Color (moist)	% Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-5 BYR4/3		SANGERAM
5-151 104R3/3 104R 4/4	2	SCL
	<del></del>	
<sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=N	lasked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwis	se noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
	Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
	ce (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
	ineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)  Stratified Layers (A5)  Loamy Gleyed M Depleted Matrix		Piedmont Floodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Constant Con	
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark S		Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depression		Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)		Other (Explain in Remarks)
	(F11) (MLRA 151)	N 50
	Masses (F12) (LRR O, P, T	
	(F13) (LRR P, T, U)	wetland hydrology must be present,
	7) (MLRA 151) (F18) (MLRA 150A, 150B)	unless disturbed or problematic.
	plain Soils (F19) (MLRA 149	ΙΔ)
	nt Loamy Soils (F20) (MLRA	
Dark Surface (S7) (LRR P, S, T, U)	, , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,
Restrictive Layer (if observed):		SHOOT SEED HARMAN CONTRACTOR OF THE SECOND CON
Туре:		V
Depth (inches):		Hydric Soil Present? Yes No
Remarks:		
No hus		4
No Nucl	7C 200	12 Present



Upland data point whlh027\_u facing east



Upland data point whlh027\_u facing north

## whlh027 soils



Wetland/upland soils

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

Project/Site: Atlantic Coast Pipeline	City/Co	ounty: Halifax		Sampling Date: 11/17/2014
Applicant/Owner: DOMINION			State: NC	Sampling Point: whlh027e_w
	Section Section			
Landform (hillslope, terrace, etc.): Depression  Subregion (LRR or MLRA): P	Local i	eller (coricave, corivex,	77 67966951	Slope (%)
Subregion (LRR or MLRA):	O to 2 percent sleppes	Long:	77.0700001	Datum: WGG 1004
Soil Map Unit Name: Goldsboro fine sandy loam				
Are climatic / hydrologic conditions on the site type				,
Are Vegetation, Soil, or Hydrolog	y significantly disturb	ed? Are "Normal	l Circumstances" p	present? Yes No
Are Vegetation, Soil, or Hydrolog	y naturally problema	tic? (If needed, e	explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS - Attach s	ite map showing sam	pling point location	ons, transects	, important features, etc.
Lhydrophytic Vegetation Present?	/ No			
	·/ No	Is the Sampled Area	,	
	✓ No	within a Wetland?	Yes <u>√</u>	No
Remarks:				
PEM wetland is located with a maintained powe	mile reav the wettand also in	iolades some planted L	obiony i me decan	ngo. Vogetation to distarbed.
HYDROLOGY				
Wetland Hydrology Indicators:			-	ators (minimum of two required)
Primary Indicators (minimum of one is required			Surface Soil	
	_ Aquatic Fauna (B13)			getated Concave Surface (B8)
	_ Marl Deposits (B15) (LRR		Drainage Par	
	_ Hydrogen Sulfide Odor (C		Moss Trim Li	
	<ul><li>Oxidized Rhizospheres ale</li><li>Presence of Reduced Iron</li></ul>		Crayfish Buri	Water Table (C2)
Sedifficit Deposits (B2)	Recent Iron Reduction in			isible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	_ Thin Muck Surface (C7)	1 11100 00110 (00)	✓ Geomorphic	
	Other (Explain in Remarks	3)	Shallow Aqui	
Inundation Visible on Aerial Imagery (B7)	_ , ,	,	✓ FAC-Neutral	Test (D5)
Water-Stained Leaves (B9)			Sphagnum m	noss (D8) <b>(LRR T, U)</b>
Field Observations:	_			
	Depth (inches):			
	✓ Depth (inches):			_
	✓ Depth (inches):	Wetland H	Hydrology Presen	nt? Yes <u>√</u> No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monite	oring well, aerial photos, prev	ious inspections), if ava	ailable:	
	<b>3</b>	, ,,		
Remarks:				
Wetland hydrology present				

20		Dominant		Dominance Test worksheet:
· /		Species?		Number of Dominant Species
1				That Are OBL, FACW, or FAC:1 (A)
2				Total Number of Dominant
3				Species Across All Strata: 1 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:  ORL species 90 y 1 90
		= Total Cove		OBL species X1 = 00
50% of total cover:0	20% of	total cover:	0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1				FACU species x 4 =
2.				UPL species $0 \times 5 = 0$
3.				Column Totals: (A) (B)
4				5 1 1 50 12
				Prevalence Index = B/A = 1.2
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8	0	T-1-1-0		✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
500/ 1/11 0		= Total Cove		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:0	20% of	total cover:		
Herb Stratum (Plot size: 5)  1. Rhynchospora capitellata	90	V	OBL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		Yes		be present, unless disturbed or problematic.
2. Dichanthelium dichotomum	5	No No	FAC	Definitions of Four Vegetation Strata:
3. Euthamia caroliniana	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.				
	100	= Total Cove	er	
50% of total cover: 50		total cover:	00	
Woody Vine Stratum (Plot size:30 )	_			
1				
2.				
3				
4				
5	0 .			Hydrophytic
0		= Total Cove		Vegetation Present? Yes ✓ No
		total cover:		
Remarks: (If observed, list morphological adaptations below	v).			
Disturbed due to ROW activities				

SOIL Sampling Point: whlh027e\_w

Depth	Profile Description: (Describe to the depth needed to document the indicator or confirement of the Depth Matrix Redox Features							<b>,</b>
(inches)	Color (moist)	%	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10 YR 3/2	100					CL	
3-14	2.5 Y 6/1	90	2.5 Y 6/6	10	С	PL/M	CL	
				-	-			
				-	· <del></del>			
<sup>1</sup> Type: C=C	concentration, D=Dep	etion, RM=	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: PL=	Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Application	able to all L	RRs, unless other	wise not	ed.)		Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histoso	I (A1)		Polyvalue Be	low Surfa	ice (S8) <b>(L</b>	RR S, T, U	) 1 cm Muck	(A9) (LRR O)
	pipedon (A2)		Thin Dark Su					(A10) (LRR S)
	istic (A3)		Loamy Mucky			R O)		ertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4)		Loamy Gleye		(F2)			Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)	T 11\	✓ Depleted Mat		-c)			Bright Loamy Soils (F20)
_	: Bodies (A6) (LRR P, ucky Mineral (A7) (LR		Redox Dark S Depleted Dar				(MLRA 1	t Material (TF2)
	resence (A8) <b>(LRR U</b>		Redox Depre					ow Dark Surface (TF12)
	uck (A9) (LRR P, T)	,	Marl (F10) <b>(L</b>		0)			lain in Remarks)
	d Below Dark Surface	e (A11)	Depleted Och		(MLRA 1	51)		,
Thick D	ark Surface (A12)		Iron-Mangane	ese Mass	es (F12) (	LRR O, P,	T) <sup>3</sup> Indicators	s of hydrophytic vegetation and
	Prairie Redox (A16) (N		) Umbric Surfa	ce (F13)	(LRR P, T	', U)	wetland	hydrology must be present,
	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric				unless o	disturbed or problematic.
	Gleyed Matrix (S4)		Reduced Ver					
	Redox (S5)		Piedmont Flo					200
	d Matrix (S6) urface (S7) <b>(LRR P, S</b>	T 11\	Anomalous B	right Loai	my Soils (	F20) (MLR)	A 149A, 153C, 153	30)
	Layer (if observed):	, 1, 0)					I	
Type:								
	rchoc):		<del></del>				Hydric Soil Bro	sent? Yes No
	iches):						Hydric Soil Fres	Sent: TesNO
Remarks:								
Hydric soil pr	esent							



Photo 1 Wetland data point WHLH027e\_w facing north



Photo 2
Wetland data point WHLH027e\_w facing west

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

Project/Site: Atlantic Coast Pipeline	City/	Sampling Date: 11/17/2014					
Applicant/Owner: DOMINION	City/County: Halifax Sampling Date: 11/17/201 State: NC Sampling Point: whlh027_						
• •	Section, Township, Range: No PLSS in this area						
	c.): Flat Local relief (concave, convex, none): none Slope (%): 0						
Subregion (LRR or MLRA): P							
		Long	NIVI classifie	Datum			
Soil Map Unit Name: Are climatic / hydrologic conditions on the s							
Are Vegetation, Soil, or Hy							
Are Vegetation, Soil, or Hyd	drology naturally problem	natic? (If needed, e	explain any answe	rs in Remarks.)			
SUMMARY OF FINDINGS - Atta	ach site map showing sar	mpling point location	ons, transects	, important features, etc.			
Lhidranhitia Variation Present?	Vac No /						
Hydrophytic Vegetation Present? Hydric Soil Present?	Yes No <u>✓</u> Yes No <u>✓</u>	Is the Sampled Area					
Wetland Hydrology Present?	Yes No <u>✓</u>	within a Wetland?	Yes	No			
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:	and and the street all that and ha		-	tors (minimum of two required)			
Primary Indicators (minimum of one is rec			Surface Soil Cracks (B6)				
Surface Water (A1)	Aquatic Fauna (B13)	ID III		getated Concave Surface (B8)			
High Water Table (A2) Saturation (A3)	Marl Deposits (B15) (LR Hydrogen Sulfide Odor (		Drainage Pat Moss Trim Li				
Water Marks (B1)	Oxidized Rhizospheres			Water Table (C2)			
Sediment Deposits (B2)	Presence of Reduced Ire		Crayfish Burr				
Drift Deposits (B3)	Recent Iron Reduction in			sible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)	Thin Muck Surface (C7)		Geomorphic				
Iron Deposits (B5)	Other (Explain in Remar	·ks)	Shallow Aqui	tard (D3)			
Inundation Visible on Aerial Imagery	(B7)		FAC-Neutral				
Water-Stained Leaves (B9)			Sphagnum m	noss (D8) <b>(LRR T, U)</b>			
Field Observations:							
	_ No _ ✓ Depth (inches):						
·	_ No _ ✓ Depth (inches):						
Saturation Present? Yes (includes capillary fringe)	_ No _ ✓ Depth (inches):	Wetland F	lydrology Presen	t? Yes No <u>√</u>			
Describe Recorded Data (stream gauge,	monitoring well, aerial photos, pre	evious inspections), if ava	ilable:				
Remarks:							
No wetland hydrology present							

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

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?	Status	
1. Quercus rubra	60	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC:2 (A)
2. Pinus taeda	20	Yes	FAC	That Ale OBE, I AOW, OF I AO.
3. Vitis sp.	10	No		Total Number of Dominant
				Species Across All Strata:5 (B)
4. Acer rubrum	10	No	FAC	Percent of Dominant Species
5				That Are OBL, FACW, or FAC:  40 (A/B)
6				(775)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	90			OBL species $0 \times 1 = 0$
50	90	= Total Cov		
50% of total cover:50	20% of	total cover:	20	FACW species x 2 = 0
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1. Gaylussacia baccata	30	Yes	FACU	FACU species140
2. Ilex opaca	15	Yes	FAC	UPL species0 x 5 =0
				Column Totals: 195 (A) 725 (B)
3. Rhododendron maximum	10	No	FAC	Column rotals (A) (B)
4				Prevalence Index = B/A =3.71
5				
6.				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	55	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 27.5	20% of	total cover:	11	
Herb Stratum (Plot size: 5 )				1
1 Gaylussacia baccata	50	Yes	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
··				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree Woody plants evaluding vines 2 in (7.6 cm) or
4				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	50	= Total Cov	er	
50% of total cover: 25	20% of	total cover:	10	
	,			
/ lot oleon				
1				
2				
3				
4				
5				Hydrophytic
		= Total Cov	_	Vegetation Present? Yes No ✓
50% of total cover:0	20% of	total cover:	0	rieseitt! Tes No
Remarks: (If observed, list morphological adaptations below	w).			
(··	,.			

SOIL Sampling Point: whlh027\_u2

Profile Desc	cription: (Describe t	o the depth	n needed to docun	nent the i	indicator	or confirm	the absence of	indicators.)	
Depth									
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-3	10 YR 2/1	100					CL		
3-14	2.5 Y 6/3	90	7.5 YR 5/8	10	С	PL/M	CL		
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion, RM=F	Reduced Matrix, MS	S=Masked	d Sand Gr	ains.	<sup>2</sup> Location: Pl	L=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless other	wise not	ed.)		Indicators fo	r Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Be	low Surfa	ce (S8) <b>(L</b>	.RR S, T, U	) 1 cm Mu	ck (A9) <b>(LRR O)</b>	
	pipedon (A2)		Thin Dark Su					ck (A10) <b>(LRR S)</b>	
	istic (A3)		Loamy Mucky					Vertic (F18) (outside MLRA 150A,B)	
·	en Sulfide (A4)		Loamy Gleye					t Floodplain Soils (F19) (LRR P, S, T)	
Stratifie	d Layers (A5)		Depleted Mat	trix (F3)				us Bright Loamy Soils (F20)	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F	<del>-</del> 6)		(MLRA	153B)	
5 cm Mi	ucky Mineral (A7) (LR	R P, T, U)	Depleted Dar	k Surface	e (F7)		Red Pare	ent Material (TF2)	
Muck P	resence (A8) (LRR U)	)	Redox Depre	ssions (F	(8)		Very Sha	illow Dark Surface (TF12)	
1 cm Mi	uck (A9) (LRR P, T)		Marl (F10) (L	RR U)			Other (Ex	xplain in Remarks)	
Deplete	d Below Dark Surface	(A11)	Depleted Och	nric (F11)	(MLRA 1	51)			
	ark Surface (A12)		Iron-Mangane					ors of hydrophytic vegetation and	
	rairie Redox (A16) (N					, U)		nd hydrology must be present,	
	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric				unless	s disturbed or problematic.	
-	Gleyed Matrix (S4)		Reduced Ver						
-	Redox (S5)		Piedmont Flo						
	d Matrix (S6)		Anomalous B	right Loai	my Soils (	F20) <b>(MLR</b> /	A 149A, 153C, 1	53D)	
	rface (S7) (LRR P, S	, T, U)					1		
Restrictive	Layer (if observed):								
Type:								,	
Depth (in	ches):						Hydric Soil Pr	resent? Yes No	
Remarks:							•		
No hydric soi	l present								
	•								



Photo 1 Upland data point whlh027\_u2 facing east



Photo 2 Upland data point whlh027\_u2 facing east



Photo 3
Upland data point whlh027\_u2 facing south



Photo 4 Upland data point whlh027\_u2 facing east



Photo 5
Upland data point whlh027\_u2 facing north

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/0	County: Aslufax Sampling Date; 11/1
Applicant/Owner: Dominer	Sampling Rain:
DM. 1251T	ion, Township, Range:
P // i	I relief (concave, convex, none): Slope (%):
	9.849" Long: 77° 41' 07.906" Datum:
Soil Map Unit Name: Altrivis of A	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year?	~ /
Are Vegetation, Soil, or Hydrology significantly distu	
Are Vegetation, Soil, or Hydrology naturally problem	
Attach site map showing sar	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Terraino.	2
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (	
Water Marks (B1)  Sediment Deposits (B2)  Oxidized Rhizospheres a	
Sediment Deposits (B2)  Presence of Reduced Iro  Presence of Reduced Iro  Recent Iron Reduction ir	
Drift Deposits (B3)  ☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7)	n Tilled Soils (C6)
Iron Deposits (B5)  Other (Explain in Remark	
Inundation Visible on Aerial Imagery (B7)	EAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
	$\cap$
Hydrologe	0000000
1 00000	J'esery
)	U

/EGETATION	(Four	Strata)	– Use	scientific	names	of plants.
------------	-------	---------	-------	------------	-------	------------

WHLE	1078f
WHLE	-11/
mpling Point:	- W

Tree Stratum (Plat size)		Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species? Status	Number of Dominant Species
1. CATPULLY CATOLINGING .	30	V PAC	That Are OBL, FACW, or FAC: (A)
2. Liquidamber Styracithia	30	(/ FAC	(1)
- In the state of		VIII	Total Number of Dominant
3. Horodon dron tulda fora	20	V FACU	Species Across All Strata: (B)
4. Flox opace	10	FIN	opedies Adress All Ottata.
	10		Percent of Dominant Species
5			That Are OBL, FACW, or FAC: (A/B)
			That Ale OBL, FACTV, OF FAC (A/B)
6			Provolence Index worksheets
7			Prevalence Index worksheet:
8			Total % Cover of: Multiply by:
	<b>9</b>		
***	apo	= Total Cover /	OBL species x 1 =
50% of total cover: 45	20% 0	total cover: 10	FACW species x 2 =
The state of the s	20% 01	total cover	
Sapling/Shrub Stratum (Plot size:)	00	1 /	FAC species x 3 =
1. Tlax opera	25	VIER	FACU species x 4 =
- Puch was was loved		1500	UPL species x 5 =
2. Consinus Chroliniana	4	VFA	
3			Column Totals: (A) (B)
0,000			
4			Prevalence Index = B/A =
5			
6	10-10-10-10-10-10-10-10-10-10-10-10-10-1	· · · · · · · · · · · · · · · · · · ·	Hydrophytic Vegetation Indicators:
6			1 - Rapid Test for Hydrophytic Vegetation
7			2 - Dominance Test is >50%
	-		2 - Dominance Test is >50%
8	3		3 - Prevalence Index is ≤3.01
in a land	20	= Total Cover ~	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	200/ 04	total cover:	Problematic Hydrophytic Vegetation (Explain)
	20% 01	total cover.	
Herb Stratum (Plot size:	-	#	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. COMEX alaucescens	(8)	) / OBL	
			be present, unless disturbed or problematic.
2. Attriportem felex-timena	5	V FACU	Definitions of Four Vegetation Strata:
3. Oswarda Cinamomea		1 FACIL	)
		- Iren	Tree - Woody plants evoluting vines 3 in (7.6 cm) or
4			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4			more in diameter at breast height (DBH), regardless of
4			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
4 5			more in diameter at breast height (DBH), regardless of height.
4			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less
4			more in diameter at breast height (DBH), regardless of height.
4			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
4			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless
4			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
4			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
4			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
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4			more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
4	70	= Total Cover;	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
4	70		more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
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4	70	= Total Cover;	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in
4	70	= Total Cover;	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
4	70 20% of	= Total Cover total cover:	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
4	70 20% of 5	= Total Cover; total cover:	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
4	70 20% of 5	= Total Cover; total cover:	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.
4	20% of 5 20% of 20% of	= Total Cover total cover:	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
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4	20% of 5 20% of 20% of	= Total Cover; total cover:	more in diameter at breast height (DBH), regardless of height.  Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic Vegetation
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SOIL

WHLHOZ8f
Sampling Point:

Profile Descripti	on: (Describe t	o the depth	needed to docu	ment the i	ndicator	or confirm	the absence of indicators.)
Depth	Matrix		Redo	x Features			100
- 1 2	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
0-18 10	1/2 2/1						EMBYLOATM
	ι .						, , , , , , , , , , , , , , , , , , , ,
							Acceptable from the control of the c
			710000				
'Type: C=Conce						ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil India		ble to all LF			0000 C		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)			Polyvalue Be				
Histic Epiped Black Histic (			Thin Dark St				2 cm Muck (A10) (LRR S)
Hydrogen Su			Loamy Muck			0)	Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Lay			Depleted Ma		-2)		Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20)
	ies (A6) (LRR P,	T. U)	Redox Dark		6)		(MLRA 153B)
	Mineral (A7) (LR		Depleted Da	: : : : : : : : : : : : : : : : : : :			Red Parent Material (TF2)
Muck Presen	ice (A8) (LRR U)		Redox Depre				Very Shallow Dark Surface (TF12)
	A9) (LRR P, T)		Marl (F10) (I		<b>.</b>		Other (Explain in Remarks)
	ow Dark Surface	(A11)	☐ Depleted Oc	hric (F11)	MLRA 15	51)	
☐ Thick Dark S	urface (A12)	93	Iron-Mangar	ese Masse	s (F12) (I	LRR O, P, 1	<ul> <li>Indicators of hydrophytic vegetation and</li> </ul>
Coast Prairie	Redox (A16) (M	LRA 150A)	Umbric Surfa			, U)	wetland hydrology must be present,
	Mineral (S1) (LI	RR O, S)	Delta Ochric				unless disturbed or problematic.
Sandy Gleye	130 (5)		Reduced Ve				
Sandy Redox Stripped Mat			Piedmont Flo				Λ.
	(S7) (LRR P, S,	T (I)	Anomalous i	orignt Loan	ly Solls (1	-20) (MLRA	A 149A, 153C, 153D)
Restrictive Laye		1, 0)				-	
Type:	( 0200.104).						<b>\</b> /
Depth (inches	١,						Hydric Soil Present? Yes No
Remarks:	)·		_				Hydric Soil Present? Yes/No
Remarks.							
		1	_			)	$\bigcap$
	10	1, 6	100	5	-7	10	1010
	( -	740	Iric	00	4	1	Transfer C
		$\cup$				•	
							Y .

# whlh028f\_w



Wetland data point whlh028f\_w facing east



Wetland data point whlh028f\_w facing south

WEILAND DETERMINATION DATA FORM	- Atlantic and Gulf Coastal Plain Region
Project/Site: SERD City/Cou	unty: Haliffex Sampling Date:
Applicant/Owner: Dominion	State: NZ Sampling Pomt: NCHO.
Investigator(s): DDWEST Section,	Township, Range:
Landform (hillslope, terrace, etc.): Hillslope Local rel	lief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): Lat: 36161	7. 464 Long: 27 11 08 460 Datum:
Soil Map Unit Name: Cin portion	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 Vegetation, Soil, or Hydrology naturally problematic	c? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing samp	ling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes No Yes	s 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)	Secondary indicators (minimum of two required)  Surface Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR U	
Saturation (A3) Hydrogen Sulfide Odor (C1)	
Water Marks (B1) — Oxidized Rhizospheres alon	[1]
Sediment Deposits (B2)  Presence of Reduced Iron (	C4) Crayfish Burrows (C8)
☐ Drift Deposits (B3) ☐ Recent Iron Reduction in Til	lled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5)	= ' ' '
Inundation Visible on Aerial Imagery (B7)  Water-Stained Leaves (B9)	FAC-Neutral Test (D5)
Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): De	Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previo	
Second Notice Bata (Stream gauge, monitoring well, aerial photos, previo	us inspections), ii available.
Remarks:	10.50
No hydrologe	) preson
I .	1

WHLH028

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Absolute Dominant Indicator **Dominance Test worksheet:** % Cover Species? Status **Number of Dominant Species** That Are OBL, FACW, or FAC: (A) Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 6. Prevalence Index worksheet: Total % Cover of: Multiply by: \_\_\_\_ x 1 = \_ **OBL** species = Total Cover **FACW** species \_\_\_ x 2 = \_ 50% of total cover: 20% of total cover: FAC species \_\_\_\_ x 3 = \_\_ FACU species \_ x 4 = \_ \_ x 5 = \_\_\_ Column Totals: \_\_\_ \_\_\_\_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ 30 = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: 20% of total cover: <sup>1</sup>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 = Total Cover 20% of total cover 50% of total cover: 3. Hydrophytic = Total Cover Vegetation Present? 50% of total cover: ( " 20% of total cover: Remarks: (If observed, list morphological adaptations below).

SOIL

WHLHOZ8 - U
Sampling Point: \_\_\_\_

Profile Description: (Describe to the dep	th needed to document the indicator or confirm	the absence of indicators.)
DepthMatrix	Redox Features	72
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
0-2/2		
7-16+10 YR513		
. , , , -		N. S.
		and the second s
<del></del>		***************************************
<sup>1</sup> Type: C=Concentration, D=Depletion, RM	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all	LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
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) Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	Loamy Gleyed Matrix (F2)  Depleted Matrix (F3)	Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	U Other (Explain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Ochric (F11) (MLRA 151)	3
Coast Prairie Redox (A16) (MLRA 150)	Iron-Manganese Masses (F12) (LRR O, P, and Iron-Manganese Masses (F12) (LRR P, T, U)	<ul> <li>Indicators of hydrophytic vegetation and wetland hydrology must be present,</li> </ul>
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)	anos distance of problematic.
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Type:		X
Depth (inches):	——————————————————————————————————————	Hydric Soil Present? Yes No
Remarks:		
		^ -
K	10 h. C -> C-	
·	To hydric Si	or preserve
	O	A.



Upland data point whlh028\_u facing east



Upland data point whlh028\_u facing north

# whlh028 soils



Wetland/upland soils

WEILAND DETERMINATION DATA FORM – Atlantic and Golf Coastal Plain Region	16
Project/Site DDWSSV City/County. HTMLATTX Sampling Date: 111 H	1
ApplicantiOwner Domin Con State ICC Sampling Point HLH	1
investigatoris DDWEST Section Township Range	
and tim thillstope terrace etc.) Better land Local relief (concave, convex, none) Longave Stope (%)	
Lat 36 16 10.08 4 Long 77 41 17 576" Datum	-
Soil Map Unit Name Tomotley 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.	c.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Yes No	
HYDROLOGY	
Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)	
High: Water Table (A2)  Mail Deposits (B15) (LRR U)  Sparsely Vegetated Concave Surface (B6)  Drainage Patterns (B10)	
Saturation (A3) University Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)	
Oxidized Rhizospheres along Living Roots (C3) Dry Season Water Table (C2)	
Sediment Deposits (82) 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)	1
☐ Iron Deposits (B5) ☐ Other (Explain in Remarks) ☐ Shallow Aquitard (D3)	1
Inundation Visible on Aerial Imagery (B7)  FAC-Neutral Test (D5)  Sphagnum moss (D8) (LRR T, U)	
Vater-Stained Leaves (B9)  Sphagnum moss (D8) (LRR T, U)  Field Observations:	$\dashv$
Surface Water Present? Yes No \times 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	_
oceanite recorded Data (stream gauge, monitoring well aerial priotos, previous inspections). Il available	
Remarks	
	-
Hydrology present	1
2 / la correct	-
	1

WALHOZ9FW

VEGETATION (Four Strata) - Use scientific names of plants Sampling Point Absolute Dominanty Indicator Dominance Test worksheet: Status Number of Dominant Species That Are OBL FACW or FAC (A) ACI Lotal Number of Dominant Species Across All Strata. (B) Percent of Dominant Species That Are OBL FACW, or FAC (A/B) Prevalence Index worksheet: Total % Cover of Multiply by **OBL** species FACW species x 2 = FAC species x 3 = FACU species UPL species \_\_\_\_ x 5 = \_\_\_\_ Column Totals: (A) \_ Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3 0 Problematic Hydrophytic Vegetation (Explain) Heitz Stratum, (Plot size 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 9 of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in 11 height. = Total Cove Hydrophytic = Total Cover Vegetation Present? 50% of total cover 20% of total cover: Remarks (If observed, list morphological adaptations below)

SOIL

WHLHO295-W Sampling Point

miches,	Color (mass) %		× Features 1 Ype Loc	Texture Remarks
4-16+	104842	LOYR #6	7.6	Sch SCL
Iype: C=Cc Hydric Soil I  Histosol Histo Ep Stratified Granic 5 cm Mu Muck Pre 1 cm Mu Depleted Thick Da Coast Pr. Sandy M Sandy G Sandy Re Stripped Dark Sur	incentration, D=Depletion, RM= indicators: (Applicable to all iA1) ippedon (A2) inc (A5) in Sulfide (A4) I ayers (A5) isodies (A6) (LRR P, T, U) icky Mineral (A7) (LRR P, T, U) ick (A9) (LRR P, T) Below Dark Surface (A11) irk Surface (A12) airie Redox (A16) (MLRA 150A icky Mineral (S1) (LRR O, S) eyed Matrix (S4) idox (S5) Matrix (S6) iface (S7) (LRR P, S, T, U) ayer (if observed):	Reduced Matrix, MS LRRs, unless other Polyvalue Bel I him Dark Sur Loamy Mucky Loamy Gleyer Depleted Matrix Redox Dark S Depleted Dark Redox Depres Marl (F10) (LF Depleted Och Iron-Mangane Umbric Surfac Delta Ochric ( Reduced Vert Piedmont Floc	i=Masked Sand Grains. wise noted.) ow Surface (S8) (LRR S, T, U) of Mineral F1 (LRR O) d Matrix (F2) rix (F3) Gurface (F6) k Surface (F7) ssions (F8) RR U) ric (F11) (MLRA 151) ric (F13) (LRR P, T, U) F17) (MLRA 151) ic (F18) (MLRA 150A, 150I odplain Soils (F19) (MLRA right Loamy Soils (F20) (ML	*Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils3:  (U) 1 cm Muck (A9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F 18) (outside MLRA 150A,B) Piedmont Floodplain Soils (F19) (LRR P, S, T) Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks)  P, T)  Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  B) 149A)

# whlh029f\_w



Wetland data point whlh029f\_w facing east



Wetland data point whlh029f\_w facing south

WEILAND DE	TERMINATION DATA FORM - A	tlantic and Gulf Coasta	Il Plain Region HOJA
Projections 58RP	City/County	6thalitrax	Sampling Date
Applicant/Owner Domin	City/County	State A	Z Sampling Poiss -6 - 14
Investigatoris DP (DS 57)	Contrar Tou	unahun Danaa	·
andtoni bilislope terrace etc.)	hillstope 1 Local relief	concave convex none1	Slope (%) 0-7
Subregion (cRR or MLRA)	Lat 36º16'10,"	168" Long 79" 41"	17.006 Datum =
Soil Map Unit Name Tomo			ssification
Are denoted by drologic conditions on the		No ill no explair	un Remarke
Are vegetation Soil or Hy			ces present? Yes No
Are Vegetation Soil or Hy		(If needed, explain any a	/
	5 (243) <u>1.11 - 1.1</u>		
SUMMARY OF FINDINGS - Atta	The second secon	point locations, trans	ects, important features, etc.
Cydrophylic Vegetation Present?  Cydrophylic Sent Present?  Activity to dogs Present?  Remarks	Yes No within	AN OWNER DESIGNATION OF	No
Not	all three pr	maneters	present
HYDROLOGY			J
Wetland Hydrology Indicators:		Secondary I	ndicators (minimum of two required)
Primary Indicators (minimum of one is re	quired, check all that apply)		Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13)		y Vegetated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LRR U)	Drainag	e Patterns (B10)
Saturation (A3) Water Marks (B1)	Hydrogen Sulfide Odor (C1)		im Lines (B16)
Sediment Deposits (B2)	Oxidized Rhizospheres along Lin Presence of Reduced Iron (C4)		son Water Table (C2)
Doft Deposits (83)	Recent Iron Reduction in Tilled S		Burrows (C8) on Visible on Aerial Imagery (C9)
Aigal Mat or Crust (B4)	Thin Muck Surface (C7)		phic Position (D2)
Iron Deposits (B5)	Other (Explain in Remarks)		Aquitard (D3)
Inundation Visible on Aerial Imagery	(B7)	FAC-Ne	utral Test (D5)
Water Stained Leaves (B9) Field Observations		☐ Sphagn	um moss (D8) (LRR T, U)
	No Depth (inches)		
Zaiter Table Present? Yes	No Depth (inches)		( )
Saturation Present? Yes	Ng Depth (inches)	Wetland Hydrology Pr	esent? Yes No
(includes capillary fringe)			100
i sa sance is esorbed Data (siream gauge	monitoring well, aerial photos, previous in	ispections) if available	
Remarks			
11)= /	ydrology [	1	
100 /	yordlogy 1	pre son	
	ر ن		
			1 1 1

WHLH 029

VEGETATION (Four Strata) - Ose scientific ha				Sampling Point.
Town Steet (Die		Dominapl		Dominance Test worksheet:
Tree Stratum (Plot size)	% Cover	Species	1000	Number of Dominant Species
1 Pinus facopa	60		FAC	That Are OBL, FACW, or FAC (A)
2 Occepcus alba	10	4000000	FACU	-
3 Quercus pierre	10		FAC	Total Number of Dominant Species Across All Strata (B)
1 4 44 21 44 21 22		***********		Species Across Air Strata (B)
r 0				Percent of Dominant Species
The state of the s				That Are OBL_FACW_or_FAC(A/B)
0.				
7				Prevalence Index worksheet:
8				Total % Cover of Multiply by
	90	= Total Co	ver .	OBL species x 1 =
50% of total cover 45		total cover	1 50	FACW species x 2 =
Sapling/Shrub Stratum (Plot size)	20 % 01	total cover	10	FAC species x 3 =
( )			,	FACU species x 4 =
2 Pines took	300	/	12112	
	BO	1	FAC-	UPL species x 5 =
3 Ligitismour Styrus Flore	30		FAC	Column Totals (A) (B)
4 Williams right	30	11	FAL	Depublished lades: - D.A
Quercus alex	20	~	FACU	Prevalence Index = B/A =
6	-		TILL	Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0°
	100	= Total Cov	ver _ ray	Problematic Hydrophytic Vegetation (Explain)
50% of total cover 58	20% of	total cover	20	Troblemate Tydrophytic vegetation (Explain)
Herb Stratum (Plot size)	,			was a second
1 Pteriching agreement	K		FACU	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Grasman thing sossilation	47		FAC	Definitions of Four Vegetation Strata:
1 Mills argules	-10		FIXU	Tree - Woody plants, excluding vines, 3 in (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6.				Sanling/Shark Wand alone
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in, DBH and greater than 3.28 ft (1 m) tall.
9			The state of the s	one on our ordinary greater than 3.20 k (1 m) tall
8				Herb - All herbaceous (non-woody) plants regardless
		*******		of size, and woody plants less than 3.28 ft tall
10				Woody vine - All woody vines greater than 3.28 ft in
11				height
12	**			
	80	= Total Cov	/or	
50% of total cover			ファ	
	20% 01	total cover		
Woody Vine Stratum (Plot size	20	. /	1-1-	
Sivular intenditolic	10		rac	
2				
3				2
4			1	
I.	- (remine) il locationi in			
THE CO. LANS.   Comp.   Comp.   Company Company   Company Company   Compan	20			Hydrophytic
segun trees and a second		Fotal Cov	2.1	Vegetation Present? Yes No
50% of total cover.		total cover		103
Remarks. (If observed, list morphological adaptations below	w).			

JHLH029

SOIL Sampling Point Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) Redox Features 104R3/1 January 19 Dischepteron RM-Reduced Matrix, MS-Masked Sand Grains. Location. Et «Pore Liming MaMatrix. Hydric Scal Indicators (Applicable to all LRRs unless otherwise noted.) Indicators for Problematic Hydric Soils situadi, 41, Folyvalue Below Surface (S8) (LRR S, T, U) 1 on Maak (A9) (LRR 0) 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) Mick Prosence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and Coast Praine Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P. T. U) wetland hydrology must be present Saudy Marky Materal (\$1) (LRR O. S) Delta Cichoc if 12) (MLRA 151) unless disturbed or problematic Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (\$7) (LRR P. S. T. U) Restrictive Layer (if observed): vite Depth enchest Hydric Soil Present? Remarks No hydric soil



Upland data point whlh029\_u facing east



Upland data point whlh029\_u facing north

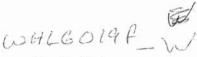
# whlh029 soils



Wetland/upland soils

WHLG0 19f-W in Region 8-7-14

W	ETLAND DETERMIN	ATION DATA FOR	M - Atlantic and G	wif Coastal Plain Region 8 7-14
Project/Site S2	er P	City/0	County Halif	RX Sampling Date
Applicant/Owner	Sominion			State Sampling Point
	DEST		on Township Range	
Landform (hillslope terra	ce etc.) depress	Loca	relief (concave_convex	none) LONCHUR Slope (%)
Subregion (LRR or MLR/	4)	Lat. 36 65	48.752 Long	72 41 37.669 Datum. —
	RIAUNS			NWI classification PFO
Are climatic / hydrologic of	conditions on the site typica	al for this time of year?	res / No	(If no. explain in Remarks )
Are Vegetation . S	or Hydrology	significantly distu	rbed? Are Norma	I Circumstances present? Yes No
	Soil or Hydrology _			explain any answers in Remarks.)
				ons, transects, important features, etc.
SOMMAN OF THE		/	Total	ons, transects, important leatures, etc.
- Cottonal vt. Conjetation	Prosent res 2	No	, is the Sampled Area	$\sim$
Hydric Soil Present?	Yes	No	within a Wetland?	Yes No
Wetland Hydrology Pre	sent? Yes /		L	
Remarks				
Fr. L1	we Hand.			
Portyrea	WETTALO.			
HYDROLOGY	A COLUMN TO THE PARTY OF THE PA		Service and the service of the servi	
Wetland Hydrology In	dicators:		U. #41. ( 10.00) \$4.00 \$4.40 \$1.00 \$	Secondary Indicators (minimum of two required)
chimacy Indicators unin	imum of one is required, ch	eck all that apply)		Surface Soil Cracks (86)
Surface Water (A1	,	Aquatic Fauna (B13)		Sparsely Vegetated Concave Surface (B8)
High Water Table (	A2)	Marl Deposits (B15) (LR	RU)	Drainage Patterns (B10)
Saturation (A3)		Hydrogen Sulfide Odor (		Moss Trim Lines (B16)
Water Marks (B1)		Oxidized Rhizospheres		Dry-Season Water Table (C2)
Sediment Deposits		Presence of Reduced In		Crayfish Burrows (C8)
Drift Deposits (B3)     Algal Mat or Crust		Recent Iron Reduction in	i filled Soils (Cb)	Saturation Visible on Aerial Imagery (C9)  Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface (C7) Other (Explain in Remai	ks)	Shallow Aguitard (D3)
	on Aerial Imagery (B7)	Other (Explain in Remai	KS)	FAC-Neutral Test (D5)
Water-Stained Lea				Sphagnum moss (D8) (LRR T, U)
Field Observations:	The second state of the se			
Surface Water Present	? Yes No	Depth (inches):		
Water Table Present?	Yes No	Depth (inches)		× 1
Saturation Present?		Depth (inches)	Wetland	Hydrology Present? Yes No
(includes capillary fring	e) ta (stream gauge, monitorir	no well aerial photos pr	evious inspections) if av	allable
	ia (an aam gaaga, maman	.g p.i.o.o., p.	5 110 50 1110 p 00 110 110 110 110 110 110 110	
Remarks	ALTERNATION AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AD			
	1	1 0		
	6	tuzurolo	gy pr	esert
	V	(3)	0 1 1	
			- '	



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

1204LG	01	9 F	
Sampling	g Point	1	

The state of the s	Absolute Dominant Indicator	Dominance Test worksheet: / 7
1 Quercus laurifolia	Cover Species Status	Number of Dominant Species That Are OBL, FACW, or FAC(A)
3 Liquidamly styroxithia	40 V FAC	Total Number of Dominant Species Across All Strata (B)
4. Lins Ronklon Fulspifera	1s FAW	Percent of Dominant Species That Are OBL. FACW. or FAC (A/B)
6.		Prevalence Index worksheet:
8		Total % Cover of Multiply by.
. 8	100 = Total Covery	OBL species x 1 =
50% of total cover	D 20% of total cover 20	FACW species x 2 =
Sapling/Shrub Stratum (Plot size)	Z_ 20 % Of total cover	FAC species x 3 =
1. Acer relogion 11	30 V 510	FACU species x 4 =
2 Ligitanly, Styrichucy	20 1 FAC	UPL species x 5 =
3 Vebernum dentatum	20 1/ FHIW	Column Totals (A) (B)
4		Describerate Index = B/A =
t,		Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
E		- Rapid Test for Hydrophytic Vegetation
		2 - Dominance Test is >50%
3		3 - Prevalence Index is \$3.0
	30 = Total Cover 14	Problematic Hydrophytic Vegetation (Explain)
50% of total cover.	20% of total cover	Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size)	. ~ /	Indicators of hydric soil and wetland hydrology must
Microsteam uminor	10 V/ FAC	be present, unless disturbed or problematic
Athyrium folio Limin	10 U/FACH	
Clethon Hlawoha	10 C FACE	Tree - Woody plants, excluding vines, 3 in 17.6 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.
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.
17		
1	30= Total Cover	
50% of total cover: (S	20% of total cover:	
Woody Vine Stratum (Plot size)		
Smelox roturditoria	15 of FAC	
? Campsis vadicans	15 V/ FAR	
U. tis rotunditolice	10 0 PAC	
4	-	
5		Hydrophytic
	Total Cover	Vegetation Van
50% of total cover 2.0	2. 20% of total cover . O	Present? Yes No
Remarks off observed list morphological adaptations below		
Hydrophytic veget	Pation is pre	sent.

	10 1
WHL60	177
	WW
	1/1/

		WWGOIII
SOIL		Sampling Point.
Profile Description: (Describe to the de	pth needed to document the indicator or confirm t	
Depth Matrix	Redox Features	
unches, Color (moist, %	Color (moist) % Type Loc	Texture Remarks
0-5 104R3/Z		SANDYLOWN
5-9 1048 4/2	104R4/1672	Soulyloon
9-16+104RX11	10 VR 5/8 75	CCH
1-18	19/10/10	
of a single consistent and popular		
	The same of the sa	
Type C=Concentration D=Depletion RM	=Reduced Matrix, MS=Masked Sand Grains.	Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to al	I LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Below Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
i tistic i nipedon (A2)	1hin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Harton A.	Coamy Mucky Mineral (E1: (LRR O)	Reduced Vertic (f 18) (outside MLRA 150A.B)
Stratified Layers (A5)	Loanty Gleyort Matrix (£2)	Predmont Floodplain Soils J 19: (LRR P. S. T)
Organic Bodies (A6) (LRR P. T. U)	Depleted Matrix (F3) Redox Dark Surface (F6)	☐ Anomalous Bright Loamy Soils (F20) (MLRA 153B)
Sam Macky Mineral (A7) (LRR P. T. U		Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	The state of the s
Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, T	Indicators of hydrophytic vegetation and
Coast Praine Redox (A16) (MLRA 150		wetland hydrology must be present
Sandy Mucky Mercial (S1) (LRR O. S)		unless disturbed or problematic
Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Reduced Vertic (F18) (MLRA 150A, 150B)	A.):
Stripped Matrix (S6)	Piedmont Floodplain Soils (F19) (MLRA 149) Anomalous Bright Loamy Soils (F20) (MLRA	
Dark Surface (S7) (LRR P. S, T, U)	Montaious Bright Loamy Soils (F20) (MERA	149A. 153C, 153D)
Restrictive Layer (if observed):		
1 vpe		1
Depth unches:		Hydric Soil Present? Yes No
Romanks		The second secon
i	7	
•	110	(/-
	10/1 // 7 5-1	1 DAGAGUST
	Hydrz Soy	ystesers
	)	

## whlg019f\_w



Wetland data point whlg019f\_w facing south



Wetland data point whlg019f\_w facing west

WHL6019 - U

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SERP City/County: HALL WAX Sampling Date:
Applicant/Owner: Dominion State: NZ Sampling Point:
Investigator(s): DOGDE ST Section Township Pages:
Landform (hillslope, terrace, etc.): Slope (%): 0 = 2
Landform (hillslope, terrace, etc.): Stope (%): 0 - 2  Subregion (LRR or MLRA): Lat: 36°15°48,318" Long: 77°5" Datum:
Soil Map Unit Name:
Are climatic / hydrologic conditions on the sile 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.
/ Attach site map showing sampling point locations, transects, important leatures, etc.
Hydrophytic Vegetation Present?  Yes No Is the Sampled Area
Hydric Soil Present? Yes No Within a Wotland?
Wetland Hydrology Present? Yes No Remarks:
Hydric Soil & hydrology indicators not observed.
) Deserved.
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B13)  Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)
Drift Deposits (B3)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surface (C7)  Geomorphic Position (D2)  Iron Deposits (B5)  Other (Explain in Remarks)  Shallow Aquitard (D3)
Iron Deposits (B5) Uother (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)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available
g non about protest provide inspections, it are indicate
Remarks / - C
No hydrology present
1 2 190107099 12 122 12

WHCGOIGH U

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

Tree Stratum (Plot size		Dominant		Dominance Test worksheet:	(	
1 Pinus taeder 1 18	-% Cover	Species?	FAC	Number of Dominant Species That Are OBL, FACW, or FAC	6	(A)
3 highdanbor stymullus	20		FACU	Total Number of Dominant Species Across All Strata	7	(B)
5	-			Percent of Dominant Species That Are OBL, FACW, or FAC	86_	(A/B)
		******************		Prevalence Index worksheet:		
				Total % Cover of	Multiply by	
8	50	-				
7.		= Total Cov	1/1			
50% of total cover	20% of	f total cover	1	FACW species x		
Sapling Shrub Stratum (Plot size 1	.10	. /	- 1	FAC speciesx		
11 Grastrum Sinense	50	$\vee$	FACO	FACU species x		
2 dagatras affidum	15		FACU	UPL species x		
3 Quercus alba	15		FACU	Column Totals (A	)	(B)
4				Prevalence Index = B/A =		-
5				Hydrophytic Vegetation Indica		
**				1 - Rapid Test for Hydrophyt		
		***************************************		2 - Dominance Test is >50%		
0	50			☐ 3 - Prevalence Index is ≤3.0	1	
50% of total cover 2/2	00	= Total Cov	er //.	Problematic Hydrophytic Veg	getation (Explan	in)
	20% 01	total cover	16			
Herb Stratum (Plot size)			/	Indicators of hydric soil and wetli be present, unless disturbed or p		nusl
microskyw viminea	5		FAC	Definitions of Four Vegetation	Strata:	
3						
4				Tree – Woody plants, excluding a more in diameter at breast height		
5				height.	(CDD) 17. regardi	C35 (/i
			SECONOMINATIVE		seconocio de como de c	
7				Sapling/Shrub - Woody plants, than 3 in. DBH and greater than		
P P				with 5 m, 55% and greater than	0.20 K ( 1 III) IUII.	
8				Herb – All herbaceous (non-wood of size, and woody plants less that		rdless
10				of size, and woody plants less tha	an 3.20 ft fall.	
				Woody vine - All woody vines go	reater than 3.28	ft in
11				height		
12	5					
7 /		= Total Cov	er 1			
50% of total cover 2.5°	20% of	total cover				
Woody Vine Stratum (Plot size	40	1/	FIN			
Smegax ropus rolle	50		WILL.			
2 Serchenia scapations	10	<u></u>	T WIC			
3 Vitis ostenel tolia	$\overline{2}$		THE			
4						
5	1			Hydrophytic		
~_		= Total Cov	er 2	Vegetation	No	
50% of total cover $32_{2}$	5_ 20% of	total cover	10	Present? Yes	No	
Remarks (If observed list morphological adaptations belo	w)					
Hy drophytic vey	etat	ion	15 /	daminant.		

WHL6019 \_ U

SOIL

Sampling Point:	ampling Point

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)						
Depth	Matrix	Redox Feature				
(inches) Cold	or (moist) %	Color (moist) %	Type' Loc'	Texture Remarks		
0-0 1041	(3/2			Dandyloan		
6-13 104	R 4/Z			Sandy lown		
173-18+109	1R5/3			5/11		
1 de final						
	Daniel Committee					
Type C=Concentra	ation D=Depletion RM=	Reduced Matrix, MS=Masked	I Sand Grains	Location PL=Pore Lining, M=Matrix.		
		LRRs. unless otherwise not		Indicators for Problematic Hydric Soils <sup>3</sup> :		
[ ] Histosol (A1)	# MM (8) (3 (8.25)	Polyvalue Below Surfa				
Histic Epipedon	(A2)	Thin Dark Surface (S9	생물을 잃었다면 하는 사람이 되었다. 그리고 하다고	2 cm Muck (A10) (LRR S)		
Black Histic (A3)		Loamy Mucky Mineral		Reduced Vertic (F18) (outside MLRA 150A.B)		
Tryprogen Sulfid	e (44)	Loamy Gleyed Matrix (	F21	Piedmont Floodplain Soils (F19) (LRR P. S. T)		
Stratified Layers	(A5)	Depleted Matrix (F3)		Anomalous Bright Loamy Soils (F20)		
	(A6) (LRR P. T. U)	Redox Dark Surface (F	6)	(MLRA 153B)		
	neral (A7) (LRR P, T, U)	<b>=</b>		Red Parent Material (TF2)		
Muck Presence		Redox Depressions (F	8)	Very Shallow Dark Surface (TF12)		
1 cm Muck (A9)	3 10 10 10 10 10 10 10 10 10 10 10 10 10	Marl (F10) (LRR U)		Other (Explain in Remarks)		
Thick Dark Surfa	Dark Surface (A11)	Depleted Ochric (F11)		T) Indicators of hydrophytic vegetation and		
The second secon	edox (A16) (MLRA 150A	Iron-Manganese Mass  Umbric Surface (F13)		wetland hydrology must be present.		
	ineral (S1) (LRR O, S)	Delta Ochric (F17) (MI		unless disturbed or problematic.		
Sandy Gleyed M		Reduced Vertic (F18)		uness distarbed of problematic.		
Sandy Redox (S		Piedmont Floodplain S		9A)		
Stripped Matrix (	(S6)	Anomalous Bright Loa	my Soils (F20) (MLRA	A 149A, 153C, 153D)		
The state of the s	7) (LRR P. S. T. U)					
Restrictive Layer (if	f observed):					
		11 may 2		$\vee$		
Depth (inches)				Hydric Soil Present? Yes No		
Remarks	H			A resource property on the electric state of a resource of the electric state of the electric state of the contract of the electric state of the electric		
İ						
		12	1	soil present		
		100	Mystoric	sory present		
# 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			U	U		
4 4 4 4 4 1						
4						
*						

## whlg019\_u



Upland data point whlg019\_u facing east



Upland data point wnhlg019\_u facing north

## whlg019 soils



Wetland/upland soils

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

Project/Site SERY City/County Hel; Lex Sampling Date  Applicant/Owner DOMINION State N Sampling Point WHIGOIST.
Project/Site SEF4 City/County Hell, tex Sampling Date  Applicant/Owner DOMINION State N Sampling Point WHLGOIEP
Investigator(s) DPVest Section. Township. Range:
Landform shillstone terrace etc.) Wallet M/FP Local relief (concave convex none) (ON(AVF Stone (%) 6
Subregion (LRR or MLRA)
Soil Map Unit Name Emperice 2-620 shope NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are VegetationSoilor Hydrologysignificantly disturbed? Are "Normal Circumstances" present? YesNo  Are VegetationSoilor Hydrologynaturally 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?  Hydro Soil Present?  Wetland Hydrology Present?  Remarks  The sampling point is located within a wetland.
HYDROLOGY
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required, check all that apply)  Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)  Drift Deposits (B3)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
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 Aquilard (D3)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U)
Field Observations:
Surface Water Present? Yes No Depth (inches)  Water Table 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
Hydrobeyy present

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

WHL6018f-w Sampling Point:\_\_\_\_

70		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:	% Cover	Species?	17907 4 4 4 4 4	Number of Dominant Species
1. Querons longistolia	30		FACIN	That Are OBL, FACW, or FAC:(A)
2. Agen whom	30	2/_	MAC	Total Number of Dominant
3. Francisco pennsylvanica	70		PACIN	Species Across All Strata: (B)
4.	-			
5		1110		Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6.				That Are OBE, I ACVV, OF I AC.
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8	-77			OBL species x 1 =
77 /-		= Total Co		FACW species x 2 =
50% of total cover: 35	20% o	f total cover	: 10	FAC species x 3 =
Sapinta/Stratum (Flot size.	20	1		FACU species x 4 =
1. Carpinus caroliniana	20		I-AR	
2. Ser Cubrum	15	-V/	PAC.	UPL species x 5 =
3. Franklines pennsylvanica	10		FACIN	Column Totals: (A) (B)
4.				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				
The state of the s				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.	155-			3 - Prevalence Index is ≤3.01
77	70	= Total Co	ver 0	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 22	20% 0	f total cover	r:	
Herb Stratum (Plot size:)	A.	/	CWal	¹Indicators of hydric soil and wetland hydrology must
1. Annolinalla giasita			FIXIN	be present, unless disturbed or problematic.
2. Fresama Haphyllum	5	<u> </u>	FACE	Definitions of Four Vegetation Strata:
3. Course alturessions	5	<u> </u>	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Balle Mark beet	89			more in diameter at breast height (DBH), regardless of
5. Cleathern alnifolia	2		FACW	height.
6. Hexastylis ari to her	2		PHOU	Sapling/Shrub – Woody plants, excluding vines, less
1				than 3 in, DBH and greater than 3.28 ft (1 m) tall.
100				
8.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9.				of size, and woody plants less than 5.20 it tall.
10.				Woody vine - All woody vines greater than 3.28 ft in
11.				height.
12.				
0.	19	= Total Co	ver /	
50% of total cover: 3,5	20%	of total cove	r: <u>0.0</u>	
Woody Vine Stratum (Plot size:)			/	
1. Som law intendiblica	_5	$\sim$	FAC	
2				
3.				
J				
5				
5	K	- T-4-1 O-		Hydrophytic Vegetation
7 (		_ = Total Co		Present? Yes No
50% of total cover: 2.8		of total cove	r:t	
Remarks: (If observed, list morphological adaptations bel	ow).			
1.				
Hydrophytic Veget	ation	15	prese	+
The property of the		/		ă

rı	
	_

Sampling Point:

Profile Description: (Describe to the d	epth needed to docum	ent the i	indicator	or confirm	the absence of in	dicators.)
Depth Matrix		Feature				
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0-4 10 XV. 7/1	100000000000000000000000000000000000000				_65	
4-10 2,576/	7.547/6	1			13	
10-144 7.6 47/1	1048 516	-6			13	
6011	- 10 /1 //0					
					-	
1						
Type: C=Concentration, D=Depletion, R	M=Reduced Matrix, MS	=Masked	Sand Gr	ains.		Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to						Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Histic Epipedon (A2)	Polyvalue Bel					(A9) (LRR O)
Black Histic (A3)	Thin Dark Sur Loamy Mucky				·	(A10) (LRR S) ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed			. 0)		loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Matr		/			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S		6)		(MLRA 1	
5 cm Mucky Mineral (A7) (LRR P, T,						Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depres	ssions (F	8)			w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LF	RR U)			Other (Expl	ain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Och	0.70	20	50		
Thick Dark Surface (A12)	Iron-Mangane					of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 18				, U)		hydrology must be present,
Sandy Mucky Mineral (S1) (LRR 0, S				04 4505)		isturbed or problematic.
Sandy Redox (S5)	Reduced Vert					
Stripped Matrix (S6)					эд) A 149A, 153C, 153	DI
III ourbeed matrix (oo)	L Allollidious Di					0,
		.5 = 0	iny dons (	, (		
Dark Surface (S7) (LRR P, S, T, U)		.5	my cons (		1	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):		.5	my dona (	20, (2.0		
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:			my cons (			ant? Vas X No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:  Depth (inches):			my cons (		Hydric Soll Pres	ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:			my cons (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny cons (			ent? Yes No No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny cons (			ent? Yes No No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			my dons (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type:  Depth (inches):			my cons (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			my cons (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny cons (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny cons (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny dona (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny dona (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny dona (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny dona (			ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:			ny dona (			ent? Yes No No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No No
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):  Type: Depth (inches):  Remarks:						ent? Yes No No

# whlg018f\_w



Wetland data point whlg018f\_w facing south



Wetland data point whlg018f\_w facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: SFR Sampling Date: 2 Applicant/Owner: DO 11 Sampling Point: Investigator(s): DDWest Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): CONVE Slope (%): 31,218 Long: 77.4 Subregion (LRR or MLRA): Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_ (If no, explain in Remarks.) \_, Soil \_\_ \_, or Hydrology \_ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aguitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Saturation Present? Wetland Hydrology Present? Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Withand hydrology indicaters are not present

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

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?		Dominance Test worksheet:	
1. Pines feeda	// COVE	Species	F 10 -	Number of Dominant Species	
2. Lindandron tulnastera	50	1	IFACU	That Are OBL, FACW, or FAC:	(A)
3. Daniel				Total Number of Dominant Species Across All Strata:	(B)
4				Percent of Deminant Species 29	
5				Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/B)
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8	20.00			OBL species x1 =	
1,00		Total Cov	er /		
50% of total cover: 10	20% of	total cover:	<u>Q</u>	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size:	0		, mar 101	FAC species x 3 =	
1. Liguidansa Front king	10	1/	FAC	FACU species x 4 =	
2. Carrollendon telipitera	15		PACU	UPL species x 5 =	
3. Quercus Glba			FACU	Column Totals: (A)	. (B)
4. Carya alla bonento sa	_5		UPL	Prevalence Index = B/A =	
5. 100 levelled to	6			Hydrophytic Vegetation Indicators:	
6. Amba spinosa	5		PNCV	1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8					
	417)	= Total Cov	er er	3 - Prevalence Index is ≤3.01	
50% of total cover: 20	47			Problematic Hydrophytic Vegetation¹ (Explain	)
Herb Stratum (Plot size:)	20% 01	total cover,			1
1. Artandaria (Florisize)		2/	1-1/11	, Indicators of hydric soil and wetland hydrology m	ust
	mi-x	$\rightarrow$	FACU	be present, unless disturbed or problematic.	
2. Book of frank Pfayilmen ague	3			Definitions of Four Vegetation Strata:	
3. Clerthera mbyitalia			FACW	Tree - Woody plants, excluding vines, 3 in. (7.6 c	m) or
4				more in diameter at breast height (DBH), regardle	
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, regard	lloce
9				of size, and woody plants less than 3.28 ft tall.	1033
10				N	
11.				Woody vine – All woody vines greater than 3.28 theight.	t in
12.					
	-15	= Total Cov	er		
50% of total cover: 7.5	-				- 1
Woody Vine Stratum (Plot size:	20 % 01	total cover.	-		
1. Smiles rotaditolice	de	1/	FAC		
2			171		
2					
3					
4					
5				Hydrophytic	
2.5		= Total Cov		Vegetation Present? Yes No	
50% of total cover: 4.00		total cover:		riesellt res No	
Remarks: (If observed, list morphological adaptations below	w).				
Hydrophytic veges	tatio	~ 13	d	loninat.	

#### SOIL

Profile Desc	cription: (Describe to the dep	oth needed to docum	mont the maleute		the absence o	
Depth	Matrix		ox Features			
(inches)	Color (moist) %	Color (moist)	% Type	Loc <sup>2</sup>	Texture	Remarks
25	10/1-1/2				45	
3-17	104/15/3	107P6M	10		45	
17-141	7.5460	10412311	7		, (	
7-11	<u> </u>	10/10/10				
		- mayeracona -				
		Account the second				
<del></del>						
	oncentration, D=Depletion, RM			Grains.		PL=Pore Lining, M=Matrix.
The second second	Indicators: (Applicable to all		at consequent an experimental part			or Problematic Hydric Soils <sup>3</sup> :
Histosol			elow Surface (S8)			uck (A9) (LRR O)
	pipedon (A2)		urface (S9) (LRR :	44		uck (A10) (LRR S)
	istic (A3)	possessing .	ky Mineral (F1) (LF	RR O)		d Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4) d Layers (A5)	=	ed Matrix (F2)		T-1	nt Floodplain Soils (F19) (LRR P, S, T)
	Bodies (A6) (LRR P, T, U)	Depleted Ma	Surface (F6)			ous Bright Loamy Soils (F20) A 153B)
	ucky Mineral (A7) (LRR P, T, U		irk Surface (F7)			rent Material (TF2)
	resence (A8) (LRR U)	Redox Depre			7	allow Dark Surface (TF12)
	uck (A9) (LRR P, T)	Marl (F10) (L				Explain in Remarks)
☐ Deplete	d Below Dark Surface (A11)	Depleted Oc	chric (F11) (MLRA	151)	•	
☐ Thick D	ark Surface (A12)	☐ Iron-Mangar	nese Masses (F12	(LRR O, P,	T) <sup>3</sup> Indica	tors of hydrophytic vegetation and
Coast P	rairie Redox (A16) (MLRA 150		ace (F13) (LRR P.		wetla	and hydrology must be present,
	Mucky Mineral (S1) (LRR O, S)	Delta Ochric	(F17) (MLRA 151	1)	unle	ss disturbed or problematic.
	Gleyed Matrix (S4)		rtic (F18) (MLRA			
	Redox (S5)		oodplain Soils (F1		S SALES REPORT	AE3007
-	f Matrix (S6) irface (S7) (LRR P, S, T, U)	Anomalous I	Bright Loamy Soils	(F20) (MLR	A 149A, 153C,	153D)
Restrictive	Layer (if observed):		227 - 2477 100			
Restrictive	Layer (if observed):					X
Restrictive Type: Depth (in	Layer (if observed):		3397 98907 Val 3		Hydric Soil I	Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):					Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):		re not	- 00		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicake	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicate	e not	· pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicati	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelizaki	a not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	- nelizaki	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicaki	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	- inelizate	ce not	- pr		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	helicake	e not	- pr		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicake	e not	- pr		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicate	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicate	e not	L pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicati	s ret	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicati	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicaki	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelizaki	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelizaki	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelizati	e not	- pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	helicaka	e not	pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	helicaka	e not	pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	helicaki	e not	L pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	nelicati	s ret	L pre		Present? Yes No
Restrictive Type: Depth (in Remarks:	Layer (if observed):	helicate	s ret	- pre		Present? Yes No

## whlg018\_u



Upland data point whlg018\_u facing east



Upland data point wnhlg018\_u facing north

## whlg018 soils



Wetland/upland soils

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

Project/Site SFRP City/C	ounty. 1/4, fayo Sampling Date 8/7/14
Applicant/Owner POMINIUM	State NC Sampling Point: WIKGON.
0012:1	on Township Range
	reflet (conceye, convex. none): None Slope (%): O
Subregion (LRR or MLRA)	Long 17 12 3.948 Datum
Soil Map Unit Name	NWI classification
fire climatic hydrologic conditions on the site typical for this time of year? You	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Are Vegetation	
Are Vegetation Soil or Hydrology naturally problems SUMMARY OF FINDINGS - Attach site map showing sam	
· · · · · · · · · · · · · · · · · · ·	31
Hydrophytic Vegetation Present? Yes No	is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Remarks	, , , , , , , , , , , , , , , , , , ,
Wetland present.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required, check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRF	R U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C	
Water Marks (B1) — Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Iron	
- U Shift Deposits (R3)	<b>5</b>
☐ Algal Mat or Crust (B4) ☐ Thin Muck Surface (C7) ☐ Iron Deposits (B5) ☐ Other (Explain in Remark	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches)	
Water Table Present? Yes No X Depth (inches)	
Saturation Present? Yes No Depth (inches)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	
Hydrology present.	

VEGETATION (Four Strata) – Use scientific names of plan	EGETATION	N (Four Strata	) – Use	scientific	names	of plant	s
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Sampling Point

1 Pinus to take Styra Duy	= Total Cover	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata.  Percent of Dominant Species That Are OBL FACW or FAC  Prevalence Index worksheet:  Total % Cover of:  Multiply by.  OBL species  x 1 =  FACW species  x 2 =  FAC species  x 3 =  FACU species  x 4 =
2 Liquidamber Styria Duy 3 4 6 8		UPL species x 5 =
1 Chasman Plot size 30, 1 Chasman Provider Decretary Provider Office Provider Constructions  3 Vaccinities Constructions  4 page 4 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	PAGW PAGW	Problematic Hydrophytic Vegetation (Explain)  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.
50% of total cover: 27  Woody Vine Stratum (Plot size 30)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	55 = Total Cover 5 20% of total cover:	Woody vine – All woody vines greater than 3.28 ft in height.  Hydrophytic
Remarks (II observed, list morphological adaptations bell florition fine Stand		Vegetation Present?  Yes No

WITL 60175-W Sampling Point

Pr	ofile Desci	ription: (Describ	e to the depth	n nee	ded to docu	iment the i	ndicator	or confirm	the absence o	of indicators.)
	epth	Matrix	The state of the s			ox Feature	s			
1 711	nchesi	Color (moist)		Co	lor (moist)	%	Туре	_Loc'	Texture	Remarks
1	2 - 6/	10713	<u> </u>						54	
1	1-141	10 11 6	/2	10	11-6/6	dy			5L	
				1						
1	****	***************************************	-			-			· · · · · · · · · · · · · · · · · · ·	
									<del></del>	
ļ										
!				a no						
1										
1 'T	una C=Co	ncentration. D=D	oplotion PM=	Dodu.	and Matrix A	AC=Masks				DI = Dara Linina M=Matrix
		ndicators: (App						ains.		PL=Pore Lining, M=Matrix, or Problematic Hydric Soils <sup>3</sup> ;
1	Histosol							.RR S, T, U)		uck (A9) (LRR O)
1	=	ipedon (A2)		H	Thin Dark S			The Control of the control of the		uck (A10) (LRR S)
	Black His	stic (A3)			Loamy Muc					d Vertic (F18) (outside MLRA 150A,B)
	4	Sulfide (A4)			Loamy Gle	yed Matrix (	F2)		Piedmoi	nt Floodplain Soils (F19) (LRR P. S, T)
Ę	4	Layers (A5)		$\boxtimes$	Depleted M	atrix (F3)			Anomal	ous Bright Loamy Soils (F20)
Ļ	5	Bodies (A6) (LRR		$\vdash$	Redox Dark					A 153B)
1	5	cky Mineral (A7) (	and the second s	H	Depleted D					rent Material (TF2)
1-		esence (A8) (LRR ck (A9) (LRR P. 1	27.COM	H	Redox Dep		8)		——————————————————————————————————————	allow Dark Surface (TF12)
F	7	Below Dark Surf		H	Marl (F10) Depleted O		/MIRA1	51)	U Other (E	Explain in Remarks)
1	100	rk Surface (A12)	acc (riving	Ħ				LRR O. P. 1	T) Indica	itors of hydrophytic vegetation and
Ì	S. Commence of the second	airie Redox (A16)	(MLRA 150A)	$\Box$	Umbric Sur					and hydrology must be present.
	Sandy M	ucky Mineral (S1)	(LRR O. S)		Delta Ochri	c (F17) (ML	RA 151)		unles	ss disturbed or problematic
1	=	leyed Matrix (S4)			Reduced V					
1	4	edox (S5)		Н				(MLRA 149		
F		Matrix (S6)		Ш	Anomalous	Bright Loa	my Soils (	F20) (MLRA	149A, 153C,	153D)
L	AND THE RESERVE AND ASSESSMENT OF THE PARTY.	face (S7) (LRR P	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~							
150		85 (0)								185. 10
	Contract Contract									Present? Yes No
		hes)		******					Hydric Soil F	Present? Yes No No
146	emarks								2000	٨
						11	Λ		<()	C+
E						HY.	977	200	JY DY	resent
						V			1	
İ										
Ī										
î										
L										

# whlg017s\_w



Wetland data point whlg017s\_w facing south



Wetland data point whlg017s\_w facing west

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site SERP Applicant/Owner DOMINION Investigatoris DDWEST Section Township, Range Local relief (concave, convex, none) Landform (hillslope, terrace, etc.) Fig. + Lat 36°15 20.395 Long 77 42 Subregion (LRR or MLRA) 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 Remark SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Vietland Hydrology Present? HYDROLOGY Wetland Hydrology Indicators Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required, check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Dutt 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) from Ceposity (Bfg. Other (Explain in Remarks) Shallow Adultard (D3) Principles Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Nater stained Leaves (89) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Water Table Present? Saturation Present? Wetland Hydrology Present? Yes \_\_\_ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Wetland Lydrologe Besters as not present

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

NATIONAL AND THE STATE OF THE S	Absolute			Dominance Test worksheet:
hard stratum. Phot size	"i Cover	Species?		Number of Dominant Species
NONE				That Are OBL FACW or FAC (A)
Pane				Fotal Number of Dominant Species Across All Strata (B)
				Percent of Dominant Species (5) IAB.
0				
7				Prevalence Index worksheet:
8				Total % Cover of Multiply by
		= Total Cov	ver	OBL species x 1 =
50% of total cover	20% of	total cover		FACW species x 2 =
Sapling Shrub Stratum (Plot size	21	/		FAC species x 3 =
fines tada	55	V/_	EHC	FACU species x 4 =
Liquidomber styracidus	15	~~	FAC	UPI, species x 5 =
Querons phellos	18		EACW	Column Totals (A) (B)
4. They office			FAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
			***************************************	2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3 0
20		= Total Cov		Problematic Hydrophytic Vegetation (Explain)
50% of total cover 32.	5 20% 01	total cover	12	
1 Reguler a faco Pleudium a der linus	. 5	2	-PACIT	Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 Chargan than Caxum	30		FACIN	Definitions of Four Vegetation Strata:
3. Rubus argutes	20	V	FAR	Control of the second of the s
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH) regardless of
5				height.
6				Sapling/Shrub – Woody plants excluding vines, less than 3 in, DBH and greater than 3 28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	55			
7 7	- depth - bearing -	= Total Co		
Woody Vine Stratum (Plot size)	20% 01	total cover	- 66	
Take State of the				
2 NOWE	-			
1 3		***************************************	****	
1.6				\ /
		= Total Co	101	Hydrophytic Vegetation
50% of total cover	20% 0			Present? Yes No
Remarks (If observed list morphological adaptations belo		- total cover		
in observed list morphological adaptations belo		t'	1 -	
Hydrophytic Vegetat	tion	10 0	omina	<u>_</u>
100				

WHL6617 \_ M Sampling Point: \_\_\_\_

Depth	ription: (Describe to the dept Matrix		ent the indicator or Features	confirm the al	bsence of indicators.)
(inches)	Color (moist) %	Color (moist)		Loc <sup>2</sup> Tex	cture Remarks
0-4	10 48 2/2				L
11-110+	757614	2343/6		— <del>-</del>	1
1-14		01/10	7		
7					- 1111101 ≥ 1 H
Type C=Co	ncentration, D=Depletion, RM=	Reduced Matrix MS:	Masked Sand Grain	s 21.0	ocation. PL=Pore Lining, M=Matrix.
	ndicators: (Applicable to all L				icators for Problematic Hydric Soils <sup>3</sup> :
[ Histosol		And the state of t	w Surface (S8) (LRF		De antenire ser i como trans entre a superior a menor anti menor anti se como como como de como como como como
$\equiv$	ipedon (A2)		ace (S9) (LRR S, T,		1 cm Muck (A9) (LRR O) 2 cm Muck (A10) (LRR S)
Black His	5 5 5		Mineral (F1) (LRR O		Reduced Vertic (F18) (outside MLRA 150A,B)
Property .	Sulfide (A4)	Loamy Gleyed		′ <u>П</u>	Piedmont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	Depleted Matr		П	Anomalous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P. T. U)	Redox Dark S			(MLRA 153B)
	cky Mineral (A7) (LRR P. T. U)	Depleted Dark			Red Parent Material (TF2)
	esence (A8) (LRR U)	Redox Depres	7.7		Very Shallow Dark Surface (TF12)
	ck (A9) (LRR P, T)	Marl (F10) (LF			Other (Explain in Remarks)
	Below Dark Surface (A11)	☐ Depleted Ochr	ic (F11) (MLRA 151)		Androp on the second section of the entry of the second of
and the same of th	rk Surface (A12)		se Masses (F12) (LR	R O, P, T)	3Indicators of hydrophytic vegetation and
The state of the s	airie Redox (A16) (MLRA 150A		e (F13) (LRR P, T, U	)	wetland hydrology must be present.
	ucky Mineral (S1) (LRR O, S)	Delta Ochric (I	17) (MLRA 151)		unless disturbed or problematic.
	eyed Matrix (S4)		c (F18) (MLRA 150A		
	edox (S5)		dplain Soils (F19) (M		
	Matrix (S6)	☐ Anomalous Br	ght Loamy Soils (F20	0) (MLRA 149A	A, 153C, 153D)
the time probabilities of the first and are	face (S7) (LRR P, S, T, U)				
42 - 00-0	ayer (if observed):				
Type	P				
Depth (inc	hes):			Hydi	ric Soil Present? Yes No
Remarks	The second secon	Marie of Physics and American Street,			
11.	hic spil ind	Section .	na not	L pre	stat
1790	the gir the	12910 1	art it	Pic	
./					
				entel more within	

# whlg017\_u



Upland data point whlg017\_u facing east



Upland data point wnhlg017\_u facing north

## whlg017 soils



Wetland/upland soils

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

Project/Site: 5 EFF City/Co	ounty: Halifax Sampling Date: 8/7/14
Applicant/Owner: Dom 1 N10 N	State: NC Sampling Point: WHLG0164
Investigator(s): Dovest Section	n, Township, Range:
Landform (hillslope, terrace, etc.): Flood plan Local re	elief (concave, convex, none): CONCAVE Slope (%):
Landform (hillslope, terrace, etc.): Flood plane Local re Subregion (LRR or MLRA): Lat: 36-15-4	739" Long: 77 42 1723" Datum:
	NWI classification: ANTE 17FO
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 problemat	
SUMMARY OF FINDINGS – Attach site map showing samp	pling point locations, transects, important features, etc.
Hydric Soil Present?	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR	
Saturation (A3)  Hydrogen Sulfide Odor (C	
☐ Water Marks (B1) ☐ Oxidized Rhizospheres ald ☐ Presence of Reduced Iron	
Drift Deposits (B3)  Recent Iron Reduction in T	
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 NoX 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, prev	flous inspections), if available:
Remarks:	
Agarologi	y present
	.) '

w

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

WHL6016 f\_ W Sampling Point:

70	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% Cover	Species?	-01	Number of Dominant Species
1. Nysser biflore	- 12		OBL	That Are OBL, FACW, or FAC:(A)
2. Quercus Jauritelia	30	V	1-OACM	Total Number of Dominant
3. Acco subrum	15_		FAC	Species Across All Strata: (B)
4. Liquidanser styresillus	10		PAE	
5	-			Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
8	90			OBL species x 1 =
		= Total Co		FACW species x 2 =
50% of total cover:	<u>_</u> 20% of	f total cover	r: <u>18</u>	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30 )	<b>~</b> 4-	11	6.	
1. Her rubum	20	_ 11/	FAC	FACU species x 4 =
2. Nyssa bitlora	10	_/_	OBL	UPL species x 5 =
3. Flex agace	5		- 10.00 A	Column Totals: (A) (B)
4				Prevalence Index = R/A =
5				Prevalence Index = B/A =
6.				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7		-		2 - Dominance Test is >50%
8	3/	= Total Co	. ——	3 - Prevalence Index is ≤3.01
, ~,				Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	<u>4 )</u> 20% of	f total cove	r:	
Herb Stratum (Plot size:)	/		0.00	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Comundo regalis	- 5,		081	be present, unless disturbed or problematic.
2. Com sofrum afriances			DBL.	Definitions of Four Vegetation Strata:
3. Microstegina viminea	15_		FAC	Tree Meady plants avaluding vines 3 in (7.6 cm) or
4. Cleathra donfilia	2		FIAGN	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6			2775111	Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9			The state of the s	of size, and woody plants less than 5.20 it tall.
10			Action and the second	Woody vine - All woody vines greater than 3.28 ft in
11				height.
12	777			
15h		= Total Co		
50% of total cover: 18	20% 0	f total cove	r: ( • 🕇	
Woody Vine Stratum (Plot size:)	1	,	1 501	
1. Sm. lax peternol. follow			THE	
2				
3				
4.			10-10-10-10-11	
5.		-		Hadanahada
	5	= Total Co	ver	Hydrophytic Vegetation
50% of total cover: 2				Present? Yes No
		i total cove	· <del></del>	L
Remarks: (If observed, list morphological adaptations bel	6-0005VI			
Hydrophytic vege	tatio	n 1	s di	oninat

WHL GO16 f\_w Sampling Point:

Profile Desc	cription: (Describe	to the depth	needed to docu	ment the i	indicator	or confirm	the absence of in-	dicators.)	
Depth	Matrix			ox Feature					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks	
0-4	1041 2								
4-14+	10 AU CL		1078-516	15					
	· · · · · · · · · · · · · · · · · · ·				. ——				
			A TANK AND A STATE OF THE STATE	L. Seelles					
¹Type: C=C	oncentration, D=Dep	lotion DM=0	Paduaad Matrix N	AC-Maakas	Cand Ca		21 continue DI -	ore Lining, M=Matri	
Hydric Soll	Indicators: (Applic	able to all L	RRs. unless oth	erwise not	ed.)	diris.		roblematic Hydric	
☐ Histosol			Polyvalue B			DD C T II		A9) (LRR O)	oons .
	oipedon (A2)		Thin Dark S					A10) (LRR S)	
	stic (A3)		Loamy Muc				A 100 March 200	rtic (F18) (outside I	MLRA 150A.B)
	en Sulfide (A4)		Loamy Gley			7:5. <b>7</b>		oodplain Soils (F19)	
	d Layers (A5)		Depleted M	atrix (F3)				Bright Loamy Soils (	
	Bodies (A6) (LRR P		Redox Dark				(MLRA 15		
	icky Mineral (A7) (LF		Depleted D		(5) (5)			Material (TF2)	
	esence (A8) (LRR U	1)	Redox Dep	Carlotte Day Carlotte	8)			w Dark Surface (TF1	(2)
	d Below Dark Surfac	e (A11)	☐ Marl (F10) (☐ Depleted O		(MI RA 1	51)	Uther (Expla	in in Remarks)	
	ark Surface (A12)	0 (/ ( / )	Iron-Manga		Contract of the contract of th		T) <sup>3</sup> Indicators	of hydrophytic vege	tation and
	rairie Redox (A16) (N	MLRA 150A)						nydrology must be p	
	fucky Mineral (S1) (L	LRR O, S)	Delta Ochri				unless di	sturbed or problema	itic.
	Sleyed Matrix (S4)		Reduced Ve	ertic (F18) (	MLRA 15	0A, 150B)			
	Redox (S5)		Piedmont F						
	Matrix (S6)	. T	☐ Anomalous	Bright Loai	my Soils (	F20) (MLRA	A 149A, 153C, 153I	0)	
	rface (S7) (LRR P, S Layer (if observed):								
Type:	Layer (ii observeu).	•							
	abaa):							V	
	ches):						Hydric Soll Pres	ent? Yes	No
Remarks:									
,									
	7 dric	11/	0 /						
FI	7015, C	5011	preset	-					
10			/						
							ranger resentations		

# whlg016f\_w



Wetland data point whlg016f\_w facing south



Wetland data point whlg016f\_w facing west

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

Project/Site: SEPP City/C	Sounty: 14 fax Sampling Date: 08/7/14  State: N Sampling Point: WH16016 U
Applicant/Owner: DOMINION	State: NC Sampling Point: WH1 6016 _ U
	on, Township, Range:
Landform (hillslope, terrace, etc.): 1+1/5/02-1 local	relief (concave convex none): (CONVEX Slone (%): 3-6)
Subregion (LRR or MLRA): T Lat: 365/5	5.374" Long: 77.42 16.85/11 Datum:
Soil Map Unit Name: Caldshore	relief (concave, convex, none): CONFX Slope (%): 3-4  5 3 2 4 Long: 27 42 16 56 11 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 problems	
SUMMARY OF FINDINGS – Attach site map showing sam	
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present?  Yes NoX  Wetland Hydrology Present?  Yes NoX	within a Wetland? Yes No
Remarks:	
All 3 parameters not po	resent.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRI	The state of the s
Saturation (A3)  Hydrogen Sulfide Odor (C	
☐ Water Marks (B1) ☐ Oxidized Rhizospheres a ☐ Sediment Deposits (B2) ☐ Presence of Reduced Iro	
Drift Deposits (B3)  Recent Iron Reduction in	
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Iron Deposits (B5)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:  Surface Water Present?  Yes No Depth (inches):	
Surface Water 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	vious inspections), if available:
Remarks:	
Wetland hydrology not pres-	ent
/ // /	

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

WHLG016	U
Sampling Point	

70		Dominant		Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2. NONE	-			Total Number of Dominant
3.				Species Across All Strata: (B)
4				
				Percent of Dominant Species / 07
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Control Control Security Control Contr
8				Total % Cover of: Multiply by:
	:	= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)				FAC species x 3 =
1. Liquidanser styracitles	10	FAC	. /	FACU species x 4 =
1 CIGCIO GIASER STYLIGHT	30	The And		UPL species x 5 =
[] [[] [[] [[] [[] [] [] [[] [[] [] [[] [[] []		1010		Column Totals: (A) (B)
3				(3)
4.				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				☐ A - Rapid Test for Hydrophytic Vegetation
7				
8.				2 - Dominance Test is >50%
0.	725			3 - Prevalence Index is ≤3.0
1 1		= Total Cov		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover.	20% of	total cover	16	
Herb Stratum (Plot size: 30 )		West hard had		¹Indicators of hydric soil and wetland hydrology must
1 Cheathers colnicia	15	FACIN	V/	be present, unless disturbed or problematic.
2 Chesmanthim laxun	1	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
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				Mark All background (non-woods) plants conceding
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				or size, and woody plants ross than size water
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	10:	= Total Cov	er//	
50% of total cover	20% of	total cover:		
Woody Vine Stratum (Plot size: 30 )			***	
1 Vitre retencifolis	1	FAC		
3 / 1	71	FIA	$\overline{}$	
2 Kerbins cregistus		1 / 1		
3				
4				
5				Hydrophytic
	30.	= Total Cov	er /-	Vegetation
50% of total cover:	20% of			Present? Yes No
Remarks: (If observed, list morphological adaptations be		TOTAL GOVEL.		
Hydrophytic veget	1 1-	54	1	Sout
U. donnatic Veget	ation	12	don	IARV.
Liboral J.	W			
~				
L				

WHLGO16. - M Sampling Point.

Depth	cription: (Describe to Matrix	o the depth n				or confirm	the absence of	indicators.)	
(inches)	Color (moist)	% (	Color (moist)	Features %	Type	_Loc <sup>?</sup> _	Texture	Remarks	
0-4	10 All 6/3						56		
4-14	7.54 W	7	546/6	-5			52		//
7			A-Ming				recountries and a second		
0.0000 0.000 0.000								*****	and the second second second second second
	-								
	oncentration, D=Deple					ains.		=Pore Lining, M=Matr	
	Indicators: (Applica	ible to all LRF			The same of the same			Problematic Hydric	Soils':
Histosol	(A1) Dipedon (A2)	ļ	Polyvalue Bell Thin Dark Sur		이 없는데 하는데 하는데 하는데			k (A9) (LRR O)	
	stic (A3)	Ì	Loamy Mucky					k (A10) (LRR S) Vertic (F18) (outside	MI RA 150A R)
	en Sulfide (A4)	Ī	Loamy Gleyed		100	0,	1	Floodplain Soils (F19)	
and the same of th	f Layers (A5)	Ţ	Depleted Matr	nx (F3)			Anomalou	s Bright Loamy Soils	F20)
	Bodies (A6) (LRR P,		Redox Dark S		*		(MLRA		
	icky Mineral (A7) (LR esence (A8) (LRR U)		Depleted Dark					nt Material (TF2)	2)
	ick (A9) (LRR P. T)	Ī	Redox Depres Mart (F10) (LF		)			low Dark Surface (TF: plain in Remarks)	(2)
	d Below Dark Surface	(A11) [	Depleted Och		MLRA 1	51)	Other (Iza)	prairi in reginares/	
	ark Surface (A12)	]	Iron-Mangane				T) <sup>3</sup> Indicato	rs of hydrophytic vege	tation and
	raine Redox (A16) (M		Umbric Surfac			, U)		d hydrology must be p	
	Mucky Mineral (S1) (LI Bleyed Matrix (S4)	RRO,S) [	Delta Ochric (			0	unless	disturbed or problema	itic.
=	Redox (S5)	Ť	Reduced Vert Piedmont Floor	2. 2.2			A)		
	Matrix (S6)	Ī					A 149A, 153C, 15	(3D)	
CONTRACTOR AND AND AND ADDRESS OF THE PARTY	rface (S7) (LRR P, S.	T, U)							
	Layer (if observed):								,
							Paur ou an accompans		$\times$
	ches)						Hydric Soil Pre	esent? Yes	No /
Remarks									
			S			,		$\cap$	
		at.	1 1			- ()		ient	
	9	100	Mydle	7.2	5	UT!	Pres		
		V	0						

## whlg016\_u



Upland data point whlg016\_u facing east



Upland data point wnhlg016\_u facing north

## whlg016 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region Sampling Date: 10/67/19 Project/Site: Sampling Point: Whih 0350 Applicant/Owner: DOINES4 Investigator(s): \_\_\_ Section, Township, Range: Landform (hillslope, terrace, etc.): \_ Local relief (concave, convex, none): \_ Concave Lat: 36° 15' 08-179" Long: 77642' 25.073" Subregion (LRR or MLRA): NWI classification: PEM 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? // a Are "Normal Circumstances" present? Yes \_\_\_\_ No \_\_\_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic?  $\mathcal{N}_{\mathfrak{o}}$  (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) \_\_\_ Aquatic Fauna (B13) \_\_\_ Sparsely Vegetated Concave Surface (B8) High Water Table (A2) \_\_\_ Drainage Patterns (B10) \_\_\_ Marl Deposits (B15) (LRR U) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) \_\_ Presence of Reduced Iron (C4) \_\_ Crayfish Burrows (C8) Drift Deposits (B3) \_\_\_ Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) \_\_\_ Thin Muck Surface (C7) Geomorphic Position (D2) \_\_\_ Iron Deposits (B5) \_\_ Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Yes \_\_\_\_ No \_ Depth (inches): \_\_\_ Surface Water Present? Water Table Present? Yes \_\_\_\_\_ No \_\_ Depth (inches): \_\_\_\_\_ Wetland Hydrology Present? Yes No Saturation Present? Yes \_\_\_\_\_ No \_\_ Depth (inches): \_\_\_\_\_ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: y drology present.

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

Sampling Point: Whith 035e w

Tree Stratum (Plot size: 36	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1		, , , , , , , , , , , , , , , , , , , ,		That Are OBL, FACW, or FAC: (A)
2				And Annual State of the An
3		-	-	Total Number of Dominant 2
3				Species Across All Strata: (B)
4				Percent of Dominant Species / 🖔 🖒
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6				(VB)
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
		= Total Co	ver	
50% of total cover:	20% of	total cover	:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)				FAC species x 3 =
1 Salin Minor	10	V	OBL	FACU species x 4 =
1. Salix nigra			UDU	UPL species x 5 =
2				Column Totals: (A) (B)
3				Coldifilit Totals (A) (B)
4				Prevalence Index = B/A =
5				
6.				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
7		×		✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	10	= Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 5	20% of	total cover	2	Trobismatio riyaropriyato vogetation (Explain)
Herb Stratum (Plot size: 30 )				
1. Rubus betalifolius	10		FAC	¹Indicators of hydric soil and wetland hydrology must
	2/0	V	500	be present, unless disturbed or problematic.
2. Commelina communis	177	<del></del>	FAC	Definitions of Four Vegetation Strata:
3. Festuca Sp.			FAC.	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Caret Sp.	10		FALW	more in diameter at breast height (DBH), regardless of
5. Juneus Befrusus	10		OBL	height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
11			( <del>)</del>	Woody vine – All woody vines greater than 3.28 ft in height.
12.				neight.
12.	16	Carried to telephone		
		= Total Cov	4	
50% of total cover: 30	20% of	total cover	: 12	
Woody Vine Stratum (Plot size:36)			-	
1				
			*	,
2			2-11/2	
3				
4				
5	(1 <u>2</u>		***************************************	Hydrophytic
**************************************		= Total Cov	<i>i</i> er	Vogotation
50% of total cover:	37-1-12-12-12-12		- 1	Present? Yes No
50% of total cover:		total cover		
Remarks: (If observed, list morphological adaptations belo	w).			
11 1 1				
Hydrology presents				P.E.
/ //				
				-

Profile Desc	ription: (Describe	to the dept	h needed to docu	ment the i	ndicator	or confirm	the absence of in	ndicators.)	
Depth	Matrix		Redo	x Feature					
(inches)	Color (moist)		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0->18	164R 4/4	96	104R516	10			10am		
35 11/10/2014									
-	-								
<del>Concerned to the</del>		-							
									80
-	-					*		Balanta Campina	
		-							
-									
<sup>1</sup> Type: C=Co	oncentration, D=Dep	oletion, RM=	Reduced Matrix, M	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL=	Pore Lining, M=Matri	ix.
Hydric Soil I	ndicators: (Applic	able to all L	RRs, unless othe	rwise note	∍d.)		Indicators for I	Problematic Hydric	Soils³:
Histosol	(A1)		Polyvalue Be	elow Surfa	ce (S8) (L	.RR S, T, U			entroperation by
Histic Ep	oipedon (A2)		Thin Dark St	urface (S9)	(LRR S,	T, U)		(A10) (LRR S)	
Black His	stic (A3)		Loamy Muck					ertic (F18) (outside I	MLRA 150A,B)
	n Sulfide (A4)		Loamy Gley					Floodplain Soils (F19)	
	Layers (A5)		Depleted Ma					Bright Loamy Soils (	- 12 P
	Bodies (A6) (LRR P		Redox Dark		886		(MLRA 1	18	
	cky Mineral (A7) (LI		Depleted Da				/	t Material (TF2)	
	esence (A8) (LRR L	J)	Redox Depre		8)			ow Dark Surface (TF1	2)
	ick (A9) <b>(LRR P, T)</b> I Below Dark Surfac	o (A11)	Marl (F10) (L		/8.81 D.A. 4	-4\	Other (Exp	lain in Remarks)	
	rk Surface (A12)	æ (ATT)	Depleted Oc				T\ 31d:t		K-41I
	airie Redox (A16) (I	MI RA 150A	Iron-Mangar	100 (E13) (	IDDD T	LKK U, P,		s of hydrophytic vege	
Sandy M	lucky Mineral (S1) (	LRR O. S)	Delta Ochric			, 0)		hydrology must be particularly historial hydrology must be particularly historial hydrology with the hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology must be particularly historial hydrology	1199554500001100
	leyed Matrix (S4)	0, 0,	Reduced Ve			0A. 150B)	unless	isturbed of problema	iuo.
AND CONTRACT STATE OF THE PARTY	edox (S5)		Piedmont Flo				9A)		
(37)	Matrix (S6)						A 149A, 153C, 153	3D)	
Dark Sur	face (S7) (LRR P, S	S, T, U)	(7	J	2 (	7 1		<b>.</b>	
Restrictive L	ayer (if observed):	•					11,89		
Type:	1		<u> </u>			E)			
Depth (inc	ches):		0.000				Hydric Soil Pres	sent? Yes 🗡	No
Remarks:								7/00/2007	
1.									
Ha	drie Soil	0	1_						
17	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	preses	+						
									5

# whlh035e\_w



Wetland data point whlh035e\_w facing east



Wetland data point whlh035e\_w facing south

WETLAND DETERMINATION DATA FO	ORM – Atlantic and Gulf Coastal Plain Region
Project/Site: Ci	
Applicant/Owner: Dominion	State: <u>NC</u> Sampling Point: <u>whiho3</u>
0.04 > 1-	
Landform (hillslope terrace etc.): 5 de 5 (v.a.e.	ection, Township, Range:
Subregion (LRR or MIRA):	ocal relief (concave, convex, none): N 3 2 Slope (%): 1 % Slope (%): 1 % Datum: WGS8
Soil Man Unit Name:	
Soil Map Unit Name: Lynchburg	NWI classification:N/A
Are climatic / hydrologic conditions on the site typical for this time of year	? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dis	sturbed? 🗸 o Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem.	ematic? 🌿 (If needed, explain any answers in Remarks.)
	ampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No 7	within a Wetland? Yes No
Remarks:	
The sampling point is not 1	ocated willing with
The state of the s	within a werreld.
LIVERGLACIA	
HYDROLOGY	1.
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	Sparsely Vegetated Concave Surface (B8)
Saturation (A3) Hydrogen Sulfide Odd 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	narks) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches): _	9
Water Table Present?  Yes No Depth (inches):	
Saturation Present?  (includes capillant fines):  Ves No Depth (inches):	
(moddes capillary intige)	5 Mars
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	
12	5.6.38659000000000000000000000000000000000000
Hydrology is not present.	
1190001099 13 NOT Present.	
, , , , , , , , , , , , , , , , , , , ,	
000	29
*	~

Tree Stratum (Plot size: 30)	Absolute	Dominant	Indicator	Sampling Point: White Dominance Test worksheet:
(Plot size:)	% Cover	Species?	Status	
1				That Am ODI That A
3.				Total Number of Dominant
1				Species Across All Strata:(E
5				Percent of Dominant Species
5,				That Are OBL, FACW, or FAC:
3.				,
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	-	Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
Appling/Snrub Stratum (Plot size:)				FAC species x 3 =
•				FACU species 70 x 4 = 280
				UPL species
				Column Totals: 70 (A) 280 (
				(A) 280 (
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
William Control of the Control of th				2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0¹
	=		r	
50% of total cover:	20% of t	otal cover:		Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
erb Stratum (Plot size:)				
Gossypium hirsutum	50	Y	FA/11	Indicators of hydric soil and wetland hydrology must
Lolium sperenne	70	V	FACU	be present, unless disturbed or problematic.
		1-	7FCU	Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
		A		more in diameter at breast height (DBH), regardless
				height.
				Sapling/Shrub - Woody plants, excluding vines, less
			1	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				There is a second of the secon
				Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
				Woody vine - All woody vines greater than 3.28 ft in
				height.
	70			
50% of total		Total Cover		
50% of total cover:	25 20% of to	tal cover: _	14	
		otal Cover		Hydrophytic
50% of total cover:				Vegetation Present? Yes No K
marks: (If observed, list morphological adaptations be	20% of to	al cover:		165 NO
Hydrophytic vegetation i		inact.		

Sampling Point: whih 035 - u

Profile Desc	ription: (Describe to the	ne depth needed to docu	ment the indicato	r or confirm	the absence of	indicators.)
Depth	Matrix	Redo	ox Features			,
(inches)	Color (moist)	% Color (moist)	% Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
0->18	2.545/3					Nomarko
					loan	
				-		
				-		
				42,0730,0010,000		
					and the second second	
40.00						
'Type: C=Co	oncentration, D=Depletio	n, RM=Reduced Matrix, M	S=Masked Sand G	rains.	<sup>2</sup> Location: PI	=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applicable	to all LRRs, unless othe	rwise noted.)		Indicators for	Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)	Polyvalue Be	elow Surface (S8) (	IRRSTII		k (A9) (LRR O)
Histic Ep	ipedon (A2)	Thin Dark St	urface (S9) (LRR S	. T. U)		k (A10) (LRR S)
Black His		Loamy Muck	y Mineral (F1) (LR	R O)		Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)	Loamy Gley		,	Piedmont	Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)	Depleted Ma				is Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P, T, I	J) Redox Dark			(MLRA	
5 cm Mu	cky Mineral (A7) (LRR P		rk Surface (F7)			nt Material (TF2)
Muck Pre	esence (A8) (LRR U)	Redox Depre				low Dark Surface (TF12)
1 cm Mu	ck (A9) (LRR P, T)	Marl (F10) (L				olain in Remarks)
Depleted	Below Dark Surface (A	11) Depleted Oc	hric (F11) (MLRA 1	151)		Tam in remaine)
Thick Da	rk Surface (A12)	Iron-Mangan	ese Masses (F12)		T) <sup>3</sup> Indicator	rs of hydrophytic vegetation and
Coast Pr	airie Redox (A16) (MLR	A 150A) Umbric Surfa	ace (F13) (LRR P,	T, U)		d hydrology must be present,
	ucky Mineral (S1) (LRR	O, S) Delta Ochric	(F17) (MLRA 151)	5 3		disturbed or problematic.
	leyed Matrix (S4)		rtic (F18) (MLRA 1			and an en producting the
Sandy R		Piedmont Flo	oodplain Soils (F19	(MLRA 14	9A)	
Stripped		Anomalous B	Bright Loamy Soils	(F20) (MLR/	A 149A, 153C, 15	3D)
	face (S7) (LRR P, S, T,	J)		3 3 7		
Restrictive L	ayer (if observed):		- Human	MINISTER COURT		-
Type:		•				
Depth (inc	hes):				Hydric Soil Pre	esent? Yes No_×_
Remarks:					Tiyunc Son Fie	sent resNo
1.0						
Ha	deie cail	not present	L			
17	4216 3011	NOT present	,			
		/				
	3					
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						1
						1
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						1
						f

# whlh035\_u



Upland data point whlh035\_u facing north



Upland data point whlh035\_u facing west

## whlh035 soils



Wetland/upland soils

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

Project/Site SERP	City/County: Halifax Sampling Date: 8/7/14
Applicant/Owner: Dominion	
Investigator(s): DD WEST	Section Township, Range: N/A
Landform (hillslope terrace etc.): FIAT	Local relief (concave, convex, none); None Slope (%);
Subregion / PR or MI PA)	Local relief (concave, convex, none): None Slope (%): 0.738 Long 77 42 21, 595 Datum: WGS84
Soil Map Unit Name: Rains	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of ye	14
Are Vegetation Soil or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  Planted Thinned Pine	within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply	
Surface Water (A1) Aquatic Fauna (B	
High Water Table (A2)  Saturation (A3)  High Water Table (A2)  Marl Deposits (B1)	
Saturation (A3) Hydrogen Sulfide  Water Marks (B1) Oxidized Rhizosp	wheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)  Sediment Deposits (B2)  Presence of Redu	
	uction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	
Iron Deposits (B5) Other (Explain in	
Inundation Visible on Aerial Imagery (B7)	✓ FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes NoX Depth (inche	
Water Table Present? Yes NoX Depth (inche	38)
Saturation Present? Yes No X Depth (inche (includes capillary fringe)	es): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	otos, previous inspections), if available:
Demonstra	
Remarks:	
hydrology Criteria	met

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

Sampling Point: While 0/5 f. w

Tree Stratum (Plot size: 30)		Dominan		Dominance Test worksheet:
	% Cover	Species'		Number of Dominant Species
1. Pinus taeda	30	<del></del>	FAC	That Are OBL, FACW, or FAC: (A)
2. Tryagnatum arboreum	2	N		Total Number of Francisco
3.	31_000000000000000000000000000000000000			Total Number of Dominant Species Across All Strata  (B)
4			-	Opedies Adross All Strata(B)
5.				Percent of Dominant Species That Are ORL FACW or FAC: 88
5				That Are OBL, FACW. or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	35	= Total Co	ver	OBL species x 1 =
50% of total cover: 17	5 20% 01	f total cove	7	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)				FAC species x 3 =
1 Oxydendrum arboreum	E	γ	FACH	FACU species x 4 =
2 Liquidambar styraciflua				UPL species x 5 =
2 Vocamber Stylasteria	_5_		FAC	
3. Vaccinium corymbosom	_5_	<u> </u>	PACW	Column Totals: (A) (B)
4. Ilex opaca		<u> </u>	FAC	Prevalence Index = B/A =
5.	************			Hydrophytic Vegetation Indicators:
6				
7		-7		1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
	70	= Total Co	-	☐ 3 - Prevalence Index is ≤3.01
50% (100)		= Total Co	ver 21	Problematic Hydrophytic Vegetation' (Explain)
Herb Stratum (Plot size. 30 )	20% o	f total cove	r:	
Rha vice		V	г ,	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Rhexia mariana		_1	FACW	be present, unless disturbed or problematic.
2. Scirpus cyperinus	_5_	4	OBL	Definitions of Four Vegetation Strata:
3. Microstegium vimineum	10	V	FAC	7
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5		-		height.
6		-		
7		****		Sapling/Shrub - Woody plants, excluding vines less
. 7.	******			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	50	= Total Co	ver	
50% of total cover: 10	20% 0	f total cove	. 4	
Woody Vine Stratum (Plot size 3 0		i total cove	, —	
2				
3.				
4		-	-	
5			ACC-SASSIBLE ACCOUNTS	Livelyambutta
	0	= Total Co	Ver	Hydrophytic Vegetation
50% of total cover:(				Present? Yes No
Remarks (If observed, list morphological adaptations belo		i ioiai cove		
i	/w/).			
. 1				
Vegetation Criteria	may			
J. Tel.a	1116			
- 25				

inches	Matrix		Redox	Features			the absence of in	
O U	Color (moist)	%	Color (moist)	%	Type:	Loc²		Remarks
1-4	104R 2/1	100						
4-6	2.54 5/1	98	104R5/6	2	<u>C</u>	PL	SCL_	
-14	2596/2	96	104R5/6	Z	C	PL	SCL	
			Gley 1-4 Gy	2	D	M		
De terretario								
***********								
			M=Reduced Matrix, MS			ains.		Pore Lining, M=Matrix
Editor particular		cable to a	II LRRs, unless other		2.000 c. •s.			Problematic Hydric Soils <sup>3</sup> :
Histoso	ol (A1) Epipedon (A2)		Polyvalue Be				, J.	(A9) (LRR O)
	Histic (A3)		Thin Dark Su Loamy Muck					: (A10) (LRR S) /ertic (F18) (outside MLRA 150A,B
march.	gen Sulfide (A4)		Loamy Gleye			. 0)		Floodplain Soils (F19) (LRR P, S, T
	ed Layers (A5)		Depleted Ma	trix (F3)				s Bright Loamy Soils (F20)
	c Bodies (A6) (LRR		Redox Dark				(MLRA	(6.00) (1
	Mucky Mineral (A7) (L Presence (A8) (LRR		J) Depleted Dar		62 61			nt Material (TF2) ow Dark Surface (TF12)
	fuck (A9) (LRR P, T)		Marl (F10) (L	AT-GOOD TO THE OWNER OF THE OWNER OWNER OF THE OWNER O	0)		T	ow Dark Surface (TF 12) blain in Remarks)
	ed Below Dark Surfa		Depleted Oct	이 경하고 없었다.	(MLRA 1	51)	James Giller (all)	
	Dark Surface (A12)		☐ Iron-Mangan					rs of hydrophytic vegetation and
	Prairie Redox (A16)					200		d hydrology must be present.
	Mucky Mineral (S1) Gleyed Matrix (S4)	(LRR O, S	Delta Ochric Reduced Ve		사용하다 그 사는 기가			disturbed or problematic.
	Redox (S5)		Piedmont Flo					
-	ed Matrix (S6)			Action and the second	and the state of the state of		RA 149A, 153C, 15	3D)
and the same of the same of	Surface (S7) (LRR P,	The second second second						
Restrictiv	e Layer (if observed	55						
Type: _							# 12 75 X	÷
	inches)						Hydric Soil Pre	esent? Yes X No
		************					Hydric Soil Pro	esent? Yes X No
Depth (		**************************************		was dear a ladar t			Hydric Soil Pro	esent? Yes X No
Depth (		THE LABORATOR OF THE CO.				ng ko <u>wakana n</u> a manana <del>n</del> a s	Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The state of the s			<b></b>		Hydric Soll Pro	esent? Yes X No
Depth (	inches)	The state of the s	Criteria w	net			Hydric Soll Pro	esent? Yes X No
Depth (	inches)	The state of the s		net			Hydric Soll Pro	esent? Yes X No
Depth (	inches)	The second secon		net		-	Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soll Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soll Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soll Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soll Pro	esent? Yes X No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No No
Depth (	inches)	The second secon		net			Hydric Soil Pro	esent? Yes X No

### whlg015f\_w



Wetland data point whlg015f\_w facing south



Wetland data point whlg015f\_w facing west

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

Project/Site SERP Applicant/Owner Dominion			Sampling Date: 8/7/14 Sampling Point: Whig 0 15F
	Section, Township, Range: _		Sampling Point: Whigh 15 F
	Legal relief (concerns concerns	TAN VOIN	2 21
Subregion (LRR or MLRA) 1 Lat: 36	15 0 83	17 47 =	2/19 99 " De 1 1/2 GU
Soil Map Unit Name Golds bard	Long.	1 1 16 5	cation: None
Are climatic / hydrologic conditions on the site typical for this time of ye	V V		
Are Vegetation Soil or Hydrology significantly			
Are Vegetation Soil, or Hydrology naturally pr			present? Yes No
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locati	ons, transect	s, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  Yes No  Yes No  Y  Remarks:	Is the Sampled Area within a Wetland?		NoX
HYDROLOGY	· · · · · · · · · · · · · · · · · · ·		
Wetland Hydrology Indicators:		Sacondary India	cators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	0		il Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1			egetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B1		Drainage P	atterns (B10)
Saturation (A3) Hydrogen Sulfide		Moss Trim	
	heres along Living Roots (C3)		Water Table (C2)
	ction in Tilled Soils (C6)	Crayfish Bu	Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface			c Position (D2)
Iron Deposits (85) Other (Explain in I		Shallow Aq	
Inundation Visible on Aerial Imagery (B7)	(n 27) (250 (48) 250)	FAC-Neutra	
Water-Stained Leaves (B9)		Sphagnum	moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Depth (inches	s)		
Water Table Present? Yes No Depth (inche:			(/
Saturation Present? Yes No Depth (inche: (includes capillary fringe)	s): Wetland	Hydrology Prese	ent? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if a	vailable:	
Remarks:			
hydrology Criteria no	n met		

Tron Stratum (Blatains 20)		Dominan		Dominance Test worksheet:
Tree Stratum (Plot size: 30) 1. Pinus taeda	% Cover	Species	Status FAC	Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
2. Acer rubrum 3.	5	<u>N</u>	FAC	Total Number of Dominant Species Across All Strata (B)
5				Percent of Dominant Species That Are OBL, FACW. or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8.	75		************	OBL species x 1 =
500 (1.1.)	50	= Total Co	ver	FACW species x 2 =
50% of total cover: 17. Sapling/Shrub Stratum (Plot size: 30)	20% of	total cove	r:	FAC species x 3 =
1 Oxydendrum arbureum	5	V	EM II	FACU species x 4 =
2 Acer rubrum	2	-1	FAC 4	UPL species x 5 =
3. Liquidambas Styraci Plua	2	7	FAC	Column Totals: (A) (B)
4		<del></del>	FAO	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6.				1 - Rapid Test for Hydrophytic Vegetation
7				X 2 - Dominance Test is >50%
8.			-	3 - Prevalence Index is ≤3.01
7 .	15	= Total Co	ver	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 7.5	20% 0	f total cove	r: <u>3</u>	
Herb Stratum (Plot size. 30	_	125	L.	Indicators of hydric soil and wetland hydrology must
1 Chasmanthium 19xum			FACW	be present, unless disturbed or problematic.
2. Vaccinium conymbosum		<u> </u>	FACW	Definitions of Four Vegetation Strata:
3. Micro stegium vimineum		<del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> -	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5		S <del>1900</del>	-	more in diameter at breast height (DBH), regardless of height.
6				Sapling/Shrub Woody plants, excluding vines less than 3 in, DBH and greater than 3.28 ft (1 m) tall.
8			- 1	Herb – All herbaceous (non-woody) plants, regardless
10.		1 <del>10 - 10 - 11 - 1</del>		of size, and woody plants less than 3.28 ft tall.
11				Woody vine - All woody vines greater than 3.28 ft in height.
12	15			
50% of total cover: 7		= Total Co		
Woody Vine Stratum (Plot size 30)	20% 0	1 total cove	ir	
1 Vitis rotundifola	10	V	FAC	
2		_/	PIL	
사람들은 그는 그는 그들은 그들은 살아가는 그는 그는 그는 그는 그는 그는 그를 가는 것이 없는 것이 없는 것이 없다면 살아 싶다면 살아 없다면 살아 싶다면 살아요. 얼마나 살아 살아 살아 살아 싶다면 살아 싶다면 살아 싶다면 살아 싶다면 살아요. 얼마나 살아 살아 살아 살아 살아 살아 싶다면 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아 살아 살아요. 얼마나 살아 살아 살아요. 얼마나 살아 살아 살아 살아요	-			
3.	-			
4	-	-		
9				Hydrophytic
500 ( (	_10	= Total Co	over	Vegetation Present? Yes No
50% of total cover: _5		f total cove	er. <u> </u>	
Remarks (If observed, list morphological adaptations believed)	ow).			
Vegetation Criteria me	, 1			
.5				

Sampling Point: Whilg 015 - 4

Depth	Matrix			Redo	x Feature	S				
inches) 1 - 3	Color (moist)	%	Colo	or (moist)	%	Type <sup>1</sup>	_Loc2	Texture	Rema	rks
	104RZ/Z	100						_54		
3-6	2.546/3	98		6/4	2	C	M	SL		
-14	2.546/4	95	2.54	6/4	5	C	M	SL	Cornels (see IIIII) and see an out of	
(M4 (M4 4) AV.	Alexander and the second and the sec									
Histoso Histoso Histoso Histoso Histoso Histoso Hydrog Stratifie Organi 5 cm M Muck F 1 cm M Deplete Thick E Coast I Sandy Sandy Sandy	Concentration, D=Dep I Indicators: (Applications) DI (A1) Epipedon (A2) Histic (A3) Jen Sulfide (A4) Jed Layers (A5) C Bodies (A6) (LRR P. Mucky Mineral (A7) (LI Presence (A8) (LRR D. Huck (A9) (LRR P. T.) Jed Below Dark Surface Dark Surface (A12) Prairie Redox (A16) (I Mucky Mineral (S1) (I Mucky Mineral (S1) (I Mucky Mineral (S1) (I Gleyed Matrix (S4) Redox (S5)	P, T, U) RR P, T, U J) ce (A11) MLRA 150	A)	unless other Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark: Depleted Dar Redox Depre Marl (F10) (L Depleted Oct Iron-Mangan Umbric Surfa Delta Ochric Reduced Ver Piedmont Flo	rwise not allow Surface (S9 y Mineral ad Matrix trix (F3) Surface (I rk Surface (I rk Surface (I rk Surface (I f f f f f f f f f f f f f f f f f f	ted.) ace (S8) (I b) (LRR S, (F1) (LRR (F2) F6) e (F7) f8) (MLRA 1 fees (F12) (LRR P, 7 LRA 151) (MLRA 15 Soils (F19)	ERR S, T, ( T, U) R O) (LRR O, P, T, U) 50A, 150B	Indicators f U) 1 cm Mi 2 cm Mi Reduce Piedmo Anomal (MLR Red Pai Very Sh Other (E	PL=Pore Lining, M=I for Problematic Hydrock (A9) (LRR O) uck (A10) (LRR S) d Vertic (F18) (outs nt Floodplain Soils ( ous Bright Loamy S A 153B) rent Material (TF2) nallow Dark Surface Explain in Remarks) ators of hydrophytic and hydrology must ss disturbed or prob	ide MLRA 150A,8 F19) (LRR P, S, T oils (F20)  (TF12)  vegetation and be present.
Dark Sestrictive	urface (S7) (LRR P. S Layer (if observed)	:			ong in Loa			RA 149A, 153C,	1000/	- Carolina de la Carolina de la Carolina de la Carolina de la Carolina de la Carolina de la Carolina de la Caro
Depth (i	nches).							Hydric Soll F	Present? Yes	No <u>.X</u>
	hydric	Soil	Cr	iteria	V\ a**	† /	Vel			

### whlg015\_u



Upland data point whlg015\_u facing east



Upland data point wnhlg015\_u facing north

### whlg015 soils



Wetland/upland soils

Project/Site: Atlantic Coast Pipeline		County: Halifax		Sampling Date: 11/17/2014				
Applicant/Owner: Dominion					Sampling Point: WHLB100f_w			
Investigator(s): TP, RH		Section	on, Township, Range: No	PLSS in this area	1			
Landform (hillslope, terrace, etc.): drainage	ief (concave, convex, no	ne): concave	Slope (%): 1					
Subregion (LRR or MLRA): P	La	t: 36.24696055	Long: -77.	70965054	Datum: WGS 1984			
Soil Map Unit Name: Rains fine sandy loa	nm, 0 to 1 pe	ercent slopes		NWI classific	eation: None			
Are climatic / hydrologic conditions on the	site typical	for this time of year? Y	′es No	(If no, explain in R	emarks.)			
Are Vegetation, Soil, or Hy	drology	significantly distur	bed? Are "Normal	l Circumstances" p	oresent? Yes <u>√</u> No			
Are Vegetation, Soil, or Hy								
SUMMARY OF FINDINGS – Atta								
Hydrophytic Vegetation Present?	Yes ✓	No						
Hydric Soil Present?		No	Is the Sampled Area within a Wetland?	Voc. V	No			
Wetland Hydrology Present?		No	within a wettand?	res				
Remarks:								
PFO wetland adjacent to SHLB100.								
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is re	equired; che	ck all that apply)		Surface Soil	Cracks (B6)			
Surface Water (A1)		_ True Aquatic Plants (	B14)	Sparsely Ve	getated Concave Surface (B8)			
High Water Table (A2)		_ Hydrogen Sulfide Od	or (C1)	✓ Drainage Pa	tterns (B10)			
Saturation (A3)	✓	Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim L	ines (B16)			
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	Crayfish Bur	rows (C8)			
✓ Drift Deposits (B3)		Thin Muck Surface (C	C7)	Saturation V	isible on Aerial Imagery (C9)			
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)	Stunted or S	tressed 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:	,							
		Depth (inches):						
1		_ Depth (inches):						
Saturation Present? Yes (includes capillary fringe)	No <u></u>	Depth (inches):	Wetland H	tland Hydrology Present? Yes No				
Describe Recorded Data (stream gauge	, monitoring	well, aerial photos, pre	evious inspections), if ava	nilable:				
Remarks:								
Remarks:								

Sampling	Point: WHLB100f_	w
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•	Absolute	Dominant I	ndicator	Dominance Test worksheet:	
Tree Stratum (Plot size:)			Status	Number of Dominant Species	
1. Pinus taeda	30	Yes	FAC	That Are OBL, FACW, or FAC:8 (A)	()
2. Acer rubrum	20	Yes	FAC	Total Nevel on of Descional	
3. Betula nigra	15	Yes	FACW	Total Number of Dominant Species Across All Strata:  8 (B)	3
4				(5	'
				Percent of Dominant Species That Are OBL FACW or FAC: 100	(5)
5				That Are OBL, FACW, or FAC: (A	/B)
b				Prevalence Index worksheet:	
1	65			Total % Cover of: Multiply by:	
20.5		= Total Cove	r 13	OBL species $0 \times 1 = 0$	
50% of total cover: 32.5	20% of	total cover:_		40	
Sapiing/Shrub Stratum (Piot size:)				FACW species x z =	
1. Magnolia virginiana	15	Yes	FACW	FAC species X3 =	
2. Liquidambar styraciflua	10	Yes	FAC	FACU species x 4 =	
3. Carpinus caroliniana	10	Yes	FAC	UPL species 0 x 5 = 0	
4. Quercus phellos	10	Yes	FAC	Column Totals:(A)(B)(I	B)
5				0.00	
				Prevalence Index = B/A =2.66	
6				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
8				✓ 2 - Dominance Test is >50%	
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
00.5		= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide support	tina
50% of total cover: 22.5	20% of	total cover:_	9	data in Remarks or on a separate sheet)	9
Herb Stratum (Plot size:5				. ,	
1. Arundinaria gigantea	10	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2					
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must	t
Δ				be present, unless disturbed or problematic.	
5				Definitions of Four Vegetation Strata:	
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)	or
6				more in diameter at breast height (DBH), regardless	of
7				height.	
8				Sapling/Shrub – Woody plants, excluding vines, les	ss
9				than 3 in. DBH and greater than or equal to 3.28 ft (	
10				m) tall.	
11				Herb – All herbaceous (non-woody) plants, regardle	222
	10	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.	
50% of total cover:5	20% of	total cover:_	2	Was designed Allows designed and the color of the	
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.	n
1				noight.	
2					
3					
4				Hydrophytic	
5				Vegetation Present? Yes ✓ No	
		= Total Cove	^	Present? Yes Y No No	
50% of total cover:0	20% of	total cover:_			
Remarks: (Include photo numbers here or on a separate s	heet.)				

Depth	Matrix		Redox	K Features	,			
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	10YR 3/1	95	10YR 4/6	5	C	PL	SL	
4-12	10YR 6/1	100					SCL	
-								
<sup>1</sup> Type: C=C	oncentration, D=Depl	letion, RM	=Reduced Matrix, MS	=Masked	Sand Gra	ains.	<sup>2</sup> Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indic	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)			2	2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel		e (S8) (N	ILRA 147,		Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su					(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F	=2)		F	Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		✓ Depleted Mat	rix (F3)				(MLRA 136, 147)
2 cm Mu	uck (A10) (LRR N)		Redox Dark S	Surface (F	6)		\	/ery Shallow Dark Surface (TF12)
Depleted	d Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)		C	Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	3)			
Sandy N	Mucky Mineral (S1) (L	.RR N,	Iron-Mangane	ese Masse	es (F12) (	LRR N,		
MLRA	A 147, 148)		MLRA 136	5)				
Sandy G	Bleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain Sc	oils (F19)	(MLRA 14	8) we	etland hydrology must be present,
Stripped	l Matrix (S6)		Red Parent M	laterial (F2	21) <b>(MLR</b>	A 127, 147	') un	nless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	I Present? Yes ✓ No
Remarks:							1 -	



Photo 1
Wetland data point WHLB100f\_w facing northwest



Photo 2
Wetland data point WHLB100f\_w facing southeast

Project/Site: Atlantic Coast Pipeline	City/County: Halifax	Sampling Date: 11/17/2014
Applicant/Owner: Dominion	, ,	State: NC Sampling Point: WHLB100f_w
Investigator(s): TP, RH		
Landform (hillslope, terrace, etc.): drainageway		
Subregion (LRR or MLRA): P	at: 36.24700414	7092758 Dotum: WGS 1984
Soil Map Unit Name: Rains fine sandy loam, 0 to 1	nercent slones	Datum. None
Are climatic / hydrologic conditions on the site typical		
Are Vegetation, Soil, or Hydrology _	✓ significantly disturbed? Are "Normal	Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology _	naturally problematic? (If needed, e	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	/ No Is the Sampled Area	
	No Is the Sampled Area within a Wetland?	Yes ✓ No
	/ No	103
Remarks:		
Emergent wetland located in pine plantation. Reconsist of a mosiac of upland and wetland plants, e	ently timbered, nydrology is a combination of skid e.g. dog-fennel mixed with Carex and Rhexia. Ma	der ruts and drainage from roadway. Plants y contain 5% upland pockets.
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; ch	eck all that apply)	Surface Soil Cracks (B6)
	True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1)	Sparsely Vegetated Concave Surface (B8)
	✓ Drainage Patterns (B10)	
` '	✓ Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16)
	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
	Thin Muck Surface (C7) Other (Explain in Remarks)	Saturation Visible on Aerial Imagery (C9)
	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		<ul><li>Geomorphic Position (D2)</li><li>Shallow Aquitard (D3)</li></ul>
Water-Stained Leaves (B9)		✓ Microtopographic Relief (D4)
Aquatic Fauna (B13)		✓ FAC-Neutral Test (D5)
Field Observations:		<u> </u>
Confess Water Bressett	Depth (inches):	
Water Table Present? Yes No	Depth (inches):	
Saturation Present? Yes ✓ No	Depth (inches):  Depth (inches):  Depth (inches):  Wetland H	lydrology Present? Yes ✓ No
(includes capillary fringe)	Deptif (inches) wetiand r	nydrology Fresent? Tes No
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, previous inspections), if ava	ilable:
Remarks:		
lots of skidder ruts		
1		

Sampling Point: V	VHLB1	00f_	W
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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Deminant
3				Total Number of Dominant Species Across All Strata:  3 (B)
4				(2)
				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
5				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
1	0			Total % Cover of: Multiply by:
0		= Total Cove	er O	OBL species15 x 1 =15
50% of total cover: 0	20% of	total cover:		20 40
Sapling/Shrub Stratum (Plot size:)				FACW species $\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$
1				FAC species $\frac{0}{0}$ $x 3 = \frac{0}{0}$
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals:35
5				4.57
				Prevalence Index = B/A =1.57
6		-		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
0		= Total Cove	_	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Carex lupulina	15	Yes	OBL	Problematic Hydrophytic Vegetation (Explain)
2. Rhexia lutea	10	Yes	FACW	4
3. Arundinaria gigantea	10	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
5				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
b				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
	35	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:17.5	20% of	total cover:	7	Was deades Allows decises wester than 0.00 ft is
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				noight.
2.				
3				
4				Hydrophytic
5				Vegetation Present? Yes ✓ No
0		= Total Cove	^	Present? res No
50% of total cover:0		total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)	· <u> </u>		
This wetland wa	s still for	ested in	2/2013.	
<u> </u>				

Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 3/1	100					SL	
3-12	10YR 4/1	95	10YR 4/6	5	С	PL	SCL	
								-
	·							
			-					
1 <sub>T</sub> 0 0	tustian D Dani		Dadwaad Matrix MC	Maalaad	C===1 C=		21	L. Dave Linia v. M. Matrix
Type: C=C Hydric Soil		etion, Rivi	=Reduced Matrix, MS	=IVIasked	Sand Gr	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
•			Dorle Curtono	(07)				· ·
Histosol	oipedon (A2)		Dark Surface Polyvalue Be		o (99) <b>(1</b>	II D A 1/17		cm Muck (A10) <b>(MLRA 147)</b> Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				146) 0	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	. ,	•	147, 140)	Р	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mat		-/			(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		6)		V	'ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar	•	,			Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	5)			
Sandy N	Mucky Mineral (S1) (L	.RR N,	Iron-Mangane	ese Masse	s (F12) (	LRR N,		
	A 147, 148)		MLRA 136	•				
	Sleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent M	laterial (F2	21) <b>(MLR</b>	A 127, 147	<u>')</u> un	less disturbed or problematic.
	Layer (if observed):							
Type:								,
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								



Photo 1
Wetland data point WHLB100f\_w facing north



Photo 2
Wetland data point WHLB100f\_w facing south

Project/Site: Atlantic Coast Pipeline	City/County: Halifax		Sampling Date: 11/17/2014	
Applicant/Owner: Dominion		State: NC	Sampling Point: WHLB100_u	
Investigator(s): TP, RH	Section, Township, R	ange: No PLSS in this area		
Landform (hillslope, terrace, etc.): hillslope				
Subregion (LRR or MLRA): P	Lat: 36.24694263	ng: -77.70982575	Datum: WGS 1984	
Soil Map Unit Name: Rains fine sandy loam, 0 to	1 percent slopes	NWI classific	ation: None	
Are climatic / hydrologic conditions on the site type	ical for this time of year? Yes No	(If no, explain in R	emarks.)	
Are Vegetation, Soil, or Hydrology	/significantly disturbed? Are	"Normal Circumstances" p	resent? Yes _ ✓ No	
Are Vegetation, Soil, or Hydrolog				
SUMMARY OF FINDINGS – Attach s				
Hydrophytic Vegetation Present? Yes _	✓ No Is the Sample			
Hydric Soil Present? Yes _	J No			
Wetland Hydrology Present? Yes _	No within a Wetla	and? Yes	NO	
Remarks:				
HYDROLOGY				
Wetland Hydrology Indicators:		·	tors (minimum of two required)	
Primary Indicators (minimum of one is required;		Surface Soil		
Surface Water (A1)	<ul><li>True Aquatic Plants (B14)</li><li>Hydrogen Sulfide Odor (C1)</li></ul>		etated Concave Surface (B8)	
High Water Table (A2)	Drainage Pat			
Saturation (A3)	Oxidized Rhizospheres on Living Ro			
Water Marks (B1) Sediment Deposits (B2)	<ul><li>Presence of Reduced Iron (C4)</li><li>Recent Iron Reduction in Tilled Soils</li></ul>	Dry-Season Water Table (C2) Is (C6) Crayfish Burrows (C8)		
Sediment Deposits (B2) Drift Deposits (B3)	Thin Muck Surface (C7)		sible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	Other (Explain in Remarks)		ressed Plants (D1)	
Iron Deposits (B5)		Geomorphic		
Inundation Visible on Aerial Imagery (B7)		Shallow Aqui		
Water-Stained Leaves (B9)			phic Relief (D4)	
Aquatic Fauna (B13)		✓ FAC-Neutral	Test (D5)	
Field Observations:				
	✓ Depth (inches):			
	✓ Depth (inches):			
Saturation Present? Yes No	✓ Depth (inches): <b>V</b>	etland Hydrology Presen	t? Yes No✓	
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitor	l oring well, aerial photos, previous inspection	ns), if available:		
Remarks:				

Sampling Point: WHL	B10	0_u
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00	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2				T. 111 (5 )
3				Total Number of Dominant Species Across All Strata:  6 (B)
				Species Across Air Strata.
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:66.66666666 (A/B)
6				Prevalence Index worksheet:
7				
	50	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover: 25	20% of	total cover:	10	OBL species 0 x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 )		_		FACW species5
1 Quercus alba	15	Yes	FACU	FAC species 70 x 3 = 210
2. Crataegus marshallii	10	Yes	FAC	FACU species 25 x 4 = 100
				0
3. llex opaca	10	Yes	FACU	UPL species $\begin{array}{c} 0 \\ x5 = \\ 0 \\ 320 \end{array}$
4. Liquidambar styraciflua	10	Yes	FAC	Column Totals: (A) (B)
5				
				Prevalence Index = B/A =3.2
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	45	= Total Cove	er	
50% of total cover: 22.5	20% of	total cover:_	9	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1 Arundinaria gigantea	5	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
!! <u></u>			171011	
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				John Mondo of Four Pogotation Official
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Herb – All herbaceous (non-woody) plants, regardless
	5	= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 2.5		total cover:		or oreg, and moday plante rees than even it tam
0070 01 total 00101.	20 /0 01	total cover.		Woody vine – All woody vines greater than 3.28 ft in
vvoody vine otratum (i lot size)				height.
1				
2				
3				
4				
5.				Hydrophytic
o	0	T-1-1-0		Vegetation Present? Yes No
50% of total cover: 0		= Total Cove	er O	
0070 01 total 00v01:		total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix			x Features				
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 3/1	100					SL	
3-12	10YR 5/1	90	10YR 5/6	10	С	М	SCL	
		·						
		letion, RM	=Reduced Matrix, MS	S=Masked S	Sand Gra	ains.		L=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indic	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol			Dark Surface					cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Be				<b>148)</b> C	Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su	. , .		47, 148)		(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye		2)		P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mat					(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		•			/ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar				_ c	Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre					
	Mucky Mineral (S1) (L	.RR N,	Iron-Mangane		s (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 130	•	U D A 40	0 400)	3,	Parton of hadron barbara and the
	Gleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)  Layer (if observed):		Red Parent N	riateriai (FZ	I) (IVILK	A 127, 147	) un	less disturbed or problematic.
	Layer (II Observeu).							
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								



Photo 1
Upland data point WHLB100\_u facing northwest



Photo 2
Upland data point WHLB100\_u facing southeast

Project/Site: Atlantic Coast Pipeline		City/C	County: Halifax		Sampling Date: 11/17/2014			
Applicant/Owner: Dominion				State: NC	Sampling Point: WHLB100f_w			
Investigator(s): TP, RH		Section	on, Township, Range: No	PLSS in this area	1			
Landform (hillslope, terrace, etc.): drainage	geway	Local reli	ief (concave, convex, no	ne): concave	Slope (%): 1			
Subregion (LRR or MLRA): P	La	t: 36.24696055	Long: -77.	70965054	Datum: WGS 1984			
Soil Map Unit Name: Rains fine sandy loa	nm, 0 to 1 pe	ercent slopes		NWI classific	eation: None			
Are climatic / hydrologic conditions on the	site typical	for this time of year? Y	′es No	(If no, explain in R	emarks.)			
Are Vegetation, Soil, or Hy	drology	significantly distur	bed? Are "Normal	l Circumstances" p	oresent? Yes <u>√</u> No			
Are Vegetation, Soil, or Hy								
SUMMARY OF FINDINGS – Atta								
Hydrophytic Vegetation Present?	Yes ✓	No						
Hydric Soil Present?		No	Is the Sampled Area within a Wetland?	Voc. V	No			
Wetland Hydrology Present?		No	within a wettand?	res				
Remarks:								
PFO wetland adjacent to SHLB100.								
HYDROLOGY								
Wetland Hydrology Indicators:				Secondary Indica	ators (minimum of two required)			
Primary Indicators (minimum of one is re	equired; che	ck all that apply)		Surface Soil	Cracks (B6)			
Surface Water (A1)		_ True Aquatic Plants (	B14)	Sparsely Ve	getated Concave Surface (B8)			
High Water Table (A2)								
Saturation (A3)	✓	Oxidized Rhizospher	es on Living Roots (C3)	Moss Trim L	ines (B16)			
Water Marks (B1)		Presence of Reduced	d Iron (C4)	Dry-Season	Water Table (C2)			
Sediment Deposits (B2)		Recent Iron Reduction	n in Tilled Soils (C6)	(C6) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)				
✓ Drift Deposits (B3)		Thin Muck Surface (C	C7)					
Algal Mat or Crust (B4)		Other (Explain in Rer	marks)					
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:	,							
		Depth (inches):						
1		_ Depth (inches):						
Saturation Present? Yes (includes capillary fringe)	No <u></u>	Depth (inches):	Wetland H	Hydrology Preser	nt? Yes No			
Describe Recorded Data (stream gauge	, monitoring	well, aerial photos, pre	evious inspections), if ava	nilable:				
Remarks:								
Remarks:								

Sampling	Point: WHLB100f_	w
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•	Absolute	Dominant I	ndicator	Dominance Test worksheet:	
Tree Stratum (Plot size:)			Status	Number of Dominant Species	
1. Pinus taeda	30	Yes	FAC	That Are OBL, FACW, or FAC:8 (A)	()
2. Acer rubrum	20	Yes	FAC	Total Newsham of Descious	
3. Betula nigra	15	Yes	FACW	Total Number of Dominant Species Across All Strata:  8 (B)	3
4				(5	'
				Percent of Dominant Species That Are OBL FACW or FAC: 100	(5)
5				That Are OBL, FACW, or FAC: (A	/B)
b				Prevalence Index worksheet:	
1	65			Total % Cover of: Multiply by:	
20.5		= Total Cove	r 13	OBL species $0 \times 1 = 0$	
50% of total cover: 32.5	20% of	total cover:_		40	
Sapiing/Shrub Stratum (Piot size:)				FACW species x z =	
1. Magnolia virginiana	15	Yes	FACW	FAC species X3 =	
2. Liquidambar styraciflua	10	Yes	FAC	FACU species x 4 =	
3. Carpinus caroliniana	10	Yes	FAC	UPL species 0 x 5 = 0	
4. Quercus phellos	10	Yes	FAC	Column Totals:(A)(B)(I	B)
5				0.00	
				Prevalence Index = B/A =2.66	
6				Hydrophytic Vegetation Indicators:	
7				1 - Rapid Test for Hydrophytic Vegetation	
8				✓ 2 - Dominance Test is >50%	
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>	
00.5		= Total Cove		4 - Morphological Adaptations <sup>1</sup> (Provide support	tina
50% of total cover: 22.5	20% of	total cover:_	9	data in Remarks or on a separate sheet)	9
Herb Stratum (Plot size:5				. ,	
1. Arundinaria gigantea	10	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
2					
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must	t
Δ				be present, unless disturbed or problematic.	
5				Definitions of Four Vegetation Strata:	
5				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)	or
6				more in diameter at breast height (DBH), regardless	of
7				height.	
8				Sapling/Shrub – Woody plants, excluding vines, les	ss
9				than 3 in. DBH and greater than or equal to 3.28 ft (	
10				m) tall.	
11				Herb – All herbaceous (non-woody) plants, regardle	222
	10	= Total Cove	r	of size, and woody plants less than 3.28 ft tall.	
50% of total cover:5	20% of	total cover:_	2	Was designed Allows designed and the color of the	
Woody Vine Stratum (Plot size: 30 )				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.	n
1				noight.	
2					
3					
4				Hydrophytic	
5				Vegetation Present? Yes ✓ No	
		= Total Cove	^	Present? Yes Y No No	
50% of total cover:0	20% of	total cover:_			
Remarks: (Include photo numbers here or on a separate s	heet.)				

Depth	Matrix		Redox	K Features	,			
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	10YR 3/1	95	10YR 4/6	5	C	PL	SL	
4-12	10YR 6/1	100					SCL	
-								
<sup>1</sup> Type: C=C	oncentration, D=Depl	letion, RM	=Reduced Matrix, MS	=Masked	Sand Gra	ains.	<sup>2</sup> Location: P	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators:						Indic	ators for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Dark Surface	(S7)			2	2 cm Muck (A10) (MLRA 147)
	pipedon (A2)		Polyvalue Bel		e (S8) (N	ILRA 147,		Coast Prairie Redox (A16)
Black Hi	stic (A3)		Thin Dark Su					(MLRA 147, 148)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F	=2)		F	Piedmont Floodplain Soils (F19)
Stratified	d Layers (A5)		✓ Depleted Mat	rix (F3)				(MLRA 136, 147)
2 cm Mu	uck (A10) (LRR N)		Redox Dark S	Surface (F	6)		\	/ery Shallow Dark Surface (TF12)
Depleted	d Below Dark Surface	e (A11)	Depleted Dar	k Surface	(F7)		C	Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8	3)			
Sandy N	Mucky Mineral (S1) (L	.RR N,	Iron-Mangane	ese Masse	es (F12) (	LRR N,		
MLRA	A 147, 148)		MLRA 136	5)				
Sandy G	Bleyed Matrix (S4)		Umbric Surfa					dicators of hydrophytic vegetation and
Sandy F	Redox (S5)		Piedmont Flo	odplain Sc	oils (F19)	(MLRA 14	8) we	etland hydrology must be present,
Stripped	l Matrix (S6)		Red Parent M	laterial (F2	21) <b>(MLR</b>	A 127, 147	') un	nless disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	I Present? Yes ✓ No
Remarks:							1 -	



Photo 1
Wetland data point WHLB100f\_w facing northwest



Photo 2
Wetland data point WHLB100f\_w facing southeast

Project/Site: Atlantic Coast Pipeline	City/County: Halifax	Sampling Date: 11/17/2014
Applicant/Owner: Dominion	, ,	State: NC Sampling Point: WHLB100f_w
Investigator(s): TP, RH		
Landform (hillslope, terrace, etc.): drainageway		
Subregion (LRR or MLRA): P	at: 36.24700414	7092758 Dotum: WGS 1984
Soil Map Unit Name: Rains fine sandy loam, 0 to 1	nercent slones	Datum. None
Are climatic / hydrologic conditions on the site typical		
Are Vegetation, Soil, or Hydrology _	✓ significantly disturbed? Are "Normal	Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology _	naturally problematic? (If needed, e	explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site	map showing sampling point location	ons, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	/ No Is the Sampled Area	
	No Is the Sampled Area within a Wetland?	Yes ✓ No
	/ No	103
Remarks:		
Emergent wetland located in pine plantation. Reconsist of a mosiac of upland and wetland plants, e	ently timbered, nydrology is a combination of skid e.g. dog-fennel mixed with Carex and Rhexia. Ma	der ruts and drainage from roadway. Plants y contain 5% upland pockets.
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; ch	eck all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)	
High Water Table (A2)	✓ Drainage Patterns (B10)	
` '	✓ Oxidized Rhizospheres on Living Roots (C3)	Moss Trim Lines (B16)
	Presence of Reduced Iron (C4)	Dry-Season Water Table (C2)
	Recent Iron Reduction in Tilled Soils (C6)	Crayfish Burrows (C8)
	Thin Muck Surface (C7) Other (Explain in Remarks)	Saturation Visible on Aerial Imagery (C9)
	Other (Explain in Remarks)	Stunted or Stressed Plants (D1)
Iron Deposits (B5) Inundation Visible on Aerial Imagery (B7)		<ul><li>Geomorphic Position (D2)</li><li>Shallow Aquitard (D3)</li></ul>
Water-Stained Leaves (B9)		✓ Microtopographic Relief (D4)
Aquatic Fauna (B13)		✓ FAC-Neutral Test (D5)
Field Observations:		<u> </u>
Confess Water Bressett	Depth (inches):	
Water Table Present? Yes No	Depth (inches):	
Saturation Present? Yes ✓ No	Depth (inches):  Depth (inches):  Depth (inches):  Wetland H	lydrology Present? Yes ✓ No
(includes capillary fringe)	Deptif (inches) wetiand r	nydrology Fresent? Tes No
Describe Recorded Data (stream gauge, monitoring	ng well, aerial photos, previous inspections), if ava	ilable:
Remarks:		
lots of skidder ruts		
1		

Sampling	Point: WHLB100f_	W
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	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC:3 (A)
2				Total Number of Deminant
3				Total Number of Dominant Species Across All Strata:  3 (B)
4				(2)
				Percent of Dominant Species That Are ORL FACW or FAC: 100 (A/R)
5				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
1	0			Total % Cover of: Multiply by:
0		= Total Cove	er O	OBL species15 x 1 =15
50% of total cover: 0	20% of	total cover:		20 40
Sapling/Shrub Stratum (Plot size:)				FACW species $\phantom{aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa$
1				FAC species $\frac{0}{0}$ $x 3 = \frac{0}{0}$
2				FACU species x 4 =
3				UPL species x 5 =
4				Column Totals:35
5				
				Prevalence Index = B/A =1.57
6		-		Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				✓ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
2		= Total Cove	_	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
50% of total cover:0	20% of	total cover:	0	data in Remarks or on a separate sheet)
Herb Stratum (Plot size:5				Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. Carex lupulina	15	Yes	OBL	Problematic Hydrophytic Vegetation (Explain)
2. Rhexia lutea	10	Yes	FACW	4
3. Arundinaria gigantea	10	Yes	FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
4				
5				Definitions of Four Vegetation Strata:
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
b				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
	35	= Total Cove	er	of size, and woody plants less than 3.28 ft tall.
50% of total cover:17.5	20% of	total cover:	7	Was deades Allows decises wester than 0.00 ft is
Woody Vine Stratum (Plot size:)				<b>Woody vine</b> – All woody vines greater than 3.28 ft in height.
1				
2				
3				
4				Hydrophytic
5				Vegetation Present? Yes ✓ No
0		= Total Cove	^	Present? res No
50% of total cover:0		total cover:	0	
Remarks: (Include photo numbers here or on a separate s	heet.)			
This wetland wa	s still for	ested in :	2/2013.	
				l l

Depth	Matrix			<ul> <li>Features</li> </ul>				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 3/1	100					SL	
3-12	10YR 4/1	95	10YR 4/6	5	С	PL	SCL	
								-
	·							
1 <sub>Tymor</sub> C C	ancontrotion D Donl	otion DM	Doduced Metrix MC	Mooked	Cond Cr		<sup>2</sup> l continue D	L Doro Lining M Motriy
Hydric Soil		etion, Rivi	=Reduced Matrix, MS	=IVIasked	Sand Gr	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
•			Dorle Curfoso	(07)				· ·
Histosol	oipedon (A2)		Dark Surface Polyvalue Be		o (S9) <b>(N</b>	II D A 1/17		cm Muck (A10) <b>(MLRA 147)</b> Coast Prairie Redox (A16)
	stic (A3)		Folyvalde Be				0	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	. ,	•	147, 140)	P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mat		2)		'	(MLRA 136, 147)
	uck (A10) (LRR N)		Redox Dark S		3)		V	'ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar	•	,			Other (Explain in Remarks)
	ark Surface (A12)		Redox Depre				<u>—</u>	
	Mucky Mineral (S1) (L	RR N,	Iron-Mangane			LRR N,		
	A 147, 148)	,	MLRA 136		, , ,	,		
	Gleyed Matrix (S4)		Umbric Surfa	•	ILRA 13	6, 122)	<sup>3</sup> Ind	licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
Stripped	Matrix (S6)		Red Parent M					less disturbed or problematic.
Restrictive	Layer (if observed):							
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:							1 -	



Photo 1
Wetland data point WHLB100f\_w facing north



Photo 2
Wetland data point WHLB100f\_w facing south

Project/Site: Atlantic Coast Pipeline	City/C	County: Halifax		Sampling Date: 11/17/2014			
Applicant/Owner: Dominion			State: NC	Sampling Point: WHLB100_u			
Investigator(s): TP, RH	Section	on, Township, Range: No	PLSS in this area				
Landform (hillslope, terrace, etc.): hillslope							
Subregion (LRR or MLRA): P	Lat: 36.24694263	Long: -77.7	70982575	Datum: WGS 1984			
Soil Map Unit Name: Rains fine sandy loam	, 0 to 1 percent slopes		NWI classifica	ation: None			
Are climatic / hydrologic conditions on the si	te typical for this time of year? Y	′es No	(If no, explain in Re	emarks.)			
Are Vegetation, Soil, or Hydi	ology significantly distur	bed? Are "Normal	Circumstances" p	resent? Yes _ ✓ No			
Are Vegetation, Soil, or Hydr							
SUMMARY OF FINDINGS – Attac							
Hydrophytic Vegetation Present?	/es ✓ No						
Hydric Soil Present?	/es No	Is the Sampled Area	V	No ✓			
Wetland Hydrology Present?	/es No <b>✓</b>	within a Wetland?	res	NO <u> </u>			
Remarks:							
HYDROLOGY							
Wetland Hydrology Indicators:				tors (minimum of two required)			
Primary Indicators (minimum of one is requ	uired; check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	B14)	Sparsely Vegetated Concave Surface (B8)					
High Water Table (A2) Hydrogen Sulfide Odor (C1) Drainage Patterns (B10)							
Saturation (A3)	• , ,						
Water Marks (B1)	d Iron (C4)	Dry-Season Water Table (C2)					
Sediment Deposits (B2)	on in Tilled Soils (C6)						
Drift Deposits (B3)	C7)	<ul><li>Saturation Visible on Aerial Imagery (C9)</li><li>Stunted or Stressed Plants (D1)</li></ul>					
Algal Mat or Crust (B4) Iron Deposits (B5)	marks)	Geomorphic Position (D2)					
Inundation Visible on Aerial Imagery (I		Shallow Aquitard (D3)					
Water-Stained Leaves (B9)	51)		Microtopographic Relief (D4)				
Aquatic Fauna (B13)			✓ FAC-Neutral				
Field Observations:							
Surface Water Present? Yes	No✓ Depth (inches):						
	No ✓ Depth (inches):						
	No ✓ Depth (inches):		Wetland Hydrology Present? Yes No ✓				
(includes capillary fringe)  Describe Recorded Data (stream gauge, m							
Describe Necolded Data (Stream gauge, in	ionitoning well, aenai priotos, pre	ivious irispections), ii ava	liable.				
Remarks:							

Sampling Point: WHL
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00	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)		Species?		Number of Dominant Species
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC: 4 (A)
2				T. IN
3				Total Number of Dominant Species Across All Strata:  6 (B)
				Species Across Air Strata.
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 66.6666666 (A/B)
6				Prevalence Index worksheet:
7				
	50	= Total Cove	er	Total % Cover of: Multiply by:
50% of total cover: 25	20% of	total cover:_	10	OBL species x 1 = 0
Sapling/Shrub Stratum (Plot size: 15 )		_		FACW species5 x 2 =10
1 Quercus alba	15	Yes	FACU	FAC species 70 x 3 = 210
2. Crataegus marshallii	10	Yes	FAC	FACU species 25 x 4 = 100
3. llex opaca	10	Yes	FACU	UPL species $\begin{array}{c} 0 \\ 100 \\ \end{array}$ $\begin{array}{c} x = 0 \\ 320 \\ \end{array}$
4. Liquidambar styraciflua	10	Yes	FAC	Column Totals: (A) (B)
5				
				Prevalence Index = B/A =3.2
6				Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				✓ 2 - Dominance Test is >50%
9				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	45	= Total Cove	er	
50% of total cover: 22.5	20% of	total cover:_	9	4 - Morphological Adaptations <sup>1</sup> (Provide supporting
Herb Stratum (Plot size:5		_		data in Remarks or on a separate sheet)
1 Arundinaria gigantea	5	Yes	FACW	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
!! <u></u>			171011	
2				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
3				be present, unless disturbed or problematic.
4				Definitions of Four Vegetation Strata:
5				John Mondo of Four Vogotation Official
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
7				height.
8				Sapling/Shrub – Woody plants, excluding vines, less
9				than 3 in. DBH and greater than or equal to 3.28 ft (1
10				m) tall.
11.				Herb – All herbaceous (non-woody) plants, regardless
	5 .	= Total Cove		of size, and woody plants less than 3.28 ft tall.
50% of total cover: 2.5		total cover:		or orgon and moday plante look than orgon train
0070 01 total 00101.	20 /0 01	total cover.		Woody vine – All woody vines greater than 3.28 ft in
vvoody vine otratum (i lot size)				height.
1				
2				
3				
4				
5.				Hydrophytic
o	0	T 0		Vegetation Present? Yes No
50% of total cover: 0		= Total Cove	er O	
0070 01 total 00v01:		total cover:		
Remarks: (Include photo numbers here or on a separate s	heet.)			

Depth	Matrix	<u>_</u>		x Features				
(inches)	Color (moist)	%	Color (moist)		Type <sup>1</sup>	Loc <sup>2</sup>	<u>Texture</u>	Remarks
0-3	10YR 3/1	100					SL	
3-12	10YR 5/1	90	10YR 5/6	10	С	М	SCL	
	-							-
	-							
1T C. C.	tustian D Dan	lation DM	Dadwaad Matrix MC		S		21	L. Dave Linian M. Matrix
Hydric Soil		letion, Rivi	=Reduced Matrix, MS	s=iviasked S	sand Gra	ains.		L=Pore Lining, M=Matrix.  ators for Problematic Hydric Soils <sup>3</sup> :
•			Dark Curface	(07)				•
Histosol	oipedon (A2)		Dark Surface Polyvalue Be		(CO) /N	II D A 1/17		cm Muck (A10) <b>(MLRA 147)</b> Coast Prairie Redox (A16)
	stic (A3)		Thin Dark Su				140) C	(MLRA 147, 148)
	en Sulfide (A4)		Loamy Gleye	. , .		41, 140)	P	Piedmont Floodplain Soils (F19)
	d Layers (A5)		✓ Depleted Mat		_,		— .	(MLRA 136, 147)
	uck (A10) <b>(LRR N)</b>		Redox Dark S		)		V	'ery Shallow Dark Surface (TF12)
	d Below Dark Surface	e (A11)	Depleted Dar		•			Other (Explain in Remarks)
Thick Da	ark Surface (A12)		Redox Depre	ssions (F8)				
Sandy M	Mucky Mineral (S1) (L	.RR N,	Iron-Mangan	ese Masses	s (F12) <b>(</b>	LRR N,		
	A 147, 148)		MLRA 13	•				
	Sleyed Matrix (S4)		Umbric Surfa					licators of hydrophytic vegetation and
	Redox (S5)		Piedmont Flo					etland hydrology must be present,
	Matrix (S6)		Red Parent N	faterial (F2	1) <b>(MLR</b>	A 127, 147	<b>')</b> un	less disturbed or problematic.
	Layer (if observed):							
Type:								/
Depth (in	ches):						Hydric Soil	Present? Yes No
Remarks:								



Photo 1
Upland data point WHLB100\_u facing northwest



Photo 2
Upland data point WHLB100\_u facing southeast

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

Project/Site SERP	aug . Halifax	in obustair i	- /a Avenut 2014
Applicant/Owner Dominion	City/County: Hall fax	N. NC	Sampling Date: 6 August 2014 Sampling Point: while 014f w
	Section, Township, Range:	NA	Sampling Point: 50119 0171
	Local relief (concave, convey,	nono): Conca	V.* Sland (9/ ); 7 Z
Landform (hillslope: terrace, etc.): Depression  Subregion (LRR or MLRA): P Lat: 36	14' 34.575 Long 5	77 42'	16.389" Datum: WGS 84
Soil Map Unit Name Lynch burg		NWI classific	PFO
Are climatic / hydrologic conditions on the site typical for this time of ye			
Are Vegetation Soil, or Hydrology significantly			
Are Vegetation, Soil, or Hydrology naturally pr		xplain any answe	THE CONTROL OF THE PARTY
SUMMARY OF FINDINGS - Attach site map showing	g sampling point locatio	ns, transects	s, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?  Remarks:  Yes X No No No No No No No No No No No No No	within a Wotland?	Yes>	< No
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Carrier and the second		Cracks (B6)
Surface Water (A1) Aquatic Fauna (B1		Sparsely Ve	getated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B1			itterns (B10)
Saturation (A3) Hydrogen Sulfide  Water Marks (B1) Oxidized Rhizosoft		Moss Trim L	
Sediment Deposits (B2)  Sediment Deposits (B2)  Presence of Redu	heres along Living Roots (C3)		Water Table (C2)
	ction in Tilled Soils (C6)	Crayfish Bur	rows (C8) /isible on Aerial Imagery (C9)
Algal Mat or Crust (84) Thin Muck Surface		Process.	: Position (D2)
Iron Deposits (B5) Other (Explain in I		Shallow Aqu	A STATE OF THE STA
Inundation Visible on Aerial Imagery (B7)		FAC-Neutra	a. (2.1
Water-Stained Leaves (B9)		Sphagnum r	moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes NoX Depth (inches	s):		
Water Table Present? Yes NoX Depth (inches	s)		920
Saturation Present? Yes No Depth (inches (includes capillary fringe)	s): Wetland H	lydrology Prese	nt? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos	tos, previous inspections), if ava	ilable:	
Remarks			
	1		
hydrology criteria n	net		

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

Sampling Point: While OMF\_w

Tree Stratum (Plot size: 30  1. Quercus laurifolia 2. Liquidambar Styrac; flua 3. Acer rubrum 4. 5. 6 7.	% Cover 40 20 10	У У .У	Status EACW FAC	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  Total Number of Dominant Species Across All Strata  Percent of Dominant Species That Are OBL, FACW, or FAC:  Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 30)  1 Morella Cerifera  2 Liquidumbar styrael flua  3. Ilex Opaca	70 = 20% of t	Total Covorotal cover	FAC FAC FAC	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)           (B)
5	40 = \$ 20% of t	Total Cover	ver 8 FACW	Prevalence Index = B/A =  Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%  3 - Prevalence Index is ≤3.0¹  Problematic Hydrophytic Vegetation¹ (Explain)  ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  Definitions of Four Vegetation Strata:  Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
6 7 8				Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall.  Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  Woody vine All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size 30)  1 Vitis rotundifulia 2. Smilax rotundifulia 3. 4. 5	20% of5	y y = Total Co	FAC FAC	Hydrophytic Vegetation Present?  Yes No
Vegetation Crite		net		

Profile Desc	ription: (Describe	to the de	pth needed to docur	nent the	indicator	or confirm	the absence	of indicators.)
Depth _(inches)	Matrix Color (moist)	%		x Feature	S			557
0-14	104R5/1	98	104R 5/4		Type <sup>1</sup>	$\frac{Loc^2}{PL}$	<u>Texture</u>	Remarks
14-20	104R5/Z			2			27	
1 Lan Q	10118512	95	10 YR 5/4	2_		M	SL	
					-			
****			The second secon	-			120-045-20-00-010-00-00-0	
		_						
							**************	
192000000000000000000000000000000000000		** ** ** ******************************						
'Type C=Co	ncentration D=De	nletion PA	I=Reduced Matrix, MS			<del></del>	2,	
Hydric Soil	Indicators: (Applie	cable to al	I LRRs, unless other	s=iviaske	d Sand Gr	ains.		PL=Pore Lining, M=Matrix. for Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be			DD S T I		for Problematic Hydric Solls :  fuck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su	rface (S9	(LRR S.	T. U)		Muck (A10) (LRR S)
Black Hi			Loamy Muck	y Mineral	(F1) (LRF	(0)		ed Vertic (F18) (outside MLRA 150A,B)
	n Sulfide (A4)		Loamy Gleye		(F2)		L Piedmo	ont Floodplain Soils (F19) (LRR P, S, T)
	Layers (A5) Bodies (A6) (LRR F	D T 111	Depleted Ma					llous Bright Loamy Soils (F20)
5 cm Mu	cky Mineral (A7) (L	RR P. T. L	Redox Dark  Depleted Da					RA 153B) arent Material (TF2)
Muck Pr	esence (A8) (LRR I	J)	Redox Depre					hallow Dark Surface (TF12)
1 cm Mu	ick (A9) (LRR P, T)		Marl (F10) (L	RR U)				(Explain in Remarks)
	d Below Dark Surfac ark Surface (A12)	ce (A11)	Depleted Oc				****	27 (2)
	rairie Redox (A16) (	MI RA 150	Iron-Mangan  (A) Umbric Surfa	ese Mass	ses (F12) (	LRR O, P,		ators of hydrophytic vegetation and
Sandy N	Nucky Mineral (S1) (	LRR O, S	Delta Ochric	(F17) (MI	LRA 151)	, 0)		land hydrology must be present. ess disturbed or problematic.
Sandy G	Bleyed Matrix (S4)		Reduced Ve	rtic (F18)	(MLRA 15	0A, 150B)		os distarbed of problemane.
	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	9A)	
	Matrix (S6) rface (S7) (LRR P,	C T 111	Anomalous E	Bright Loa	my Soils (	F20) (MLR	A 149A, 153C	, 153D)
	Layer (if observed)						1	
Type:								
	ches).						Hydric Soll	Present? Yes _ X No
Remarks							Trydric 30ii	riesenti ies No
	1 1	0.1	Oriteria v	nel				
	nydric	2011	J.,					

### whlg014f\_w



Wetland data point whlg014f\_w facing south



Wetland data point whlg014f\_w facing west

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

Series SERO	Adamic and Gun Co	astal Plain Region
The state of the s	City/County: Halifax	Sampling Date: 6 August 20
Applicant/Owner: Dominion Investigator(s): DD WEST	State:	Sampling Date: 6 August 20
Landform (billeton)	Section, Township, Range: NA	
Landform (hillslope, terrace, etc.): Side Slope  Subregion (LRR or MLRA). P Lat: 36°  Soil Map Unit Name: Lynchburg	Local relief (concave, convex, none): (	Concave Slope (%): 5
Subregion (LRR or MLRA) Lat: 36	14' 35.282' Long 77'4	12' 45, 979" Datum W 65 84
()	NIV	M classification: Nove (
Are Vegetation	ear? Yes × No //f no av	volain in Demedia I
or Hydrology significantly	disturbed? Are "Normal Circum	olapage" assessed to
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If peeded cyptain a	stances present? Yes V No
SUMMARY OF FINDINGS - Attach site man showing	a compliant a list to	iny answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, tra	ansects, important features, etc.
Hydrophytic Vegetation Present?         Yes         X         No           Hydric Soil Present?         Yes         No         X           Wetland Hydrology Present?         Yes         No         X	Is the Sampled Area	
Wetland Hydrology Present? Yes No X		Yes No _X
Remarks:		100
- 12-Note		
HYDROLOGY		
Wetland Hydrology Indicators:	Second	ary Indicators (minimum 1)
Primary Indicators (minimum of one is required; check all that apply)		ary Indicators (minimum of two required) face Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B1:	3) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	arsely Vegetated Concave Surface (B8)
High Water Table (A2)  Saturation (A3)  Hydrogen Sulfide C	(LRR U)	inage Patterns (B10)
= Tydrogen Suilde C	Odor (C1) Mos	ss Trim Lines (B16)
Sediment Deposits (B2)  Presence of Reduc		-Season Water Table (C2)
Date D		yfish Burrows (C8)
Thin Muck Surface		uration Visible on Aerial Imagery (C9)
Iron Deposits (85) Uniform Other (Explain in R		morphic Position (D2) Ilow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		C-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:		agnum moss (D8) (LRR T, U)
Surface Water Present? Yes No X Depth (inches)		
Deput (inches)	·	
Water Table Present? Yes No Depth (inches) Saturation Present? Yes No Depth (inches)	· ————	,
(molddes capillary iringe)		y Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s, previous inspections), if available:	
Remarks:	4	
The state of the s		
Hydrology Criteria not	+.	
Direg Criteria no	meo	

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

Sampling Point: whig 014\_4

Tree Stratum (Plot size: 30	Absolute		t Indicator	Dominance Test worksheet:
1. Acer rubrum	- surjet browning	Species	? Status	Number of Dominant Species
	30	7	FAC	That Are OBL, FACW, or FAC: (A)
2. Pinus taeda	20	٧	FAC	Total Number of Dominant
3. Liriodendron tulipifera	10	$\sim$	FACU	Species Across All Strata (B)
4. Pronos serotina	_5	$\sim$	FAC 4	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: / 0 0 (A/B)
6				That Are OBL, FACW. or FAC: _/O (A/B)
7				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
~ ~	45	= Total Co	over	
50% of total cover: 32	5 20% 0	total cove	r: _/	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)				FAC species x 3 =
1 Acer rubrum	20		FAC	FACU species x 4 =
2 Quercus lauritolia	7.0	y	FACW	UPL species x 5 =
3. Liquidambar styraciflua	10	N	FAC	Column Totals (A) (B)
4. Prunus serotina	5	N	FACU	
5.				Prevalence Index = B/A =
6.	-	-		Hydrophytic Vegetation Indicators:
6	-	***************************************		1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	F F			3 - Prevalence Index is ≤3.01
2.2	22	= Total Co	over	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 22	20% 0	f total cove	er: _//	Permitted to the second of the
Herb Stratum (Plot size 30 )				Indicators of hydric soil and wetland hydrology must
1 Gaylussacia dumosa	5	<u>y</u>	FAC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3,				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5		***************************************	-	height
6				
2				than 3 in. Don and greater than 3.20 it (1 m) tall.
8.			-	Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10	-			Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
The second secon		= Total Co	over	
50% of total cover: 2.5	20% o	f total cove	er: /	
Woody Vine Stratum (Plot size 30)				
1 5 miles rotundifulia	.5	Y	FA	
2				
3.				
1 00				
4.				
5		-		Hydrophytic
0.5		= Total Co	over,	Vegetation Present? Yes V
50% of total cover: 2 . 5		f total cove	er: <u>/</u>	Fresentr 165_F NO
Remarks (If observed, list morphological adaptations belo	ow).			
Vegetation Criteria Met				
Vege				
S. F				

Profile Desc	cription: (Describe	to the dep	th needed to docum	nent the in	ndicator	or confirm	n the absence of	f indicators.)
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	9/6	Color (moist)	%	Type'	_Loc²	Texture	Remarks
	10485/2	100					St_	
3-20	10415/3	80	104R5/4	20		M	SCL	
							-	
					***********			
11 11 1 11 11 11 11 11 11 11 11 11					******			
				-			-	
							-	
'Type: C=C	oncentration, D=De	pletion, RM=	Reduced Matrix, MS	S=Masked	Sand Gr	ains.	<sup>2</sup> Location: P	L=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applie	cable to all	LRRs, unless other	rwise note	d.)	W-10-10-10-10-10-10-10-10-10-10-10-10-10-		or Problematic Hydric Soils <sup>3</sup> :
Histosol			Polyvalue Be	low Surfac	ce (S8) (L	RR S, T, I	J) 🔲 1 cm Mu	ck (A9) (LRR O)
	nipedon (A2) istic (A3)		Thin Dark Su	rface (S9)	(LRR S,	T, U)		ck (A10) (LRR S)
	en Sulfide (A4)		Loamy Mucky Loamy Gleye	y Mineral (	F1) (LRF	(0)		Vertic (F18) (outside MLRA 150A,B)
	d Layers (A5)		Depleted Mat	trix (F3)	- 2)			nt Floodplain Soils (F19) (LRR P, S, T) bus Bright Loamy Soils (F20)
Organic Organic	Bodies (A6) (LRR F	P, T, U)	Redox Dark S		6)			A 153B)
5 cm Mt	ucky Mineral (A7) (L	RR P, T, U)	Depleted Dar	rk Surface	(F7)			ent Material (TF2)
Muck Pr	resence (A8) (LRR ( uck (A9) (LRR P, T)	J)	Redox Depre		3)		Very Sha	allow Dark Surface (TF12)
Deplete	d Below Dark Surface	ce (A11)	Marl (F10) (L				U Other (E	xplain in Remarks)
Thick D	ark Surface (A12)	OG (A11)	Depleted Och				T) 3Indicat	ors of hydrophytic vegetation and
Coast P	rairie Redox (A16) (	MLRA 1504	) Umbric Surfa	ce (F13) (	LRR P, T	. U)		nd hydrology must be present.
Sandy N	Mucky Mineral (S1) (	(LRR O, S)	Delta Ochric	(F17) (ML	RA 151)		unles	s disturbed or problematic.
Sandy C	Sleyed Matrix (S4) Redox (S5)		Reduced Ver					Participal Control Con
	Matrix (S6)		Piedmont Flo	odplain So	oils (F19)	(MLRA 14	19A)	
	rface (S7) (LRR P.	S, T, U)	LI Anomalous B	ongni Loan	ny Solls (	-20) (WILH	RA 149A, 153C, 1	153D)
	Layer (if observed)						1	
Type:								
Depth (in	ches).						Hydric Soil P	resent? Yes No _X
Remarks							1.,	
		v.	Soil Criter		. +	mot		
	hyc	deic '	Soil Criter	14	No.	1110		
	1							
								1

### whlg014\_u



Upland data point whlg014\_u facing east



Upland data point whlg014\_u facing north



Wetland/upland soils

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

Project/Site SERP City/C Applicant/Owner Dominion Investigator(s) DD WEST Section	State: NC Sampling Point: Whig 0/3F W
Landform (hillslope, terrace, etc.): Interstream FLAT Local Subregion (LRR or MLRA) P Lat: 36 14 5	relief (concave, convex, none): Non & Slope (%): 0
	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Y	2
Are Vegetation Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problems	
SUMMARY OF FINDINGS – Attach site map showing sam	ipling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  Yes X No No No No No No No No No No No No No	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)  Aquatic Fauna (B13)	Surface Soil Cracks (B6)
High Water Table (A2)  Marl Deposits (B15) (LRF	Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)
Saturation (A3)  Hydrogen Sulfide Odor (C	
Waler Marks (B1)	
Sediment Deposits (B2)  Presence of Reduced Iro	
Drift Deposits (B3)  Recent Iron Reduction in	
Algal Mat or Crust (B4)  Iron Deposits (B5)  Thin Muck Surface (C7)  Other (Explain in Remark	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)  FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No Depth (inches)	
Saturation Present? Yes No Y Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	
End e-device (Decoration	
hydrology criteria met	
V	

Free Stratum (Plot size. 30)  1. Pinus taeda	% Cover	Dominant Species?		Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:  (A)
3				Total Number of Dominant Species Across All Strata (B)
5				Percent of Dominant Species That Are OBL, FACW. or FAC:/ O O (A/B)
				Prevalence Index worksheet:
50% of total cover: 25 sapling/Shrub Stratum (Plot size: 30 )	20% of	= Total Cov f total cover	/ <i>O</i>	FACW species
Liguidumbar Styraciflua Acer rubeum	20	<u>y</u>	FAC	FACU species x 4 =
3. Vaccinium curymbusum 4.			FACW	Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%
50% of total cover:		= Total Cov		3 - Prevalence Index is ≤3.0¹  Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size. 30) 1 Clethra alno folia			FACW	Madical Control of the state of
2				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.
	*******		1-11-1-11-11-11-11-11-11-11-11-11-11-11	than 3 in DBH and greater than 3.28 ft (1 m) tall.
9				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: 5		= Total Cov	-	
Woody Vine Stratum (Plot size 30)  1 Smilax rotundifulia 2 Vitis rotundifulia	10	<u>y</u>	FAC	

50% of total cover: 7.5 Remarks (If observed, list morphological adaptations below).

Vegetation Criteria met

Hydrophytic Vegetation Present?

Sampling Point: Whig OBF- W

	Matrix		oth needed to docu Red	ox Feature				
(inches)	Color (moist)	%	Color (moist)	%		Loc²	Texture	Remarks
7-2	104R 3/Z	100					54	
2-6	10 YR 5/Z	98	104R5/8	_ Z	C	PL	5 L	
,-ZO	104R 5/2	90	104R5/4	10		M	SCL	
ydric Soi  Histoso  Histoso  Histoso  Histoso  Histoso  Histoso  Stratifie  Organic  Som M  Muck F  1 cm M  Deplete  Thick D  Coast I  Sandy  Sandy  Strippe  Dark S	Concentration, D=Derindicators: (Applied Indicators: (Applied Indicators: (Applied Indicators: (Applied Indicators: (A3) Indicators: (A3) Indicators: (A3) Indicators: (A4) Indicators: (A5) Indicators: (A6) Indicators: (A6) Indicators: (A6) Indicators: (A7) Indicators: (A7) Indicators: (A7) Indicators: (A7) Indicators: (A7) Indicators: (A12) Indicators: (A12) Indicators: (A12) Indicators: (A13) Indicators: (A13) Indicators: (A14) Indicators: (A14) Indicators: (A15) Indicators: (A15) Indicators: (A16) Indicators:	P, T, U) RR P, T, U J) ce (A11) MLRA 150 LRR O, S)	LRRs, unless othe Polyvalue B Thin Dark S Loamy Muci Loamy Gley Depleted Mark Redox Dark Depleted Da Redox Depr Marl (F10) ( Depleted Oc Iron-Mangal A) Umbric Surf Reduced Ve Piedmont Fl	erwise not elow Surface (S9 ky Mineral red Matrix atrix (F3) Surface (I ark Surface ressions (F LRR U) chric (F11) nese Mass ace (F13) c (F17) (Mi ertic (F18)	(MLRA 1: (LRR P. T (LRR P. T (F1) (LRR P. T (F2) (MLRA 1: (LRR P. T (MLRA 1: (MLRA 1: (MLRA 1: (MLRA 1: (MLRA 1:	RR S, T, L T, U) (O) (MLRA 14	Indicators for J 1 cm Mu 2 cm Mu 2 cm Mu Reduced Piedmor Anomalo (MLRA Red Par Very Sh Other (E	PL=Pore Lining, M=Matrix. or Problematic Hydric Soils <sup>3</sup> : ock (A9) (LRR O) ock (A10) (LRR S) of Vertic (F18) (outside MLRA 150A,8 ott Floodplain Soils (F19) (LRR P, S, T) ous Bright Loamy Soils (F20) och 153B) ent Material (TF2) allow Dark Surface (TF12) xplain in Remarks) ors of hydrophytic vegetation and ond hydrology must be present. s disturbed or problematic.
Denth /	nches)				N. 18. 273 S. 201	0 (0 (0) (000) 4 (0) (0 (0) (0) (0) (0) (0) (0) (0) (0)	Hydric Soil P	resent? Yes 🕺 No
emarks		Soil	Criteria	Me"	t			

### whlg013f\_w



Wetland data point whlg013f\_w facing south



Wetland data point whlg013f\_w facing west

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

Project/Site SERP Applicant/Owner Dominion	City/County: HALI FAY State: NC Sampling Date: 6 August 2014 State: NC Sampling Point: Whig 0/3-4
investigator(s).	Section Township Panne: N. I.
Landform (hillstope, terrace, etc.): Interstream Flat	Local relief (concave, convex, none): $ConcAvE$ Slope (%): $\frac{14'40.843}{40.843}$ Long $\frac{77'42'40.54}{40.54}$ Datum: $\frac{14584}{40.843}$
Subregion (LRR or MLRA) P (at 36°	14 40, 843 Loss 77 42 40, 5/4 Constant 10 68 64
Soil Map Unit Name Goldsbord	NWI classification: Non C
Are climatic / hydrologic conditions on the site typical for this time of year	-Landy-wind at tolking pigting-land with more and the extension for the extension in the extension of the ex
	disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally pr	
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?	Is the Sampled Area within a Wetland?  Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)  Drainage Patterns (B10)  Odor (C1)  Moss Trim Lines (B16)  Dry-Season Water Table (C2)  ced Iron (C4)  Ction in Tilled Soils (C6)  Geomorphic Position (D2)
Surface Water Present? Yes No X Depth (inches Water Table Present? Yes No X Depth (inches Saturation Present? Yes No X Depth (inches (includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photographics)	S): Wetland Hydrology Present? Yes No X
hydrology Criteria not	met

Sampling Point: whigoBE 4

Tree Stratum (Plot size: 30)	Absolute Dominion & Cover Species	20.00	Dominance Test worksheet:  Number of Dominant Species
2. Liquidamber Styracifluq 3. Accr rubrom	20 Y 20 Y	FAC	Total Number of Dominant Species Across All Strata (B)
4. Tlex opaca 5.		FAC_	Percent of Dominant Species That Are OBL, FACW. or FAC: 8 (A/B)
7			Prevalence Index worksheet:
50% of total cover: 46 Sapling/Shrub Stratum (Plot size: 30			FACW species x 2 = FAC species x 3 =
1 I lex opaca 2 Queicus nigra	20 Y	FAC	FACU species x 4 = UPL species x 5 =
3. Liquidamber styracyflua 4. Acer rubrum 5. Clethra almifolia	10 N	FAC FAC	Column Totals (A) (B)  Prevalence Index = B/A =
6	-		Hydrophytic Vegetation Indicators:  1 - Rapid Test for Hydrophytic Vegetation  2 - Dominance Test is >50%
850% of total cover: 3.5	70 = Total	Cover	3 - Prevalence Index is ≤3.0¹  Problematic Hydrophytic Vegetation¹ (Explain)
1. Vaccinium Stamineum 2. Clothra alnifolia	20 y	FACU	'Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3			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
8. 9.			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
11			Woody vine - All woody vines greater than 3.28 ft in height.
50% of total cover: 15 Woody Vine Stratum (Plot size. 3 0	3 0 = Total 20% of total co	/	
1 Smilax rodund I falia 2. 3.		_ FAC	
5 50% of total cover: 2.		Contraction ( )	Hydrophytic Vegetation Present? Yes _ √ No
Remarks (If observed, list morphological adaptations be			

Sampling Point: Whig 0/3f-4

Profile Desc	ription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	n the absence of ir	ndicators.)	
Depth	Color (moist)		Red	ox Feature	s .				
(inches)		1/3.0	Color (moist)	%	Type <sup>1</sup>	Loc²		Remarks	
	104124/2	100		-			<u>LS</u>		
3-10	104R 5/3	95	104R5/4	5	C_	M	SCL		
10-50	104R 5/4	100					SCL		
						22			THE STATE OF THE S
	1 ma ( managed with managed and managed) and	N. Advantage Military	***************************************						
				-					
					-				
Type: C=C	oncentration, D=Dep	oletion, RM	=Reduced Matrix, N	1S=Maske	d Sand Gr	ains.	<sup>2</sup> Location: PL=	Pore Lining, M=Mat	rix.
	Indicators: (Applic	able to all					Indicators for	Problematic Hydric	
Histosol			Polyvalue B	elow Surfa	ace (S8) (L	.RR S, T, I		(A9) (LRR O)	
Black Hi	pipedon (A2)		Thin Dark S	urface (S9	) (LRR S,	T, U)	State State	(A10) (LRR S)	
	en Sulfide (A4)		Loamy Muc	ky Mineral	(F1) (LRF	(0)		ertic (F18) (outside	
	d Layers (A5)		Depleted M		(1.2)			Floodplain Soils (F19 Bright Loamy Soils	
Organic	Bodies (A6) (LRR F	, T, U)	Redox Dark		F6)		(MLRA 1		(1 20)
5 cm Mu	icky Mineral (A7) (L	RR P, T, U		ark Surface	e (F7)			t Material (TF2)	
	esence (A8) (LRR ( uck (A9) (LRR P, T)	J)	Redox Depi		8)			ow Dark Surface (TF	12)
	d Below Dark Surface	e (A11)	Marl (F10) (		/MI DA 1	E4\	U Other (Exp	lain in Remarks)	
	ark Surface (A12)	C (/////	Depleted O				T) <sup>3</sup> Indicator	s of hydrophytic veg	etation and
Coast P	rairie Redox (A16) (		A) Umbric Sur	face (F13)	(LRR P, 1	, U)		hydrology must be	
Sandy N	Mucky Mineral (S1) (	LRR O, S)	Delta Ochri	c (F17) (M	LRA 151)		unless	disturbed or problem	
Sandy C	Sleyed Matrix (S4)		Reduced Ve						
	Redox (S5) I Matrix (S6)		Piedmont F					-20	
	rface (S7) (LRR P.	s T U)	Anomalous	Bright Loa	imy Soils (	F20) (MLF	RA 149A, 153C, 15	3D)	
	Layer (If observed)						T		
Type:									
Depth (in	ches).						Hydric Soil Pre	sent? Yes	No X
Remarks								30111 103	
						Later Section 1			

#### whlg013\_u



Upland data point whlg013\_u facing east



Upland data point wnhlg013\_u facing north

### whlg013 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region \_\_\_\_\_ City/County: HALLARX Project/Site: SE Applicant/Owner: Sampling Point: WHL/ Investigator(s): DDWEST Section, Township, Range: Landform (hillslope, terrace, etc.): Dopression (Local relief (concave, convex, none): SLIGITALY CONCAVE Slope Subregion (LRR or MLRA): Soil Map Unit Name: \_ NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Cravfish 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? Water Table Present? Saturation Present? Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Depressional wetland with signs of Saturation and ponding

VEGETATION (Four Strata) – Use scientific na		Sampling Point: WHLH
Tree Stratum (Plot size:  1. Liquidantoper styrosciffu	Absolute Dominant Indicate  **Cover Species? Status	Number of Dominant Species
2. Acer rubrum 3. Pinus taeda 4.	20 J FA	Total Number of Dominant Species Across All Strata: (B)
5		Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
7		Prevalence Index worksheet:
B		Total % Cover of: Multiply by:
	65 = Total Cover	OBL species x 1 =
	20% of total cover: 13	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	/	FAC species x 3 =
. Acer rubrum	30 / FA	
Magnalia Virgenicena	20 / FAC	UPL species x 5 =
Liquidamber Styree office		
. Pinus taeda	10 FAC	Prevalence Index = B/A =
· Vaccinium corymbosum	S FACE	Hydrophytic Vegetation Indicators:
. Clethra alnifolia	10 FAC	1 - Rapid Test for Hydrophytic Vegetation
· <del></del>		-
		— 3 - Prevalence Index is ≤3.01
~~	Total Cover	П выменя и и и и и и и и и и
50% of total cover: 50	20% of total cover:	_
Herb Stratum (Plot size: ). Chasman thum laxum	20 V FAC	¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2		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.
0 1		Woody vine – All woody vines greater than 3.28 ft in height.
2		_
10	20 = Total Cover	
50% of total cover:	20% of total cover: 4	_
Noody Vine Stratum (Plot size:)		
·		_
		_
		_
•		_
		- Hydrophytic ( /
	= Total Cover	Vegetation
	20% of total cover:	Present? Yes \ No

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

Sampling Point: WHL	HOME
tors.)	$\neg \sim$

			n needed to docur	ment the i	ndicator	or contirn	n the absence	or indica	tors.)	
Depth	Matrix		Redo	x Feature					entre entre entre entre entre entre entre entre entre entre entre entre entre entre entre entre entre entre en	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture		Remarks	
0-3	104R3/2						SANdy	(DAM		
3-8	104R 5/2				The same of the sa		John	BAN	0	
8-16	DYR 5/2		104R 4/6	72	2	m	501			
	-						-		VV-H-III-	
		—								
<del></del>	-									
'Type: C=C	oncentration, D=Deple	etion, RM=R	Reduced Matrix, MS	S=Masked	Sand Gra	ains.			Lining, M=Matr	
	Indicators: (Applica	ible to all L							ematic Hydric	Soils <sup>3</sup> :
Histosol	pipedon (A2)		Polyvalue Be					fuck (A9) (		
	istic (A3)		Thin Dark Su Loamy Mucky	пасе (S9)	(LRRS,	(1, 0)	2 cm N	fuck (A10)	(LRR S)	MI DA 450A DI
	en Sulfide (A4)		Loamy Gleye			0)				MLRA 150A,B) (LRR P, S, T)
	d Layers (A5)		Depleted Mat		-,				t Loamy Soils	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S					RA 153B)		/
5 cm Mu	ucky Mineral (A7) (LR	R P, T, U)	Depleted Dar					arent Mate		
	resence (A8) (LRR U) uck (A9) (LRR P, T)		Redox Depre		)				rk Surface (TF1	12)
	d Below Dark Surface	(A11)	☐ Marl (F10) (L ☐ Depleted Och		MI DA 16	:1)	U Other	Explain in	Remarks)	
	ark Surface (A12)	V ,	Iron-Mangane				T) <sup>3</sup> Indic	ators of hy	drophytic vege	tation and
	rairie Redox (A16) (M		Umbric Surfa						logy must be p	ACT ACT ACT ACT ACT ACT ACT ACT ACT ACT
	Mucky Mineral (S1) (LI	RR O, S)	Delta Ochric	(F17) (ML	RA 151)		unle	사람이 되는 말을 잃었다. 그렇	ed or problema	
	Gleyed Matrix (S4)		Reduced Ver							
	Redox (S5) Matrix (S6)		Piedmont Flo							
	rface (S7) (LRR P, S,	T III	Anomalous B	right Loan	ly Solls (F	20) (MLR	A 149A, 153C	153D)		
	Layer (if observed):	1,0)					Γ			
		1,01			-	-		1100		
Restrictive L	Layer (if observed):	1,0)	——————————————————————————————————————				Hydric Soil	Present?	Yes	No
Restrictive I	Layer (if observed):	1, 0,	_				Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):						Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):			- Winn	0		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):		- 15 pre	son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):		- ls pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		- Is pre	son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		- 15 pre	son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):		- 15 pre	son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		- Is pre	son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		= ls pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		= ls pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		- 15 pre	son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):		= 15 pre	son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		= ls pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		= ls pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		= ls pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		- 15 pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):		- 15 pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		= 15 pre	Sor	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):		- ls pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomers) Remarks:	Layer (if observed):		- Is pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No
Restrictive I Type: Depth (incomerks:	Layer (if observed):		- ls pre	Son	<b>D</b> .		Hydric Soil	Present?	Yes	No

# Whlh012f\_w



Wetland data point whlh012f\_w facing east



Wetland data point whlh012f\_w facing south

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

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

	Absolute Dominant I	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species?		
1. Pinus taeda	30 V	FAC	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. LigardombAR Styrocifluse	75 1/	FAL	That Are OBE, I AGW, OF FAG(A)
	50	FAC	Total Number of Dominant
3. Her rubrum	20 0		Species Across All Strata: (B)
4			
5			Percent of Dominant Species That Are OBL, FACW, or FAC:  (A/B)
6			That Are OBE, I ACVV, OF FAC.
			Prevalence Index worksheet:
7		- Torres	Total % Cover of: Multiply by:
8	<del></del>		
0.7	(S = Total Cove	r, 2	OBL species x 1 =
50% of total cover: 37.	20% of total cover:	10	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	/		FAC species x 3 =
1. Pinus taeda	30 V	FAC	FACU species x 4 =
2. Myrica cerifera	20 1	FAC	UPL species x 5 =
3. Ligen Contor Status Chica	25	FAC	Column Totals: (A) (B)
3. Haracantor Statiacidnice			(A)(B)
4. Clothry almitolia	10	ALW	Prevalence Index = B/A =
5. Maris egga Ulmus alata		FACU	Hydrophytic Vegetation Indicators:
6.Acer rubrum	_ 5	FAC	1 - Rapid Test for Hydrophytic Vegetation
7			
8			2 - Dominance Test is >50%
0	100 = Total Cove		3 - Prevalence Index is ≤3.01
()	= Total Cove		Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover:	20% of total cover: _	10	The second of th
Herb Stratum (Plot size:)	10 /	c. ]	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Pteridium agentinum	10	FACU	be present, unless disturbed or problematic.
			Definitions of Four Vegetation Strata:
			Definitions of Four Vegetation Strata.
3			Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4			more in diameter at breast height (DBH), regardless of
5			height.
6			Sapling/Shrub - Woody plants, excluding vines, less
7			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8			Herb - All herbaceous (non-woody) plants, regardless
9			of size, and woody plants less than 3.28 ft tall.
10			Woody vine – All woody vines greater than 3.28 ft in
11			height.
12			
	10 = Total Cove	-	
50% of total cover: 5		7_	
	20% of total cover: _		
Woody Vine Stratum (Plot size:)		-0-	
1. Rhysondicions	20 V	FITC	
2. Gelsemium sempervirens	15 0	FAC	
3	30 01	PAC	
4.			
5			
·	7.5		Hydrophytic
27	= Total Cover	13	Vegetation Present? Yes No
50% of total cover: 2/4	§ 20% of total cover: _	10	resoluti res
Remarks: (If observed, list morphological adaptations below	w).	70.0	
			1

Sampling Point: \_\_\_\_\_

Profile Description: (Describe to the dept	h needed to docum	nent the i	ndicator	or confirm	the absence	of indicate	ors.)	
Depth Matrix	Redo	x Features	5				-21	
(inches) Color (moist) %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup> _	Texture		Remarks	
0-5 1012 112 -					Long			
5-11 60416 4/3					loang	Sand	N 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
11-16 109R 5/3	10 YR 416	12	C	m	SCL			
							THE TOTAL TOTAL	
		-						
1								
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.			ining, M=Matr	
Hydric Soil Indicators: (Applicable to all L  Histosol (A1)							matic Hydric	Soils <sup>3</sup> :
Histic Epipedon (A2)	Polyvalue Bel					luck (A9) (L		
Black Histic (A3)	Thin Dark Sur Loamy Mucky					luck (A10)		MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleye			. 0,				(LRR P, S, T)
Stratified Layers (A5)	Depleted Mat	rix (F3)					Loamy Soils	
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S				_ (MLF	(A 153B)		
5 cm Mucky Mineral (A7) (LRR P, T, U) Muck Presence (A8) (LRR U)	Depleted Dar					rent Materi		
1 cm Muck (A9) (LRR P, T)	Redox Depre		9)		District Control of the Control of t		Surface (TF	12)
Depleted Below Dark Surface (A11)	Depleted Och		MLRA 15	51)	U Other (	Explain in F	remarks)	
Thick Dark Surface (A12)	☐ Iron-Mangane				T) <sup>3</sup> Indic	ators of hyd	rophytic vege	tation and
Coast Prairie Redox (A16) (MLRA 150A)	Printed .			, U)	wetl	and hydrole	ogy must be p	resent,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (				unle	ss disturbe	d or problema	itic.
Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Reduced Vert							
Stripped Matrix (S6)	Anomalous B					153D)		
Dark Surface (S7) (LRR P, S, T, U)		igitt Loan	iy oolis (i	20) (WILK)	1 1400, 1000,	1330)		
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):			ly dolls (r	20) (WILK)	1400, 1000,	1000)		
Restrictive Layer (if observed):  Type:		Tight Loan	iy dolla (r	20) (MERO	1402, 1000,	1000)		~
Restrictive Layer (if observed):  Type:  Depth (inches):	_	ight Loan	iy dolls (r	20) (MERO	Hydric Soil	II CIIIIS	Yes	No X
Restrictive Layer (if observed):  Type:	_	ight Loan	iy dolls (r	20) (MERO	M 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	II CIIIIS	Yes	No <u>×</u>
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	Lydroz			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No_X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X
Restrictive Layer (if observed):  Type:  Depth (inches):  Remarks:	_			22 24	Hydric Soil	Present?		No X

# Whlh012\_u



Upland data point whlh012\_u facing east



Upland data point whlh012\_u facing north

# Whlw012 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region Project/Site: 5 Sampling Date: 7 - (4 -City/County: Applicant/Owner: Sampling Point: WHLH Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Subregion (LRR or MLRA): Soil Map Unit Name: Emporia tine sond NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ \_\_ (If no, explain in Remarks.) \_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes Remarks: HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) ☐ Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (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 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Obvious depressional onea with 12-18" water marks VEGETATION (Four Strata) – Use scientific names of plants.

Sampling Point: WHLH 013

Tree Stratum (Plot size:		Dominant		Dominance Test worksheet:
1. Quercus phellon	% Cover	Species		Number of Dominant Species
2. Her rubrum	30		FACE	That Are OBL, FACW, or FAC:(A)
3. Liquid sombor styracistue	15	<del>-</del>	FAC	Total Number of Dominant
4	12		FAC	Species Across All Strata: (B)
				Percent of Dominant Species
5 6				That Are OBL, FACW, or FAC: (A/B)
				Prevalence Index worksheet:
7		-		Total % Cover of: Multiply by:
8	TAK	= Total Co		OBL species x 1 =
50% of total cover: 32.	200/ -	= Total Cov	<sup>/er</sup> 13	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	20% 01	total cover	:	FAC species x 3 =
1. Liquidombor Styraciflua	10	1	FAC	FACU species x 4 =
2. Disspyros virginiana	10	1/	FAC	UPL species x 5 =
3. Vaccinium cory mosium	5	1	FACIL	Column Totals: (A) (B)
4			11100	1
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7			·	1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
	25	= Total Cov	er	3 - Prevalence Index is ≤3.01
50% of total cover: 12-5	20% of	total cover	5	Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size:)				New Management of the state of
1	4. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10			Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
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 THE REAL PROPERTY.	Total Cov		
50% of total cover:	_ 20% of t	total cover:		
Woody Vine Stratum (Plot size:	10	./	rno	
1. Smilax Potundi Folia	10		FAC	
2				
3				
4				
5	10			Hydrophytic \ \ \ \
50% -(1-1-1		Total Cove	er >	Vegetation Present? Yes No
50% of total cover:		otal cover:		163 110
Remarks: (If observed, list morphological adaptations below	).			

Profile Desc	cription: (Describe to the dept	h needed to docum	ent the i	ndicator o	r confirm	the absence of inc	dicators.)
Depth (inches)	Matrix Color (moist) %	Redox	Features				
<b>20</b> 0-6		Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		Remarks
1 100						loam	
6-10	104R4/2					Clay loar	n
10-16	104R4/2	104R416	2			claylon	m
						(	
	——————————————————————————————————————						
1Tuna: 0-0-							
Hydric Soil I	oncentration, D=Depletion, RM= ndicators: (Applicable to all L	Reduced Matrix, MS=	Masked	Sand Grain	is.	<sup>2</sup> Location: PL=P	ore Lining, M=Matrix.
☐ Histosol (		2000		7.0			roblematic Hydric Soils <sup>3</sup> :
	ipedon (A2)	Polyvalue Belo	w Surfac	e (S8) (LR	R S, T, U		A9) (LRR O)
Black His	는 2000 원래(1950 PEC)	Loamy Mucky	Mineral (f	F1) (LRR C	0)	Reduced Ver	A10) (LRR S) rtic (F18) (outside MLRA 150A,E
_	n Sulfide (A4)	Loamy Gleyed	Matrix (F	2)		Piedmont Flo	odplain Soils (F19) (LRR P, S, T
	Layers (A5) Bodies (A6) (LRR P, T, U)	Depleted Matri				Anomalous E	Bright Loamy Soils (F20)
5 cm Muc	cky Mineral (A7) (LRR P, T, U)	Redox Dark Su				(MLRA 153	
Muck Pre	esence (A8) (LRR U)	Depleted Dark Redox Depress	Surface (	(F7) \		Red Parent N	Material (TF2)
1 cm Muc	ck (A9) (LRR P, T)	Mari (F10) (LR		,			Dark Surface (TF12) n in Remarks)
Depleted	Below Dark Surface (A11)	Depleted Ochri		MLRA 151		Other (Explai	ir ir Remarks)
	rk Surface (A12)	☐ Iron-Manganes	e Masses	s (F12) (LR	R O, P, T	ndicators o	of hydrophytic vegetation and
Coast Pra	airie Redox (A16) (MLRA 150A)		(F13) (L	.RR P, T, U	)	wetland hy	ydrology must be present,
	ucky Mineral (S1) (LRR O, S) eyed Matrix (S4)	Delta Ochric (F	17) (MLF	RA 151)		unless dis	turbed or problematic.
Sandy Re		Reduced Vertice Piedmont Floor	(F18) (N	ILRA 150A	, 150B)	•	
	Matrix (S6)					149A, 153C, 153D	
☐ Dark Surf	ace (S7) (LRR P, S, T, U)		, in abani,	) 00110 (1 2	) (IIILIO	1437, 1330, 1330	)
Restrictive La	ayer (if observed):						
Туре:		_					1/
Depth (inch	nes):					Hydric Soil Preser	nt? Yes X No
Remarks:							
	11 -				_		
	[a], AO	c soil			1		
	Hydail	C 200	D	res	en	7	
	$\circ$		1				

# $Whlh013f_w$



Wetland data point whlh013f\_w facing east



Wetland data point whlh013f\_w facing south

WEILAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: Kalcubility City/County: Halitax Sampling Date: 7-14-)
Applicant/Owner:
Investigator(s): DINEST Section, Township, Range:
Landform (hillslope, terrace, etc.): Hills lope Local relief (concave, convex, none): Slope (%): 0 - 7
Subjection (LKR of MLRA).
Soil Map Unit Name: Emporice fine small form 0-2% 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 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
Tydic Soil Fresent? Yes No Within a Wetland? Yes No
Remarks:
Not all three parameters present
1000 att me parameters present
• • • • • • • • • • • • • • • • • • • •
HYDROLOGY
Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B13)  Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)
Water Marks (B1) — Oxidized Rhizospheres along Living Roots (C3) — Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)
Drift Deposits (B3)  Recent Iron Reduction in Tilled Soils (C6)  Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surface (C7)  Geomorphic Position (D2)  Other (Explain in Remarks)
Strailow Adultard (D3)
☐ Vvater-Stained Leaves (B9) ☐ Sphagnum moss (D8) (LRR T, U) Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
tale (all all galage, mornioring well, aerial photos, previous inspections), if available:
Remarks:
NE dedictions of the formation of
No hydrology indicators present

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: \_whlh013\_u Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size: % Cover Species? Status **Number of Dominant Species** corcus al That Are OBL, FACW, or FAC: (A) Total Number of Dominant Species Across All Strata: (B) Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B) Prevalence Index worksheet: Total % Cover of: OBL species \_\_\_\_\_ x 1 = \_\_\_\_ = Total Cover 50% of total cover: FACW species \_\_\_\_\_ x 2 = \_\_\_ 20% of total cover: FAC species \_\_\_\_\_ x 3 = \_\_\_\_ FACU species \_\_\_\_\_ x 4 = \_\_\_\_ UPL species \_\_ x 5 = \_\_ Column Totals: \_\_ (A) \_\_\_\_\_ (B) Prevalence Index = B/A = \_\_\_ 5. **Hydrophytic Vegetation Indicators:** 6. 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0¹ = Total Cover Problematic Hydrophytic Vegetation¹ (Explain) 50% of total cover: 20% of total cover: <sup>1</sup>Indicators of hydric soil and wetland hydrology must hasmanthium sessi 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. = Total Cover 50% of total cover: Hydrophytic = Total Cover Vegetation Present? 50% of total cover: 20% of total cover: Remarks: (If observed, list morphological adaptations below).

Sampling Point: whlh013\_u

Profile Description: (Describe to the depth needed to document the indicator or	r confirm the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type <sup>1</sup>	Loc <sup>2</sup> Texture Remarks
0-4 104R3/2	sandy lown
M-10, 104R 4/12	Sondy horam
0+18 104R 3/3	Stong lown
14-18 104R 5/4 WYR4/6 2	sandy lonin
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 Copper of Court
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grain	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Polyvalue Below Surface (S8) (LRI Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T,	
Black Histic (A3)  Loamy Mucky Mineral (F1) (LRR C	
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)	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) (LR	AC 2
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U	
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4)  Reduced Vertic (F18) (MLRA 150A	
Sandy Redox (S5)  Stripped Matrix (S6)  Piedmont Floodplain Soils (F19) (N Anomalous Bright Loamy Soils (F2)	
☐ Stripped Matrix (S6) ☐ Anomalous Bright Loamy Soils (F2) ☐ Dark Surface (S7) (LRR P, S, T, U)	(MLRA 149A, 153C, 153D)
Restrictive Layer (if observed):	
Type:	
Depth (inches):	Hydric Soil Present? Yes No
Remarks:	
	^
No history	ladicators present
, agoric son	(801501012 Bresen

# Whlh013\_u



Upland data point whlh013\_u facing east



Upland data point whlh013\_u facing north

# Whlh013 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region Applicant/Owner: Sampling Point: WHL Investigator(s): \_ Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Londov 13'51.006" Long: 1 Subregion (LRR or MLRA): Soil Map Unit Name: Chastagn Are climatic / hydrologic conditions on the site typical for this time of year? Yes\_ (If no, explain in Remarks.) Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_ \_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_ \_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Water Table Present? Saturation Present? Wetland Hydrology Present? Yes \_ Depth (inches): (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: edrology



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

WHLH014F

	mee or plante.	Sampling Point:
Tree Stratum (Plataine)	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover Species? Status	Number of Dominant Species
1. Umus americana	20 V FALW	That Are OBL, FACW, or FAC: (A)
2. Corpines carolina	20 J FAL	(A)
		Total Number of Dominant 1 L I
	20 V FAC	Species Across All Strata: (B)
4. Acer vubrum	70 V FX	The state of the s
5. Liquidamber styraciflia	70 V FAL	Percent of Dominant Species   PTT
STYTHER THE	70	That Are OBL, FACW, or FAC: (A/B)
6		- 2
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
V	1000	
· ·	100 = Total Cover	OBL species x 1 =
50% of total cover: 50	_ 20% of total cover: 20	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		FAC species x 3 =
	70 V -	
1. Josephium corymbosum	10 FACE	FACU species x 4 =
2. Her rubrum	ZO Y FAC	UPL species x 5 =
3. Liguicambor stymacitlua	75 1/ 501	Column Totals: (A) (B)
Comment Stylle	7 4	(A)(B)
4. Carpinus carplintana	10 V FAC	Providence Index = D/A =
5. Crateagus marshallii	2 FAC	Prevalence Index = B/A =
		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		
8		2 - Dominance Test is >50%
	02	☐ 3 - Prevalence Index is ≤3.01
11.7	_82 = Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of total cover:	- resistant rijaroprijao vegetation (Explain)
Herb Stratum (Plot size:) ,		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20 1	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Hundinaria algrantea	10 V	be present, unless disturbed or problematic.
1. Arundinaria gignitea 2. Rubus augustus	25	Definitions of Four Vegetation Strata:
3		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		height.
6		
6		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		993 - 1940 - 5 Deal
		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
10		height.
12	<del></del>	
	Total Cover 9	
50% of total cover: 22.5	2004 - (4-4-4-4	
	_ 20% of total cover:('	
Woody Vine Stratum (Plot size:)	¬ - /	1
1. Imlax retundifolia	15 V. FAC	
2. Campsis radicans	IS FINE	
	13 V TAC	
3. Rhis malcans	10 J HAC	
4.		
-		
5	<del></del>	Hydrophytic
987 - D	_50 = Total Cover . ~	Vegetation
50% of total cover: 25	1/ \	Present? Yes No
	_ 20% of total cover: _ TU	
Remarks: (If observed, list morphological adaptations below	).	

Profile Description: (Describe to the dept Depth Matrix (inches) Color (moist) %	Redo	x Features	5			ones sunte 2007 32577 57740
Color (moist) %	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
11/2 2 10/1	54R.5/6	10	<u> </u>	M	Sanly	lemm
0-141 2.446/1	54R5/6	25	<u>C</u>	$\underline{m}$	SCL	
						<u> </u>
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS	=Masked	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
yuric Soil Indicators: (Applicable to all L	RRs, unless other	wise note	d.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)	Polyvalue Bel	ow Surfac	e (S8) (LI	RR S, T, U		luck (A9) (LRR O)
Histic Epipedon (A2) Black Histic (A3)	Thin Dark Sur	face (S9)	(LRR S, 1	r, u)	2 cm M	luck (A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Mucky	Mineral (I	-1) (LRR	0)	Reduce	ed Vertic (F18) (outside MLRA 150
Stratified Layers (A5)	Loamy Gleyed	Matrix (F	2)		☐ Piedmo	ont Floodplain Soils (F19) (LRR P. S
Organic Bodies (A6) (LRR P, T, U)	Depleted Matr	ix (F3)			Anomal	lous Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Redox Dark S	urface (F6	5)		(MLR	A 153B)
Muck Presence (A8) (LRR U)	Depleted Dark	Surface (	F7)		H Red Pa	rent Material (TF2)
1 cm Muck (A9) (LRR P, T)	Redox Depres	sions (F8)	1		₩ Very Sh	nallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Marl (F10) (LR	(RU)		940	Other (8	Explain in Remarks)
Thick Dark Surface (A12)	Depleted Ochr	IC (F11) (I	VILRA 15	1)	- •	
Coast Prairie Redox (A16) (MLRA 150A)	Iron-Manganes	se masses	5 (F12) (L	RR O, P, 1		tors of hydrophytic vegetation and
Sandy Mucky Mineral (S1) (LRR O, S)	Umbric Surface	E (F 13) (L	RR P, I,	U)	wetla	and hydrology must be present,
Sandy Gleyed Matrix (S4)	Reduced Vertic	~ /E19\ /RA	A 151)	A 450D)	unle	ss disturbed or problematic.
Sandy Redox (S5)	Piedmont Floor	dalain Sai	LKA 150	A, 150B)		
Stripped Matrix (S6)	Anomalous Bri	aht Loami	(Soile (E	MLKA 149	(A)	
Dark Surface (S7) (LRR P, S, T, U)	/ wiemalous bit	giit Luaini	) 30115 (F	20) (MLRA	149A, 153C,	153D)
strictive Layer (if observed):						
Туре:				1		
Depth (inches):	_			1	Hydric Soil P	resent? Yes_X No
marks:						

### Whlh014f\_w



Wetland data point whlh014f\_w facing east



Wetland data point whlh014f\_w facing south

WEILAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SE Reliability City/County: HALTERY Sampling Date: 7-141-
Applicant/Owner: State: W Sampling Point: WHLH
Investigator(s): Section, Township, Range:
Landform (hillstone torsee etc.)
Subregion (LRR or MLRA):  Lat: 36 13 51019 Long: 77° H3 18.830 Datum:
Soil Map Unit Name: Tomother fine smaylor rurely Hoded 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 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.
Hydric Soil Present? Ves No No Is the Sampled Area
Wetland Hydrology Present? Yes No Within a Wetland? Yes No
Remarks: N > C OO - N
Not all three parameters present.
HYDROLOGY
Wetland Hydrology Indicators
Primary Indicators (minimum of two required)
Surface Water (A1)
High Water Table (A2)  Sparsely Vegetated Concave Surface (B8)
Saturation (A2)
Water Marks (B1)  Oxidized Rhizospheres along Living Roots (C3)  Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)
☐ Drift Deposits (B3) ☐ Recent Iron Reduction in Tilled Soils (C6) ☐ Saturation Visible on Aerial Images (C0)
Thin Muck Surface (C7) Geomorphic Position (D2)
Unit Deposits (B5) Unit of Deposits (B5) Uni
inundation visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)  Field Observations:  Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Procent? Yes
(includes capillary fringe)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
No hydrology present
No regarding present

VEGETATION	(Four Strata) -	Use scientific names of plants.
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Sampling Point: \_\_\_\_\_\_U

T 0 1	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	30	$\overline{}$	FAC	That Are OBL, FACW, or FAC:(A)
2. travinus pennsylvanica	CI.		FACW	
3. Ulmus americiona	20	V	FACE	Total Number of Dominant
4			11111	Species Across All Strata: (B)
5			L	Percent of Dominant Species / /
6				That Are OBL, FACW, or FAC: (A/B)
7.				B 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7				Prevalence Index worksheet:
8	10			Total % Cover of:Multiply by:
70	60	= Total Cov	/er	OBL species x 1 =
50% of total cover:	20% of		: 12	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:		/		FAC species x 3 =
1. Overcus allos	15	/	FACU	FACU species x 4 =
2. Ulmus american	15			UPL species x 5 =
3. Carpines carolina	10	$-\!$	FAW	
S. Car Buttes Caronin	1/2		FAC	Column Totals: (A) (B)
4. Lipostrem sinenso	15	1	FACU	Prevalence Index = B/A =
5. Ulmes alata	15		FACU	Hydrophytic Vegetation Indicators:
6				
7				- The root for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
	75	Total Cov	~	3 - Prevalence Index is ≤3.01
50% of total cover: <u>37.5</u>	200/ -64	- Total Cov	15	Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size:	_ 20% of 1	total cover:	10	
	(	1	~ · · · · /	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Aryndinewia grantos	<u> </u>	·/_	FALW	be present, unless disturbed or problematic.
2. Rubus argutus	30.	<u></u>	FACU	Definitions of Four Vegetation Strata:
3. Dischorea	2		FAC	
4.			*	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of height.
6.				100 C 100 C
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				AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
	27 -	Total Cove		
50% of total cover: 185		Total Cove	7.41	
Woody Vine Stratum (Plot size:)	_ 20% of to	otal cover:	( ,	
voody vine stratum (Plot size:	20	/		
much rotunationa	20	<u> </u>	FAC	
2. Jampsis radicans		0/	FAC	
3. Khus radicans	10	$\checkmark$	FAC	
4. Apios amoricana	2		FA	
5				
	77 -	Total Cause		Hydrophytic Vogetation
50% of total annual 18 (	- 1	Total Cove	7.4	Vegetation Present? Yes No
50% of total cover: [17]		tal cover:		1657 10
Remarks: (If observed, list morphological adaptations below)				
				1

Sampling Point: 1714014

Profile Des	cription: (Describe to	o the depth i	needed to docu	ment the i	ndicator	or confirm	the absence of	indicators.)	V
Depth	Matrix		Redo	x Features	S				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remark	s
0-6	2544/2			_			Jandy	OAM	
6-16+	25 Y 5/Z						smaly!		
							DISTANT T	OAIN	
-	-								
		H							
¹Type: C=C	Concentration, D=Deple	tion PM-Po	duced Metrix M	C-Maskad	<u></u>		2, 51		<del></del>
Hydric Soil	Indicators: (Applica	ble to all LRI	Rs. unless othe	rwise note	Sano Gra	ains.	Indicators for	=Pore Lining, M=Ma Problematic Hydr	atrix.
☐ Histoso			Polyvalue Be			DD C T II			ic sons :
	pipedon (A2)	i	Thin Dark Su					k (A9) (LRR O) k (A10) (LRR S)	
	listic (A3)	1	Loamy Muck					Vertic (F18) (outsid	e MI RA 150A R)
	en Sulfide (A4)	Ì	Loamy Gleye			-,		Floodplain Soils (F1	
	d Layers (A5)	į	Depleted Ma		55			s Bright Loamy Soil	
	Bodies (A6) (LRR P,		Redox Dark				(MLRA 1		
5 cm M	ucky Mineral (A7) (LRF	R P, T, U)	Depleted Da					nt Material (TF2)	
	resence (A8) (LRR U)	ļ	Redox Depre		3)			ow Dark Surface (T	F12)
	uck (A9) (LRR P, T) d Below Dark Surface	(0.44)	Marl (F10) (L				U Other (Exp	olain in Remarks)	
	ark Surface (A12)	(ATT) [	Depleted Oc				<b>-</b> ) 3,		
	rairie Redox (A16) (MI	LRA 150A)	☐ Iron-Mangan☐ Umbric Surfa					rs of hydrophytic ve	
	Mucky Mineral (S1) (LF		Delta Ochric			U)		l hydrology must be disturbed or probler	
	Gleyed Matrix (S4)		Reduced Ver			0A. 150B)		disturbed of probler	natic.
Sandy F	Redox (S5)	Ī	Piedmont Flo						
	d Matrix (S6)	I					A 149A, 153C, 15	3D)	
	ırface (S7) (LRR P, S,	T, U)						16.5	
Restrictive	Layer (if observed):							200000000000000000000000000000000000000	
Type:			-						<b>Y</b>
Depth (in	ches):						Hydric Soil Pre	sent? Yes	No 🔨
Remarks:			-		11 11/1/				
						Α			
			1) = h	1.0	7	()	0	(	August
			100 10	400	ic S	SOU	marca	YOUR DV	eson
			112	741	n	.[		fors pr	,0
			NO W	501 11G	25 6	Deser	rued i	n UDA	r small
				(X)		- /1		- 0/0/-	30 4
			P	DAIL	eu	with	25 V	5/2 11	(
			ŧ				/ .	5/2 ma	ELIX.

### Whlh014\_u



Upland data point whlh014\_u facing east



Upland data point whlh014\_u facing north

### whlh014 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region Sampling Date: Applicant/Owner: Sampling Point: W Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): \_ C DNC AVC Slope (%): Subregion (LRR or MLRA): 13 13.199" Long: 77° 43' 55, 339 Soil Map Unit Name: % NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_\_\_\_ (If no, explain in Remarks.) \_, Soil \_\_\_\_, or Hydrology \_ \_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes \_ Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_ \_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (inches): Saturation Present? Wetland Hydrology Present? Yes X No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Obvious drop in topography from adjacent upland Saturated edge of forested wetland

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

WHLHOISF\_W Sampling Point:\_\_\_

	Absolute	Dominant	Indicator	
Tree Stratum (Plot size:)	% Cover	Species?	Status	Dominance Test worksheet:
1. Splix nigra	15	Openios:	- Otatus	Number of Dominant Species
2. Acer rubrum	17		1	That Are OBL, FACW, or FAC: (A)
	- 10		FAC	Total Number of Dominant
3. Diopyros virginiana	_5		FAC	Species Across All Strata:
4. TOUXINILL DONNSYLVACING	2 15	/	FACU	J
5. Pinus tadda	10		E4/	Percent of Dominant Species
6.	. —		PPIC	That Are OBL, FACW, or FAC: (A/B)
				Dravels 1 - 1
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	55:	= Total Cov	er	OBL species x 1 =
50% of total cover:	5 20% of	total cover:	11	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)		total cover.	<u> </u>	FAC species x 3 =
1. Forxinus ponnsylvanica	10	. /		
2 1 1 PARICA	30	<del></del>	FACH	FACU species x 4 =
2. Olmus americana	20		FACW	UPL species x 5 =
3. Despyros virgeniana	O		FAC	Column Totals: (A) (B)
4. Tel Oboum	24		FW-	
5. Liquidantor Styrucidua	1		FAL	Prevalence Index = B/A =
16				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	,			3 - Prevalence Index is ≤3.0¹
	4000 =	Total Cove	r	
50% of total cover: 45	20% of t	otal cover	18	Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size:)		/	10	
1 House Diagram Curata las	MO		+100	Indicators of hydric soil and wetland hydrology must
1. Arundinaria gignentea	<u>u</u> .		FACE	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of height.
6				
7				Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
11.			- 1	Woody vine – All woody vines greater than 3.28 ft in
12.				height.
	10			
20.		Total Cover	·,-,	
50% of total cover: 50	_ 20% of to	otal cover: _	12	
Woody Vine Stratum (Plot size:)		7	1	
1. Longora japoniza	20	V, 1	FAC	
2. Smiles rotunditalias	70	1/	FIAT	, lik
3. Rheer cardicane	7 00	<del>\</del>	Chi	
4	-		AC	
5	<del></del>			Hydrophytic
¬ -	60 =	Total Cover		Vegetation
50% of total cover: 30	7	tal cover: _	12	Present? Yes No
Remarks: (If observed, list morphological adaptations below				
the second secon	<i>)</i> ·			
				1

Sampling Point: WHLH015EN

Profile Description:	(Describe to t	he depth n	eeded to docur	ment the i	ndicator	or confirm	n the absence of ir	Sampling Point:
Depth	Matrix		Redo	x Features	3		in the absence of it	idicators.)
	(moist)	% (	Color (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remarks
4 . 4 .	R3/1_			<u> </u>			(oran	
	R3/2_					_Sm	Deloam	
11-18+ 1041	25/2_		YR4/6=	72		M	SCL	
							- Di	
¹Type: C=Concentratio	on, D=Depletio	n, RM=Red	luced Matrix MS	S=Masked	Sand Gra	ine	21 anation: DL 1	
Hydric Soil Indicators	: (Applicable	to all LRR	s, unless other	wise note	d.)	11115.	Indicators for P	Pore Lining, M=Matrix. Problematic Hydric Soils <sup>3</sup> :
Histosol (A1)		[	Polyvalue Be	low Surfac	e (S8) (L	RR S, T, U		(A9) (LRR O)
Histic Epipedon (A Black Histic (A3)	2)	F	Thin Dark Su	rface (S9)	(LRR S,	T, U)		(A10) (LRR S)
Hydrogen Sulfide (	(A4)	F	Loamy Mucky	/ Mineral (I	F1) (LRR	0)	Reduced Ve	ertic (F18) (outside MLRA 150A,B)
Stratified Layers (A		<u> </u>	Loamy Gleye Depleted Mat		2)		Piedmont FI	oodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A	6) (LRR P, T, L	J) [	Redox Dark S		6)		(MLRA 15	Bright Loamy Soils (F20)
5 cm Mucky Miner	al (A7) (LRR P	, T, U)	Depleted Dari	k Surface (	F7)		Red Parent	Material (TF2)
Muck Presence (All 1 cm Muck (A9) (L	BRPT)	F	Redox Depres	ssions (F8)	)			v Dark Surface (TF12)
Depleted Below Da	ark Surface (A1	<sub>11)</sub>	Marl (F10) (LI Depleted Och		MI DA 15	4)	U Other (Expla	in in Remarks)
Thick Dark Surface	(A12)	Γ	Iron-Mangane	se Masses	(F12) (L	') .RR O. P. 1	T) <sup>3</sup> Indicators	of hydrophytic vegetation and
Coast Prairie Redo	× (A16) (MLRA	A 150A)	Umbric Surface	ce (F13) (L	RR P, T,	U)		lydrology must be present,
Sandy Mucky Mine Sandy Gleyed Mate	ral (S1) (LRR (	o, s)	Delta Ochric (	F17) (MLR	RA 151)			sturbed or problematic.
Sandy Redox (S5)	1 (34)	F	Reduced Vert	ic (F18) <b>(N</b>	ILRA 150	A, 150B)		
Stripped Matrix (S6	i)		Anomalous Br	ight Loam	v Soils (F	MLKA 149 20) /MI RA	9A) A 149A, 153C, 153D	w
Dark Surface (S7)	LRR P, S, T, U	J)		J	, 00.10 (1	Lo) (IIILIO	1432, 1330, 1331	")
Restrictive Layer (if of	served):							
Type:								27
Depth (inches):							Hydric Soil Prese	ont? Yes No
Remarks:					11			
	1	1 (		$\cap$				
		tos	Doric &				$\bigcirc$	
		Se		300	( P	rese	Du	

## *Whlh015f\_w*



Wetland data point whlh015f\_w facing east



Wetland data point whlh015f\_w facing south

WETERIND DETERMINATION DATA FOR	RM – Atlantic and Gulf Coastal Plain Region
Project/Site: Se Reliability City/	County Halifax
Applicant/Owner: Dominion	State: NC Sampling Point WHLHOL
Investigator(s): DDWEST Sect	ion Township Pages
Landform (hillslope, terrace, etc.): Hills ope Loca	al relief (concave convex none):
Subregion (LRR or MLRA): Lat: 36 13	al relief (concave, convex, none): Slope (%): 0 - 2 / 3. 592 Long: 77° 36 / 3. 54. 635 Datum:
Soil Map Unit Name: Empora fino soundy loam	2-(6% 5 One NIM classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No //f no explain in Remarks
Are Vegetation, Soil, or Hydrology significantly distu	rbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, explain any answers in Remarks.)
	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Wetland Hydrology Present?  Remarks:  Notall thee paramoters pro	Is the Sampled Area within a Wetland? Yes No
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)  Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Saturation (A3)  Marl Deposits (B15) (LRF	R U) Drainage Patterns (B10)
Saturation (A3) Water Marks (B1) Hydrogen Sulfide Odor (C) Oxidized Rhizospheres al	=
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)	s) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9) Field Observations:	☐ Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches):	- 0 = - 1/22 2 = - 1/22
Saturation Present? Yes No Depth (inches):	Wotland Hudretow Burn 10 M
(includes capillary fringe)	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, prev	lous inspections), if available:
Remarks:	
No hydrology n	Acators present

VEGETATION	(Four Strata	- Use scientific names of plants
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	mes of plants		Indicator	Sampling Point:	
Lipuration (Plot size:) Planes toeda	% Cover Sp	ecies?	Status FIAC	Dominance Test worksheet:  Number of Dominant Species That Are OBL, FACW, or FAC:	(A)
Liriocondron tulipitera	Charles and the second	<del>/</del>	FACU	Total Number of Dominant Species Across All Strata:	(B)
				Percent of Dominant Species That Are OBL, FACW, or FAC:	(A/E
			- 7-15-7 2-7 1-7	Prevalence Index worksheet:	
				Total % Cover of: Multiply by:	
	515 = Tol	tal Cove	ero	OBL species x 1 =	
50% of total cover: 27.	5 20% of total	cover:	9	FACW species x 2 =	
nling/Chrish Ctrations /DI-1-1		/		FAC species x 3 =	
Liquidamper Stylucilus	200 1		TIM.	FACU species x 4 =	
Rhies copilline	TE -	<del>~</del> .	FACU	UPL species x 5 =	
Mmuzalata	12 -	<u> </u>	1	Column Totals:	
Hor rubrum	10-		FACU	Column Totals: (A)	(B)
From Junium	10_	_/.	FAC	Prevalence Index = B/A =	
Ba Ligustoum sinense	20 1	∠.	FACU	Hydrophytic Vegetation Indicators:	-
				1 - Rapid Test for Hydrophytic Vegetation	
				2 - Dominance Test is >50%	
		7.0			
	75 = Tota	al Cove	,	3 - Prevalence Index is ≤3.01	
50% of total cover: 37.5	20% of total	COVE	15	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
erb Stratum (Plot size:)	_ 20% 01 10181	cover.			
Rubus argutus	50 1	<u> </u>	FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology mu be present, unless disturbed or problematic.	st
Conzya, Canadensis Erechtites hieracifolia	18-		FACV	Definitions of Four Vegetation Strata:	
Phytolaca americana.	15		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm more in diameter at breast height (DBH), regardless height.	) or s of
3 3				Sapling/Shrub – Woody plants, excluding vines, le than 3 in. DBH and greater than 3.28 ft (1 m) tall.	ss
				Herb – All herbaceous (non-woody) plants, regardle of size, and woody plants less than 3.28 ft tall.	ess
				<b>Woody vine</b> – All woody vines greater than 3.28 ft height.	n
	0				
1 (= -	Tota	I Cover	10		
50% of total cover: 47.5	20% of total of	cover: _	19		
oody Vine Stratum (Plot size:)					
CAMPSIS TADICANS	15	16	FAC		
Shis FAdicons	15 1	7	-AC		
Swilas rotunditalia	15	7 7	-41		
			11		
	ice			Hydrophytic	
50% of total cover: 27.5 marks: (If observed, list morphological adaptations below)	20% of total co	Cover		Vegetation Present?  Yes No	

umpling Point:

Profile Description: (Describe to the dep	h needed to document the indicator or confirm	Sampling Point:
Matrix	Redox Features	if the absence of indicators.)
(inches) Color (moist) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	
0-3 104R3/3		loam
3-10 104R 4/R		84 nely lown
10-18-104R.573	104R414 <2 C M	- 011-11 P
1-		
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L  Histosol (A1)		Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)	Polyvalue Below Surface (S8) (LRR S, T, U	
Black Histic (A3)	Thin Dark Surface (S9) (LRR S, T, U) Loamy Mucky Mineral (F1) (LRR O)	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix (F2)	Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	Depleted Matrix (F3)	Piedmont Floodplain Soils (F19) (LRR P, S, T) 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) Muck Presence (A8) (LRR U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
1 cm Muck (A9) (LRR P, T)	Redox Depressions (F8)  Marl (F10) (LRR U)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	Under (Explain in Remarks)
☐ Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (I PP O P	T) <sup>3</sup> 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) Sandy Gleyed Matrix (S4)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Redox (S5)	Reduced Vertic (F18) (MLRA 150A, 150B)	žii –
Stripped Matrix (S6)	Piedmont Floodplain Soils (F19) (MLRA 148 Anomalous Bright Loamy Soils (F20) (MLRA	PA)
Dark Surface (S7) (LRR P, S, T, U)	La sur la	149A, 153C, 153D)
Restrictive Layer (if observed):		
Type:		rec as
Depth (inches):	_	Hydric Soil Present? Yes No
Remarks:		
	k) 1	
	No hydric so	
	10000	a Morcators
	present	
	,	
	•	
	•	
	•	
	•	
	•	
	•	
	•	

### *Whlh015\_u*



Upland data point whlh015\_u facing east



Upland data point whlh015\_u facing north

### Whlh015 soils



Wetland/upland soils

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

Project/Site: SE Reliability City/County: 470/160x Sampling Date: 15-14
Sampling Date: 13 1
State: 1°C Sampling Point: WHC(+O) 6
Occion, Township, Range
Landform (hillslope, terrace, etc.): Bottom and Local relief (concave, convex, none): Concione Slope (%):
· · · · · · · · · · · · · · · · · · ·
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 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 No
Wetland Hydrology Present? Yes No Within a Wetland? Yes No No
Remarks:
Obvious bottom land, six significant topo break to adjacent upland
to all all significant topo Bieak
HYDROLOGY
Wetland Hydrology Indicators:  Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)  Surface Soil Cracks (B6)
☐ Surface Water (A1) ☐ Aquatic Fauna (B13) ☐ Sparsely Vegetated Canadia Surface (B2)
Mari Deposits (B15) (LRR U)  Drainage Patterns (B10)
Hydrogen Sulfide Odor (C1)  Moss Trim Lines (B16)
Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)
Drift Denosits (R3)
Algel Met or Crust (PA)
Iron Denocite (B5)
Inundation Visible on Aerial Imagery (B7)
Water-Stained Leaves (B9)  Sphagnum moss (D8) (LRR T, U)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No Depth (inches):
Saturation Present? Yes No Depth (inches): 5 Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
Hydrology present
7 7 7

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

Sampling Point: \_\_\_\_

The second of th				
Tree Stratum (Plot size:)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. Acer ruprum	70 Cover	Species?	Status	Number of Dominant Species
2. Ulmus americana	37	$\overline{}$	FAC	That Are OBL, FACW, or FAC: (A)
3. Duerous dre 1105	20		FACH	Total Number of Dominant
	10		PACW	Species Across All Strata: (B)
4. Fraxinus popusylvanica	25		FACH	) — ·-/
5. Liquidrimbor Hyones Plus	<u>_</u> 5			Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	910	Total Car	10	OBL species x 1 =
50% of total cover: 43	20001	Total Cov	er 7	FACW species
Sapling/Shrub Stratum (Plot size:)	20% of 1	total cover:	60	FAC species x 2 =
1. Acer rubrum	15	\/	- 0 1	FACULTURE X 3 =
2. Clethrn alnifolic	3	<u> </u>	1-1/1	FACU species x 4 =
	<b>a</b> 25.		FACH	UPL species x 5 =
3. Veherryen nidem	5		DBL	Column Totals: (A) (B)
4. Lindendron tulipitena	5		FALL	Browless to to 100
5. Liquidambor Styrocitus.	_5		FIAC	Prevalence Index = B/A =
6	1111-1111-1111			Hydrophytic Vegetation Indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
	75	T-4-10	900	☐ 3 - Prevalence Index is ≤3.01
50% of total cover 37, 5		Total Cove	15	Problematic Hydrophytic Vegetation¹ (Explain)
Herb Stratum (Plot size:	_ 20% of to	otal cover:	12	
1. Woodwardia aereplata		. /	OBI	Indicators of hydric soil and wetland hydrology must
2. Arisaema triphylla	-		-	be present, unless disturbed or problematic.
Broken and Triphyla	_ ب		FACW	Definitions of Four Vegetation Strata:
3. Brehmena cylindrica	_5		FACW	
4. Rubus	20			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				than 3 iii. DBH and greater than 3.28 ft (1 m) tall.
9.				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				220
~ =	50=1	otal Cover	-	
50% of total cover:	20% of to	tal cover:	10	
Woody Vine Stratum (Plot size:	2	/		
1. Index rotundifolia.	20		IFAC	
2. Lites rotundifolia a	5 -		FAI	
3. Parthonoussus 40 engrande.	5 -		FN	
4.	<u> </u>		MC	
5				
	7/		1	Hydrophytic
10-2		otal Cover		Vegetation
50% of total cover:	20% of total	al cover: _	9	Present? Yes No
Remarks: (If observed, list morphological adaptations below).				

Sampling Point VHLHO16 F\_W

Profile Des	cription: (Describe	to the dep	th needed to docu	ment the i	ndicator	or confin	m the absence o	Sampling Fo	oirm:
	IVIALITY		Redo	x Feature:	s	0. 00	in the absence o	indicators.)	
(inches)	Color (moist)	%	Color (moist)	_ %	_Type <sup>1</sup>	_Loc <sup>2</sup>	Texture	Remark	cs
3 7	104R 3/1						LOA		
7-16	104R4/1		WYR 4/6	75		m		,,,	
			110				_ <u> </u>		
	Control of the contro								
									1 - 24 - 24 - 24 - 24 - 24 - 24 - 24 - 2
4	===								
¹Type: C=Co	oncentration, D=Depl	letion DM-	Podusod Matric Na						
Hydric Soil	Indicators: (Applica	able to all I	RRs unless other	S=Masked	Sand Gra	ins.	<sup>2</sup> Location: P	L=Pore Lining, M=Ma	atrix.
☐ Histosol	(A1)							or Problematic Hydr	ic Soils³:
	pipedon (A2)		Polyvalue Be Thin Dark Su	face (SO)	e (S8) (LF	RRS, T, U		ck (A9) (LRR O)	
Black Hi	stic (A3)		Loamy Muck	v Mineral (I	(LKK 5, 1	() ()	2 cm Mu	ck (A10) (LRR S)	5 22 2
	n Sulfide (A4)		Loamy Gleye	d Matrix (F	2)	0)	Piedmon	Vertic (F18) (outsid	e MLRA 150A,B)
Stratified	Layers (A5)		Depleted Mat	rix (F3)	-/		Anomalo	t Floodplain Soils (F1 us Bright Loamy Soil	9) (LRR P, S, T)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F6			(MLRA	153B)	s (F20)
Music Day	cky Mineral (A7) (LR	R P, T, U)	Depleted Dar	k Surface (	(F7)			ent Material (TF2)	
1 cm Mu	esence (A8) (LRR U) ck (A9) (LRR P, T)		Redox Depre	ssions (F8)	)			llow Dark Surface (Ti	F12)
Depleted	Below Dark Surface	//44/	Marl (F10) (L	RR U)			U Other (Ex	(plain in Remarks)	
Thick Da	rk Surface (A12)	(A11)	Depleted Och	ric (F11) (I	MLRA 151	1)			
Coast Pr	airie Redox (A16) (M	LRA 150A)	Iron-Mangane	ese Masses	s (F12) (L	RR O, P,		ors of hydrophytic veg	getation and
Sandy M	ucky Mineral (S1) (LI	RR O. S)	Umbric Surface Delta Ochric (	Ce (F13) (L	RR P, T,	U)	wetlan	nd hydrology must be	present,
☐ Sandy GI	leyed Matrix (S4)	0, 0,	Reduced Vert	ic (F18) (N	(A 151)	A 150D)	unless	disturbed or problem	natic.
Sandy Re	edox (S5)		Piedmont Flor	odplain Soi	Is (F19) (	MI PA 14	9.61		
	Matrix (S6)		Anomalous Br	right Loam	v Soils (F2	20) (MLR	A 149A, 153C, 15	53D)	
☐ Dark Surf	face (S7) (LRR P, S,	T, U)				.,		300)	
	ayer (if observed):								
Туре:							1		
Depth (incl	hes):		_				Hydric Soil Pre	esent? Yes	No
Remarks:								100 1	<u> </u>
									1
									1
									1

## Whlh016f\_w



Wetland data point whlh016f\_w facing east



Wetland data point whlh016f\_w facing south

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

Project/Site: Se Reliability City/County: Halifax Sampling Date: 7-15-14
Applicant/Owner:
Investigator(s):
Landform (Lille)
Subregion (LRR or MLRA):  Lat: 3/2/57./09 Long: 77 44/17.69/ "Datum:
Soil Map Unit Name: Gritney fine sundy loam 6-10% NWI classification:
Are climatic / hydrologic conditions on the site hydrologic Millions on the site hydrologic manufacture of the site hydro
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)  SUMMARY OF FINDINGS Attach site man showing compliance in the state of the
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?  Hydric Soil Present?  Yes X No Is the Sampled Area  Wetland Hydrology Present?  Yes No X  Wetland Hydrology Present?  Yes No X  Within a Wetland?  Yes No X
Hydric Soil Present?  Yes No _X  Wetland Hydrology Present?  Yes No _X  within a Wetland?  Yes No
Wetland Hydrology Present? Yes No No No No No No No No No No No No No
Not all three parameters present
HYDROLOGY
Wetland Hydrology Indicators:
Primary Indicators (minimum of two required)
Surface Water (A1)  Aquatic Fauna (B13)  Surface Soil Cracks (B6)  Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)  Marl Deposits (B15) (LRR U)  Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
☐ Water Marks (B1) ☐ Oxidized Rhizospheres along Living Roots (C3) ☐ Dry-Season Water Table (C2)
Sediment Deposits (B2)  Presence of Reduced Iron (C4)  Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)  Thin Muck Surface (C7)  Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Other (Explain in Remarks) ☐ Shallow Aquitard (D3) ☐ Inundation Visible on Aerial Imagery (B7) ☐ FAC-Neutral Test (D5)
Water-Stained Leaves (PO)
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 indicators present

<b>VEGETATION</b>	(Four Strata) -	Use scientific	names of plants
	(i oui otiata) -	Use scientific	names of plants

WHLHO16 - U

Tree Stratum (DL.)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:	% Cover	Species?	1	Number of Dominant Species
1. Lividendron tulipiters	30	$\rightarrow$	HALL	That Are OBL, FACW, or FAC:(A)
2. Lyoudambor Styrisi Thea	- 45	$\rightarrow$	FAC	Total Number of Dominant
3. Tlex opaca	10		FAC	Species Across All Strata: (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:  57 (A/B)
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	65	= Total Cov	er er	OBL species x 1 =
50% of total cover:	5 20% of	total cover	13	FACW species x 2 =
Sanling/Shrub Stratum (Plot size)		total cover.		FAC species x 3 =
1. Livia dendron tulipitera	20	1//	CA/I	FACU species x 4 =
2. Liquidampor Styracilla	5	<del>-</del>	FAX	UPL species x 5 =
3. Liquistrum sinense	7			Column Totals: (A) (B)
4. Ilax opaga ci	7/		FACU	(b)
5. Cleffern Alnifolia	10		FAC	Prevalence Index = B/A =
	13		PACW	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	Open			3 - Prevalence Index is ≤3.0¹
610	-70:	= Total Cov	er /C	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 4.5	20% of	total cover:	18	The second are rigarophytic vegetation (Explain)
Herb Stratum (Plot size:)	-	/	_	Indicators of hydric soil and wetland hydrology must
1. Kubus argutus	25		PAKU	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				
4				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
5				more in diameter at breast height (DBH), regardless of height.
6				10-20-00
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				than 3 m. DBH and greater than 3.28 ft (1 m) tall.
9.				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10	-			Woody vine - All woody vines greater than 3.28 ft in
				height.
12	<del>- 75</del> -			
178		Total Cove	「ノ	
50% of total cover:	_ 20% of t	otal cover:	2	
Woody Vine Stratum (Plot size)	ファ	/	-n/	
1. VITIS POTEENA INVICE	20	<u> </u>	1746	
2. Smikex rotunditolia	25	<u> </u>	TAC	
3				
4				1
5				Hydrophytic
25.	45=	Total Cove		Vegetation
50% of total cover:	20% of to	otal cover:	7	Present? Yes No
Remarks: (If observed, list morphological adaptations below	1).			
ŷ.*	**			

-	-	

WHLHOI6 \_U

Profile Des	scription: (Des	scribe to the de	pth nee	eded to docur	nent the ir	dicator	or confirm	m the abs	sence of indic	ators )	
Deptil	IVI	latrix		Redo	x Features			iiio ubi	sones or man	at015.)	
(inches)	Color (mo	70	Co	lor (moist)	%	Type <sup>1</sup>	_Loc <sup>2</sup>	Text	ıre	Remark	S
0.79	LOYR.	5/2						-lv	am		
4-13	WAR	4/3			A Para Salara		5	and	24 Com	٨	
13-18	LOYR	5/3	101	1R4/4	12	-	m	4	37 1	4	, in the second
								: <del>                                     </del>			
	-		-								
1											
Type: C=C	Concentration, [	D=Depletion, RM	l=Reduc	ced Matrix, MS	=Masked S	Sand Gra	ins.	<sup>2</sup> Loca	ation: PL=Pore	Lining, M=Ma	trix.
		Applicable to al	-					Indic	ators for Prob	lematic Hydri	c Soils <sup>3</sup> :
Histoso	pipedon (A2)		뷔	Polyvalue Bel	ow Surface	(S8) (LF	RR S, T, L		cm Muck (A9)	(LRR O)	
	listic (A3)		H	Thin Dark Sur	face (S9) (	LRR S, T	', U)		cm Muck (A10		
	en Sulfide (A4)		Ħ	Loamy Mucky Loamy Gleyer	d Matrix (F	1) (LRR	0)	H.	Reduced Vertic	(F18) (outside	MLRA 150A,B)
	d Layers (A5)			Depleted Mat		-/		H	nomalous Brid	plain Soils (F19 ht Loamy Soils	9) (LRR P, S, T)
Organic	Bodies (A6) (L	-RR P, T, U)		Redox Dark S	Surface (F6				(MLRA 153B)		(F20)
5 cm Mu	ucky Mineral (A	(7) (LRR P, T, U		Depleted Dark					ed Parent Mat		
1 cm Mu	resence (A8) (Luck (A9) (LRR	-RR U) D T\		Redox Depres				ЦV	ery Shallow Da	ark Surface (TF	12)
Deplete	d Below Dark S	Surface (A11)		Marl (F10) (LF Depleted Och		II DA 45			ther (Explain i	n Remarks)	
☐ Thick Da	ark Surface (A1	12)		Iron-Mangane	se Masses	(F12) (I	I) RR O P	T) :	Indicators of h	ydrophytic veg	
Coast P	rairie Redox (A	16) (MLRA 150	A) 🔲	Umbric Surfac	e (F13) (LI	RR P, T,	U)	•,	wetland hydr	ology must be	etation and
Sandy N	Mucky Mineral (	(S1) (LRR O, S)		Delta Ochric (	F17) (MLR	A 151)			unless distur	ped or problem	atic.
	Sleyed Matrix (\$ Redox (S5)	S4)	H:	Reduced Verti	ic (F18) (M	LRA 150	A, 150B)				
	Matrix (S6)		H	Piedmont Floo	idplain Soil	s (F19) (I	VILRA 14	9A)			
	rface (S7) (LRF	R P, S, T, U)	ш,	Anomalous Br	ignt Loamy	Solls (F2	20) (MLR)	A 149A, 1	153C, 153D)		
Restrictive I	Layer (if obser	rved):						F			
Type:								i.			
Depth (inc	ches):							Hydric	Soil Present?	Yes	No
Remarks:					11941 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			yano		103	NO
		10	i	^		_			,		0
		No	hu	Doz		7.	1.	. > 1/1	truc	0	Som H
		•	- 1	WI LC	20	15	NO	166	111017	INC	3014
										Ą	
											1
											1
											1



Upland data point whlh016\_u facing east



Upland data point whlh016\_u facing north

### Whlw016 soils



Wetland/upland soils

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region City/County: \_ Applicant/Owner: \_ Sampling Point: WHLHC Investigator(s): Section, Township, Range: \_ Landform (hillslope, terrace, etc.): Hom land Local relief (concave, convex, none): Lon clave Lat: 36°12' 31. 289Long: 77°45'23.180Datum: Subregion (LRR or MLRA): Soil Map Unit Name: \_\_\_\_\_\_\_ Are climatic / hydrologic conditions on the site typical for this time of year? Yes \_ \_\_ (If no, explain in Remarks.) \_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Depth (inches): Water Table Present? No Depth (inches): \_ Saturation Present? Depth (inches): \_ Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Hydrology preser

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

WHLHO17fw Sampling Point:

Tree Stratum (Plot size:)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. DALIX nigra	30 30	Species?	OBL	That Ass OBL States
2. DOFULAINICATA	35	7	FIXW	Total Number of Barriers
" TUDIUM	-	$\overline{}$	FAC	Species Across All Strata: (B)
4 5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: (A/B)
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
Li	80	= Total Cov	er ,	OBL species x 1 =
50% of total cover:)  Sapling/Shrub Stratum (Plot size:)	20% of	total cover:	160	FACW species x 2 = FAC species x 3 =
1. Acer invorum	20		FAC	FACU species x 4 =
2. Clethra blaitolia	410	<u> </u>	FACU	
3. I/ex opera	10		FIAC	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7 8				2 - Dominance Test is >50%
	70 :	Total Cove	er	3 - Prevalence Index is ≤3.0¹
50% of total cover: 35	20% of	total cover:	14	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:)  1	2.0	,		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2. Athyrium felix fimina	40	<del></del>	6BL	be present, unless disturbed or problematic.
				Definitions of Four Vegetation Strata:
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5			-	more in diameter at breast height (DBH), regardless of height.
6.				Sapling/Shrub - Woody plants, excluding vines, less
<i>t</i> ,				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.
11				Woody vine – All woody vines greater than 3.28 ft in height.
12				- Tongon
777		Total Cover		
50% of total cover: 27.5 Woody Vine Stratum (Plot size:)	_ 20% of t	otal cover: _	7	
1. Lonizera (Commission)	17		FAI	
2. Smilar votunditolia	25	<u></u>	FAC	
3. Inlax auritalia	15		FACW	
4				
5	~			Hydrophytic
50% of total cover: 25		Total Cover	10	Vegetation Present? Yes No
Remarks: (If observed, list morphological adaptations below		ital cover		7
HE TO SERVICE TO THE SERVICE STATE AND AND AND AND AND AND AND AND AND AND				

Profile Description: (Describe to the	depth needed to docu	ment the indica	tor or confirm	the absence of i	ndicators.)
DepthMatrix	Redo	x Features			
$\frac{\text{(inches)}}{O - 1} \frac{\text{Color (moist)}}{O \times O \times$	Color (moist)	%Typ	e Loc²	Texture	Remarks
- 10/18 5/1					
7-11 104R 4/1					
11-16 104R 5/1					7 195 1977 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
					-
	_				— <u>— — — — — — — — — — — — — — — — — — </u>
l <del></del>					
¹Type: C=Concentration, D=Depletion, F	RM=Reduced Matrix, MS	S=Masked Sand	Grains.	<sup>2</sup> Location: PL=	Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to	all LRRs, unless other	wise noted.)		Indicators for I	Problematic Hydric Soils <sup>3</sup> :
Histosol (A1) Histic Epipedon (A2)	Polyvalue Be	low Surface (S8	) (LRR S, T, U		(A9) (LRR O)
Black Histic (A3)	Thin Dark Su	rface (S9) (LRF	S, T, U)		(A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Gleye	y Mineral (F1) (I	.RR O)	Reduced V	ertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	Depleted Mat			Anomalous	loodplain Soils (F19) (LRR P, S, T) Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark S			(MLRA 1	53B)
5 cm Mucky Mineral (A7) (LRR P, T,		k Surface (F7)		Red Parent	Material (TF2)
Muck Presence (A8) (LRR U)  1 cm Muck (A9) (LRR P, T)	Redox Depre				w Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Marl (F10) (L			U Other (Expl	ain in Remarks)
Thick Dark Surface (A12)		nric (F11) (MLR. ese Masses (F1		T) 31-414	
Coast Prairie Redox (A16) (MLRA 18	(OA) Umbric Surface	ce (F13) (LRR F	2, (LKK O, P, 2, T. U)		of hydrophytic vegetation and hydrology must be present,
Sandy Mucky Mineral (S1) (LRR 0, 5)		(F17) (MLRA 15	1)		isturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Vert	tic (F18) (MLRA	150A, 150B)		istarbed of problematic.
Sandy Redox (S5)	Piedmont Flo	odplain Soils (F	9) (MLRA 149	9A)	
Stripped Matrix (S6)	Anomalous B	right Loamy Soi	s (F20) (MLRA	4 149A, 153C, 153	D)
Dark Surface (S7) (LRR P, S, T, U)  Restrictive Layer (if observed):					
Type:					
Depth (inches):	<del></del>				×
Remarks:				Hydric Soil Pres	ent? Yes No No
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. 1					
[]	o . \	$\circ$		$\cap$	
Hyd	lor soi	Y DI	esen	<del>}</del>	1
0		1		*	
					1
					1
					1

## whlh017f\_w



Wetland data point whlh017f\_w facing east



Wetland data point whlh017f\_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region City/County: Applicant/Owner: Sampling Point: WH Investigator(s): Section, Township, Range: Landform (hillslope, terrace, etc.): Local relief (concave, convex, none): Subregion (LRR or MLRA): 327 Long: 77° 45" 22.555 Datum: Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes (If no, explain in Remarks.) \_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Is the Sampled Area Hydric Soil Present? within a Wetland? Wetland Hydrology Present? Yes Remarks: **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) FAC-Neutral Test (D5) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Water Table Present? Saturation Present? Depth (inches): Wetland Hydrology Present? Yes (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

WHLHOV7 \_ U
Sampling Point: \_\_\_\_

Tron Charles (DL)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:	% Cover	Species?	Status	Number of Dominant Species
1. Hourstanbar styrac. Pluce	10	<u> </u>	FAC	That Are OBL, FACW, or FAC:(A)
2. Hounus serotina	15		FACU	Total Number of Dominant
3. Liviodondron talepitera	25	$\overline{}$	FACU	Species Across All Strata: (B)
4. Botala nigra	10		FACL	
5				Percent of Dominant Species That Are OBL, FACW, or FAC:
6				
7				Prevalence Index worksheet:
8				Total % Cover of:Multiply by:
7.0	10	= Total Cov	er / U	OBL species x 1 =
50% of total cover: 35	20% of	total cover:		FACW species x 2 =
Sapling/Shrub Stratum (Plot size:)	2 ~	/	٠.	FAC species x 3 =
1. Cothen anitolia	15	$\overline{}$	FACU	FACU species x 4 =
2. Vaccinium corymbexim	-5		FACU	UPL species x 5 =
3. Ligardamber Styroscollera	15	<u>~</u>	FAC	Column Totals: (A) (B)
4. Otherous nigra	10		FAC	Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	P/			3 - Prevalence Index is ≤3.0¹
	<u> </u>	Total Cove	er	Problematic Hydrophytic Vegetation¹ (Explain)
50% of total cover: 27,4	≥ 20% of	total cover:	1 (	(Explain)
Herb Stratum (Plot size:  1. Cle Wra calvidous	7 5	/	_	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	20.	<del>~</del>	FACW	be present, unless disturbed or problematic.
2. Osmunda connamomea			1-14CW	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	57			
17		Total Cove	$r \sim 1$	
50% of total cover: 1 2 ic	≥ 20% of t	otal cover: _	5	4
Woody Vine Stratum (Plot size:	1	. /	1100	
- milax istunditalia -	13 -	<del></del>	THE	
2. MAIS VOTEMAN TOPICE	10	<u> </u>	FAC	
3				
4				
5	<u> </u>			Hydrophytic
-m 12 E		Total Cove	14-32	Vegetation Present? Yes No
50% of total cover: 12.5		otal cover: _	2	riesell() fesNo
Remarks: (If observed, list morphological adaptations below)	١.		72,00	
				. 1
				÷.
				+

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) % Color (moist) % Type¹ Loc²	
104511	1993
4-7 LOYR 613	
7-16+ LOYR 6/3 LOYR614 2	
Type: C=Concentration D=Depletion DM-Date and Date and Da	
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.  Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Histosol (A1)  Polyvalue Below Surface (S8) (LRR S, T, U	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)  Thin Dark Surface (S9) (LRR S T LI)	)
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)
Organic Bodies (A6) (LRR P, T, U)  Depleted Matrix (F3) Redox Dark Surface (F6)	Anomalous Bright Loamy Soils (F20)
5 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) ☐ Marl (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)  Thick Dark Surface (A12)  Depleted Ochric (F11) (MLRA 151)  Iron-Manganese Masses (F12) (I RR O. P. 1	
I flick 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, unless disturbed or problematic.
Sandy Gleyed Matrix (S4)  Reduced Vertic (F18) (MLRA 150A, 150B)	diffess disturbed of problematic.
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)	A 149A, 153C, 153D)
Restrictive Layer (if observed):	
Туре:	
Depth (inches):	Hydric Soil Present? YesNo
Remarks:	Hydric Soil Present? Yes No /\
No hegdriz soil 11	$\Omega$
· - reporte 500 (1)	noisators present
: Your	1
	l.

### whlh017\_u



Upland data point whlh017\_u facing east



Upland data point whlh017\_u facing north