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

ALP CHU	County Robecco	Sampling Date: 6-28-1
Project/Site: <u>ACP</u> City	County 1000000	tata: NE Sampling Point: Wroo 00
Applicant/Owner: Vomo on	N. T. Al	
Investigator(s): ESL( Koper /Vaughan ) Sec	tion, Township, Range: <u>10</u>	Signa (%): 0=
Landform (hillslope, terrace, etc.): <u>Arainage</u> Loc	al relief (concave, convex, n	To aspect Stope (%).
Subregion (LRR or MLRA): L L L P Lat: 34.84	9646 Long:	78.920915 Datum: 0005
Soil Map Unit Name: Wagram Loamy Sand		NWI classification: 17-0
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (II	f no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dist	urbed? Are "Normal (	Circumstances" present? Yes Vo No
Are Vegetation . Soil . or Hydrology naturally problem	matic? (If needed, ex	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point location	ns, transects, important features, e
Underschulie Verschulier Prosent? Vers / No		
Hydrophydd Vegetation Present?	Is the Sampled Area	No.
Wetland Hydrology Present? Yes No	within a Wetland?	fes No
Remarks: N/ W/AMA: Rottongland Ha	dwood Fore	5+
NOWAT BOILDING TH	011000 10	- 1
Return 2440		
Fain within 2 This.	Construction of the second se second second sec	
HYDROLOGY	and a stranger and	Reader Indicators (minimum of two required
Wetland Hydrology Indicators:		Secondary Indicators (minimum or two required
Primary Indicators (minimum of one is required; check all that apply)		Surface Soli Cracks (Bo)
Surface Water (A1)	<b>DD</b> 10	Drainage Patterns (B10)
High Water Table (A2)	(C1)	Moss Trim Lines (B16)
Water Marks (B1)	along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	ron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	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 Rema	ırks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Alpho and considered to a second	Sphaghum moss (Do) (ERK 1, D)
Field Observations:	414	
Surface Water Present? Yes No Depth (inches):	10 in	
Vater Table Present? Yes No Pepti (inches): /	Sin Wetland H	vdrology Present? Yes No
(includes capillary fringe)	State to a state of the state o	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if avail	lable:
	a second and a second as a second	and a second to the second
Remarks:		
		and a second

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

Sampling Point: Uro00024-w

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30ft + 30ft</u> )	% Cover	Species?	Status FAC	Number of Dominant Species (A)
2. Magnolia Virginiana	20	yes	FACW	Total Number of Dominant 7 (B)
3. All and the set of				
45				Percent of Dominant Species 85.7 (A/B)
6				
7				Prevalence Index worksneet:
8.				Total % Cover or:Multiply by
	30	= Total Co	ver	OBL species x 1 =
50% of total cover: 15	20% of	total cover	: 6	FACW species
Sapling/Shrub Stratum (Plot size: 30ft = 30ft )				FAC species x 3 =
1 Lieustrum Sincase	30	Ves	FAC	FACU species x 4 =
7				UPL species x 5 =
2	ALINTART M	-		Column Totals: (A) (B)
3.	and the second second			Developes laday = P/A =
#.	THE PROPERTY OF	The second	5.000	Prevalence index = D/A =
D	1000 C 100			Hydrophytic Vegetation Indicators:
				- Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test Is >50%
8	20			3 - Prevalence Index is ≤3.0
IE.		= Total Cov	/er	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover:	20% of	total cover		
Herb Stratum (Plot size: 3014 - 3014 )			<b>C</b> .(	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Lighstrum Sinense	25	yes_	FAC	be present, unless disturbed of problematic.
2. Rubus argutus		yes	FAC	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4	Junio maria			more in diameter at breast height (DBH), regardless of
5.		and the second	and and the second	height.
6.				Sapling/Shrub - Woody plants, excluding vines, less
7.			ALL AND ADD	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.	S and a second	1.1.1.1.1.1	and the second	Herb - All herbaceous (non-woody) plants, regardless
9	a to band the	Terrest a permit	and an and a start of the	of size, and woody plants less than 3.28 ft tall.
10				Weedy vine All woody vines greater than 3.28 ft in
11		A Second Second		height.
12	T. C. Sec. and	111112		1.5.1
12.	35	- Total Con		
FOR of latel agrices 175	200/ 0	total covor	. 7	
	20% 01	total cover	A Charles and	
Woody Vine Stratum (Piot size: Sort 2 Sort)	6	10-	FAC	
1. Tarthenocissus quinquetolia	20		Elle	
2. Vitis rotunditolia	-20	yes	FAC	
3. Lonirera lisponira		yes	FACU	
4	Service Service	and dealers and		
5	Server & Trends			Hydrophytic
	40	= Total Co	ver	Vegetation
50% of total cover: 20	20% of	total cover	. 8	Presentr Tes NO
Remarks: (If observed, list morphological adaptations belo	w).		and second as a second	and the second
and a second				
		-		
and the second	a de la come	and the second	As a de same	e an antipa balanta a seconda da bandhar na ang pang na banang sa

SOIL

Depth	Matrix		Redo	x Features	and have been a	_	Demedia
(inches)	Color (moist)	%	Color (moist)	%	Type' Loc'	Texture	Remarks
0-8	10- 3/1	100				6	
3-20	10.r 4/1	195	10 vr 4/4	5	CM		
And a second			/ /				
•							a An an
lana ang sang sa	and the second second		na ann an Anna an Anna an Anna Anna Anna				
ype: C=C	oncentration, D=De	epletion, RM=F	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix.
ydric Soil	Indicators: (Appli	icable to all L	RRs, unless othe	rwise note	ed.)	Indicators for	
Histoso	1 (A1)		Polyvalue Be	elow Surfac	ce (S8) (LRR S, 1		k (A10) (I RR S)
Histic E	pipedon (A2)		Thin Dark Si	Inface (S9)	(LRR 5, 1, U)	Reduced	Vertic (F18) (outside MLRA 150A,
Black H	ISUC (A3)			ed Matrix (	=2)	D Piedmont	Floodplain Soils (F19) (LRR P, S, T
Stratifie	d Lavers (A5)		M Depleted Ma	trix (F3)	-,		is Bright Loamy Soils (F20)
Organio	Bodies (A6) (LRR	P, T, U)	Redox Dark	Surface (F	6)	(MLRA	153B)
5 cm M	ucky Mineral (A7) (I	LRR P, T, U)	Depleted Da	rk Surface	(F7)	Red Pare	nt Material (TF2)
Muck P	resence (A8) (LRR	U)	Redox Depr	essions (FI	3)	U Very Shall	plain in Remarks)
1 cm M	uck (A9) (LRR P, T)	)	Depleted Or	hric (E11)	(MI RA 151)		
Thick D	ark Surface (A12)	ice (ATT)	Iron-Mangar	nese Mass	(F12) (LRR O	P,T) <sup>3</sup> Indicato	rs of hydrophytic vegetation and
Coast F	Prairie Redox (A16)	(MLRA 150A)	Umbric Surf	ace (F13) (	LRR P, T, U)	wetlan	d hydrology must be present,
Sandy	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric	(F17) (ML	RA 151)	unless	disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) (	MLRA 150A, 15	ов)	
Sandy	Redox (S5)		Piedmont FI	oodplain S	oils (F19) (MLRA	149A)	
Strippe	d Matrix (S6)		Anomalous	Bright Loan	my Soils (F20) (N	ILRA 149A, 153C, 1	53D)
Dark S	urface (S7) (LRR P,	, S, T, U)	A set the set of the bar		Ale on the standard	e en argenteren en argenter e en la generation de la g	
lestrictive	Layer (if observed	1):					
Type:						Hudric Soil Pr	asant? Yes V No
Depth (ii	iches):		and the second second	aligen alla	Libert Marchenes	Tiyane contri	
lemarks:							

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Environmental Field Surveys Wetland Photo Page



Wetland data point wroo002f\_w facing east.



Wetland data point wroo002f\_w facing north.

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

Project/Site: ACP	ity/County: Robeson Sampling Date: 6-28-16
Applicant/Owner: Daminian	State: NC Sampling Point: WrobOD2-4
Investigator(a): EST ( La Value - (Ropper) Si	ection Township Range: Nonc
Landform (billologo torgon gto): Dills / pOr	slope (%): 0-31
Candiorn (initiality), LPPP Lat 348	48912 Long 78,920993 Datum: WGS84
Subregion (LRR or MLRA) Lat Lat	NWI classification: N A
Soil Map Unit Name: Wagram 10amy sana	2 Yes / No. (If no. explain in Remarks.)
Are climatic / hydrologic conditions on the site typical for this time of year	Y tes No (into, explain internation
Are Vegetation, Soil, or Hydrology significantly di	sturbed? Are Normal Circuitistances present? Tes
Are Vegetation, Soil, or Hydrology naturally proof	sampling point locations, transects, important features, etc.
SUMMART OF FINDINGS - Allach site map showing s	
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Rain within 24hrs.	
HYDROLOGY	· · · · · · · · · · · · · · · · · · ·
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Gracks (B0)
Surface Water (A1)	Drainage Patterns (B10)
High Water Table (A2)	or (C1) Moss Trim Lines (B16)
Water Marks (B1)	es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	I Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	n in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	C7) Geomorphic Position (D2)
Iron Deposits (B5)	narks) EAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	XIA
Water Table Present? Yes No Depth (inches):	7.14
Saturation Present? Yes No Depth (inches):	Vetland Hydrology Present? Yes No
(includes capillary fringe)	previous inspections), if available:
Describe Recorded Data (stream gauge, monitoring weil, aenai photos,	
Remarks:	
could not anger past 14 inches	

.

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

Sampling Point: Wros002-u

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30FF+ 30FF )	% Cover	Species?	Status	Number of Dominant Species
1 Prunus Seratina	10	Ves	FACU	That Are OBL, FACW, or FAC: (A)
2		7		
£				Total Number of Dominant 7
3				Species Across All Strata.
4				Percent of Dominant Species 57
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
	10 - 10 M			Total % Cover of: Multiply by:
8	10			OBL species x 1 =
	10	= Total Cov	/er	EACW species x 2 =
50% of total cover: 5	20% of	total cover	: <u>Z</u>	
Sapling/Shrub Stratum (Plot size: 30ft x 3aft)				
1 Lichstrum Sinense	30	YES	FAC	FACU species X4 =
- <u>Pgaa</u>				UPL species x 5 =
	5		the second second second	Column Totals: (A) (B)
3.		· · · · · · · · · · · · · · · · · · ·	Care Sector	
4				Prevalence Index = B/A =
5	a har ground	And a street		Hydrophytic Vegetation Indicators:
6.	Same Sa		and the second states of the	1 - Rapid Test for Hydrophytic Vegetation
7		and the second	and a second second	1 2 - Dominance Test is >50%
	1	and the second s	the second second	
	26	Talal C		
11		= Total Cov	/er	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: 75	20% of	total cover	· (o	
Herb Stratum (Plot size: 30f4 - 30f4 )			1100	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1 Lighstrum Sincose	20	yes.	FAC	be present, unless disturbed or problematic.
2 Rubul acquites	20	yes	FAC	Definitions of Four Vegetation Strata:
2	- A BORNES	- Constant		
3.	Service and allow	1.2 - 121 10 2.20	Provide and a second second	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. A second state of the s	ha a la desta de la	CALLER AND	A STORE AND A STORE	more in diameter at breast height (DBH), regardless of
5	and all seen			neight.
6.			ALLER	Sapling/Shrub - Woody plants, excluding vines, less
7			A STAND	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		the state of the	and a second of	the dube the second (non-woody) plants regardless
	Constant and	The second second	The second se	of size and woody plants less than 3.28 ft tall.
9		A building of the	La a de la serente	
10	and a state of the	e coloradore a	Constantine State	Woody vine - All woody vines greater than 3.28 ft in
11	and white	hiles hidden		height.
12.				. 2017년 1월 2 1월 2017년 1월 2 1월 2017년 1월 2
and the second secon	40	= Total Cov	ver	
ED% of total cover: 2-0	20% of	total cover	. 8	
	_ 20 /0 01	total cover	North March 1997	
Woody Vine Stratum (Plot size: SOFF & SOFT )	0.		F.A.	5
1. Vitis rotunditalia	20	yes	MAC.	
2. Parthenocissus Quinquefolia	10	yes	FACU	
3 Looicera icensico	10	405	FACU	
Jop strices	1111	A CANCERT	The second second	
4	and the second states		Contraction of the	
5.		1	and the second s	Hydrophytic
	40	= Total Co	ver	Vegetation No.
50% of total cover: 20	20% of	total cover	: 8	Present? Tes No
Remarks: (If observed list membelogical adaptations belo	w)	11 M 127 (Made) 1		<ul> <li>Standards and standards and standard</li> </ul>
Remarks. (il observed, list morphological adaptations belo	w).			
		*		

#### SOIL

(inches)	Blackrive		Reday Features	
IN THE REAL PROPERTY AND A DECEMPENT	Color (moist)	%	Color (moist) % Type' Loc	Texture Remarks
0-14	10 r 5/3	100	and a second	5
			and the second second second second second second	
			and a second	
		terre terre terre		21 II - Di - Dese Lieles M-Matrix
Type: C=C	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS=Masked Sand Grains.	Indicators for Problematic Hydric Soils <sup>3</sup> :
lydric Soil	Indicators: (Applic	able to all LR	Rs, unless otherwise noted.)	
Histoso	1 (A1)		Polyvalue Below Sufface (S8) (LRR S,	1, 0) 1 2 cm Muck (A10) (LRR S)
Histic E	pipedon (A2)		Learny Mucky Mineral (E1) (LRR 0)	Reduced Vertic (F18) (outside MLRA 150A,E
Black P	on Sulfide (A4)		Loamy Gleved Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T
Stratifie	d Lavers (A5)		Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organie	Bodies (A6) (LRR P	, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm M	ucky Mineral (A7) (LI	RR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck P	resence (A8) (LRR L	J) .	Redox Depressions (F8)	Very Shallow Dark Surface (1F12)
1 cm M	uck (A9) (LRR P, T)		Marl (F10) (LRR U)	Under (Explain in Remarks)
Deplete	ed Below Dark Surfac	e (A11)	Depleted Ochric (F11) (MLRA 151)	<sup>3</sup> Indicators of hydrophytic vegetation and
Thick D	ark Surface (A12)		Iron-Manganese Masses (F12) (LRR (	wetland hydrology must be present,
Coast	raine Redox (A16) (	IPPO S)	Delta Ochic (E17) (MI BA 151)	unless disturbed or problematic.
Sandy	Gleved Matrix (S4)	LRR 0, 3)	Reduced Vertic (F18) (MLRA 150A, 1	50B)
Sandy	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR	A 149A)
Strippe	d Matrix (S6)		Anomalous Bright Loamy Soils (F20) (	MLRA 149A, 153C, 153D)
Dark S	urface (S7) (LRR P,	S, T, U)		and the second
Restrictive	Layer (if observed)	:	and the second secon	
Tuna		han hann		
Type.	Construction of the owner own			Hudric Soil Present? Yes NO
Depth (i	nches):		and the Case of the second designed as a first of the second second second second second second second second s	Hydric Son Present? Tes
Depth (i Remarks:	nches):	a a range a range	and the set of a set of set of a set of set of a set o	Hydric Son Present 1105 115
Depth (i Remarks:	nches):	4 1	to avoir Cefusal	Nyune don Present 1105 115
Depth (i Remarks:	nches): R Pas+ 1	4 due	to auger refusal	Hydric don Present 1 ros to
Depth (i Remarks:	nches): R Past 1	4 due	to auger refusal	Hydric Son Present Pres 15
Depth (i Remarks: CN	nches): R Pas+ 1	4 due	to auger refusal	Hydric Solf Present Pros 10
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CN	nches): R. Past 1	4 due	to auger refusal	
Depth (i Remarks: CN	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches):	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R. Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R. Past 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CN	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ /	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ /	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i emarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i emarks: CW	nches): R Pas+ 1	4 due	to auger refusal	

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Upland data point wroo002\_u facing south.



Upland data point wroo002\_u facing west.

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

ALP CHU	Kounty Roberon	Sampling Date: 6-28-1
Project/Site: <u>ACP</u> City	County 1000000	tata: NE Sampling Point: Wroo 00
Applicant/Owner: Vomo on	N. T. Al	
Investigator(s): ESL( Koper /Vaughan ) Sec	tion, Township, Range: <u>10</u>	Signa (%): 0=
Landform (hillslope, terrace, etc.): <u>Arainage</u> Loc	al relief (concave, convex, n	To aspect Stope (%).
Subregion (LRR or MLRA): L L L P Lat: 34.84	<u>9646</u> Long:	78.920915 Datum: 0005
Soil Map Unit Name: Wagram Loamy Sand		NWI classification: 17-0
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (II	f no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dist	urbed? Are "Normal (	Circumstances" present? Yes Vo No
Are Vegetation . Soil . or Hydrology naturally problem	matic? (If needed, ex	xplain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point location	ns, transects, important features, e
Underschulie Verschulier Prosent? Vers / No		
Hydrophydd Vegetation Present?	Is the Sampled Area	No.
Wetland Hydrology Present? Yes No	within a Wetland?	fes No
Remarks: N/ W/AMA: Rottongland Ha	dwood Fore	5+
NOWAT BOILDING TH	011000 10	- 1
Return 2440		
Fain within 2 This.	Construction of the second se second second sec	
HYDROLOGY	and a stranger and	Reader Indicators (minimum of two required
Wetland Hydrology Indicators:		Secondary Indicators (minimum or two required
Primary Indicators (minimum of one is required; check all that apply)		Surface Soli Cracks (Bo)
Surface Water (A1)	<b>DD</b> 10	Drainage Patterns (B10)
High Water Table (A2)	(C1)	Moss Trim Lines (B16)
Water Marks (B1)	along Living Roots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	ron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3)	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 Rema	ırks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Alpho and considered to a second	Sphaghum moss (Do) (ERK 1, D)
Field Observations:	414	
Surface Water Present? Yes No Depth (inches):	10 in	
Vater Table Present? Yes No Pepti (inches): /	Sin Wetland H	vdrology Present? Yes No
(includes capillary fringe)	State to a state of the state o	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if avail	lable:
	a second and a second as a second	and a second
Remarks:		
		and a second

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

Sampling Point: Uro00024-w

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30ft + 30ft</u> )	% Cover	Species?	Status FAC	Number of Dominant Species (A)
2. Magnolia Virginiana	20	yes	FACW	Total Number of Dominant 7 (B)
3. All the second				
45				Percent of Dominant Species 85.7 (A/B)
6				
7				Prevalence Index worksneet:
8.				Total % Cover or:Multiply by
	30	= Total Co	ver	OBL species x 1 =
50% of total cover: 15	20% of	total cover	: 6	FACW species
Sapling/Shrub Stratum (Plot size: 30ft = 30ft )				FAC species x 3 =
1 Lieustrum Sincase	30	Ves	FAC	FACU species x 4 =
7				UPL species x 5 =
2	ALINTATI M	-		Column Totals: (A) (B)
3.	and the second second			Developes laday = P/A =
#.	THE PROPERTY OF	The second	5.000	Prevalence index = D/A =
D	1000 C 100			Hydrophytic Vegetation Indicators:
				- Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test Is >50%
8	20			3 - Prevalence Index is ≤3.0
IE.		= Total Cov	/er	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover:	20% of	total cover		
Herb Stratum (Plot size: 3014 - 3014 )			<b>C</b> .(	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Lighstrum Sinense	25	yes_	FAC	be present, unless disturbed of problematic.
2. Rubus argutus		yes	FAC	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4	Junio maria			more in diameter at breast height (DBH), regardless of
5.		and the second	and and the second	height.
6.				Sapling/Shrub - Woody plants, excluding vines, less
7.			ALL AND ADD	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.	S and a second	1.1.1.1.1.1	and a second second	Herb - All herbaceous (non-woody) plants, regardless
9	a to be not a star	Territoria porte a a di adapte 1452	and an and a start of the	of size, and woody plants less than 3.28 ft tall.
10				Weedy vine All woody vines greater than 3.28 ft in
11		A Second Second		height.
12	T. C. Sec. et al.	111112		110.0
12.	35	- Total Con		
FOR of latel agrices 175	200/ 0	total covor	. 7	
50% Of total cover: 17.5	20% 01	total cover	A Contraction	
Woody Vine Stratum (Piot size: Sort 2 Sort)	6	10-	FAC	
1. Tarthenocissus quinquetolia	20		Elle	
2. Vitis rotunditolia	-20	yes	FAC	
3. Lonirera lisponira		yes	FACU	
4	Service Service	and dealers and		
5	Server & Trends			Hydrophytic
	40	= Total Co	ver	Vegetation
50% of total cover: 20	20% of	total cover	. 8	Presentr Tes NO
Remarks: (If observed, list morphological adaptations belo	w).		and the state of the state	and the second
and a second				
		~		
and the second	a de la come	and the second	As a discourse	e an antipa balanta an an fan train a stelle an antipa an an an an an an an an an

SOIL

Depth	Matrix		Redo	x Features	and have been a	_	Demedia
(inches)	Color (moist)	%	Color (moist)	%	Type' Loc'	Texture	Remarks
0-8	10- 3/1	100				6	
3-20	10.r 4/1	195	10 vr 4/4	5	CM		
And a second			/ /				
•							a An an
lana ang sang sa	and the second second		na ann an Anna an Anna an Anna Anna Anna				
ype: C=C	oncentration, D=De	epletion, RM=F	Reduced Matrix, M	S=Masked	Sand Grains.	<sup>2</sup> Location: PL	=Pore Lining, M=Matrix.
ydric Soil	Indicators: (Appli	icable to all L	RRs, unless othe	rwise note	ed.)	Indicators for	
Histoso	1 (A1)		Polyvalue Be	elow Surfac	ce (S8) (LRR S, 1		k (A10) (I RR S)
Histic E	pipedon (A2)		Thin Dark Si	Inace (S9)	(LRR 5, 1, U)	Reduced	Vertic (F18) (outside MLRA 150A,
Black H	ISUC (A3)			ed Matrix (	=2)	D Piedmont	Floodplain Soils (F19) (LRR P, S, T
Stratifie	d Lavers (A5)		M Depleted Ma	trix (F3)	-,		is Bright Loamy Soils (F20)
Organio	Bodies (A6) (LRR	P, T, U)	Redox Dark	Surface (F	6)	(MLRA	153B)
5 cm M	ucky Mineral (A7) (I	LRR P, T, U)	Depleted Da	rk Surface	(F7)	Red Pare	nt Material (TF2)
Muck P	resence (A8) (LRR	U)	Redox Depr	essions (FI	3)	U Very Shall	nain in Remarks)
1 cm M	uck (A9) (LRR P, T)	)	Depleted Or	hric (E11)	(MI RA 151)		
Thick D	ark Surface (A12)	ice (ATT)	Iron-Mangar	nese Mass	(F12) (LRR O	P,T) <sup>3</sup> Indicato	rs of hydrophytic vegetation and
Coast F	Prairie Redox (A16)	(MLRA 150A)	Umbric Surf	ace (F13) (	LRR P, T, U)	wetlan	d hydrology must be present,
Sandy	Mucky Mineral (S1)	(LRR O, S)	Delta Ochric	(F17) (ML	RA 151)	unless	disturbed or problematic.
Sandy	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) (	MLRA 150A, 15	ов)	
Sandy	Redox (S5)		Piedmont FI	oodplain S	oils (F19) (MLRA	149A)	
Strippe	d Matrix (S6)		Anomalous	Bright Loan	my Soils (F20) (N	ILRA 149A, 153C, 1	53D)
Dark S	urface (S7) (LRR P,	, S, T, U)	A set the set of the bar		All services and and and	e ere dependent er	
lestrictive	Layer (if observed	1):					
Type:						Hudric Soil Pr	asant? Yes V No
Depth (ii	iches):		and the second second	aligen alle	Like in Marcharens	Tiyane contri	
lemarks:							

L

Environmental Field Surveys Wetland Photo Page



Wetland data point wroo002f\_w facing east.



Wetland data point wroo002f\_w facing north.

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

Project/Site: ACP	ity/County: Robeson Sampling Date: 6-28-16
Applicant/Owner: Daminian	State: NC Sampling Point: WrobOD2-4
Investigator(a): EST ( La Value - (Ropper)	ection Township Range: Nonc
Landform (hillologo torgon gto): Dills / pOr	slope (%): 0-31
Candion (initiality), lenate, etc.). <u>Pressupe</u>	48912 Long 78,920993 Datum: WGS84
Subregion (LRR of MLRA) Lat Lat	NWI classification: N A
Soil Map Unit Name: Wagram 10amy sana	2 Yes / No. (If no explain in Remarks.)
Are climatic / hydrologic conditions on the site typical for this time of year	Y tes No (into, explain internation
Are Vegetation, Soil, or Hydrology significantly di	sturbed? Are Normal Circuitistances present? Tes
Are Vegetation, Soil, or Hydrology naturally proof	sampling point locations, transects, important features, etc.
SUMMART OF FINDINGS - Attach site map showing s	
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Rain within 24hrs.	
HYDROLOGY	· · · · · · · · · · · · · · · · · · ·
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Gracks (B0)
Surface Water (A1)	Drainage Patterns (B10)
High Water Table (A2)	or (C1) Moss Trim Lines (B16)
Water Marks (B1)	es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2)	I Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	n in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	C7) Geomorphic Position (D2)
Iron Deposits (B5)	narks) EAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	XIA
Water Table Present? Yes No Depth (inches):	7.14
Saturation Present? Yes No Depth (inches):	Vetland Hydrology Present? Yes No
(includes capillary fringe)	previous inspections), if available:
Describe Recorded Data (stream gauge, monitoring weil, aenai photos,	
Remarks:	
could not anger past 14 inches	

.

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

Sampling Point: Wros002-u

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30FF+ 30FF )	% Cover	Species?	Status	Number of Dominant Species
1 Prunus Seratina	10	Ves	FACU	That Are OBL, FACW, or FAC: (A)
2		7		
£				Total Number of Dominant 7
3				Species Across All Strata.
4				Percent of Dominant Species 57
5				That Are OBL, FACW, or FAC: (A/B)
6				
7				Prevalence Index worksheet:
	10 - 10 M			Total % Cover of: Multiply by:
8	10			OBL species x 1 =
	10	= Total Cov	/er	EACW species x 2 =
50% of total cover: 5	20% of	total cover	: <u>Z</u>	
Sapling/Shrub Stratum (Plot size: 30ft x 3aft)				
1 Lichstrum Sinense	30	YES	FAC	FACU species X4 =
- <u>Pgaa</u>				UPL species x 5 =
	5		the second second second	Column Totals: (A) (B)
3.		· · · · · · · · · · · · · · · · · · ·	Care Sector	
4				Prevalence Index = B/A =
5	a har ground	And a street		Hydrophytic Vegetation Indicators:
6.	San Sa		and the second states of the	1 - Rapid Test for Hydrophytic Vegetation
7		and the second	and a second second	1 2 - Dominance Test is >50%
	1	and the second s	the second second	
	26	Talal C		
11		= Total Cov	/er	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: 75	20% of	total cover	· (o	
Herb Stratum (Plot size: 30f4 - 30f4 )			1100	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1 Lighstrum Sincose	20	yes.	FAC	be present, unless disturbed or problematic.
2 Rubul acquites	20	yes	FAC	Definitions of Four Vegetation Strata:
2	- A BORNES	- Constant		
3.	Service and allow	1.2 - 121 10 2.20	Provide and a second second	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. A second state of the s	ha a la desta de la	CALLER AND	A STORAGE AND A	more in diameter at breast height (DBH), regardless of
5	and all seen			neight.
6.			Accession	Sapling/Shrub - Woody plants, excluding vines, less
7			A STAND	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		the state of the	and a second of	the dube the second (non-woody) plants regardless
	Constant and	The second second	The second se	of size and woody plants less than 3.28 ft tall.
9		A building of the	La a de la sere de	
10	and a state of the	e colonidate a	Constantine State	Woody vine - All woody vines greater than 3.28 ft in
11	and shirts	hiles hidden		height.
12.				. 2017년 1월 2 1월 2017년 1월 2 1월 2017년 1월 2
and the second secon	40	= Total Cov	ver	
ED% of total cover: 2-0	20% of	total cover	. 8	
	_ 20 /0 01	total cover	North March 1997	
Woody Vine Stratum (Plot size: SOFF & SOFT )	0.		F.A.	5
1. Vitis rotunditalia	20	yes	MAC.	
2. Parthenocissus Quinquefolia	10	yes	FACU	
3 Looicera icensico	10	405	FACU	
Jop strices	1111	A CANCERT	The second second	
4	and the second states		Contraction of the	
5.		A start of the second s	and the second s	Hydrophytic
	40	= Total Co	ver	Vegetation No.
50% of total cover: 20	20% of	total cover	: 8	Present? Tes No
Remarks: (If observed list membelogical adaptations belo	w)	11 M 127 (Made) 1		<ul> <li>Standards and standards and standard</li> </ul>
Remarks. (il observed, list morphological adaptations belo	w).			
		*		

#### SOIL

(inches)	Blackrive		Reday Features	
IN THE REAL PROPERTY AND A DECEMPENT	Color (moist)	%	Color (moist) % Type' Loc	Texture Remarks
0-14	10 r 5/3	100	and a second	5
			and the second second second second second second	
			and a second	
		terre terre terre		21 III - Di - Dese Lieles M-Matrix
Type: C=C	oncentration, D=Dep	letion, RM=Re	duced Matrix, MS=Masked Sand Grains.	Indicators for Problematic Hydric Soils <sup>3</sup> :
lydric Soil	Indicators: (Applic	able to all LR	Rs, unless otherwise noted.)	
Histoso	1 (A1)		Polyvalue Below Sufface (S8) (LRR S,	1, 0) 1 2 cm Muck (A10) (LRR S)
Histic E	pipedon (A2)		Learny Mucky Mineral (E1) (LRR 0)	Reduced Vertic (F18) (outside MLRA 150A,E
Black P	on Sulfide (A4)		Loamy Gleved Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T
Stratifie	d Lavers (A5)		Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
Organie	Bodies (A6) (LRR P	, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm M	ucky Mineral (A7) (LI	RR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck P	resence (A8) (LRR L	J) .	Redox Depressions (F8)	Very Shallow Dark Surface (1F12)
1 cm M	uck (A9) (LRR P, T)		Marl (F10) (LRR U)	Under (Explain in Remarks)
Deplete	ed Below Dark Surfac	e (A11)	Depleted Ochric (F11) (MLRA 151)	<sup>3</sup> Indicators of hydrophytic vegetation and
Thick D	ark Surface (A12)		Iron-Manganese Masses (F12) (LRR (	wetland hydrology must be present,
Coast	raine Redox (A16) (	IPPO S)	Delta Ochic (E17) (MI BA 151)	unless disturbed or problematic.
Sandy	Gleved Matrix (S4)	LRR 0, 3)	Reduced Vertic (F18) (MLRA 150A, 1	50B)
Sandy	Redox (S5)		Piedmont Floodplain Soils (F19) (MLR	A 149A)
Strippe	d Matrix (S6)		Anomalous Bright Loamy Soils (F20) (	MLRA 149A, 153C, 153D)
Dark S	urface (S7) (LRR P,	S, T, U)		and the second
Restrictive	Layer (if observed)	:	and the second secon	
Tuna		han hann		
Type.	Construction of the owner own			Hudric Soil Present? Yes NO
Depth (i	nches):		and the Case of the second designed as a first of the second second second second second second second second s	Hydric Son Present? Tes
Depth (i Remarks:	nches):	a a single a si	The second se	Hydric Son Present 1105 115
Depth (i Remarks:	nches):	4 1	to avoir Cefusal	Hydric don Present 1105 115
Depth (i Remarks:	nches): R Pas+ 1	4 due	to auger refusal	Hydric don Present 1 ros to
Depth (i Remarks:	nches): R Past 1	4 due	to auger refusal	Hydric Son Present Pres 15
Depth (i Remarks: CN	nches): R Pas+ 1	4 due	to auger refusal	Hydric Solf Present Pros 10
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CN	nches): R. Past 1	4 due	to auger refusal	
Depth (i Remarks: CN	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches):	4 due	to auger refusal	
Depth (i Remarks: CW	nches):	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R. Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R. Past 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Past 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CN	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ /	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ /	4 due	to auger refusal	
Depth (i Remarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i emarks: CW	nches): R Pas+ 1	4 due	to auger refusal	
Depth (i emarks: CW	nches): R Pas+ 1	4 due	to auger refusal	

Environmental Field Surveys Wetland Photo Page



Upland data point wroo002\_u facing south.



Upland data point wroo002\_u facing west.

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

Project/Site: ACP	_ City/County: Robeson Sampling Date: 6-28-16
Applicant/Owner: Dominion	State: <u>AIC</u> Sampling Point: <u>wroo 001-f-w</u>
Investigator(s): EST(L. Roper W. Vaushan	_ Section, Township, Range:
Landform (hillslope, terrace, etc.): depression	_ Local relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): LRRP Lat: 34-	B4349B Long: -78.925456 Datum: WGS84
Soil Map Unit Name: Wa Kulla Sand	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 significan	tly 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 showin	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No	Is the Sampled Area     within a Wetland?   Yes
Rain within 24 hrs.	
HYDROLOGÝ	A second seco
Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required: check all that apply         Surface Water (A1)       Aquatic Fauna (B)         High Water Table (A2)       Marl Deposits (B)         Saturation (A3)       Hydrogen Sulfide         Water Marks (B1)       Oxidized Rhizosp         Sediment Deposits (B2)       Presence of Red         Drift Deposits (B3)       Recent Iron Red         Algal Mat or Crust (B4)       Other (Explain in         Iron Deposits (B5)       Other (Explain in         Inundation Visible on Aerial Imagery (B7)         Water-Stained Leaves (B9)	y)       Secondary Indicators (minimum or two reduited)         313)       Surface Soil Cracks (B6)         313)       Drainage Patterns (B10)         a Odor (C1)       Moss Trim Lines (B16)         pheres along Living Roots (C3)       Dry-Season Water Table (C2)         tuced Iron (C4)       Crayfish Burrows (C8)         luction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         ce (C7)       Geomorphic Position (D2)         n Remarks)       Shallow Aquitard (D3)         EAC-Neutral Test (D5)       Sphagnum moss (D8) (LRR T, U)
Surface Water Present?       Yes No Depth (inched)         Water Table Present?       Yes No Depth (inched)         Saturation Present?       Yes No Depth (inched)         (includes capillary fringe)       Depth (inched)	es): <u>NH</u> es): <u>&gt; ZO</u> es): <u>/0 in</u> Wetland Hydrology Present? Yes <u>No</u> <u>No</u>
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:
Remarks:	

ŝ,

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

Sampling Point: Wros DOIf-W

	Abachd	Deering	Indicator	Deminance Test workshest:
Tree Stratum (Plat aler Safe - Zafe )	Absolute	Dominant	Status	
Tree Stratum (Plot size: <u>JOP+ x JOF+</u> )	76 COVEL	Species	File	Number of Dominant Species
1. Finus tacda	65	yes	FAC	That Are OBL, FACW, or FAC: (A)
2. Liquidambar Styraciflua	15	Ves	FAC	Total Number of Dominant
		'		Species Across All Strata: 0 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: _/OO_ (A/B)
6.				
7				Prevalence Index worksheet:
			The second	Total % Cover of: Multiply by:
8		-		OBL species x1 =
	40	= Total Co	ver	
50% of total cover: 20	20% of	total cover	: 8	FACVV species x 2
Caption/Shrub Stratum (Plateize: SAL - ROLL )				FAC species x 3 =
Saping Stride Straten (Plot size)	10	Line	EAC	FACU species x 4 =
1. Liquidambar Styracitlas	12	yes	MAL	LIPL species x 5 =
2. Vaccinium Corymbosum	/D	yes.	FACW	
3 Acer rubrum	10	yes	FAC	
and and the substantial sector with the sector is the sector of the sect		- /	1999 (1990) - 19	Designed and an a DIA a
*** A sector of the sector				Prevalence index = B/A =
5			-	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
	anna eachdana		Jan Grander Street	2 - Dominance Test is >50%
	1	and the second		
8,	25	-		3 - Prevalence Index is \$3.0
		= Total Co	ver	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: 17.5	_ 20% of	total cover	:_/	
Herb Stratum (Plot size: 30ff × 30ff )				Indicators of hydric soil and wetland hydrology must
	15	1.01	TACIA	he present unless disturbed or problematic.
1. Vallinium Corymbosum		-1-3	FACE	De present, andere and andere of presents:
2.	and the second		and the second s	Definitions of Four Vegetation Strata.
3	an all and the	12 Martine	Libertia I.S.	Tree - Woody plants excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
A subscription of the second	Contentination and a second	A set the reality of	The first start	height.
5	Brially were a delified	A STREET STREET	A reason for dalary	
6		A State Courseling		Sapling/Shrub - Woody plants, excluding vines, less
7.			S. Carriero	than 3 in. DBH and greater than 3.28 ft (1 m) tail.
				Hart All both accourt (non-woody) plants regardless
the second s	5 12 S 12 4. 12 E	in a hard bearing	a stranger of the	of size and woody plants less than 3.28 ft tall.
9		n an 1765 (1985) Transformer	Contractor	of size, and woody plants less than one of them
10	a servera		and the bar	Woody vine - All woody vines greater than 3.28 ft in
11.	Sandaria.	Margaret .	. La duchies	height.
12	I and the state			
12.	18	T-1-10	(A providence of the	and the second
		= Total Co	ver	and the second
50% of total cover: 7.5	_ 20% of	total cover		
Woody Vine Stratum (Plot size: 30ff x 30ff )				
1 Similar rating files	10	VES	FAr	
I Distant I fait	e		Fue	
2. Vitis Totunditalia	0	yes	FAC	
3		and more		
4				
		Sal analogia		
5		Carry Marson		Hydrophytic
	15	= Total Co	ver	Vegetation
50% of total cover: 7.5	20% of	f total cove	r: 3	Present? Tes No
Remarks. (If observed, list morphological adaptations below	(v).			
a second seco			and the second	and the second secon

#### SOIL

Profile Des	cription: (Describe	e to the depth	needed to docu	ment the i	Indicator	or confirm	the absence of I	nuicators.j
Jepth (inches)	Color (moist)	%	Color (moist)	%	Type'	Loc <sup>2</sup>	Texture	Remarks
2-7	2.5, 2.5/1	100	and a second				LFS	
7-15	254 3/1	100					LFS	
5-70	7.5. 5/1	100		-		The state of the state	LFS	
ype: C=0 ydric Soi Histoso Histic E Black H Hydrog Stratific Organi 5 cm M Muck F 1 cm M Deplet Thick I Coast Sandy Sandy Strippe Dark S	Concentration, D=De Indicators: (Appli of (A1) Epipedon (A2) distic (A3) een Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR lucky Mineral (A7) (I Presence (A8) (LRR P, T) ed Below Dark Surface (A9) (LRR P, T) ed Below Dark Surface (A12) Prairie Redox (A16) Mucky Mineral (S1) Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) urface (S7) (LRR P,	P, T, U) LRR P, T, U) (MLRA 150A) (LRR O, S) , S, T, U)	educed Matrix, M Rs, unless othe Polyvalue Be Thin Dark Si Loamy Muck Loamy Gley Depleted Ma Redox Dark Depleted Da Redox Depr Marl (F10) (1 Depleted Oc Iron-Mangar Umbric Surf Delta Ochric Reduced Ve Piedmont Fl Anomalous	S=Maskee rwise not elow Surfa urface (S9 ky Mineral ed Matrix atrix (F3) Surface (i ark Surface (i ark Surface (F3) chric (F11) nese Mass face (F13) c (F17) (M ertic (F18) loodplain S Bright Loa	d Sand Gr red.) ince (S8) (L ince (S8) (L ince (S8) (L ince (S8) (L ince (S8) (L ince (S8) (L ince (S8) (C ince (S8) (C in	ains. .RR S, T, U T, U) C O) 51) (LRR O, P T, U) 50A, 150B ) (MLRA 1 (F20) (MLR	<sup>2</sup> Location: PL Indicators for J) 1 cm Muc 2 cm Muc Reduced 1 Piedmont Anomalou (MLRA Red Pare Very Shal Other (Ex Other (Ex vetlan unless ) 49A) RA 149A, 153C, 12	=Pore Lining, M=Matrix. Problematic Hydric Solls <sup>3</sup> : k (A9) (LRR O) k (A10) (LRR S) Vertic (F18) (outside MLRA 150A,I Floodplain Soils (F19) (LRR P, S, T is Bright Loamy Soils (F20) 153B) nt Material (TF2) flow Dark Surface (TF12) plain in Remarks) ors of hydrophytic vegetation and id hydrology must be present, a disturbed or problematic. 53D)
estrictive Type: Depth (i	a Layer (if observed nches):	i):					Hydric Soil Pr	resent? Yes <u> </u>
emarks:								

Environmental Field Surveys Wetland Photo Page



Wetland data point wroo001f\_w facing west.



Wetland data point wroo001f\_w facing north.

Photo Sheet 1 of 2

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

Project/Site: <u>ACP</u> City/C Applicant/Owner: <u>Dominion</u> Investigator(s): <u>ESE(Roper/Vaughan</u> ) Section Landform (hillslope, terrace, etc.): <u>Flat</u> Local	ounty: <u>Robeson</u> State: <u>NC</u> Sampling Date: <u>G-28-lG</u> State: <u>NC</u> Sampling Point: <u>(Jroo 00] = M</u> on, Township, Range: <u>Nonc</u> relief (concave, convex, none): <u>Nunc</u> Slope (%): <u>O</u>
Subregion (LRR or MLRA): LRP Lat: 34. 04343	9 Long: ~78, 92, 5535 Datum:G584
Soil Map Unit Name: Wakulla Sand	NWI classification: NP
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturb	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation . Soil . or Hydrology naturally problema	tic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sam	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No	Is the Sampled Area within a Wetland? Yes No
Rain within 24hrs.	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)         Surface Water (A1)       Aquatic Fauna (B13)         High Water Table (A2)       Marl Deposits (B15) (LRF         Saturation (A3)       Hydrogen Sulfide Odor (C         Water Marks (B1)       Oxidized Rhizospheres al         Sediment Deposits (B2)       Presence of Reduced Iron         Drift Deposits (B3)       Recent Iron Reduction in         Algal Mat or Crust (B4)       Thin Muck Surface (C7)         Iron Deposits (B5)       Other (Explain in Remark)         Water-Stained Leaves (B9)       Water-Stained Leaves (B9)	Surface Soli Cracks (86)         Sparsely Vegetated Concave Surface (88)         Drainage Patterns (810)         C1)         Iong Living Roots (C3)         Dry-Season Water Table (C2)         n (C4)         Tilled Soils (C6)         Saturation Visible on Aerial Imagery (C9)         Geomorphic Position (D2)         s)         FAC-Neutral Test (D5)         Sphagnum moss (D8) (LRR T, U)
Field Observations:         Surface Water Present?       Yes No Depth (inches):         Water Table Present?       Yes No Depth (inches):         Saturation Present?       Yes No Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	VA         20         20         Wetland Hydrology Present? Yes         No         vious inspections), if available:
Remarks:	

\*

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

Sampling Point: Wros 001-4

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30ft + 30ft )	% Cover	Species	Status	Number of Dominant Species
1 Pique tacha	30	Ves	FAC	That Are OBL, FACW, or FAC: (A)
I. I may include	15		Enc	
2. LIQUIDAMBAR Styralitlus		yes	TAL	Total Number of Dominant
3				Species Across All Strata: (B)
4				Research of Reminant Species
5				That Are OBL FACW or FAC: (OC) (A/B)
G				
0				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	45	= Total Co	ver	
50% of total cover: 22.5	20% of	total cover	. 9	FACW species
Santing/Shrub Stratum (Plat size: 30CL - WCL)	10.0000000			FAC species x 3 =
Saphing/Shirub Shatum (Plot size. <u>SOAT 2007</u> )	15	leer	FAC	FACU species x 4 =
1. LIQUICIAMOUT Styracitius	15	YES	- nc	UPL species x 5 =
2. Vaccinium corybasum	10	YES	FACW	Column Totals: (A) (B)
3		distanting of the		
4			The second s	Prevalence Index = B/A =
5				Undershutia Vagetation Indicators:
J			Sector Sector	
b				1 - Rapid Test for Hydrophytic Vegetation
7	and the strength	The second second		2 - Dominance Test is >50%
8	<u>le change</u>	the second		$3$ - Prevalence Index is $\leq 3.0^{1}$
	25	= Total Co	ver	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 12,5	20% of	total cover	- 5	
Hat Stratum (Plateine: SULL . 200)			The second s	to use of the transformation of budgeless must
Herb Stratum (Plot size	15	1.41	TACIN	Indicators of hydric soil and wetland hydrology must
1. Vaccinium corybosum	15	YES	FALW	be present, unless distanced of problemate.
2	1.15.16.24.46			Definitions of Four Vegetation Strata:
3.	and the second		- deling h	Tree - Woody plants excluding vines, 3 in, (7.6 cm) or
4	and grade and	S. S	and the second second	more in diameter at breast height (DBH), regardless of
	Constraint Start		1.	height.
5.	eres merilenet	C.R	v sprit opromigoed	
6		Bar Sarahar		Sapling/Shrub – Woody plants, excluding vines, less
7	a - 111 (111 (111 (111 (111 (111 (111 (1	A CONTRACTOR	Contractor and Contractor	than 3 m. DBH and greater than 3.20 m (1 m) tam
8	part handle	in which is not	- and the second	Herb - All herbaceous (non-woody) plants, regardless
9.			4 10 11 14	of size, and woody plants less than 3.28 ft tall.
10	and a second	ter er gette over		the state Allowed unines greater than 3.29 ft in
		1000 000	The second s	woody vine - All woody vines greater than 3.26 it in
		The second second		Height.
12	an a		$\frac{(x_1,y_2,\dots,y_{n-1}$	a design of the second second second second second second second
	15	= Total Co	ver	a l'est de la segure de la companya
50% of total cover: 7.5	_ 20% of	total cover	r: <u>S</u>	
Woody Vine Stratum (Plot size: 30ft - 30ft )				
1 Vitis rotund folia	15	Ves	FAC	
a C to get belo	15	- Lee	EAC	
2. Drulat 1074 nd talia	13	Ye5	FAL	
3. Tokicodendron radicans	5	no	FAC	
4		Section and		
5				Hydrophytic
	35	- Total Co	Vor	Vegetation
175		- 1012100	7	Present? Yes No
50% of total cover: _/ 7, 3	_ 20% 01	total cove	r:	
Remarks: (If observed, list morphological adaptations below	N).			
a management of a literature of the set of the	i and a second		000000202000	e i u provinsi provinsi a para dan manadilaritenye parteka di matana

#### SOIL

# Sampling Point: wrooll-u

Color (molt)       %       Color (molt)       %       Doc       Issue       250%       Annotast         1 - 20       Ioy,- 4/4       Doc       LS       250%       Annotast       250%       Annotast         1 - 20       Ioy,- 4/4       Doc       S	Depth	Matrix	and an all and the same	Red	ox Features	_		Demarka
2-11       //02/4/2       /02	(inches)	Color (moist)		Color (moist)	<u>% Type' Loc</u>	Texture	>20%	
1- 2D       Doy- 5/4       Loz         Type:       C-Concentration. D=Depletion. RM-Reduced Matrix. MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Type:       C-Concentration. D=Depletion. RM-Reduced Matrix. MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Type:       C-Concentration. D=Depletion. RM-Reduced Matrix. MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Type:       C-Concentration. D=Depletion. RM-Reduced Matrix. (F3)       Tim Dark Surface (S0) (LRR S, T, U)       1 or Muck (A0) (LRR O)         Black Histic. (A3)       Doppleted Matrix. (F2)       Commy Gleyed Matrix. (F2)       Commy Gleyed Matrix. (F2)         Statified Layers (A5)       Doppleted Matrix. (F2)       Red Parent Material. (F2)       Muck (A10) (LRR P, T, U)         Depleted Matrix. (F2)       Matrix. (F1)       Commy Gleyed Matrix. (F2)       Red Parent Material. (F2)         Muck Presence (A8) (LRR P, T, U)       Depleted Matrix. (F2)       Red Parent Material. (F2)       Muck Material. (F1)         Doppleted Matrix. (F3)       Doppleted Matrix. (F1)       Doppleted Matrix. (F1)       Muck Material. (F2)       Muck Material. (F2)         Sandy Cleyed Matrix. (F3)       Doppleted Matrix. (F3)       Doppleted Matrix. (F1)       Muck Material. (F2)       Muck Material. (F2)         Sandy Gleyed Matrix. (F3)       Doppleted Matrix. (F3)       Dopleted Matrix	0-11	10y-4/3	100				13012	uncoated
Type:       C=Concentration       D=Depletion       RM-Reduced Matrix:       MS-Masked Sand Grains.       *Location:       PL-Pore Lining, M-Matrix.         ydric Seil Indicators:       (Applicable to all LRs, unless otherwise noted.)       Indicators for Problematal Hydric Soils':       Indicators for Problematal Hydric Soils':       Indicators for Problematal Hydric Soils':         Hitatic Epideon (A2)       Epideon (A2)       Damy Macky Minerai (F1) (LRR P, T, U)       Rescator Soils (F20)       Rescator Soils (F20)         Organic Bodie (A)       Depided Dack Surface (F0)       Depided Chris (F2)       Red Parent Matrix (F2)         Organic Bodie (A)       Depided Chris (F1) (URR P, T)       Depided Chris (F1)       Depided Chris (F1)         Depidet Bodie (A)       Indicators (A3) (URR P, T)       Depided Chris (F1) (URR P, T)       Depided Chris (F1)       Depided Chris (F1)         Depidet Bodie (A)       Mari (F1) (URR P, T)       Depided Chris (F1) (URR P, T)       Depided Chris (F1) (URR P, T)       Depided Chris (F1) (URR P, T)         Sandy Oleyd Matrix (F3)       Mari (F1) (URR P, T)       Depided Chris (F1) (URR P, T)       Depidet Bodie (Chris (F1) (URR P, T))       Depidet Bodie (Chris (F1) (	11-20	104r 5/4	100					
Type:       C-Concentration:       Publicable to all LRRs, unless otherwise noted)       Indicators for Problematic Hydric Solls?         Histosol (A1)       Polynalus Below Surface (A3) (LRR 5, T, U)       Indicators for Problematic Hydric Solls?         Histosol (A2)       Ioamy Kucky Minerai (F) (LRR 0)       Ioamy Kucky Minerai (F) (LRR 0)         Statified Layser (A5)       Ioamy Kucky Minerai (F) (LRR 0, C)       Ioamy Kucky Minerai (F) (LRR 0, C)         Organic Bodies (A6) (LRR P, T, U)       Ioamy Gleyed Matrix (F2)       Ioamy Kucky Minerai (F) (LRR 0, C)         Statified Layser (A5)       Ioamy Gleyed Matrix (F2)       Ioamy Kucky Minerai (F) (LRR 0, C)         Organic Bodies (A6) (LRR P, T, U)       Ioamy Gleyed Matrix (F2)       Ioamy Kucky Minerai (F) (LRR 0, C)         Depleted Dark Surface (F1)       Indicators of hydrophylic vegetation and veland hydrology must be present, unless disturbed or problematic.         Sandy Mucky (B0) (RR P, S, T, U)       Ioamit Floodplain Solls (F20) (RR A 150A)         Sandy Ketze (S1)       Indicators (S1) (IRR P, S, T, U)         Sandy Ketze (S2)       Ioamit Floodplain Solls (F20) (RR A 149A)         Sandy Ketze (S2)       Ioamit Floodplain Solls (F20) (MLR A 149A)         Sandy Ketze (S1)       Indicators of hydrophylic vegetation and veland hydrology must be present, unless disturbed or problematic.         Sandy Ketze (S2)       Ioamit Floodplain Solls (F20) (MLR A 149A)		1						
Ype:       C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location:       Plote Lining, M=Matrix.         Ydric Soll Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators: (Applicable to all LRRs, unless otherwise noted.)       Indicators: (Applicable to all LRRs, unless otherwise noted.)         Histoc Ejbedon (42)       Initiate Ejbedon (42)       Initiate Ejbedon (42)       Initiate Ejbedon (42)         Data Kurds (46)       Initiate (47)       Initiate (47)       Initiate (47)         Organic Boide (46)       Initiate (47)       Initiate (47)       Initiate (47)         Organic Boide (46)       Initiate (47)       Initiate (47)       Initiate (47)         Organic Boide (46)       Initiate (47)       Initiate (47)       Initiate (47)         Mack Yendon (48)       Initiate (47)       Initiate (47)       Initiate (47)         Depleted Date (47)       Initiate (47)       Initiate (47)       Initiate (47)         Coast Praine Redx (A16)       Initiate (47)       Initiate (47)       Initiate (47)         Depleted Date (47)       Initiate (47)       Initiate (47)       Initiate (47)         Coast Praine Redx (A16)       Initiate (47)       Initiate (47)       Initiate (47)         Stand Macky Mineral (51)       Initiate Surease (51)       Initiate Surease (51)       Init								
Type:       C-Concentration. D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pere Lining, M=Matrix.         Hidicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Solls':         Hidicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators:       Indicators:         Hidicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators:       Indicators:         Hidicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators:       Indicators:         Hidicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators:       Indicators:         Brack Histic (A3)       Depleted Matrix (F2)       Indicators:       Indicators:       Indicators:         Statilied Layers:       (Applicable to all LRRs, unless otherwise (F2)       Indicators:       Indicators: <td></td> <td></td> <td></td> <td></td> <td>New York Company Street Company of the</td> <td></td> <td></td> <td></td>					New York Company Street Company of the			
Yps:       C=Concentration. D=Depletion. RM=Reduced Matrix, MS=Masked Sand Grains.       * Incelators: (Applicable to all LRRs, unless attravias noted.)       Indicators: (Applicable to all LRRs, unless attravias noted.)         Hittosol (A1)       Implement of the physic Below Surface (S8) (LRR S, T, U)       I am Muck (A9) (LRR O)         Black Hitt (CA3)       Learny Mucky Minaral (F1) (LRR P, S, T, U)       Peledmont Floodpain Soits (F19) (URR P, S)         Stratified Layrer (A5)       Depleted Matrix (F2)       Peledmont Floodpain Soits (F19) (URR P, S)         Organic Bodies (A6) (LRR P, T, U)       Depleted Matrix (F2)       Peledmont Floodpain Soits (F19) (URR P, S)         Mucky Mineral (A1)       Depleted Matrix (F3)       Peleded Chris (F12)         Mucky Mineral (S1) (LRR P, T)       Depleted Matrix (F3)       Peleded Chris (F12)         Trick Dark Surface (A12)       Depleted Matrix (F3)       Peleded Chris (F13) (URR P, F1)         Coast Partie Radox (A16) (MLRA 150A)       Delta Ochric (F17) (MLRA 151)       Peledmont Floodpain Soits (F12) (URR P, O, P, T)         Sandy Gleyee Matrix (S6)       Peledmont Floodpain Soits (F13) (URR P, T3)       Peledmont Floodpain Soits (F12) (URR P, T4)         Sandy Gleyee Matrix (S6)       Peledmont Floodpain Soits (F13) (URR A 149A)       Stipped Matrix (S6)         Sandy Gleyee Matrix (S6)       Peledmont Floodpain Soits (F13) (MLRA 149A)       Anormalous Bright Learny Soits (F20) (MLRA 149A)         S								
Type:       C-Concentration       DeDepletion       RM-Reduced Matrix, MS=Masked Sand Grains.       *Location:       PL=Pore Lining, M=Matrix.         Variation       Indicators:       (Applicable to all LRRs, unless otherwise noted.)       Indicators for Problematic Hydric Solis:         Histids:       Epipedon (A2)       Initio Dark Surface (S0) (LRR S, T, U)       Initio Dark Surface (S0) (LRR S, T, U)       Initio Dark Surface (S0) (LRR S, T, U)         Black Histic (A3)       Hydrogen Surface (S0)       Depleted Matrix (F2)       Anoralous Bifght Learny Solis (F20)         Organic Bodies (A6) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Pareint Matrial (TF2)       Anoralous Bifght Learny Solis (F20)         Muck Presence (A9) (LRR P, T, U)       Depleted Dark Surface (F7)       Red Pareint Matrial (TF2)       Mick A1359)         Depleted Below Dark Surface (A1)       Thork Dark Surface (A2)       Hore Manganese Masses (F12) (LRR P, T, U)       Depleted Dark Surface (F12)       Other (Explain In Remarks)         Sandy Mucky (Mineral (S1) (LRR R, O, S)       Depleted Dark Surface (F12) (DRR P, T, U)       Depleted Dark Surface (F12)       Other (Explain In Remarks)         Sandy Mucky (Mineral (S1) (LRR R, O, S)       Depleted Dark Surface (F12) (URR A 1430)       Anoralous Bifght Learny Solis (F19) (MLRA 1430)         Striped Matrix (S4)       Reduced Vertic (F13) (LRR A 1430, A 1400, A 1400		·		an Marana ang Kabupatén Kabupatén Kabupatén Prak			-	anne e anna ann ann ann ann ann ann ann. D
Type:         Coconcertation         Debeletion         Reduced Matex, MS=Masked San Octa)         Todation         Turdetators         Turdetators <thturdetators< th="">         Turdetators         Turdeta</thturdetators<>						211		ing M-Matrix
Yaho Solin Matchalars (Application (Gamerica)       Polyvalue Below Surface (S9) (LRR 5, T, U)       1 cm Muck (A9) (LRR 0)         Histool (A1)       Thin Dark Surface (S9) (LRR 5, T, U)       2 cm Muck (A10) (LRR 0)         Brack Histic (A3)       Loamy Mcky Mineral (F1) (RR 0, F2)       Polytadue Below Surface (S9) (LRR 0, T, U)         Organic Bodie (A6) (LRR P, T, U)       Depieted Matrix (F2)       Anomalous Bright Loamy Solis (F20) (MLRA 1530)         Muck Y Mineral (A7) (LRR P, T, U)       Depieted Dark Surface (F7)       Red x Depressions (F8)         Muck Y Mineral (A7) (LRR P, T, U)       Depieted Dark Surface (F1)       Red x Depressions (F8)         Depieted Dark Surface (F10) (LRR 0, P, T)       Mari (F10) (LRR 0, F11) (MLRA 151)       Incon-Manganese Massea (F12) (LR 0, P, T)         Depieted Dark Surface (F13) (LRR 0, F11) (MLRA 150, 1508)       Depieted Oark Surface (F13) (LR P, T, U)       Index regetation and wetland hydroogy musb te present, unless disturbed or problematic.         Sandy Redox (S5)       Peledmort Frodulin Solis (F10) (MLRA 150, 1508)       Piedmort Frodulin Solis (F20) (MLRA 149A, 153C, 153D)         Sartictive Layrer (If observed):       Type:	Type: C=C	Concentration, D=De	pletion, RM=R	educed Matrix, M	S=Masked Sand Grains.	Indicators	for Problem	atic Hydric Soils <sup>3</sup> :
Initial Epidedon (A2)       Initial Epidedon (A2)       Initial Epidedon (A2)       Initial Existence (S3) (LRR B, T, U)       Initial Existence (A3)       Reduced Vertic (F13) (outside MLR A1 550A         Black Histic (A3)       Initial Existence (A3)       Initial Existence (A1)       Initial Existence (A2)       Initial Existence (A2)         Organic Bodies (A6) (LRR P, T, U)       Bedota RA Surface (F7)       Initial Existence (A3)       Initial Existence (F7)       Initial Existence (F7)         Sem Micky Mineral (A7) (LRR P, T)       Depided Dark Surface (F7)       Red X Dark Surface (F7)       Initial Existence (F12)         I cross Micky Mineral (A7) (LRR P, T)       Depided Dark Surface (F12)       Initial Existence (F12)       Initial Existence (F12)         Depided Bolew Dark Surface (A11)       Depided Dark Surface (F13) (LRR P, T, U)       Depided Dark Surface (F12) (LRR P, T, U)       Initial Existence (F12) (LRR P, T, U)         Sandry Bordy Matrix (S4)       Depided Dark Surface (F13) (LRR P, T, U)       Initial Existence (F12) (LRR P, T, U)       Initial Existence (F12) (LRR P, T, U)       Initial Existence (F13) (LRR P, T, U)         Sandry Bordy Matrix (S5)       Depided Ochic (F17) (MLRA 150, 150B)       Piedmont Floodplain Solis (F19) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Existence (S7) (LRR P, S, T, U)       Existence (S7) (LRR P, S, T, U)         Sandry Bordy Matrix (S5)       Depided Dark Surface (S7) (LRR P, S, T, U) </td <td></td> <td></td> <td></td> <td>Rolwalue B</td> <td>elow Surface (S8) (LRR S. T</td> <td>. U) 1 cm</td> <td>Muck (A9) (LI</td> <td>RR O)</td>				Rolwalue B	elow Surface (S8) (LRR S. T	. U) 1 cm	Muck (A9) (LI	RR O)
Black Hatte (A3)       Loamy Mucky Mineral (F1) (LRR 0)       Heducate Vettic (F18) (butklet MLRA 1584)         Hydrogen Suffde (A4)       Staffde Layres (A5)       Depicted Matrix (F2)       Hedmont Floodphin Solis (F19) (LRR 0, F1, U)         S om Mucky Mineral (A) (LRR P, T, U)       Red x Atta (F12)       Muck (A9) (LRR P, T, U)       Red Parent Material (TF2)         Muck Presence (A6) (LRR U)       Depicted Dark Surface (F10)       Mart (F10) (LRR U)       Depicted Dark Surface (F12)         Depicted Dark Surface (F13)       Mart (F10) (LRR U)       Depicted Dark Surface (F12) (LRR O, P, T)       Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR O, S)       Bandy Gleyed Matrix (S3)       Delta Oark Surface (F19) (MLRA 150), 1500       Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Sandy Redxx (S5)       Delta Oark Surface (F19) (MLRA 150, 1500)       Piedmont Floodplain Solis (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Learny Solis (F20) (MLRA 149A, 153C, 153D)       Depts difficult Layrer (ff observed):         Type:	Histic F	ninedon (A2)		Thin Dark S	urface (S9) (LRR S, T, U)	2 cm	Muck (A10) (1	RRS)
Hydrogen Suifice (A4)       Loamy Gleyed Matrix (F2)       Image: Constraint Floodplain Soils (F19) (LRR P, S)         Organic Bodies (A6) (LRR P, T, U)       Depleted Matrix (F3)       Image: Constraint Floodplain Soils (F20)         S m Mucky Mineral (A7) (LRR P, T, U)       Depleted Dark Surface (F7)       Image: Constraint Floodplain Soils (F19)         1 cm Muck (P3) (LRR P, T, U)       Depleted Dark Surface (F7)       Image: Constraint Floodplain Soils (F19)         1 m Muck (P3) (LRR P, T, U)       Depleted Confic (F11) (MLRA 151)       Image: Constraint Floodplain Soils (F19)         1 m Muck (P49) (LRR P, T)       Depleted Confic (F11) (MLRA 151)       Image: Constraint Floodplain Soils (F19)         1 m Muck (P49) (LRR P, T)       Depleted Confic (F11) (MLRA 151)       Image: Constraint Floodplain Soils (F19)         2 Sandy Mucky Mineral (S1)       Image: Constraint Floodplain Soils (F19) (MLRA 150)       Image: Constraint Floodplain Soils (F19) (MLRA 150)         2 Sandy Mucky Mineral (S1)       Image: Constraint Floodplain Soils (F19) (MLRA 150)       Image: Constraint Floodplain Soils (F19) (MLRA 150)         2 Sandy Mucky Mineral (S1)       Image: Constraint Floodplain Soils (F19) (MLRA 150)       Image: Constraint Floodplain Soils (F19) (MLRA 150)         2 Sandy Mucky Mineral (S1)       Image: Constraint Floodplain Soils (F19) (MLRA 150)       Image: Constraint Floodplain Soils (F19) (MLRA 149A)         2 Sandy Mucky (S10)       Image: Constraint Floodplain Soils (F19) (MLRA 149A)	Black	listic (A3)		Loamy Muc	ky Mineral (F1) (LRR O)	Redu	ced Vertic (F1	8) (outside MLRA 150A,
Stratiled Layers (A5)	Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix (F2)	Piedn	nont Floodpla	n Soils (F19) (LRR P, S, T
Organic Bodies (A6) (LRR P, T, U)              Red Xolface (Fr)             Sem Muck Nersel (A7) (LRR P, T, U)             Bed Farent Matchal (TF2)             Very Shalow Dark Surface (Fr12)             Very Shalow Dark Surface (TF12)             Very Shalow Dark Surface (TF12)             Depleted Bodro Dark Surface (TF12)             Depleted Dark Surface (TF12)             Untric Surface (TF12) (LRR 0, P, T, 1)             Sandy Redox Surface (TF12)             Untric Surface (TF12) (LRR 0, P, T, 1)             Sandy Redox (S5)             Delta Ochric (F12) (MLRA 150, 150B)             Reduced Vertic (F13) (MLRA 150A, 150B)             Piedmont Floodplain Solis (F20) (MLRA 149A, 153C, 153D)             Dark Surface (S7) (LRR P, F, S, T, U)             testrictive Layer (if observed):             Type:	Stratifie	ed Layers (A5)	den 1777 d	Depleted M	atrix (F3)		alous Bright I	oamy Solis (F20)
a cm Muck Presence (AB) (LRR P, T) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface (A12) Cher (Explain in Remarks) Depleted Below Dark Surface (A12) Caset Prairie Redox (A16) (MLRA 150A) Sandy Mucky Mineral (S1) (LRR O, S) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochic (F11) (MLRA 151) Delta Ochic (F17) (MLRA 151) Delta Ochic (F17) (MLRA 151) Delta Ochic (F17) (MLRA 151) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Testrictive Layer (if Oserved): Type: Depth (inches): Type: Temarks:	Organi	c Bodies (A6) (LRR I		Redox Dark	Sufface (Fb) ark Sufface (F7)	Red	Parent Materia	al (TF2)
1 cm Muck (A9) (LRR P, T)       Marl (F10) (LRR U)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       Depleded Ochric (F11) (MLRA 151)       Inc. Mark Surface (A12)         Coast Praine Redox (A16) (MLRA 150A)       Umbric Surface (F13) (LRR P, T, U)       Incle Sark Surface (A13)         Sandy Mucky Mineral (S1) (LRR 0, S)       Delta Ochric (F13) (MLRA 151)       unless disturbed or problematic.         Sandy Redox (S5)       Reduced Vertic (F13) (MLRA 150A, 150B)       Nettor (F13) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Hydric Soil Present? Yes No         Verter ::       Ype:         Depth (Inches):       Hydric Soil Present? Yes       No	Muck F	resence (A8) (LRR	U)	Redox Depr	ressions (F8)	U Very	Shallow Dark	Surface (TF12)
Depleted Below Dark Surface (A11)       Depleted Ochic (F11) (MLRA 151)       Inon-Manganese Masses (F12) (LRR 0, P, T)       Indicators of hydrophytic vegetation and vetland hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR 0, S)       Deta Ochic (F17) (MLRA 151)       unless disturbed or problematic.         Sandy Gleyed Matrix (S6)       Deta Ochic (F17) (MLRA 150, 150)       pleta Ochic (F19) (MLRA 150, 150)         Sandy Recx (S5)       Deta Ochic (F17) (MLRA 150, 150)       pleta Ochic (F19) (MLRA 150, 150)         Sandy Recx (S5)       Deta Ochic (F19) (MLRA 150, 150)       pleta Ochic (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       testrictive Layer (if observed):       type:         Type:	1 cm M	uck (A9) (LRR P, T)	2	Marl (F10) (	LRR U)	Other	(Explain in R	emarks)
Thick Dark Surface (A12)       Inor-Manganese Masses (F12) (LRR 0, F, 1)       Indicators of hydrophydc Vegetation and Dydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR 0, S)       Delta Ochric (F17) (MLRA 151)       unless disturbed or problematic.         Sandy Mucky Mineral (S1) (LRR 0, S)       Delta Ochric (F17) (MLRA 150A, 150B)       nuness disturbed or problematic.         Sandy Redox (S5)       Enduced Vertic (F18) (MLRA 150A, 150B)       Piedmont Hoodplain Solis (F20) (MLRA 149A)         Stripped Matrix (S6)       Piedmont Hoodplain Solis (F19) (MLRA 149A)         Anomalous Bright Loamy Solis (F20) (MLRA 149A, 153C, 153D)       Datt Surface (F3) (LRR P, S, T, U)         testrictive Layer (if observed):       Type:         Type:	Deplete	ed Below Dark Surfa	ce (A11)	Depleted O	chric (F11) (MLRA 151)	1	last state	
Coast Prairie Redox (A16) (MLRA 150)       Unitinic Surface (F15) (ILRA 151)       Unleast disturbed or problematic.         Sandy Mucky Mineral (S1) (LRA 0, S)       Delta Ochric (F17) (MLRA 150A, 150B)       Reduced Vertic (F18) (MLRA 149A, 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D)       Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Restrictive Layer (if observed):       Type:         Type:	Thick D	Dark Surface (A12)		Iron-Manga	nese Masses (F12) (LRR O,	P,T) Ind	cators of nyo	av must be present.
Sandy Gleyd Matrix (S4)       Reduced Vertic (F18) (MLRA 150A, 150B)         Sandy Redox (S5)       Piedmont Floodplain Solis (F19) (MLRA 149A)         Stipped Matrix (S6)       Anomalous Bright Learny Solis (F20) (MLRA 149A, 153C, 153D)         Dark Sufface (S7) (LRR P, S, T, U)       Hydric Soli Present? Yes No         testrictive Layer (if observed):       Hydric Soli Present? Yes No         Type:       Hydric Soli Present? Yes         Depth (Inches):       No	Coast	Prairie Redox (A16)	(MLRA 150A)	Delta Ochri	ace (F13) (LRR P, 1, U)	UF	less disturbe	d or problematic.
Sandy Redox (S5)       Pledmont Floodplain Soils (F19) (MLRA 149A)         Stripped Matrix (S6)       Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Estrictive Layer (if observed):         Type:	Sandy	Gleved Matrix (S4)	(LKK 0, 3)	Reduced Ve	ertic (F18) (MLRA 150A, 150	)B)	A Berraria Maria	
Stripped Matrix (S6)       Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)         Dark Surface (S7) (LRR P, S, T, U)       Itestrictive Layer (if observed):         Type:	Sandy	Redox (S5)		Piedmont F	loodplain Soils (F19) (MLRA	149A)		
Dark Surface (S7) (LRR P, S, T, U)         testrictive Layer (if observed):         Type:         Depth (inches):         Hydric Soil Present? Yes         No         Vernarks:	Strippe	d Matrix (S6)		Anomalous	Bright Loamy Soils (F20) (M	LRA 149A, 153	C, 153D)	
Type:	Dark S	urface (S7) (LRR P,	S, T, U)		Construction and the second second		and the second	a a la seconda de la composición de la Recorde de la composición de la composic
Iype:     Hydric Soil Present? Yes No	Restrictive	Layer (if observed	):					
Depth (incres):	Type:		and and a second se Second second			Hydric So	Il Present?	Yes No
Yemarks:	Depth (i	ncnes):			Andrew Constant and the second	inguite de		a destruction and a second
	Remarks.							

Environmental Field Surveys Wetland Photo Page



Upland data point wroo001\_u facing southeast.



Upland data point wroo001\_u facing southwest.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region	
Project/Site: ACP City/County: Rubosca " Sampling Date: 9-18-14	
Applicant/Owner: DOMINION State: NC Sampling Date, DROHOIGI	p
Investigator(s): Section Townshin Pange:	
Landform (hillslope, terrace, etc.): Reference (and the second se	$\nabla$
Subregion (LRR or MIRA): $1000000000000000000000000000000000000$	
Soil Man Unit Name: (Life) Lat. 01 10 2010 Long: 18 26 20. 120 Datum: 0.963 82	7
Are climatic / hydrologic conditions on the site twice for the first of the site of the si	
Are Vegetation Sail Sail Sail Sail Sail Are Vegetation (If no, explain in Remarks.)	
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No	
SUBARAA BY (35 FINDINGS - Attack in the iteration of the	
SOMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present?       Yes       No	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1)	
High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10)	
Saturation (A3)	
Sediment Deposits (B2)	
$\Box$ Drift Deposits (B3) $\Box$ Recent Iron Reduction in Tilled Soils (C6) $\Box$ Saturation Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	
Iron Deposits (B5)     Other (Explain in Remarks)     Shallow Aquitard (D3)	
Motor Visible on Aerial Imagery (B7)	
Field Observations:	
Surface Water Present? Yes No Depth (inches);	
Water Table Present? Yes No Depth (inches): 15"	
Saturation Present? Yes No Depth (inches): 91' Wetland Hydrology Present? Yes No No	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Pomorko	
Remarks: Hydrohogy present Abruht boundary to adjoeant up land.	

#### VEGETATION /E

<u>% Cover</u> <u>60</u> <u>(5</u> <u>15</u>	<u>Species?</u>	<u>Status</u> FAC	, Number of Dominant Species 5
15		FAC	That Are OBL, FACW, or FAC:
15		FAC	$\sim$
15			Total Number of Dominant
		EACW	Species Across All Strata:
	L		That Are OBL FACW or FAC:
	·		Prevalence Index worksheet:
			Total % Cover of:Multiply by:
70	= Total Cov	ver ,	OBL species x 1 =
20% of	total cover	: 18	FACW species x 2 =
			FAC species x 3 =
20		-ACN	FACU species x 4 =
10		FAC	UPL species x 5 =
10	1	FACU	/Column Totals: (A)
40	$\overline{}$	FACIN	Provide La Dia
10		FAC	Prevalence Index = B/A =
t		······	Hydrophytic Vegetation Indicators:
			X - Rapid Test for Hydrophytic Vegetation
			12 - Dominance Test is >50%
20	= Total Cov	/er	☐ 3 - Prevalence Index is ≤3.0'
20% of	total cover:	18	L Problematic Hydrophytic Vegetation' (Explain)
~		·	All all and the second second
30	$\bigvee$	FACU	be present, unless disturbed or problematic
30	$\overline{\mathbf{\nabla}}$	FAC	Definitions of Four Vegetation Strata:
JO		OBI	
10		FACIN	Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
10		FAC	height.
10		FAC	Sonling/Chruch Missing June 1
			than 3 in, DBH and greater than 3.28 ft (1 m) tall
			of size, and woody plants less than 3 28 ft fall
			Woody vine – All woody vines greater than 3.28 ft i height
~			iogin.
- (Q)	= Total Cov	er Z	
20% of	total cover:	90	
100			
10	$\mathcal{I}$	FAC	
20	$\overline{}$	FAC	
10	$\overline{\mathbf{v}}$	FAC	
····· • • •			
40	= Total Cov	er ()	Hydrophytic Vegetation
20% of	total cover	~~~~~~	Present? Yes No
	total cover;		
	20%  of 20%  of	$\frac{20\% \text{ of total cover}}{20\% \text{ of total cover}}$ $\frac{20\% \text{ of total cover}}{20\% \text{ of total cover}}$ $\frac{20\% \text{ of total cover}}{20\% \text{ of total cover}}$ $\frac{20\% \text{ of total cover}}{10}$ $= \text{Total Cov}$ $\frac{20\% \text{ of total cover}}{10}$ $= \text{Total Cov}$ $\frac{20\% \text{ of total cover}}{10}$	$\frac{20\% \text{ of total cover}}{20\% \text{ of total cover}} = 1\%$ $\frac{20\% \text{ of total cover}}{10} = FAC$ $\frac{70}{10} = Total Cover}{20\% \text{ of total cover}} = 1\%$ $\frac{20\% \text{ of total cover}}{10} = FAC$ $\frac{70}{10} = Total Cover}{10} = FAC$ $\frac{70}{10} = Total Cover}{10} = FAC$

# WROHOIGF

Profile Decirption: [Description: [Description: [Decirption: [Dec	SOIL		Sampling Point:
Deptity         Matrix         Redox Fatures           Grides         Color Crossits         Color Crossi	Profile Description: (Describe to the depth	n needed to document the indicator or confirm	the absence of indicators.)
Industry       Lobor (mosal       %       M       Lobor (mosal       %       M       Lobor (mosal	Depth <u>Matrix</u>	Redox Features	
Log Act       Log Act         Light       Log Act         Light       Status	$\frac{\text{(incres)}}{1000} = \frac{\text{Color (molst)}}{10000} = \frac{\%}{10000} = \frac{1}{100000}$	<u>Color (moist)</u> % Type' Loc <sup>2</sup>	Remarks
Image:	9-12 18410 414		LOAM
Type: C-Concentration, D=Depletion, RM-Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Type: C-Concentration, D=Depletion, RM-Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Type: C-Concentration, D=Depletion, RM-Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Type: C-Concentration, D=Depletion, RM-Reduced Matrix, MS=Masked Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         Histod (A1)       - Polytuble Below Surface (S9) (LRR 5, T, U)       = Orm Muck (A10) (LRR 9)         Histod (A2)       - Diard Surface (S1) (LRR 1)       = Cont Muck (A10) (LRR 1)         Organic Bodies (A6) (LRR P, T, U)       - Depleted Odino (C11) (MLRA 158)       = Red Parent Matrix (C12)         Sorm Muck (A0) (LRR P, T, U)       - Depleted Odino (C11) (MLRA 159)       - More (C12) (LRR 1)         Depleted Bolow Dark Surface (A11)       - Depleted Odino (C11) (MLRA 159)       - More (C12) (LRR P, T, U)         Sond Medix (S4)       - Beduced Vertic (C12) (MLRA 150)       - More (S12) (LRR P, T, U)         Sond Medix (C18) (LRR P, T, U)       - Depleted Odino (C11) (MLRA 150)       - More Matrix (S4)         Sond Medix (S4)       - Beduced Vertic (C12) (MLRA 150)       - More Matrix (S4)         Sond Medix (S6)       - More Medix (S6) (C13) (MLRA 150, 1500)       - More Matrix (S6)         Depleted Matrix (S6)       - More Matrix (S6)<	$\frac{1}{12} \frac{1}{12} \frac$		STOKEY TOAM
Type:       C:Concentration, D=D-cycletion, RM=Reduced Matrix, MS=Marked Sand Grains, Acostance (Pi - Error Lining, M=Matrix, Mydric Solifs);         Histoci (A);       Polyvalue Bolos Sunface (S) (LRR S, T, U)       1 Cm Mack (A0) (LRR Q);         Histoci (A);       Thro Mark (MR S, T, U)       2 cm Mack (A0) (LRR Q);         Histoci (A);       Componentiation (A2);       Thro Mark (ARS T, U);       2 cm Mack (A0) (LRR Q);         Histoci (A2);       Thro Mark (MR S, T, U);       Pedmort Problematic Hydric Solifs;         Simulate Layers (A3);       Component Marker (MS) (LRR P, T, U);       Pedmort Problematic AD (LRR P, T, U);       Pedmort Problematic Marker (MS) (LRR P, T, U);         Sort Muck (Mare (A); (LRR P, T, U);       Pedmort Problematic AD (LRR P, T, U);       Pedmort Problematic AD (LRR P, T, U);       Pedmort Problematic AD (LRR P, T, U);         Depleted Debx Cark Surface (A1);       Problematic AD (LRR P, T, U);       Pedmort Problematic AD (LRR P, T, U);       Pedmort Problematic AD (LRR P, T, U);         Depleted Debx Cark Surface (A1);       Port Admargenes Massas (F1);       Problematic Marker (AD);       Problematic AD (LRR P, T);         Depleted Debx Cark Surface (A1);       Ford Marker (F1);       Under Surface (F1);       Problematic Marker (AD);         Sort Muck Wark (G1) (LRR P, S);       Depleted Coric (F1);       Problematic Marker (AD);       Problematic Marker (AD);         Sandy Rodey Mark (G5);       Problema	11-13. 10/10 211		<u>SCL</u>
Type:       C:COncentration. D=Depletion, RM=Reduced Matrix, MSIMMasked Sand Grains.       *Locator: PL=Page Ling, M=Matrix, MSIMMasked Sand Grains.         "Hydric Soll Indicators: (Applicable to all LRRs, Indicators for Problematic Hydric Solis":			
Type:         C:Concentration, D=Depletion, RM-Reduced Matrix, MS=Masked Sand Grains.         *Location: PL=Pone Lining, M=Matrix, MpdrE Soll Indicators: (Applicable to all LRRs, unless otherwise notod.)         Indicators for Problematic MydrE Solls':           Histod (A1)         Polytike below Surface (S0) (LRR S, T, U)         1 cm Muck (A0) (LRR G)           Histod (A1)         Dorphytike below Surface (S0) (LRR S, T, U)         2 cm Muck (A1) (LRR G)           Hydrogen Sulfie (A4)         Learny Gleyed Matrix (F1)         Pedmont Floodplain Solis (F16) (LRR P, S, T)           Stratified Layers (A5)         Depleted Matrix (F2)         Anomalous Bight Loarny Solia (F20)           Stratified Layers (A5)         Depleted Matrix (F2)         Monton Solia (F20)           Mont Presence (A9) (LRR P, T, U)         Redox Dark Surface (F7)         Red Parenti Materia (F2)         Monton Solia (F20)           Mont Presence (A9) (LRR P, T, U)         Depleted Dark Surface (A11)         Depleted Contro (F11) (MLRA 151)         Trick Dark Surface (A11)         Depleted Dark Matrix (A1)         Monton Surface (F12)           Code Parie Redox (A16) (MLRA 150)         Inton Surface (F17) (MLRA 151)         Intol Cohine (F17) (MLRA 151)         Intol Surface (F12)           Sandy Objed Matrix (S6)         Anomadous Bight Loarny Solis (F20) (MLRA 149A)         Sandy Objed Matrix (S6)         Predmont Floodplain Solis (F20) (MLRA 149A)           Sandy Objed Matrix (S6)         Anomadous Bight Loarny			
<sup>1</sup> Type: C=Concentration. D=Depiction. RN=Reduced Matrix, MS=Masked Sand Grains. <sup>1</sup> Location. PL=Pore Lining, M=Matrix. <sup>1</sup> Mpric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)         Indicators for Problematic Hydrife Soils <sup>1</sup> ; <sup>1</sup> Hatic Epipedon (A2)         Thin Dark Surface (SB) (LRR S, T. U)         2 cm Muck (A10) (LRR O)           Black Hatic (A3)         Learny Mucky Mineral (F1) (LRR O)         2 cm Muck (A10) (LRR P, S, T)           Granic Bide (A4)         Learny Mucky Mineral (F2)         — Anomalous Bright Loarny Soils (F20)           Organic Bide (A6) (LRR P, T, U)         Depieted Dark Surface (F7)         — Red Parent Material (TF2)           Um Muck (A9) (LRR P, T)         Depieted Cobric (F11) (MLRA 151)         — Red Parent Material (TF2)           1 mm Muck (A9) (LRR P, T)         Mark Oresene (F8)         — Weit Shallow Dark Surface (T12)           1 mm Muck (A9) (LRR P, T)         Depieted Dark Surface (F7)         — Red Parent Material (TF2)           1 mm Muck (A9) (LRR P, T)         Depieted Dark Surface (F7)         — Natrian Hydrology must be present, unless disturbed or problematic.           Sandy Useye Matrix (F8)         Delia Ontric (F12) (MLRA 151)         — Senter (F7) (MLRA 154)           Sandy Useye Matrix (F8)         Predmont Floocplain Soils (F10) (MLRA 154)         — Indicators of hydrophydrouce present, unless disturbed or problematic.           Sandy Useye Matrix (F8)         — Anomalous Brig			
Type:         Cocation:         PL-Pore Lining, M-Hatrix, Indicators: (Applicable to all LRRs, unless otherwise noted.)         Indicators: (Applicable to all LRRs, unless otherwise noted.)           Hatsack (A1)         Polyalabe Edlow Straface (S9) (LRR S, T, U)         2 cm Muck (A9) (LRR 0)           Black Hats (CA3)         Learny Block Mate (S9) (LRR 0, T)         Performatic Mydric Solis (F10) (LRR P, S, T)           Straffiel 1 agers (A5)         Depleted Matrix (F2)         Anomalous Bright Learny Solis (F20) (MLRA 150A, E)           Organic Bodies (A9) (LRR P, T, U)         Redox Cark Surface (F10)         Anomalous Bright Learny Solis (F20) (MLRA 151)           Straffiel 1 agers (A5)         Depleted Matrix (F2)         Anomalous Bright Learny Solis (F20) (MLRA 151)           Muck Presence (A8) (LRR P, T, U)         Redox Cark Surface (F10) (LRR P, T, U)         Cotast Privice (A11)           Depleted Dark Surface (F11)         Depleted Dark Surface (F12) (LRR P, T, U)         Cotast Privice (A10) (MLRA 150A)           Sandy Mucky, Mineral (S1) (LRR P, S)         Depleted Dark Surface (F12) (LRR P, T, U)         Unbric Surface (F12) (LRR P, T, U)           Sandy Mucky Mineral (S1) (LRR P, S)         Perferemt Foodplain Solis (F19) (MLRA 150A, 150B)         Netland transmarks           Sandy Mecky (S5)         Preferemt Foodplain Solis (F12) (MLRA 148A)         Hatria K16, K12, K12, K12, K12, K12, K12, K12, K12			
Hydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.)         Indicators for Problematic Hydric Solls <sup>2</sup> ;           Histos (A1)         Polyvalue Bdow Xarbace (S9) (LRR S, T, U)         2 on Muck (A10) (LRR S)           Black Histic (A2)         Thin Dark Surface (S9) (LRR S, T, U)         2 on Muck (A10) (LRR S)           Black Histic (A2)         Laamy Mucky Mineral (F1) (LRR D)         Reduced Vertic (F16) (Autside MLRA 150A,B)           Organic Bodie (A6) (LRR P, T, U)         Depicted Dark Surface (F1)         Anomalous Bright Learny Sols (F20)           Mucky Mineral (A7) (LRR P, T)         Depicted Dark Surface (F1)         Very Snallow Dark Surface (T12)           1 or Muck (A9) (LRR P, T)         Depicted Dark Surface (F1)         Very Snallow Dark Surface (T12)           1 or Muck (A9) (LRR P, T)         Mail (F10) (LRR U)         Red Very Snallow Dark Surface (T12)           1 or Muck (A9) (LRR P, T)         Mail (F10) (LRR U)         Very Snallow Dark Surface (T12)           2 on Mucky Mineral (S1) (LRR O, S)         Delite Ochric (F11) (MLRA 151)         unless disturbed or problematic.           Sardy Bleyk Matrix (S4)         Present Matrix (S4)         Present Matrix (S4)         Informatic Mydrology must be present, unless disturbed or problematic.           Sardy Bleyk Matrix (S5)         Petermont Floodplain Solls (F10) (MLRA 149A)         Single Matrix (S5)         Anomalous Bright Learny Sols (F20) (MLRA 149A)           S	<sup>1</sup> Type: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Histic Epideon (A2)       — Dolyvalue Below Surface (S0) (LRR S, T, U)	Hydric Soil Indicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Spreedion (A2)	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)
Stratified Layers (A5)       Depleted Matrix (F3)       Anomalous Bright Loary Sols (F20)         Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 1539)         Sorn Mucky Mineral (A7) (LRR P, T, U)       Redox Dark Surface (F6)       (WLRA 1539)         Muck Presence (A8) (LRR P, T)       Madi (F10) (LRR 15)       Very Shallow Dark Surface (F12)         Depleted Det Surface (A71)       Depleted Cark Surface (F12) (LRR 0, P, T)       Indicators of hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (A1) (LRR 0, S)       Depleted Vertic (F13) (MLRA 150)       Indicators of hydrology must be present, unless disturbed or problematic.         Sandy Mucky Mineral (A1) (LRR 0, S)       Delate Orbin (F11) (MLRA 150)       Indicators of hydrology must be present, unless disturbed or problematic.         Sandy Mucky (S6)       Peteront History Sols (F20) (MLRA 149A)       Indicators of hydrology must be present, unless disturbed or problematic.         Stripped Matrix (S6)       Predox Daria (S1)       Piedmont Floodplain Sols (F19) (MLRA 149A)         Surface (S7) (LRP, P, S, T, U)       Restricture Layer, If dosarred(S7) Ves (Matrix (S4)         Restricture Layer (If dosarred):       Type:       Hydric Soil Present? Ves (No)         Depth (inches):       Renarks:       No	Hydrogen Sulfide (A4)	Loamy Gleved Matrix (E2)	Reduced Vertic (F18) (outside MLRA 150A,B) Piedmont Floodnlain Soils (F19) (I PP P S T)
Organic Bodies (A6) (LRR P, T, U)       Redox Dark Surface (F6)       (MLRA 153)         S orn Muck (A9) (LRR U)       Depleted Dark Surface (F7)       Red Parent Material (F72)         How Ark Presence (A8) (LRR U)       Depleted Dark Surface (F7)       Red Parent Material (F72)         Depleted Dark Surface (A11)       Depleted Oark Surface (F7)       Parent Material (F72)         Coast Parier Redox (A6) (LRR A 150A)       Depleted Oark Surface (F3) (LRR A 157)       Indicators of hydrophytic vegetation and vetland hydrology must be present, unless disturbed or problematic.         Sandy Gleyed Matrix (S6)       Detla Ochric (F13) (MLRA 150A, 150B)       Verial Natrice (F3) (LRR A 150A, 150B)         Sandy Redox (S5)       Predmont Floodplain Solis (F19) (MLRA 149A)       vetland hydrology must be present, unless disturbed or problematic.         Stripped Matrix (S6)       Predmont Floodplain Solis (F19) (MLRA 149A, 153C, 153D)       Dark Surface (57) (LRR P, S, T, U)         Restrictive Layer (if observed):       Type:       Hydric Soil Present? Yes No       No         Depth (Inches):       Red marks:       No       Remarks:       No	Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
b or Mucky Mineral (A2) (LRR P, T)       Depleted Dark Surface (F7)       — Red Parent Material (TF2)         1 or Muck (A9) (LRR P, T)       — Mat (F10) (LRR U)       — Very Shaltow Dark Surface (A11)         Depleted Bork Surface (A11)       — Depleted Ochris (F11) (MLRA 151)       — Other (Explain in Remarks)         Depleted Bork Surface (A12)       — Depleted Ochris (F11) (MLRA 151)       — Inor-Manganese Masses (F(3) (LRR P, T, U)       — Very Shaltow Dark Surface (A12)         Sandy Mucky Mineral (S1) (KRR 0, S)       — Delta Ochris (F13) (MLRA 150, 1)       — unless disturbed or problematic.         Sandy Mucky Mineral (S1) (KRR 0, S)       — Delta Ochris (F13) (MLRA 150, 1)       — unless disturbed or problematic.         Sandy Mucky (S6)       — Predomt Flociphian Solis (F20) (MLRA 149A)       — unless disturbed or problematic.         Stipped Matrix (S6)       — Anomalous Bright Learny Solis (F20) (MLRA 149A)       — momalous Bright Learny Solis (F20) (MLRA 149A)         Restrictive Larger (If observed):       — momalous Bright Learny Solis (F20) (MLRA 149A, 153C, 153D)       — momalous Bright Learny Solis (F20) (MLRA 149A, 153C, 153D)         Depth (inches):	Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
I can Mack (a) (LRR (b)	5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Depleted Below Dark Surface (A11)	1 cm Muck (A9) (LRR P. T)	Marl (F10) (I RR II)	Very Shallow Dark Surface (1F12)
Y=Thick Dark Surface (A12)	Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	
Coast Prairie Redox (A16) (MLRA 150A)Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, Sandy Muky Mineral (S1) (LRR O, S) Delta Orthar 151) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Solis (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Learny Solis (F20) (MLRA 149A) 153C, 153D) Destrictive Layor (if observed): Type:	Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, 1	T) <sup>3</sup> Indicators of hydrophytic vegetation and
Control (Control (Contro) (Control (Control (Control (Contro) (Control (Contro) (Contro)	Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)          Stripped Matrix (S6) Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D)         Dark Sufface (S7) (LRP P, S, T, U)         Restrictive Layer (if observed):         Type:         Depth (inches):         Remarks:	Sandy Gleved Matrix (S4)	Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A 150B)	unless disturbed or problematic.
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Depth (inches): Depth (inches): Depth (inches): Remarks: Remarks:	Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	9A)
	Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	, 149A, 153C, 153D)
Type:	Dark Surface (S7) (LRR P, S, T, U)		
Pepth (Inches):	Type:		
Remarks: Hydric Soil present	Depth (inches):		Hydric Soil Present? Ves No
Hydric Soil present	Remarks:		
Hydric Sol present			
Agdvie Sou present		HC. M	$\bigcap_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{i$
		Audina Sou	Dresent
		$\bigcirc$	

wroh019f\_w



Wetland data point wroh019f\_w facing east



Wetland data point wroh019f\_w facing south

WETLAND DETERMINATION D	ATA FORM – Atlantic and Gulf	f Coastal Pl	ain Region
Project/Site: ACP	City/County: Robecon	. ••	Sampling Date: <u>9-17-14</u>
Applicant/Owner: DOMINION	Sta	ate: 1	Sampling Point: WOL019_U
Investigator(s): DDPert	Section, Township, Range:	VÁ	•
Landform (hillslope, terrace, etc.): <u> <i>H</i>ルレSLOア</u> E	Local relief (concave, convex, no	ne): <u>CON</u>	レデス Slope (%): (
Subregion (LRR or MLRA): Lat:	34°50°20. 1300ng: 7	80561	9.816 Datum: WG584
Soil Map Unit Name: Nogram	······································	NWI classific	ation: Nown
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes $\underline{X}$ No (If r	no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology signi	icantly disturbed? Are "Normal Ci	ircumstances" p	present? Yes X No
Are Vegetation, Soil, or Hydrology nature	ally problematic? (If needed, exp	lain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point locations	s, transects	, important features, etc.
Hydrophytic Vegetation Present?       Yes       No         Hydric Soil Present?       Yes       No         Wetland Hydrology Present?       Yes       No         Remarks:       A	Is the Sampled Area       within a Wetland?	Yes	No_X
All & parameters net p	resent		
HYDROLOGY			
Wetland Hydrology Indicators:	Se	econdary Indica	tors (minimum of two required)
Surface Water (A1)		Surface Soil	Cracks (B6)
High Water Table (A2)	(B15) (LRR U)	Drainage Pat	tterns (B10)
Saturation (A3)	ulfide Odor (C1)	] Moss Trim Li	nes (B16)
U Water Marks (B1) U Oxidized Rh	izospheres along Living Roots (C3)	Dry-Season	Water Table (C2)
Diff Deposits (B3)	Reduced Iron (C4)	Crayfish Burr	rows (C8)
Algal Mat or Crust (B4)	urface (C7)	Geomorphic	Position (D2)
Iron Deposits (B5)	in in Remarks)	] Shallow Aqui	itard (D3)
☐ Inundation Visible on Aerial Imagery (B7)	Ē	FAC-Neutral	Test (D5)
Field Observations:		Sphagnum m	noss (D8) <b>(LRR T, U)</b>
Surface Water Present? Yes No X Depth (	nches): > 1Z		
Water Table Present? Yes No X Depth (	nches):		
Saturation Present? Yes No X Depth (	nches): Wetland Hyd	irology Presen	nt? Yes No
Describe Recorded Data (stream gauge, monitoring well, aeria	l photos, previous inspections), if availab	ble:	
Remarks:			
Wetland hydrology	netpresent		

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

Sampling Point: Wroh019\_U

704	Absolute	Dominant	Indicator	Dominance Test worksheet
Tree Stratum (Plot size: 39 1)	% Cover	Species?	Status	Dominance Test worksneet:
1. fine tarda	40	1	FAI	Number of Dominant Species
2. Line Danchion to L'altere	= <u>+</u> D		- HC	(A)
2			tra	Total Number of Dominant
				Species Across All Strata: ((B)
4	······			(-/
5				Percent of Dominant Species
6.				That Are OBL, FACW, or FAC: (A/B)
7				Provalence Index worksheet
0	<u> </u>	······		
ð,				lotal % Cover of: Multiply by:
	50	= Total Cov	/er	OBL species x 1 =
50% of total dever: -25	20% of	total cover	110	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 H	20,001		·	FAC species x 3 =
1 Cappie Classific	10		+ Act	/FACIL spacies
Provides Flating	-12-	<u> </u>	VETCI	
"Charlene plagra	13_	$\underline{\checkmark}$	+AC	OPL species x 5 =
3. francis correttion	_5		FACU	Column Totals: (A) (B)
A. Laglactrum Simose	5		FIAN	
5. Blocca barbank	5		FATIN	Prevalence Index = B/A =
6/ Auficarate manufactor			LACO	Hydrophytic Vegetation Indicators:
7	<u> </u>		THU	1 - Rapid Test for Hydrophytic Vegetation
( ,				2 - Dominance Test is >50%
8				
	50	= Total Cov		3 - Prevalence index is \$3.0
50% of total cover: 7 %	200% 04	total asuar	(10)	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size:	20% 01	total cover	12	
1 Angle (1101 Size. <u>CS (C +1</u> )	$\mathbf{U}$	2	1- A.C.	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
- Hyuneun glestinunous	_7_		FACC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				<b>.</b>
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5.				height
6	<u></u>			neight.
·				Sapling/Shrub - Woody plants, excluding vines, less
1				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Haute Allbacks of the test of the
9				Herb – All herbaceous (non-woody) plants, regardless
10.				of size, and woody plants less than 5.26 it tail.
11				Woody vine – All woody vines greater than 3.28 ft in
				height.
12	<u> </u>			
	<u> </u>	= Total Cov	er 🚽	
50% of total Edver: Z	20% of	total cover	12A	
Woody Vine Stratum (Plot size: 70 44			<u> </u>	
1 Trucicaling and a	<	l.	CAL	
With wat fill	<u> </u>		THE	
c. HII's roundisolion	10		THE	
3. Convers Caponica	5		FAC	
4. Grilonx Tonic Holia	Z	S.	FACW	
5.		<u> </u>	1	
	-77.			Hydrophytic (/
	<u> </u>	Fotal Cov	er, ( , (	Vegetation
50% of total cover:	20% of t	total cover:	7.4	
Remarks: (If observed, list morphological adaptations below	v).		<u></u>	

Profile Descr	ption: (Describe to the dept	h needed to document the indicator or confirm	the absence of indicators )
Depth (inches)	Matrix	Redox Features	
Ka man	Definer (motst) %	Color (moist) % Type <sup>1</sup> Loc <sup>2</sup>	Texture Remarks
acyro,			Son barbaran
<u>fi</u> .	104R 412		Ston Q. John
$\frac{1-10}{1}$	WYR 4/3		Smool Liston
10-18+	184113		Side and Lord a
······································			
<sup>1</sup> Type: C=Cor	centration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains,	<sup>2</sup> Location: PL=Pore Lining M=Matrix
Hyaric Soil in	dicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Solls <sup>3</sup> ;
	A1) Sedon (A2)	Polyvalue Below Surface (S8) (LRR S, T, U)	) 1 cm Muck (A9) (LRR 0)
Black Hist	ic (A3)	Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Hydrogen	Sulfide (A4)	Loamy Gleved Matrix (F2)	Reduced Vertic (F18) (outside MLRA 150A,
Stratified L	ayers (A5)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F19) (LRR P, S, T
Organic B	odies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MLRA 153B)
Muck Pres	vy Wineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
1 cm Mucł	(A9) (LRR P, T)	Marl (E10) (LBB 11)	Very Shallow Dark Surface (TF12)
Depleted E	Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	Uther (Explain in Remarks)
Thick Dark	Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, 1	T) <sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mu	rie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Gle	ved Matrix (S4)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Red	lox (S5)	Piedmont Electric (F18) (MLRA 150A, 150B)	
Stripped N	latrix (S6)	Anomalous Bright Loamy Soils (F20) (MI RA	)A) \ 1494 1530 1520\
Stripped M	latrix (S6) ice (S7) (LRR P, S, T, U)	Anomalous Bright Loamy Soils (F20) (MLRA	9A) A 149A, 153C, 153D)
Stripped IV Dark Surfa Restrictive La	latrix (S6) .ce (S7) (LRR P, S, T, U) yer (If observed):	Anomalous Bright Loamy Soils (F20) (MLRA	9A) A 149A, 153C, 153D)
Stripped M Dark Surfa Restrictive La Type:	latrix (S6) ice (S7) (LRR P, S, T, U) yer (if observed):	Anomalous Bright Loamy Soils (F20) (MLRA	9A) A 149A, 153C, 153D)
Stripped M Dark Surfa Restrictive La Type: Depth (inche	latrix (S6) ice (S7) (LRR P, S, T, U) yer (if observed): ps):	Anomalous Bright Loamy Soils (F20) (MLRA	9A) A 149A, 153C, 153D) Hydric Soil Present? Yes No
Stripped IV Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) ice (S7) (LRR P, S, T, U) yer (if observed): ps):	Anomalous Bright Loamy Soils (F20) (MLRA	9A) A 149A, 153C, 153D) Hydric Soil Present? Yes No
Stripped IV Dark Surfa Restrictive La Type: Depth (inche Remarks:	latrix (S6) ice (S7) (LRR P, S, T, U) yer (if observed): es):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes No No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed):  ps):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes No Sold Present
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed): es):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes No Sold Present?
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) .ce (S7) (LRR P, S, T, U) yer (If observed): 	Anomalous Bright Loamy Soils (F20) (MLRA	A) A 149A, 153C, 153D) Hydric Soil Present? Yes No Sol Dreseaf
Stripped IV Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) ice (S7) (LRR P, S, T, U) yer (If observed): es):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soll Present? Yes No Sold Present? Yes No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed):  es):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soll Present? Yes No Sold Present? Yes No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed): ps):	Anomalous Bright Loamy Soils (F20) (MLRA	Hydric Soil Present? Yes No No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) .ce (S7) (LRR P, S, T, U) yer (If observed): 	Anomalous Bright Loamy Soils (F20) (MLRA	Hydric Soil Present? Yes No No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) .ce (S7) (LRR P, S, T, U) yer (If observed): 	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes No Sold Present? Yes No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed): es):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes No Sold Present? Yes No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed): ps):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes No Sold Present? Yes No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed): es):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes <u>No</u> Sold Present?
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) .ce (S7) (LRR P, S, T, U) yer (If observed): 	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes <u>No</u> <u>No</u>
Stripped M Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) .ce (S7) (LRR P, S, T, U) yer (If observed): 	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes No Sold Present? Yes No
Stripped M Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) .ce (S7) (LRR P, S, T, U) yer (If observed): 	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes No Sold Present? Yes No
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed): es):	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes <u>No</u> Sold Present? And
Stripped W Dark Surfa Restrictive La Type: Depth (incho Remarks:	latrix (S6) (ce (S7) (LRR P, S, T, U) yer (If observed): ====================================	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D) Hydric Soil Present? Yes <u>No</u> Sold Present? And

wroh019\_u



Upland data point wroh019\_u facing east



Upland data point wroh019\_u facing south

# wroh019 soils



Wetland/upland soils

WETLAND DETERMINATION DATA	FORM - Atlantic and Gulf Coastal Plain Region
Project/Cites ACP	$\frac{2}{R} = 1$
	City/County: 1000500 Sampling Date:
Applicandowner: DOMINUON	State: NC Sampling Point: KO 17021 S
Investigator(s):	Section, Township, Range:W
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): LONCAVE Slope (%): 0-2
Subregion (LRR or MLRA):	50' 26.305 Long: 78° 57' 15.364" Datum: (NGSQL)
Soil Map Unit Name: Waggroom	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes No (If no explain in Remarks)
Are Vegetation, Soil, or Hydrology significant	v disturbed? Are "Normal Circumstances" property. Yes
Are Vegetation, Soil, or Hydrology	roblematic? (If peeded, evplain any ensurers in Remarks )
SUMMARY OF FINDINGS Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vocatetien Presenta	
Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	
Seen Usunc	out it side stopp
	O States of the
HYDROLOGY	
Wetland Hydrology Indicatoria	
Primary Indicators (minimum of one is required) check of thet and the	Secondary Indicators (minimum of two required)
Surface Water (A1)	
High Water Table (A2)	5) (LRR II) Sparsely Vegetated Concave Surface (B8)
Saturation (A3)	Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)	heres along Living Roots (C3)
Sediment Deposits (B2)	Iced Iron (C4) Crayfish Burrows (C8)
Algel Mat or Crust (Pd)	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)	e (C7) Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T. U)
Field Observations:	× 7
Surface Water Present? Yes No Depth (inche	s): <u> </u>
Water Table Present? Yes No Depth (inche	s): Surface
Saturation Present? Yes X No Depth (inche	s): Scurface Wetland Hydrology Present? Yes 📈 No
Describe Recorded Data (stream gauge, monitoring well, aerial pho	tos, previous inspections), if available:
Remarks:	
	$\cap$
Soon Hus	Jez lor in Dag of the
acp - wye	rongy present

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WROHOZIS -W

6 / 1 / 1	arries or pi	ants.		Sampling Point:
Tree Stratum (Plot size: 3034)	Absolute % Cover	Dominant Species?	Indicator	Dominance Test worksheet:
<u>Overas nigra</u> 31			FAC	Number of Dominant Species That Are OBL, FACW, or FAC:
				Total Number of Dominant
		*****		Species Across All Strata:
				Percent of Dominant Spacing
				That Are OBL, FACW, or FAC:
		5-100-10-10-10-10-10-10-10-10-10-10-10-10		Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	20			OBL species x 1 =
50% of total Quer: 1 <				FACW species
apling/Shrub Stratum (Plot size:	20% OF	total cover:		FAC species
Ligerstrum signance	KO		EAR	FACU species
J Joseph Martin	<u></u>		FAC-	
	-			
				(A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	. 27			3 - Prevalence Index is ≤3.0 <sup>1</sup>
50% offtotal cover: 24	* 20% of	= Total Cov total cover:	er 10	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
10 stratum (Plot size:)	25	$\mathcal{I}$	ORI	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
Polycon Bagittatum	10		TART	De present, unless disturbed or problematic.
Ribur argutur	62		GN	Definitions of Four Vegetation Strata:
			TAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) o more in diameter at breast height (DBH), regardless of
				height.
				Sapling/Shrub Woody plants, excluding vines, less than 3 in DBH and greater than 3 22 # (4 m) toll
		······································		Herb – All herbaceous (non-woody) plants regardless
·				of size, and woody plants less than 3.28 ft tall.
·				Woody vine - All woody vines greater than 3.28 ft in
·				height.
50% ambial Alan SO	100=	Total Cove	50	
oody Vine Stratum (Plot size SO T	20% of t	total cover:		
Uctis optime to ble	432	. /	5-10	
	<u>~~~</u> .	<u> </u>	EAR	~
				Hydrophytic
			1	
	30	Total Cove	er	Vegetation X
50% of total cover: _15	<u>30</u>	Total Cove	er Co	Vegetation Present? Yes No
50% of total cover: emarks: (If observed, list morphological adaptations belo	<u>30</u> 20% of t w).	Total Cove	er <u>6</u>	Vegetation Present? Yes <u>No</u>
50% of total cover:50% and total cover:50% of total cover:50% and total cover:	<u>30</u> 20% of t w).	Total Cover:	er	Vegetation Present? Yes No
50% of total cover: <u>15</u> marks: (If observed, list morphological adaptations belo	<u>30</u> 20% of t w).	Total Cove	er <u>6</u>	Vegetation Present? Yes No No
50% of total cover: <u>15</u> marks: (If observed, list morphological adaptations belo	<u>30</u> 20% of t w).	Total Cover:	er <u>C</u>	Vegetation Present? Yes No
50% of total cover:50% o	<u>30</u> = 20% of t w).	Total Cover:	er <u>C</u>	Vegetation Present? Yes <u>No</u>

SOIL

WROHO215

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Profile Description: (Describe to the dead	1	Sampling Point:
Depth	n needed to document the indicator or confirm t	the absence of indicators.)
(inches) Color (moist) %	Redox Features	
And investigation	<u>Color (moist) % Type' Loc<sup>2</sup></u>	Texture Remarks
00 1091-12 100		$\leq 1$
6-16+ 104F-SA, MO	104636 20	
	1011 18 220	
1		
Type: C=Concentration, D=Depletion, RM=	Reduced Matrix, MS=Masked Sand Grains	<sup>2</sup> ocation: PL=Poro Lining Matura
Hydric Soll Indicators: (Applicable to all L	.RRs, unless otherwise noted.)	Indicators for Problematic Linute College
Histosol (A1)	Polyvalue Below Surface (S8) (LPP & T II)	A un the A (Ao) (I The of
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S, T, U)	
Black Histic (A3)	Loamy Mucky Mineral (51) (LRR 3, 110)	1 2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (E2)	Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	Depleted Matrix (F2)	Pleamont Floodplain Soils (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	La Anomalous Bright Loamy Soils (F20)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (E7)	
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Ked Parent Material (1F2)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LBB II)	U Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MI RA 151)	Utter (Explain in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) // RR O P T	<sup>3</sup> Indiantors of hudronic stations (1)
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P. T. II)	wotland bydrology must be much
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	wettalld hydrology must be present,
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MI RA 150A 150B)	uniess disturbed or problematic.
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MI BA 149)	A)
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MI RA	1/ 1/90 153C 152D)
Dark Surface (S7) (LRR P, S, T, U)		140A, 1000, 100D)
Restrictive Layer (if observed):		
Type:		
Depth (inches):		V
Remarks:		Hydric Soll Present? Yes No
	1	
	11 0	
	Hudre Sail	
	and and	presert
		N .
	- 3ng 111	$( \cdot ) =  \mathcal{D}( \cdot ) $
	1 JO to mottles	s withen 10
	- 1 curla	<u> </u>
	OL SOU DUMA	CC ·
	$\mathcal{V}$	
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Wetland data point wroh021s\_w facing east



Wetland data point wroh021s\_w facing south

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	(3)5
	ON DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site:	City/County: Railes and " Sampling Data - 18-14
Applicant/Owner: DOMINICTN	State: NTZ Sampling Date:
Investigator(s):	Section Township Range: -U
Landform (hillslope, terrace, etc.):	
Subregion (LRR or MLRA):	Lat: 34050' 26. 496" 78 57" (5626" Stope (%): 6
Soil Map Unit Name:	NW/ alapsification: NESS 0 [
Are climatic / hydrologic conditions on the site typical for	
Are Vegetation, Soil, or Hydrology	significantly disturbed?
Are Vegetation, Soil, or Hydrology	naturally problematic? (If needed, explain any ensurers in Remarks)
	(in reeded, explain any answers in Remarks,)
Sommart of Findings - Attach site ma	p showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes	No is the Sampled Area
Hydric Soil Present? Yes	No within a Wetland? Yes No
Remarks:	
$\lambda = 00$	Thee parameters present
1001 acc	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Surface Water (A1)	all that apply)
High Water Table (A2)	Denosits (B15) (LRR II) LI Sparsely Vegetated Concave Surface (B8)
Saturation (A3)	Degen Sulfide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)	zed Rhizospheres along Living Roots (C3)
Sediment Deposits (B2)	ence of Reduced Iron (C4)
Algel Mat or Crust (R4)	nt Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Iron Deposits (B5)	Muck Surface (C7)
Inundation Visible on Aerial Imagery (B7)	Shallow Aquitard (D3)
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   (includes capillary fringe)	Depth (inches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring we	II, aerial photos, previous inspections), if available:
Remarks:	$\Omega$
	NDD / Jalan Brandt
	The might plaged plaser

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.JPDH 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 LI FAL That Are OBL, FACW, or FAC: (A)2 min 40 TI Total Number of Dominant 3 Leunin Species Across All Strata: (B)۵ Percent of Dominant Species 5. That Are OBL, FACW, or FAC: (A/B) 6. 7 Prevalence Index worksheet: 8. Total % Cover of: Multiply by: 100 = Total Cover OBL species \_\_\_\_\_ × 1 = \_\_\_\_\_ x 2 = \_\_\_\_ FACW species 50% of total cover 20% of total cover: Sapling/Shrub Stratum (Plot size: FAC species \_\_\_\_\_ × 3 = \_\_\_\_ 1 strum sinense FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ acaspa americana UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_ Querrus riora 3. Column Totals: \_\_\_\_\_ (A) \_\_\_\_\_ (B) 4 Prevalence Index = B/A = 5. Hydrophytic Vegetation Indicators: 6. 1 - Rapid Test for Hydrophytic Vegetation 7. 2 - Dominance Test is >50% 8 \_\_\_\_\_ 3 - Prevalence Index is ≤3.01 = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) 50% of total cover: 5 20% of total cover: Herb Stratum (Plot size <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. 2. uso MAC 11 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. heiaht. \_\_\_\_\_\_ 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. 20 = Total Cover 50% of total cover:  $I \cap$ 20% of total cover Woody Vine Stratum (Plot size: Calleser 2 onicera 3. 4. 5 Hydrophytic Vegetation Present? No 50% of total cover: / ( 20% of total cover: Remarks: (If observed, list morphological adaptations below).

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SOIL

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Profile Description: (Describe & (b)			Sampling Point:
Depth	ator or confirm th	he absence of Indi	cators.)
(inches) Color (moist) % Color (moist)			
0-4 2,5496 160 - W	<u>De Loca</u>	<u>Texture</u>	Remarks
U-10 76456 1000		<u> </u>	
10 - let 10		25	
10-16- 10 10-173 00		1.5 -	****
<sup>1</sup> Type: C=Concentration D=Depletion RM=Reduced Matrix Month is a		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Hydric Soil Indicators: (Applicable to all LRBs, unless otherwise neted)	<u>1 Grains.</u>	<sup>2</sup> Location: PL=Po	re Lining, M=Matrix.
Histosol (A1)		Indicators for Pro	oblematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)	3) (LRR S, T, U)	1 cm Muck (A	9) (LRR O)
Black Histic (A3)	(S, I, U)	2 cm Muck (A	10) (LRR S)
Hydrogen Sulfide (A4)		Reduced Verti	IC (F18) (outside MLRA 150A,B)
Stratified Layers (A5) Depleted Matrix (F3)	-		ight Loomy Salls (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)		(MI RA 153)	BI
Muck Processon (AR) (LRR P, T, U) Depleted Dark Surface (F7)		Red Parent M	aterial (TF2)
1 cm Muck (A9) (LRR U) Redox Depressions (F8)		Very Shallow I	Dark Surface (TF12)
Depleted Below Dark Surface (A11)		Other (Explain	n in Remarks)
Thick Dark Surface (A12)	A 151)		
Coast Prairie Redox (A16) (MLRA 150A)	2) (LRR O, P, T)	'Indicators of	hydrophytic vegetation and
Sandy Mucky Mineral (S1) (LRR O, S)	β, I, Ψ) β4)	wetland hyd	drology must be present,
Sandy Gleyed Matrix (S4)	3150A 150B)	unless dist	urbed or problematic.
Sandy Redox (S5)	19) (MLRA 1494		
Stripped Matrix (S6)	ils (F20) (MLRA	7 149A, 153C, 153D)	
Bestrictive Lover (Is a beau with			
Type:			
Depth (inches):			
Remarks:		Hydric Soil Presen	t? Yes No
No hy	jorz	sé	present
·			

wroh021\_u



Upland data point wroh021\_u facing east



Upland data point wroh021\_u facing south

# wroh021 soils



Wetland/upland soils

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

Project/Site: Atlantic Coast Pipeline	City/County: Robeson Count	у	Sampling Da	ate: 2/23/2016
Applicant/Owner: DOMINION		State: NC	Sampling Po	pint: wroc100e_w
Investigator(s): Team C	_ Section, Township, Range: 1	No PLSS in this are	а	
Landform (hillslope, terrace, etc.): Field	Local relief (concave, convex	, none): <u>none</u>		Slope (%): 2
Subregion (LRR or MLRA): P Lat: 34.84	650606 Long:	-78.96345011		Datum: WGS 1984
Soil Map Unit Name: Wagram loamy sand, 0 to 6 percent slopes		NWI classific	cation: PEM1	Ad
Are climatic / hydrologic conditions on the site typical for this time of y	vear? Yes 🖌 No	(If no, explain in R	(emarks.)	
Are Vegetation, Soil, or Hydrology significantly	y disturbed? Are "Norma	al Circumstances" p	present? Yes	s No
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed,	explain any answe	rs in Remarks	s.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locati	ons, transects	, importar	nt features, etc.
Hydrophytic Vegetation Present?       Yes No         Hydric Soil Present?       Yes No         Wetland Hydrology Present?       Yes No         Remarks:       Yes No	Is the Sampled Area within a Wetland?	Yes	, No	
Vegetation and soil is disturbed because the wetland is located within	n an agricultural field.			
HYDROLOGY				
Wetland Hydrology Indicators:		Secondary Indica	ators (minimur	m of two required)
Primary Indicators (minimum of one is required; check all that apply)	)	Surface Soil	Cracks (B6)	

Primary Indicators (minimum	of one is require	Surface Soil Cracks (B6)	
Surface Water (A1)		Sparsely Vegetated Concave Surface (B8)	
<ul> <li>High Water Table (A2)</li> </ul>		Drainage Patterns (B10)	
Saturation (A3)		Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1)		Roots (C3) Dry-Season Water Table (C2)	
Sediment Deposits (B2)		Crayfish Burrows (C8)	
Drift Deposits (B3)		(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 Ae	rial Imagery (B7	)	FAC-Neutral Test (D5)
Water-Stained Leaves (E	39)		Sphagnum moss (D8) (LRR T, U)
Field Observations:			
Surface Water Present?	Yes N	lo 🖌 Depth (inches):	
Water Table Present?	Yes 🖌 N	lo Depth (inches):	
Saturation Present? (includes capillary fringe)	Yes 🖌 N	lo Depth (inches): 0	Wetland Hydrology Present? Yes 🖌 No
Describe Recorded Data (stre	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stre Remarks:	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stro Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stro Remarks: Wetland hydrology indicators	eam gauge, mor present	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stro Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stre Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stre Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stre Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stre Remarks: Wetland hydrology indicators	present	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stre Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stre Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:
Describe Recorded Data (stre Remarks: Wetland hydrology indicators	eam gauge, mor	nitoring well, aerial photos, previous inspe	ctions), if available:

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

Sampling Point: wroc100e\_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Number of Dominant Species
1				That Are OBL, FACW, or FAC: (A)
2				Total Number of Deminant
3.				Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species
<u> </u>				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet
7				Total % Cover of: Multiply by:
8				
	0	= Total Cov	er	OBL species $x_1 = 0$
50% of total cover:0	20% of	total cover:	0	FACW species $x^2 = 0$
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $3 \times 3 = 15$
1				FACU species70 x 4 =280
1				UPL species $0 \times 5 = 0$
2				Column Totals: 75 (A) 295 (B)
3				
4				Prevalence Index = B/A = 3.93
5				Hydrophytic Vegetation Indicators:
6.				1. Danid Toot for Hydrophytic Vegetation
7				
0				
ő	0			3 - Prevalence Index is ≤3.0 '
0		= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size: 5 )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Lolium perenne	70	Yes	FACU	be present, unless disturbed or problematic.
2. Geranium carolinianum	35	Yes		Definitions of Four Vegetation Strata:
3 Rumex crispus	5	No	FAC	
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of beight
5				noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in
10				neight.
12	110			
	110	= Total Cov	er	
50% of total cover:55	20% of	total cover:		
Woody Vine Stratum (Plot size: 30 )				
1.				
2				
3				
5				
4			<u> </u>	
5			<u> </u>	Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? Yes No
Remarks: (If observed, list morphological adaptations belo	w).			
Wetland is an a agricultural field and the vegetation is domin	nantly cove	r crops and	weeds	
	,		-	

SOIL

Depth         Matrix         Redox Features           (inches)         Color (moist)         %         Color (moist)         %         Type <sup>1</sup> Loc <sup>2</sup> Texture         Remarks           0-4         10 YR 3/2         100         SL         SL         SL
(inches)         Color (moist)         %         Color (moist)         %         Type <sup>1</sup> Loc <sup>2</sup> Texture         Remarks           0-4         10 YR 3/2         100         SL         SL         SL
0-4 10 YR 3/2 100 SL
4-18 10 YR 3/2 97 10 YR 3/6 3 C PL SI
·
· ·
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.
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) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) 🖌 Depleted Dark Surface (F7) Red Parent Material (TF2)
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) 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) <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, 150B)
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)
Restrictive Layer (if observed):
Type:
Depth (inches):
Remarks:
Hydric soil present



Photo 1 Wetland data point WROC100e\_w facing east



Photo 2 Wetland data point WROC100e\_w facing south

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

Project/Site: Atlantic Coast Pipeline	City/County:	Robeson Coun	ty	Sampling	Date: 2/23/2	2016
Applicant/Owner: DOMINION			State: NC	Sampling	Point: wroc1	00_u
Investigator(s): Team C	Section, Tow	nship, Range: _	No PLSS in this a	area		
Landform (hillslope, terrace, etc.): Slight slope	Local relief (c	concave, conve	k, none): <u>none</u>		_ Slope (%)	<u>2</u>
Subregion (LRR or MLRA): P Lat: 34	.84664777	Long:	-78.96288109		Datum:	WGS 1984
Soil Map Unit Name: Wagram loamy sand, 0 to 6 percent slopes			NWI class	sification: Non	е	
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🔽	, No	(If no, explain ir	n Remarks.)		
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Norm	al Circumstances	s" present? Y	′es 🖌	No
Are Vegetation, Soil, or Hydrology natural	ly problematic?	(If needed	, explain any ans	wers in Rema	rks.)	
SUMMARY OF FINDINGS - Attach site man show	vina samnlina	noint locat	ions transor	ts import	ant featur	os otc

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

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

### HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (	(C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches): 18	
10	
Saturation Present? Yes <u>V</u> No Depth (inches): 10	Wetland Hydrology Present? Yes 🥙 No
Saturation Present? Yes <u>V</u> No Depth (inches): <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>10</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	Wetland Hydrology Present?       Yes       V       No         tions), if available:
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>10</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	Wetland Hydrology Present? Yes <u>V</u> No <u>No</u> tions), if available:
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>10</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No <u></u> tions), if available:
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:
Saturation Present? Yes <u>Ves</u> No Depth (inches): <u>10</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No <u>No</u> tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No <u>No</u> tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No <u></u> tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No <u></u> tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No <u></u> tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No <u></u> tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No <u></u> tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:
Saturation Present? Yes <u>Ves</u> No <u>Depth (inches)</u> : <u>IU</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec Remarks:	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:

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

Sampling Point: <u>wroc100\_u</u>

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Iree Stratum</u> (Plot size:) 1.	% Cover	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2.				Tatal Number of Deminant
3				Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Provalence Index worksheet:
7	. <u> </u>			Total % Cover of Multiply by
8				$\begin{array}{c} \hline \hline \\ \hline \\ OBI \text{ species} \\ \end{array} \begin{array}{c} 0 \\ \hline \\ x 1 = \\ \end{array} \begin{array}{c} \hline \\ x 1 = \\ \end{array} \begin{array}{c} 0 \\ \hline \end{array}$
0		= Total Cov	er 0	EACW species $0$ $x^2 = 0$
50% of total cover:	20% of	total cover:		FAC species $0$ x 3 = $0$
Sapling/Shrub Stratum (Plot size: 15 )				FACU species $\frac{80}{x 4} = \frac{320}{x 4}$
1	·			UPL species 0 x 5 = 0
3				Column Totals: (A) (B)
4.				Provolonce Index = P/A = 4
5				Hydrophytic Vegetation Indicators
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is $\leq 3.0^{1}$
	0	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size: 5)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Lolium perenne	80	Yes	FACU	be present, unless disturbed or problematic.
2. Geranium carolinianum	35	Yes		Definitions of Four Vegetation Strata:
3. Lamium amplexicaule	5	No		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4	. <u> </u>	·		more in diameter at breast height (DBH), regardless of
5				neight.
6 7.				<b>Sapling/Shrub</b> – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				<b>Herb</b> – All herbaceous (non-woody) plants, regardless
9 10				Weedy vine All woody vince greater than 2.29 ft in
11				height.
12				
co.	115	= Total Cov	er	
50% of total cover:	20% of	total cover:	24	
Woody Vine Stratum (Plot size: 30 )				
1	·			
2				
3				
4				
5	0	= Total Cov	or	Hydrophytic Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes No V
Remarks: (If observed list morphological adaptations belo	w)			
	····).			

Depth	Matrix		Redo	Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-12	10 YR 2/2	100					LS		
12-18	10 YR 5/3	100					S		
Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, M	S=Masked	d Sand Gr	ains.	Location: PL=Por	re Lining, M=Matrix.	
iyaric Soli	indicators: (Applica	able to all	LKKS, unless othe	rwise not	ea.)		indicators for Pro		
Histoso	I (A1)		Polyvalue Be	elow Surfa	ice (S8) <b>(L</b>	.RR S, T, U 	) 1 cm Muck (A9	) (LRR O)	
Histic E	pipedon (A2)		Thin Dark Su	Inface (S9	) (LRR S,	T, U)	2 cm Muck (A1	0) (LRR S)	
_ Black H	istic (A3)		Loamy Muck	y Mineral	(⊢1) <b>(LR</b> F	0)	Reduced Vertic	c (F18) (outside MLRA 150A,	
Hydrog	en Sulfide (A4)		Loamy Gleye	ed Matrix (	(F2)		Piedmont Floo	dplain Soils (F19) <b>(LRR P, S,</b> '	
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			Anomalous Bri	ght Loamy Soils (F20)	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F	=6)		(MLRA 153E	3)	
5 cm M	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Da	rk Surface	e (F7)		Red Parent Ma	aterial (TF2)	
Muck P	resence (A8) (LRR U	)	Redox Depression	essions (F	8)		Very Shallow E	Dark Surface (TF12)	
1 cm M	uck (A9) (LRR P, T)		Marl (F10) <b>(L</b>	.RR U)			Other (Explain	in Remarks)	
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)			
Thick D	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) <b>(</b>	LRR O, P,	T) <sup>3</sup> Indicators of	hydrophytic vegetation and	
Coast F	Prairie Redox (A16) (N	ILRA 150A	) Umbric Surfa	ace (F13)	(LRR P, T	, U)	wetland hyd	Irology must be present,	
Sandy I	Mucky Mineral (S1) (L	.RR O, S)	Delta Ochric	(F17) (ML	RA 151)		unless distu	irbed or problematic.	
Sandy (	Gleved Matrix (S4)		Reduced Ve	rtic (F18) (	, (MLRA 15	0A. 150B)		·	
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	9A)		
Stripper	d Matrix (S6)		Anomalous F	Bright Loa	my Soils (	(MI R	A 149A, 153C, 153D)		
Dark Si	urface (S7) <b>(I RR P. S</b>	τ.υ)		Singin Loui		20) (iii2i (			
Restrictive	Laver (if observed):	, ., .,							
Typo									
Depth (in	ches):						Hvdric Soil Presen	t?Yes No 🖌	
Remarks:	,								
Cinano.									



Photo 1 Upland data point WROC100\_u facing east



Photo 2 Upland data point WROC100\_u facing north

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

Project/Site, ACP 9-11-	-14
Applicant/Owner: Dramine List	
Investigator(s): DD14 ISST Sampling Point(UROG	<u>2008</u> f
Landform (hillslope terrace etc.):	W
Subregion (LRR or MLRA) Local relief (concave, convex, none): $(DN C A C R)$ Slope (%):	
Soil Map Unit Name: Lacs 4 JO 38-307 Long: (0 JO 1 170 Datum: USG	6084
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	
Are Vegetation Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" accessed 2. Very X	
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, e	tc.
Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area         Hydric Soil Present?       Yes       No       No       within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       No       No       No       No       No         Remarks:       No       No       No       No       No       No       No       No	
Small torethe linear wetland bottomland w	•
small intermittant stream	
HYDROLOGY	
Wetland Hydrology Indicators:	
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1)	、
High Water Table (A2)	
A Saturation (A3)	
Water Marks (B1)	
Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)	
Control Deposits (B3)	
Algar Mat or Crust (84) Leap Denseity (05) Geomorphic Position (D2)	
La Inon Deposits (B5) L Other (Explain in Remarks) Shallow Aquitard (D3) *	
Water Stained Leaves (D0)	
Field Observations:	
Surface Water Present? Yes No X Dooth (inclusion)	
Water Table Present? Yes No Dopth (inches):	
Saturation Present? Yes No Depth (inches): 5/27-14CP Wetland Wydrology Propert? Yes	
(includes capillary fringe)	
active resoluted bata (stream gauge, monitoring weil, aerial photos, previous inspections), if available:	
Remarks	
Audrober present	
Seren () Preserved	
	]

. Allen

# W3R06008f

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point Absolute Dominant Indicator Dominance Test worksheet: Tree Stratum (Plot size 30 % Cover Species? Status Number of Dominant Species 1 OTA OBL That Are OBL, FACW, or FAC: (A)2 or rubrium Total Number of Dominant x nigra 50 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: \_\_\_\_\_ × 1 = \_\_\_\_\_ OBL species = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_ 50% of total cover: 20% of total cover: FAC species \_\_\_\_\_ × 3 = \_\_\_\_ Sapling/S hrub Stratum (Plot size: 30 FACU species \_\_\_\_\_ x 4 = \_\_\_\_\_ serrula UPL species \_\_\_\_\_ x 5 = \_\_\_\_\_ r11 Imina FAC Column Totals: \_\_\_\_\_ (A) \_\_\_\_ \_\_\_\_\_(B) ORI FAC Prevalence Index = B/A = rum sinense FAC Hydrophytic Vegetation Indicators: 6 anico FACV 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 8  $\square$  3 - Prevalence Index is  $\leq 3.0^{1}$ ての = Total Cover Problematic Hydrophytic Vegetation' (Explain) 50% of lotal cover: 35 20% of total cover 30 Herb Stratum (Plot size <sup>1</sup>Indicators of hydric soil and wetland hydrology must 1 Anies be present, unless disturbed or problematic. 2 OB1 Definitions of Four Vegetation Strata: 3 OBI Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or ۵ ziala DBI almore 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 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 70800 = Total Cover 50% of total cover: 20% of total cover Woody Vine 30 Stratum (Plot size land apprice Sm Van 3. litis rotund 4 5 Hydrophytic = Total Cover Vegetation 50% of total cover: 2 Present? 20% of total cover: Remarks (If observed, list morphological adaptations below).

US Army Corps of Engineers

## SOI

Death	n needed to document the indicator or co	onfirm the absence of indicators.)
Uepth <u>Matrix</u> (inches) Color (moist) %	Redox Features	
$\gamma - 1 / \delta XR 2/1$	Color (moist) % Type' Lou	c <sup>2</sup> Texture Remarks
1-14 INVR 7/2		MUCK >20% organic molen
1 1 7 X+ 1740 21.		lorm
C/-201 10/K 2/1		Isam
<sup>1</sup> Type: C=Conceptration D=D, I i		
Hydric Soil Indicators: (Applicable to all I	Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.
Histosol (A1)	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)	This Dark Surface (S8) (LRR S	1 cm Muck (A9) (LRR O)
Black Histic (A3)	Loamy Mucky Mineral (E1) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	Loamy Gleved Matrix (F2)	Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	Depleted Matrix (F3)	Anomalous Bright Learny Sails (F19) (LRR P, S, T)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	(MI RA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
$\square$ 1 cm Muck (A9) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Marl (F10) (LRR U)	Other (Explain in Remarks)
Thick Dark Surface (A12)	Depleted Ochric (F11) (MLRA 151)	
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (E12) (LRR C	O, P, T) <sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 161)	welland hydrology must be present.
Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (ML RA 150A 1)	unless disturbed or problematic.
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLR	(A 149A)
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (I	MLRA 149A, 153C, 153D)
Sestrictive Laver (If observed)		
Type:		
Depth (inches)		$\sim$
Renarks		Hydric Soll Present? Yes No No
	oryou i se	>>> Present
	0	1 2 3 . 4

wrog008f\_w



Wetland data point wrog008f\_w facing east



Wetland data point wrog008f\_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region	
Project/Site ACP Gity/County: Raho Scon Sampling Data:	
Applicant/Owner: Dominum	1 ,
Investigator(s): DDUEST Section, Township, Bange:	$\cup$
Landform (hillslope, terrace, etc.): Hills (ope ) Local relief (concave, convex, none): Stone (%): @ 7-1	
Subregion (LRR or MLRA).	
Soil Map Unit Name: Bi Do	4
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No. (If no comparis in Demorter )	
Are Vegetation Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" accessed? Ver	
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present?       Yes       No       Is the Sampled Area         Hydric Soil Present?       Yes       No       within a Wetland?       Yes       No         Wetland Hydrology Present?       Yes       No       within a Wetland?       Yes       No         Remarks:       Is the Sampled Area       Wetland?       Yes       No       Yes       No	
Not all three parameters present	
HYDROLOGY	
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)	
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1)	
Align Water Table (A2)     Marl Deposits (B15) (LRR U)     Drainage Patterns (B10)	
Water Marks (B1)	
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2)	
Inundation Visible on Aerial Imagery (B7)	
Water-Stained Leaves (B9)	
Field Observations:	
Surface Water Present? Yes No 🔀 Depth (inches);	
Water Table Present? Yes No Depth (inches)	
(includes capillary fringe) Ves No X Depth (inches); Wetland Hydrology Present? Yes No	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks	
No hydrology present	
Hillslope on edge of I-95	
<u> </u>	

US Army Corps of Engineers

WR06008\_U

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

Sampling Point:

Tree Stratum (Plot size: 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
1. Lindendagen trating	% Cover	<u>Species?</u>	Status	Number of Dominant Species 7
2. Celtis aquianta	-18-	$\rightarrow$	FAC	That Are OBL, FACW, or FAC: (A)
3	<u> </u>		THEN	Total Number of Dominant
4				Species Across All Strata: (B)
5				Percent of Dominant Species
6	*****			That Are OBL, FACW, or FAC:(A/B)
7	*****			Prevalence Index worksheet:
8	******			Total % Cover of: Multiply by
	20			OBL species x 1 =
50% of total cover in		= Total Cov	<sup>er</sup> <i>L</i>	FACW species
Sapling/Shrub Stratum (Plot size: 30	20% 01	total cover	·	FAC species $x_3 =$
1 Liquestrum Schenso	60	. /	FAC	FACU species x 4 =
2 Celtis Laguianto	42	$\rightarrow$	Fixed	UPL species x 5 =
3	-sefection	<b>`</b>	THEN	Column Totals: (A) (B)
4				
5				Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators;
7				1 - Rapid Test for Hydrophytic Vegetation
8.				2 - Dominance Test is >50%
· · · · · · · · · · · · · · · · · · ·	100	= Total Cov	rer	$\square$ Broblematic Hudsenbulis Venetation (South)
50% of total cover: 50	20% of	lotal cover	20	L Problematic Hydrophytic Vegetation (Explain)
Herb Stratum, (Plot size <u>30</u> )				Indicators of hydric soil and wetland hydrology must
1. Maustrum Simense	10	$\sim$	FAC	be present, unless disturbed or problematic.
2	······			Definitions of Four Vegetation Strata:
3.				Tree - Woody plants, excluding vince, 2 in (7.6 cm) or
				more in diameter at breast height (DBH), regardless of
6				height.
2				Sapling/Shrub Woody plants, excluding vines less
8		· · · · · · · · · · · · · · · · · · ·		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9				Herb – All herbaceous (non-woody) plants, regardless
10		•••••••••••••••••••••••••••••••••••••••		of size, and woody plants less than 3.28 ft tall.
11				Woody vine - All woody vines greater than 3.28 ft in
12			,	height.
	10			
50% of total cover:	20% of		<sup>er</sup> Z	
Woody Vine Stratum (Plot size 30	207001	total cover.		
1 Smelora rotin De Police	15		FNC	
2. Smilax alouce	15		FACU	J
3. Untes refunde folica	15	$\overline{\mathbf{x}}$	FAC	
4		¥	A VIC	
5		**************************************		
	45	= Total Cov	er o	Vegetation
50% of total cover 27,5	20% of	total cover:	7	Present? Yes No
Remarks (II observed, list morphological adaptations below	w).			
· ·				

SOIL

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$\mathcal{L}$	800	0

Profile Description: (Describe to the depth needed to down the	Sampling Point:
Depth Matrix Redox Features	m the absence of indicators.)
$\bigcirc$	
$\frac{0}{12} \frac{12}{459} \frac{112}{112}$	- Snan Oci Lorano
$\frac{1}{1-2} \frac{1}{2} $	Sand Toom
16 20 2.39 5/3	Sandy Jorann
Type: C-Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix
Histosol (A1)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Histic Epipedon (A2)	U) 1 cm Muck (A9) (LRR O)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MI RA 150A R
Stratified Layers (A5)	Piedmont Floodplain Soils (F19) (LRR P. S. T)
Organic Bodies (A6) (LRR P, T, U)	Anomalous Bright Loamy Soils (F20)
Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TE2)
1 cm Muck (A9) (LRR P, T)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	Other (Explain in Remarks)
Coast Prairie Redox (A12)	T) <sup>3</sup> Indicators of hydrophytic vogotation and
Sandy Mucky Mineral (S1) (LRR O. S)	wetland hydrology must be present.
Sandy Gleyed Matrix (S4)	unless disturbed or problematic.
Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 14	/ 49A)
Dark Surface (S7) (LRR P. S, T, U)	A 149A, 153C, 153D)
Restrictive Layer (if observed):	
Cepin (incnes).	Hydric Soll Present? Yes No
A	
$\lambda = h = 0$	< <del>(-)</del>
regard soul	present
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wrog008\_u



Upland data point wrog008\_u facing north



Upland data point wrog008\_u facing south

wrog008 soils



Upland/wetland

WETLAND DETERMINATION DATA FO	RM – Atlantic and Gulf Coastal Plain Region
Project/Site. ACPCity	/County: Robeson Sampling Date: 9-11-14
Applicant/Owner: 120mm con	State: NC sompting Date:7
Investigator(s):	tion Townshin Range:
Landform (hillslope, terrace, etc.):	al relief (concave, convoy, page):
Subregion (LRR or MLRA).	28,479 Long 78 59 14 1010 Slope (%):
Soil Map Unit Name: RAINS	Datum: Cong. 10 1 0 10 10 Datum: CASC 084
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation Soil or Hydrology significantly dist	(If no. explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly used	Are "Normal Circumstances" present? Yes No
SUMMARY OF FINDINGS - Attach site man about	(in needed, explain any answers in Remarks.)
Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	In the Deventer La
Hydric Soil Present? Yes No	is the sampled Area
Remarks: Yes No	
1) NO-H	
med inde parame	Pas preserve
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)
High Water Table (A2)	Sparsely Vegetated Concave Surface (B8)
Marl Deposits (B15) (Lf	RR U) Drainage Patterns (B10)
Water Marks (B1)	(C1) Moss Trim Lines (B16)
Sediment Deposits (B2)	Top (C4) Craviteb Purroue (C8)
Drift Deposits (B3)	in Tilled Soils (C6)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
L Iron Deposits (B5) Uther (Explain in Rema	rks) Shallow Aquitard (D3)
Water Stained Leaves (Do)	, FAC-Neutral Test (D5)
Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Dopth (inches)	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes No Depth (inches):	
(includes capillary fringe)	No No
accessible recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks	
	$\frown$
AUDIO DOGI MADI	
J J Pluse	
$\Box$	

WRO60075 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 Pin 1 10 FA That Are OBL, FACW, or FAC: (A) Magno 2. 1 p fotal Number of Dominant 3. ipind timbore = S MALI Species Across All Strata: (B) 4 5. Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B) 6 Prevalence Index worksheet: 8. Total % Cover of: Multiply by: OBL species x1= = Total Cover FACW species \_\_\_\_\_ x 2 = \_\_\_\_\_ 50% of totalicover: 20% of total cover: Sapling/Shrub Stratum (Plot size: FAC species \_\_\_\_\_ × 3 = \_\_\_\_\_ Virgeniane \_\_\_\_\_ × 4 = \_\_\_\_\_ molia FACU species 2 \_\_\_\_\_ × 5 = \_\_\_\_\_ UPL species MAC 3. Column Totals: (A) \_\_\_\_\_ (B) Prevalence Index = B/A = 5. Hydrophytic Vegetation Indicators: 6 1 - Rapid Test for Hydrophytic Vegetation 7 √2 - Dominance Test is >50% 8. 3 - Prevalence Index is ≤3.01 60 = Total Cover Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) of total cover: 20% of total cover (Plot size <sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. thus 2 622  $\mathcal{O}$ Definitions of Four Vegetation Strata: FA1 3. Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or ۵ more in diameter at breast height (DBH), regardless of 5 height. \_\_\_\_\_ 6 Sapling/Shrub - Woody plants, excluding vines less te annu prior and the second and the second and the second second and the second second second and the second s 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. 40 = Total Cover 50% of total cover: \_\_\_\_\_ 20% of total cover Woody Vine Stratum (Plot size Smilter Notinge 2 3. 4. 5 Hydrophytic 10 = Total Cover Vegetation Present? 50% of total cover: 20% of total cover: Remarks (If observed, list morphological adaptations below). Pine plantation

US Army Corps of Engineers

SOIL

WR06007}_	$\mathcal{N}$
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Profile Description: (Describe to the death		Sampling Point:
Depth Matrix	o document the indicator or confirm	the absence of indicators.)
(inches) Color (moist) % Color (m	<u>Redox Features</u>	Tauture
0-6 2.5/2/1		<u>Remarks</u>
6-10 254 4/1 T.CVIR	5/1 5 C RIM AL NO	- rouge along
10-16+2545/1 754P	te o <u>C</u> MIMPL.	Sondiploan
1	216 ID C, RM M, PL	- <u>4</u> (1)
Type: C=Concentration, D=Depletion, RM=Reduced M	atrix, MS=Masked Sand Grains	<sup>2</sup> Location: PL-Porc Lining Matter
Hydric Soil indicators: (Applicable to all LRRs, unles	ss otherwise noted.)	Indicators for Problematic Hydric Soils <sup>3</sup> :
Polyv	value Below Surface (S8) (LRR S, T, U)	1 cm Muck (A9) (LRR O)
Black Histic (A3)	Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4)	V Gleved Matrix (E2)	Reduced Vertic (F18) (outside MLRA 150A,B)
Stratified Layers (A5)	eted Matrix (F3)	Apomalous Bright Learny Seils (F19) (LRR P, S, T)
5 cm Mucky Mineral (A7) (LRR P, T, U)	x Dark Surface (F6)	(MLRA 153B)
Muck Presence (A8) (LRR U)	eled Dark Surface (F7)	Red Parent Material (TF2)
1 cm Muck (A9) (LRR P, T)	(F10) (LRR II)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11)	eted Ochric (F11) (MLRA 151)	Jother (Explain in Remarks)
Coast Prairie Redox (A16) (ML DA 450A)	Manganese Masses (F12) (LRR O, P, T	) <sup>3</sup> Indicators of hydrophytic vegetation and
Sandy Mucky Mineral (S1) (LRR O S)	Cobris (F13) (LRR P, T, U)	wetland hydrology must be present.
Sandy Gleyed Matrix (S4)	Ced Vertic (F18) (MLRA 151)	unless disturbed or problematic.
Sandy Redox (S5)	nont Floodplain Soils (F19) (MLRA 149)	۵)
Dark Surface (S7) (LBB D C T LU	alous Bright Loamy Soils (F20) (MLRA	. 149A, 153C, 153D)
Restrictive Laver (if observed):		
Туре:		
Depth (inches).		$\searrow$
Remarks		Hydric Soil Present? Yes / No
(		
110	$\sim 0$	$\cap$
Auto	E SOU Bresen	
$\sim$		

wrog007f\_w



Wetland data point wrog007f\_w facing east



Wetland data point wrog007f\_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region	
Project/Site ACP City/County Picho COD	
Applicant/Owner: DOTMINION Sampling Date:	
Investigator(s):	- ι
Landform (hillslope, terrace, etc.): Range Q Elles	
Subregion (LRR or MLRA). $T$ Lat: $2H^{\circ}$ SO $(77.40.3)$ and $78^{\circ}$ So $(14.1.77)^{\circ}$ Slope (%): $D = 2$	,
Soil Map Unit Name: Rouge	
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No	
Are Vegetation Soil, or Hydrologystantificantly disturbed? Are "Normal Circumstances" areas 10. V	
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks )	
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.	
Hydrophytic Vegetation Present?     Yes     No       Hydric Soil Present?     Yes     No       Wetland Hydrology Present?     Yes     No       Remarks:     No     Is the Sampled Area within a Wetland?     Yes       No     Yes     No	
HYDROLOGY	
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required)	
Surface Water (A1)	
High Water Table (A2)	
Saturation (A3)	
Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2)	
Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8)	
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7)	
Water-Stained Leaves (B9)	
Field Observations:	
Water Table Present? Yes No Depth (inches):	
Saturation Present?	
(includes capillary fringe) Wetland Hydrology Present? Yes No	
become Necorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks No hydrologye present Rond edge.	

WR06007 -0

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

Sampling Point:

Ture Ohn / 20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30</u> )	% Cover	Species?	Status	Number of Deminant Species
1. Pomos tacala	25	$\mathcal{A}$	FAC	That Are OBL, FACW, or FAC:
2. Juerans nigra	10		FAC	
3. Liquidanlar strongillun	10	$\overline{\mathbf{v}}$	FAC	Total Number of Dominant
4. Brer in Fubrum	K		CAT	Species Across All Strata: (B)
5.	<u> </u>			Percent of Dominant Species
6				That Are OBL, FACW. or FAC:(A/B)
7				Duralization
1.	·····			Prevalence Index worksheet:
δ				Total % Cover of: Multiply by:
	50	= Total Cov	/er	OBL species x 1 =
50% of total cover: 25	20% of	total cover	10	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)		/		FAC species x 3 =
1 Symplocostinctoria	15	$\mathbf{x}$	FAC	FACU species x 4 =
2 April ruloum	5		EA(	UPL species x 5 =
3. Morella contera	IT		X LAC	Column Totals: (A) (B)
4. Nusasylvatica	<u> </u>	<u> </u>	EAC	
5			EEX	Prevalence Index = B/A =
6				Hydrophytic Vegetation Indicators:
7.				1 - Rapid Test for Hydrophytic Vegetation
8		••••••••••••••••••••••••••••••••••••••		🔀 2 - Dominance Test is >50%
	110			3 - Prevalence Index is ≤3.0'
	40	= Total Cov	'er 🗸	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 40	20% of	lotal cover	<u> </u>	
Hein Stratum (Filot size)	.10		~	Indicators of hydric soil and wetland hydrology must
Laspalum notatum	50	$\underline{\checkmark}$	1-ACU	be present, unless disturbed or problematic.
2. CAPERUS retarsus	<u>    5                                </u>		FACU	Definitions of Four Vegetation Strata:
3. Lespedezh striata	_1D		FAU	
4 Eupatorium Istunditalia	ID		FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
5				height.
6		******		
2	· · · · · · · · · · · · · · · · · · ·			Sapling/Shrub - Woody plants, excluding vines less
8	· · · · · · · · · · · · · · · · · · ·			and o in borr and greater than 5.20 it (7 m) fail.
9				Herb – All herbaceous (non-woody) plants, regardless
10				of size, and woody plants less than 3.28 ft tall.
11				Woody vine - All woody vines greater than 3.28 ft in
12				height.
	75_	= Total Cov	'er	
50% of total cover: $2$ , $C$	20% of	total cover	15	
vvoody vine Stratum (Plot size 50	Ŷ	/	FAC	
VIAS Poture tolla	$\underline{>}$	$\sim$	110	
2.				
3				
4.				
5				The shear of the state of the s
_	3	= Total Cov	er	Vegetation
50% of total cover: 2.4	20% ი1	total cover	1	Present? Yes No
Remarks (If observed, list morphological adaptations belo	w).			
	<i>(</i> *			

#### SOIL

WROGOD7-U Sampling Point:

Profile Desc	cription: (Describe to the de	pth needed to document t	he indicator	or confirm	the absence of inc	licators.)	
(inches).	Matrix	Redox Fea	lures	7.0.000			
D-117	100101 (Inoist) 70	Color (moist) %	<u>Type</u>	_loc <sup>2</sup>	Texture	Remarks	
1 - 1	<u>of 1011(51)</u>				FANLY 107A	th	
					×		
	- 2 Million I Manhamatana ay manana Manana ana amin'ny fisiana amin'ny fisiana						
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	I will be that I have represented by presented to a second probably write the						
		the second se	TT DI ALLES STORT DE LA CALLES				
1.Turne: C=C							
Hydric Soil	Discontration, D=Depletion, RM	=Reduced Matrix, MS=Mas	ked Sand Gr	ains.	<sup>2</sup> Location: PI =P	ore Lining M=Matrix	/
	(Applicable to al	LRRs, unless otherwise	noted.)		Indicators for Pr	oblematic Hydric S	Soils <sup>3</sup>
	(A1)	Polyvalue Below Si	urface (S8) (L	RR S, T, U)			
Black Hi	stic (A3)	Thin Dark Surface	(S9) (LRR S,	Τ, U)	2 cm Muck (A	(LRR S)	
Hydroge	n Sulfide (A4)	Loamy Mucky Mine	ral (F1) (LRR	0)	Reduced Ver	tic (F18) (outside N	ILRA 150A.B)
Stratified	Lavers (A5)	Loamy Gleyed Mat	rix (F2)		Piedmont Flo	odplain Soils (F19)	(LRR P, S, T)
Organic	Bodies (A6) (LRR P. T. U)	Beday Dark Surface	3)		Anomalous B الـــــــــــــــــــــــــــــــــــ	Bright Loamy Soils (F	20)
🛛 🗍 5 cm Mu	cky Mineral (A7) (LRR P, T, U	Depleted Dark Surfac	e(rb) 200 (57)		(MLRA 153	3B)	
Muck Pre	esence (A8) (LRR U)	Redox Depressions	ace (r7) (F8)		Red Parent N	Aaterial (TF2)	
1 cm Mu	ck (A9) (LRR P, T)	Marl (F10) (LRR U)	, (. 0)		Other (Evolution	Dark Surface (TF12	2)
	Below Dark Surface (A11)	Depleted Ochric (F	11) (MLRA 18	51)		n in Remarks)	
	airia Redox (A12)	Iron-Manganese Mi	asses (F12) (I		) <sup>3</sup> Indicators o	of hydrophytic veget	ation and
Sandy M	ucky Mineral (S1) (IRPO B)	A) Umbric Surface (F1	3) (LRR P, T	, U)	wetland hy	ydrology must be pre	esent.
🔲 Sandy G	leyed Matrix (S4)	Delta Ochric (F17)	MLRA 151)		unless dis	turbed or problemat	ic.
🔲 Sandy R	edox (S5)	Piedmont Floodalu	8) (MLRA 15)	0A, 150B)			
Stripped	Matrix (S6)	Anomalous Bright	n Solis (F19)	(MLRA 149	A)		
Dark Sur	face (S7) (LRR P, S, T, U)		Damy Solis (F	-20) (MILRA	149A, 153C, 153D)	)	
Restrictive L	ayer (if observed):						
Туре:							
Depth (inc	hes).						$\sim$
Remarks	an ' fan a' fan an ar an ar an a' an a' ann a' ann a' an an an an an an an an an	nan dagi Makadar mentangan dan kabupatén dan menter di Kabupatén di Kabupatén di Kabupatén di Kabupatén di Kab			riyunc son Prese	ntr res	No <u> </u>
	~	$\land$	ı	-	<u> </u>		
	Raid	C 1)/		$\bigcirc$	()		
	1.040	side fil	1 mc	ever	1al		
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	No	ALDELE	Col		$\cdot$		
		nyanc	2011	pr	esent		
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and a second second second							

wrog007\_u



Upland data point wrog007\_u facing north



Upland data point wrog007\_u facing south

wrog007 soils



Upland/wetland

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

Project/Site: Atlantic Coa	st Pipeline	e			City/C	ounty: Rol	beson		Samplin	g Date: 11/	21/2014
Applicant/Owner: Dominion					·		State: NC	Sampline	a Point: WF	₹OB001f_w	
Investigator(s): TP, RH					Section Townshin Range. No PLSS in this area						
Landform (hillslope terra	ce etc.):	depression			Local	relief (con	cave convex	none). concave		Slope ('	<sub>%)</sub> . 0
Subragion (LDD or MLDA	л. Р			L at: 34,838	836887			78.98967278			. WGS 1984
	). <u> </u>	sandy loam		Lal			Long		PE		I
Soil Map Unit Name:	itego inte	Sandy Ioann						NWI classifi	cation: 11	040	
Are climatic / hydrologic o	onditions	on the site typ	ical fo	r this time of y	ear? Y	es 🔽	No	(If no, explain in I	Remarks.)	,	
Are Vegetation, S	oil	, or Hydrology	/	significantly	y distur	bed?	Are "Norma	I Circumstances"	present?	Yes 🔽	No
Are Vegetation, S	oil	, or Hydrology	/	naturally pr	roblema	atic?	(If needed,	explain any answ	ers in Rem	arks.)	
SUMMARY OF FIN	DINGS -	- Attach si	ite m	ap showing	g san	npling po	oint locatio	ons, transect	s, impor	tant feat	ures, etc.
Hydrophytic Vegetation	Present?	Yes	~	No		la tha Ca					
Hydric Soil Present?		Yes	~	No		is the Sa		Vac			
Wetland Hydrology Pres	sent?	Yes	~	No	_	within a	wetiand?	res	NO		
hydrology, although we d	lid note rh	izospheres. T	here i	may be upland	l inclusi	ons located	d in side of we	etland boundary (	10%).		
	liaatara							Coopdon/India	atora (mini	incurs of tur	a required)
wetland Hydrology Ind	licators:		1	11 46 . 4				Secondary Indic	ators (mini	<u>mum of two</u>	<u>) required)</u>
Primary Indicators (mini	mum of oi	ne is required;	check	(all that apply)	)			Surface Sol	I Cracks (E	36)	
Surface Water (A1)	<b>A O )</b>	_	_ Aqu	iatic Fauna (B'	13)	- III		Sparsely Ve	egetated Co	oncave Sur	face (B8)
High Water Table (	42)	_			5) (LRR U) Drainage Patterns (B10)						
Water Marks (P1)		~	_ пус ′ Охі	dizod Phizocol	Ddor (C1) Moss Trim Lines (B16)						
Sediment Deposits	(B2)	<u> </u>	_ Uxi Dro	sence of Redu	uced Iron (C4) Cravitish Burrows (C8)						
Drift Deposits (B3)	(02)		_ TTC Rec	ent Iron Redu	ction in	Tilled Soils	s (C6)	Saturation \	/isible on A	Aerial Image	erv (C9)
Algal Mat or Crust (	B4)		_ Thi	n Muck Surface	e (C7)		5 (00)	Geomorphic	Position (		Jiy (00)
Iron Deposits (B5)	51)		_ Oth	er (Explain in I	Remark	(s)		Shallow Aqu	uitard (D3)	.02)	
Inundation Visible of	n Aerial Ir	magery (B7)	_			- /		✓ FAC-Neutra	l Test (D5)	)	
Water-Stained Leav	/es (B9)							Sphagnum	moss (D8)	(LRR T, U)	)
Field Observations:											
Surface Water Present?	Ye Ye	es No _	~	Depth (inches	s):		_				
Water Table Present?	Ye	es <u>No</u> No	~	Depth (inches	s):		_				
Saturation Present? (includes capillary fringe	Ye e)	es No _	~	Depth (inches	s):		Wetland I	Hydrology Prese	nt? Yes	<u> </u>	۰o
Describe Recorded Dat	a (stream	gauge, monito	oring w	ell, aerial phot	tos, pre	vious inspe	ections), if ava	ailable:			
Remarks:											

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

Sampling Point: WROB001f\_w

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
	20	Vee		That Are OBL, FACW, or FAC: (A)
2. <u>Nex opaca</u>		Vee		Total Number of Dominant
3. <u>Acer rubrum</u>	15	res	FAC	Species Across All Strata:6 (B)
4				Percent of Dominant Species
5	·			That Are OBL, FACW, or FAC: 100 (A/B)
6				Dravalanaa Inday warkabaati
7				Total % Cover of Multiply by
8				ODL ana size 0 u.4 0
	50	= Total Cov	er	$\begin{array}{c} \text{OBL species} \\ \hline 20 \\ \hline 20 \\ \hline 40 \\ \hline \end{array}$
50% of total cover:25	20% of	total cover:	10	FACW species $22 = 10$
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $x^3 = 0$
1. Persea palustris	10	Yes	FACW	FACU species $x 4 = 0$
2. Ilex coriacea	10	Yes	FACW	UPL species $0 \times 5 = 0$
3. Liquidambar styraciflua	10	Yes	FAC	Column Totals: (A) (B)
4.				Provolonce Index = P/A = 2.75
5.				
6.				nyurophytic vegetation indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
8				2 - Dominance Test is >50%
0	30	- Total Cov		Y 3 - Prevalence Index is ≤3.0 <sup>+</sup>
50% of total approx 15	200% of		6	Problematic Hydrophytic Vegetation (Explain)
50% of total cover.	20% 01	lotal cover.		
Herb Stratum (Plot size:)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
2		·		Definitions of Four Vegetation Strata:
3			. <u> </u>	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5		. <u> </u>		neight.
6		<u> </u>		Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				<b>Woody vine</b> – All woody vines greater than 3 28 ft in
11				height.
12				
	0	= Total Cov	er	
50% of total cover: 5	20% of	total cover:	2	
Woody Vine Stratum (Plot size: 30)				
1.				
2				
3				
4				
5		·		
5	0	- Total Cav		Hydrophytic Vegetation
E00/ of total power: 0			0	Present? Yes <u>No</u>
50% of total cover.	20% 0i	total cover.		
Remarks: (If observed, list morphological adaptations belo	w).			
1				

SOIL

Profile Desc	ription: (Describe t	o the dept	h needed to docun	nent the i	indicator	or confirm	the absence	of indicators.)		
Depth	Matrix		Redo	x Features	s					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks		
0-4	10YR 3/1	95	10YR 4/6	5	С	PL	SL			
4-12	10YR 4/1	100					SCL			
· · · · · · · · · · · · · · · · · · ·										
·					·					
·					·					
					·					
<sup>1</sup> Type: C=Co	ncentration, D=Depl	etion, RM=	Reduced Matrix, MS	S=Masked	d Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.		
Hydric Soil I	ndicators: (Applica	ble to all	LRRs, unless other	wise not	ed.)		Indicators	s for Problematic Hydric Soils <sup>3</sup> :		
Histosol	(A1)		Polvvalue Be	low Surfa	ce (S8) (L	RR S. T. U)	1 cm I	Muck (A9) (LRR O)		
Histic Ep	ipedon (A2)		Thin Dark Su	rface (S9)	) (LRR S.	T. U)	2 cm l	Muck (A10) (LRR S)		
Black His	stic (A3)		Loamy Mucky	/ Mineral	(F1) <b>(LRR</b>	0)	Reduc	ced Vertic (F18) (outside MLRA 150A,B)		
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (	(F2)		Piedmont Floodplain Soils (F19) (LRR P. S. T)			
Stratified	Layers (A5)		Depleted Mat	rix (F3)			Anomalous Bright Loamy Soils (F20)			
Organic Bodies (A6) (LRR P, T, U)								(MLRA 153B)		
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)							Red Parent Material (TF2)			
Muck Presence (A8) (LRR U) Redox Depressions (F8)							Very Shallow Dark Surface (TF12)			
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Other (Explain in Remarks)							
Depleted	Below Dark Surface	e (A11)	Depleted Och	nric (F11)	(MLRA 1	51)				
Thick Da	rk Surface (A12)		Iron-Mangane	ese Mass	es (F12) <b>(</b>	LRR O, P, 1	) <sup>3</sup> Indi	cators 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 G	leyed Matrix (S4)		Reduced Ver	tic (F18) <b>(</b>	(MLRA 15	0A, 150B)				
Sandy R	edox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	A)			
Stripped	Matrix (S6)		Anomalous B	right Loar	my Soils (	F20) <b>(MLRA</b>	149A, 153C	), 153D)		
Dark Sur	face (S7) (LRR P, S	, T, U)								
Restrictive L	ayer (if observed):									
Туре:										
Depth (inc	:hes):						Hydric Soi	l Present? Yes 🖌 No		
Remarks:										



Photo 1 Wetland data point WROB001f\_w facing north



Photo 2 Wetland data point WROB001f\_w facing south
Project/Site: Atlantic Coast Pipeline	_ City/County: Ro	beson	Sampling Date: 11/21/2014
Applicant/Owner: Dominion		State: NC	Sampling Point: WROB001_u
Investigator(s): TP, RH	_ Section, Townsh	hip, Range: <u>No PLSS in this area</u>	a
Landform (hillslope, terrace, etc.): hill slope	_ Local relief (con	cave, convex, none): <u>none</u>	Slope (%): <u>3</u>
Subregion (LRR or MLRA): P Lat: 34.83	813825	Long: <u>-78.98988041</u>	Datum: WGS 1984
Soil Map Unit Name: Lakeland sand, 0 to 6 percent slopes		NWI classific	ation: None
Are climatic / hydrologic conditions on the site typical for this time of y	/ear?Yes 🖌	No (If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology significant	ly disturbed?	Are "Normal Circumstances" p	oresent? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	oroblematic?	(If needed, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling p	oint locations, transects	, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No <u>′</u>
Remarks:					
Upland point.					

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

Sampling Point: WROB001\_u

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Quercus alba	20	Vee	FACU	That Are OBL, FACW, or FAC:3 (A)
		res	FACU	Total Number of Dominant
3. Quercus nigra	10	No	FAC	Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <sup>60</sup> (A/B)
6				
7.				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
· ·	60	= Total Cove	ər	OBL species x 1 =0
50% of total covor: 30	20% of	total covor:	12	FACW species x 2 =0
So // Or total cover.	20 % 01			FAC species $x_3 ={150}$
Sapling/Shrub Stratum (Plot size:)	15	Vec	FAC	FACU species $50 \times 4 = 200$
1. <u>Nex Opaca</u>	15	Vee	TAC	UPL species $0 \times 5 = 0$
2. Symplocos tinctoria	15	res	FAC	$\begin{array}{c} 100 \\$
3. Quercus nigra	10	Yes	FAC	
4				Prevalence Index = $B/A = 3.5$
5				Hydrophytic Vegetation Indicators:
6				1 - Ranid Test for Hydronbytic Vegetation
7.				2 Dominance Test is >50%
8				2 - Dominance results > 50 %
	40	= Total Cove	⊃r	$\sim$ 3 - Prevalence index is $\leq 3.0$
50% of total covor: 20	20% of	total covor:	8	Problematic Hydrophytic Vegetation (Explain)
Start Otratum (Distainer 5	20 % 01			
Herb Stratum (Plot size:)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				<b>Tree</b> – Woody plants, excluding vines 3 in (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6.				Sanling/Shrub - Woody plants, excluding vines, less
7		·		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		·		
0		<u> </u>		Herb – All herbaceous (non-woody) plants, regardless
9		·		
10				Woody vine – All woody vines greater than 3.28 ft in
11		<u> </u>		height.
12		<u> </u>		
	0	= Total Cove	er	
50% of total cover: 5	20% of	total cover:	2	
Woody Vine Stratum (Plot size: 30 )				
1.				
2				
3		·		
0		· ·		
4		<u> </u>		
5		·		Hydrophytic
	0	= Total Cove	er	Vegetation Present? Yes No
50% of total cover:0	20% of	total cover:	0	
Remarks: (If observed, list morphological adaptations belo	w).			·

SOIL

Profile Desc	ription: (Describe f	o the dept	h needed to docu	ment the indic	cator or confirm	the absence	of indicators.)	
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	%	Color (moist)	<u>%</u> Ty	ype <sup>1</sup> Loc <sup>2</sup>	Texture	Remarks	
0-2	10YR 3/1	100				LS	salt and pepper sand	
2-12	10YR 4/4	100				SCL		
·								
<sup>1</sup> Type: C=C	oncentration D=Depl	etion RM=	Reduced Matrix M	S=Masked Sar	nd Grains	<sup>2</sup> Location	PI =Pore Lining M=Matrix	
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless othe	rwise noted.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :	
Histosol	(A1)		Polyvalue Be	elow Surface (S	S8) (LRR S, T, U	l) 1 cm l	Muck (A9) (LRR O)	
Histic E	bipedon (A2)		Thin Dark Su	urface (S9) (LF	R S, T, U)	2 cm l	Muck (A10) (LRR S)	
Black Hi	stic (A3)		Loamy Muck	y Mineral (F1)	(LRR O)	Reduc	ced Vertic (F18) (outside MLRA	150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (F2)		Piedm	nont Floodplain Soils (F19) (LRR I	P, S, T)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)		Anom	alous Bright Loamy Soils (F20)	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F6)		(ML	RA 153B)	
5 cm Mu	icky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Da	rk Surface (F7	·)	Red P	Parent Material (TF2)	
Muck Pr	esence (A8) (LRR U)		Redox Depre	essions (F8)		Very S	Shallow Dark Surface (TF12)	
1 cm Mu	ick (A9) <b>(LRR P, T)</b>		Marl (F10) <b>(I</b>	.RR U)		Other	(Explain in Remarks)	
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11) <b>(ML</b>	.RA 151)			
Thick Da	ark Surface (A12)		Iron-Mangan	ese Masses (F	F12) <b>(LRR O, P,</b>	T) <sup>3</sup> Indie	cators of hydrophytic vegetation a	and
Coast P	rairie Redox (A16) <b>(N</b>	ILRA 150A)	) Umbric Surfa	ace (F13) <b>(LRF</b>	R P, T, U)	we	tland hydrology must be present,	
Sandy N	1ucky Mineral (S1) <b>(L</b>	RR O, S)	Delta Ochric	(F17) <b>(MLRA</b>	151)	unl	ess disturbed or problematic.	
Sandy G	Bleyed Matrix (S4)		Reduced Ve	rtic (F18) <b>(MLF</b>	RA 150A, 150B)			
Sandy F	Redox (S5)		Piedmont Florence	odplain Soils	(F19) <b>(MLRA 14</b>	9A)		
Stripped	Matrix (S6)		Anomalous E	Bright Loamy S	Soils (F20) <b>(MLR</b>	A 149A, 153C	C, 153D)	
Dark Su	rface (S7) <b>(LRR P, S</b>	, T, U)				1		
Restrictive	Layer (if observed):							
Туре:								~
Depth (in	ches):					Hydric Soi	Present? Yes No _	
Remarks:								



Photo 1 Upland data point WROB001\_u facing north



Photo 2 Upland data point WROB001\_u facing south

Project/Site: Atlantic Coast Pipeline		City/County: F	Robeson		_ Sampling Da	te: 11/21/2014
Applicant/Owner: Dominion				State: NC	_ Sampling Poi	nt: WROB002f_w
Investigator(s): TP, RH		Section, Town	ship, Range: <u>1</u>	No PLSS in this ar	ea	
Landform (hillslope, terrace, etc.): drainage way		Local relief (co	oncave, convex	, none): <u>concave</u>	S	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P	Lat: 34.8	3754522	Long:	-78.98996103		Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam				NWI classif	ication: PFO1/4	IA
Are climatic / hydrologic conditions on the site typical for Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS – Attach site m	r this time of significan naturally <b>ap_showi</b> i	year? Yes <u>/</u> htly disturbed? problematic?	No Are "Norm (If needed, point locati	(If no, explain in al Circumstances" explain any answ ons. transect	Remarks.) present? Yes vers in Remarks <b>s. importan</b> t	No .) t features, etc.
Hydrophytic Vegetation Present?       Yes       ✓         Hydric Soil Present?       Yes       ✓         Wetland Hydrology Present?       Yes       ✓         Remarks:       Forested wetland depicted on NWI maps. Weak hydro	_ No _ No _ No logy. May co	Is the s within	Sampled Area a Wetland?	Yes	/ No	

Secondary Indicators (minimum of two required)
Surface Soil Cracks (B6)
Sparsely Vegetated Concave Surface (B8)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
Saturation Visible on Aerial Imagery (C9)
Geomorphic Position (D2)
Shallow Aquitard (D3)
FAC-Neutral Test (D5)
Sphagnum moss (D8) (LRR T, U)
/drology Present? Yes 🖌 No
able:

Sampling Point: WROB002f\_w

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50 )	% Cover	Species?	Status	Number of Dominant Species
1. Quercus nigra	25	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2. Pinus taeda	10	Yes	FAC	Total Number of Dominant
3.				Species Across All Strata: 6 (B)
4				(=)
5				Percent of Dominant Species
<u> </u>				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				$\frac{1}{0} \frac{1}{0} \frac{1}$
	35	= Total Cove	er _	
50% of total cover:	20% of	total cover:	1	FACW species $\underline{75}$ $x_2 = \underline{225}$
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $10$ $x 3 = 10$
1 Liquidambar styraciflua	15	Yes	FAC	FACU species $10 \times 4 = 40$
2 Acer rubrum	15	Yes	FAC	UPL species $0 \times 5 = 0$
	10	Ves	FAC	Column Totals: <sup>85</sup> (A) <sup>265</sup> (B)
	10	Vec	FACU	
4. <u>Quercus nemisphaenca</u>		103	TAGO	Prevalence Index = B/A =3.11
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8.				$\frac{2}{2} = \frac{2}{2} = \frac{2}{2} = \frac{1}{2} = \frac{1}$
	50	= Total Cov	≏r	$\sim$ 3 - Flevalence index is $\leq 5.0$
50% of total power: 25	200/ of		10	
50% of total cover.	20 % 01			
Herb Stratum (Plot size:)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1				be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				<b>Tree</b> – Woody plants, excluding vines, 3 in, (7.6 cm) or
4.				more in diameter at breast height (DBH), regardless of
5				height.
6				One line (Ohen han Manchen fan te ster heiter en in en heiter
7				than 3 in DBH and greater than 3 28 ft (1 m) tall
· · · · · · · · · · · · · · · · · · ·				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3 28 ft in
11				height.
12.				
	0	= Total Cove	er	
50% of total cover 5	20% ~	total cover:	2	
	20% 01			
Woody Vine Stratum (Plot size: 50 )				
1				
2				
3				
4.				
5				the described's
0	0	- Total Cov		Hydropnytic Vegetation
			0	Present? Yes No
50% of total cover:	20% of	total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL

Profile Desc	ription: (Describe to	the dept	h needed to docum	nent the ir	dicator	or confirm t	the absence	of indicate	ors.)	
Depth	Matrix		Redo	x Features						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-12	10YR 3/2	95	10YR 4/6	5	С	PL	SCL			
				·						
				·						
				·						
				·						
		<u> </u>		·	<u> </u>					
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM=	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore L	ining, M=Matri	x.
Hydric Soil	Indicators: (Applical	ble to all L	RRs, unless other	wise note	d.)		Indicators	for Proble	matic Hydric	Soils':
Histosol	(A1)		Polyvalue Be	low Surfac	e (S8) <b>(L</b>	RR S, T, U)	1 cm N	/luck (A9) <b>(I</b>	LRR O)	
Histic Ep	pipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm M	/luck (A10)	(LRR S)	
Black Hi	stic (A3)		Loamy Muck	y Mineral (	F1) <b>(LRR</b>	0)	Reduc	ed Vertic (F	18) (outside M	/LRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F	-2)		Piedm	ont Floodpl	ain Soils (F19)	(LRR P, S, T)
Stratified	d Layers (A5)		Depleted Ma	trix (F3)			Anoma	alous Bright	Loamy Soils (	F20)
Organic	Bodies (A6) (LRR P,	T, U)	Kedox Dark	Surface (F6	5)		(MLI	RA 153B)		
5 cm Μι	icky Mineral (A7) <b>(LRF</b>	R P, T, U)	Depleted Dar	k Surface	(F7)		Red P	arent Mater	ial (TF2)	
Muck Pr	esence (A8) (LRR U)		Redox Depre	ssions (F8	5)		Very S	Shallow Darl	k Surface (TF1	2)
1 cm Mu	ick (A9) (LRR P, T)		Marl (F10) (L	RR U)			Other	(Explain in I	Remarks)	
Deplete	d Below Dark Surface	(A11)	Depleted Och	nric (F11) <b>(</b>	MLRA 1	51)				
Thick Da	ark Surface (A12)		Iron-Mangan	ese Masse	s (F12) <b>(</b>	LRR O, P, T	) <sup>3</sup> Indic	cators of hyd	drophytic veget	tation and
Coast P	rairie Redox (A16) (MI	LRA 150A	Umbric Surfa	ce (F13) <b>(l</b>	RR P, T	, U)	wet	land hydrol	ogy must be pi	esent,
Sandy N	lucky Mineral (S1) (LF	RR O, S)	Delta Ochric	(F17) (MLI	RA 151)		unl	ess disturbe	ed or problema	tic.
Sandy G	Bleved Matrix (S4)		Reduced Ver	, tic (F18) <b>(N</b>	, MLRA 15	0A. 150B)				
Sandy F	Redox (S5)		Piedmont Flo	odplain Sc	oils (F19)	(MLRA 149	A)			
Stripped	Matrix (S6)		Anomalous E	Bright Loam	nv Soils (I	F20) (MLRA	, 149A, 153C	. 153D)		
Dark Su	rface (S7) (LRR P. S.	T. U)		<b>J</b>	<b>J</b> (	- / (	-,	,,		
Restrictive	Laver (if observed):									
Type:										
Denth (in								<b>D</b>	¥~~ ¥	N
Depth (In	cnes):						Hydric Soli	Present?	res	NO
Remarks:										



Photo 1 Wetland data point WROB002f\_w facing north



Photo 2 Wetland data point WROB002f\_w facing south

Project/Site: Atlantic Coast Pipeline	_ City/County: Ro	obeson	_ Sampling Date: <u>11/21/2014</u>
Applicant/Owner: Dominion		State: NC	_ Sampling Point: WROB002_u
Investigator(s): TP, RH	Section, Towns	ship, Range: <u>No PLSS in this ar</u>	ea
Landform (hillslope, terrace, etc.): hill slope	Local relief (cor	ncave, convex, none): <u>none</u>	Slope (%): <u>3</u>
Subregion (LRR or MLRA): P Lat: <u>34.83</u>	37435	Long: <u>-78.99012321</u>	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam		NWI classi	fication: None
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 significant	tly disturbed?	Are "Normal Circumstances'	' present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology naturally p	problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showir	ng sampling p	ooint locations, transect	s, important features, etc.

Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes 🖌 🖌 Yes Yes	No No No	Is the Sampled Area within a Wetland?	Yes	No <u> </u>
Remarks:			·		
Upland point.					

wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Primary Indicators (minimum of one is required; check all that apply)	<ul> <li>Surface Soil Cracks (B6)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> </ul>
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T. U)
Field Observations:	
Surface Water Present?       Yes No _       Depth (inches):         Water Table Present?       Yes No _       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	Wetland Hydrology Present? Yes No
Remarks:	

Sampling Point: WROB002\_u

	Absolute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: <u>30</u> )	% Cover	Species?	Status	Number of Dominant Species	
1. Pinus taeda	40	Yes	FAC	That Are OBL, FACW, or FAC: 4 (A)	
2				Total Number of Densin and	
3.				Species Across All Strata: 4 (B)	
4			·		
F.				Percent of Dominant Species	
<u> </u>				That Are OBL, FACW, or FAC: (A/B	3)
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8				$\frac{1}{ORI} = \frac{0}{2}$	
	40	= Total Cov	er		
50% of total cover: 20	20% of	total cover	8	FACW species $x 2 = \frac{255}{255}$	
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $x_3 = 0$	
1. Symplocos tinctoria	20	Yes	FAC	FACU species $0 \times 4 = 0$	
2 llex opaca	15	Yes	FAC	UPL species $0 \times 5 = 0$	
2. Liquidambar styraciflua	10	Yes	FAC	Column Totals: (A) (B)	)
4				Prevalence Index = B/A =3	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				✓ 2 - Dominance Test is >50%	
8				$\checkmark$ 3 - Prevalence Index is $\leq 3.0^{1}$	
	45	= Total Cov	er	Brohlomatia Hydrophytia Vogatatian <sup>1</sup> (Evaluin)	
50% of total cover: 22.5	20% of	total cover	9		
Llerh Stratum (Diet eize: 5			·		
				Indicators of hydric soil and wetland hydrology must	
1			<u> </u>	be present, unless disturbed or problematic.	
2				Definitions of Four Vegetation Strata:	
3				Tree – Woody plants, excluding vines, 3 in, (7.6 cm) o	or
4				more in diameter at breast height (DBH), regardless o	of
5				height.	
6.				Sanling/Shrub - Woody plants excluding vines less	
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8			·		
0				<b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants loss than 3.28 ft tall	s
9					
10				Woody vine – All woody vines greater than 3.28 ft in	
11				height.	
12					
	0	= Total Cov	er		
50% of total cover: 5	20% of	total cover	2		
Woody Vine Stratum (Plot size: 30)					
1					
2					
2					
3			······		
4					
5				Hydrophytic	
	0	= Total Cov	er	Vegetation	
50% of total cover:0	20% of	total cover	0	Present? Yes No	
Remarks: (If observed, list morphological adaptations belo	w).				
	,				

SOIL

Profile Desc	ription: (Describe t	o the dept	h needed to docu	ment the in	ndicator o	r confirm	the absence	of indicato	ors.)	
Depth	Matrix		Redo	ox Features	5					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	10YR 3/1	100					LS	salt and p	epper sand	
3-12	10YR 4/4	100					SL			
						<u> </u>				
·					······································	<u> </u>				
·										
$^{1}$ Type: C=C		etion RM=	Reduced Matrix M	S=Masked	Sand Gra	ins	<sup>2</sup> Location:	PI =Pore I	ining M=Matri	
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless othe	rwise note	ed.)		Indicators	for Proble	matic Hydric S	soils <sup>3</sup> :
Histosol	(A1)		Polvvalue B	elow Surfac	ce (S8) (LF	RR S. T. U)	1 cm I	Muck (A9) <b>(I</b>	_RR O)	
Histic Ep	bipedon (A2)		Thin Dark S	urface (S9)	(LRR S, 1	, U) ΄, ΄,	2 cm I	Muck (A10)	(LRR S)	
Black Hi	stic (A3)		Loamy Muck	ky Mineral (	F1) (LRR	O)	Reduc	ed Vertic (F	18) (outside M	/ILRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix (I	-2)		Piedm	ont Floodpla	ain Soils (F19)	(LRR P, S, T)
Stratified	d Layers (A5)		Depleted Ma	atrix (F3)			Anom	alous Bright	Loamy Soils (I	-20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F	6)		(ML	RA 153B)		
5 cm Mu	ıcky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Da	irk Surface	(F7)		Red P	arent Mater	ial (TF2)	
Muck Pr	esence (A8) (LRR U)		Redox Depr	essions (F8	3)		Very S	Shallow Darl	k Surface (TF1)	2)
1 cm Mu	ıck (A9) <b>(LRR P, T)</b>		Marl (F10) <b>(</b> I	LRR U)			Other	(Explain in I	Remarks)	
Depleted	d Below Dark Surface	e (A11)	Depleted Oc	chric (F11) (	(MLRA 15	1)	2			
Thick Da	ark Surface (A12)		Iron-Mangar	nese Masse	es (F12) <b>(L</b>	RR 0, P, T	<b>)</b> <sup>°</sup> Indio	cators of hyd	drophytic veget	ation and
Coast Pi	rairie Redox (A16) <b>(N</b>	ILRA 150A	) Umbric Surfa	ace (F13) <b>(</b> I	LRR P, T,	U)	we	tland hydrol	ogy must be pr	esent,
Sandy M	lucky Mineral (S1) <b>(L</b>	RR O, S)	Delta Ochric	: (F17) <b>(ML</b>	RA 151)		unl	ess disturbe	ed or problemat	ic.
Sandy G	Bleyed Matrix (S4)		Reduced Ve	ertic (F18) <b>(I</b>	MLRA 150	A, 150B)				
Sandy R	Redox (S5)		Piedmont FI	oodplain So	oils (F19) <b>(</b>	MLRA 149	A)			
Stripped	Matrix (S6)		Anomalous	Bright Loan	ny Soils (F	20) <b>(MLRA</b>	149A, 153C	C, 153D)		
Dark Su	rface (S7) (LRR P, S	, T, U)								
Restrictive I	Layer (if observed):									
Type:										· · ·
Depth (ind	ches):						Hydric Soi	Present?	Yes	No
Remarks:										



Photo 1 Upland data point WROB002\_u facing north



Photo 2 Upland data point WROB002\_u facing south

Project/Site: Atlantic Coast Pipeline	_ City/County: Rob	eson County	Sampling Date: <u>12/14/2015</u>	
Applicant/Owner: Dominion			State: NC	Sampling Point: wrof004f_w
Investigator(s): SH, AS		_ Section, Townshi	o, Range: <u>No PLSS ir</u>	this area
Landform (hillslope, terrace, etc.): flat		_ Local relief (conca	ave, convex, none): <u>n</u> a	one Slope (%): 1
Subregion (LRR or MLRA): P	Lat: <sup>34.83</sup>	391996	Long: -78.99563	796 Datum: WGS 1984
Soil Map Unit Name: Rains sandy loan	 ו		NW	classification: None
Are climatic / hydrologic conditions on t	he site typical for this time of y	year? Yes <u></u>	No (If no, exp Are "Normal Circums	olain in Remarks.)
Are Vegetation, Soil, or	Hydrology naturally p	problematic?	(If needed, explain ar	y answers in Remarks.)
SUMMARY OF FINDINGS - A	ttach site map showin	g sampling po	int locations, tra	nsects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	- Is the San within a W	ipled Area /etland? Y	es No
NC WAM PFO classification Pine flat	wetland			
HYDROLOGY				
Wetland Hydrology Indicators:			<u>Seconda</u>	ry Indicators (minimum of two required)
Primary Indicators (minimum of one is	required; check all that apply	()	Surf	ace Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B	13)	Spa	rsely Vegetated Concave Surface (B8)
✓ High Water Table (A2)	15) <b>(LRR U)</b>	Drai	nage Patterns (B10)	
✓ Saturation (A3)	Hydrogen Sulfide	Odor (C1)	Mos	s Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizosp	heres along Living I	Roots (C3) Dry-	Season Water Table (C2)
Sediment Deposits (B2)	Presence of Redu	uced Iron (C4)	Cray	/fish Burrows (C8)
Drift Deposits (B3)	Recent Iron Redu	uction in Tilled Soils	(C6) Satı	ration Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surfac	e (C7)	Geo	morphic Position (D2)

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 Ae	erial Imagery (B7)	✓ FAC-Neutral Test (D5)
Water-Stained Leaves (I	B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present?	Yes No 🔽 Depth (inches):	
Water Table Present?	Yes <u>/</u> No Depth (inches): <u>12</u>	
Saturation Present? (includes capillary fringe)	Yes <u>′</u> No <u>Depth</u> (inches): <u>8</u>	Wetland Hydrology Present? Yes _ V No
Describe Recorded Data (str	ream gauge, monitoring well, aerial photos, previous in:	spections), if available:
Remarks:		

Sampling Point: wrof004f\_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:		
Tree Stratum (Plot size:30 )	% Cover	Species?	Status	Number of Dominant Species		
1. Pinus taeda	55	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)		
2				Total Number of Deminent		
3.				Species Across All Strata: 4 (B)		
4						
F.				Percent of Dominant Species		
5				That Are OBL, FACW, or FAC: (A/B)		
6		<u> </u>		Prevalence Index worksheet		
7	<u> </u>					
8	<u> </u>			$\frac{20}{20} = 1000$		
	55	= Total Cov	er	OBL species $25$ $50$		
50% of total cover:27.5	20% of	total cover:	11	FACW species $x^2 = \frac{30}{246}$		
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $232 \times 3 = 240$		
1 Liquidambar styraciflua	15	Yes	FAC	FACU species x 4 =		
2				UPL species $0 \times 5 = 0$		
2				Column Totals: <sup>127</sup> (A) <sup>316</sup> (B)		
3						
4				Prevalence Index = B/A =2.48		
5				Hydrophytic Vegetation Indicators:		
6				1 - Rapid Test for Hydrophytic Vegetation		
7				✓ 2 - Dominance Test is >50%		
8.				$\checkmark$ 2 Browelence Index is <2.0 <sup>1</sup>		
	15	= Total Cov	er	$\frac{1}{2}$ 5 - Flevalence index is $\leq 5.0$		
50% of total cover: 7.5	20% of	total covor:	3	Problematic Hydrophytic Vegetation (Explain)		
Userb Otracture (Distrained and 5	20 /0 01					
Herb Stratum (Plot size:)	20	Vee		<sup>1</sup> Indicators of hydric soil and wetland hydrology must		
		res		be present, unless disturbed or problematic.		
2. Eubotrys racemosa	20	Yes	FACW	Definitions of Four Vegetation Strata:		
3. Ilex opaca	7	No	FAC	<b>Tree</b> – Woody plants, excluding vines, 3 in, (7.6 cm) or		
4. Arundinaria gigantea	5	No	FACW	more in diameter at breast height (DBH), regardless of		
<sub>5.</sub> Pinus taeda	5	No	FAC	height.		
6				Sapling/Shrub Woody planta avaluding vince loss		
7				than 3 in DBH and greater than 3 28 ft (1 m) tall		
7						
8				Herb – All herbaceous (non-woody) plants, regardless		
9				of size, and woody plants less than 3.28 ft tall.		
10				Woody vine – All woody vines greater than 3.28 ft in		
11				height.		
12						
	57	= Total Cov	er			
50% of total cover: 28.5	20% of	total cover:	11.4			
Woody Vine Stratum (Plot size: 30)						
(1 101 3/20)						
2						
3						
4						
5				Hydrophytic		
	0	= Total Cov	er	Vegetation		
50% of total cover: 0	20% of	total cover:	0	Present? Yes Ves No		
Remarks: (If observed, list morphological adaptations below						
	w).					
1						

Profile Des	cription: (Describe t	o the dep	th needed to docum	nent the	indicator	or confirm	the absence	of indicato	ors.)	
Depth	Matrix		Redo	x Feature	S					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	2.5 Y 2.5/1	100		. <u></u>	<u> </u>		SL			
3-14	2.5 Y 4/1	100					SCL			
14-20	2.5 Y 5/1	95	10 YR 5/6	5	С	М	SCL			
				·						
				·	·					
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore L	ining, M=Matrix	ζ.
Hydric Soil	Indicators: (Applica	able to all	LRRs, unless other	wise not	ed.)		Indicators	for Proble	matic Hydric S	ioils³:
Histoso	l (A1)		Polyvalue Be	low Surfa	ice (S8) <b>(L</b>	.RR S, T, U	) 1 cm M	/luck (A9) <b>(L</b>	RR O)	
Histic E	pipedon (A2)		Thin Dark Su	rface (S9	) <b>(LRR S,</b>	T, U)	2 cm N	/luck (A10) <b>(</b>	(LRR S)	
Black H	istic (A3)		Loamy Muck	y Mineral	(F1) (LRF	l O)	Reduc	ed Vertic (F	18) <b>(outside N</b>	ILRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix	(F2)		Piedm	ont Floodpla	ain Soils (F19)	(LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			Anomalous Bright Loamy Soils (F20)			
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (I	-6)		(MLRA 153B)			
5 cm Mi	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Dar	k Surface	e (F7)		Red Parent Material (TF2)			
Muck P	resence (A8) (LRR U)		Redox Depre	ssions (F	8)		Very Shallow Dark Surface (TF12)			
1 cm Mi	uck (A9) (LRR P, T)		Marl (F10) <b>(L</b>	RR U)			Other (Explain in Remarks)			
<ul> <li>Deplete</li> </ul>	d Below Dark Surface	e (A11)	Depleted Ocl	nric (F11)	(MLRA 1	51)				
Thick D	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) <b>(</b>	LRR O, P, 1	<b>T)</b> <sup>3</sup> Indic	ators of hyc	drophytic veget	ation and
Coast P	Prairie Redox (A16) <b>(N</b>	ILRA 150	A) Umbric Surfa	ce (F13)	(LRR P, T	, U)	wet	and hydrolo	ogy must be pre	esent,
Sandy M	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (MI	RA 151)		unl	ess disturbe	d or problemat	ic.
Sandy (	Gleyed Matrix (S4)		Reduced Ver	tic (F18)	(MLRA 15	0A, 150B)				
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	ÐA)			
Stripped	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (	F20) <b>(MLR</b>	A 149A, 153C	, 153D)		
Dark Su	urface (S7) (LRR P, S	, T, U)		•		, .				
Restrictive	Layer (if observed):									
Туре:										
Depth (in	ches):						Hydric Soil	Present?	Yes 🖌	No
Remarks:										



Photo 1 Wetland data point wrof004f\_w facing southeast



Photo 2 Wetland data point wrof004f\_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: F	obeson County	Sampling Date: <u>12/14/2015</u>
Applicant/Owner: Dominion		State: NC	Sampling Point: wrof004e_w
Investigator(s): SH, AS	Section, Town	ship, Range: <u>No PLSS in this are</u>	ea
Landform (hillslope, terrace, etc.): Flat	Local relief (co	ncave, convex, none): <u>concave</u>	Slope (%): 2
Subregion (LRR or MLRA): P Lat: 2	34.83415426	Long: <u>-78.99482197</u>	Datum: WGS 1984
Soil Map Unit Name: Goldsboro loamy sand, 0 to 2 percent slop	Des	NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes 🖌	No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology signif	icantly disturbed?	Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology nature	ally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF EINDINGS Attach site man she	wing compling	noint locations transact	important factures ato

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

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

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

Sampling Point: wrof004e\_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	10	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4.				
5				Percent of Dominant Species
0				That Are OBL, FACW, or FAC: (A/B)
0	·			Prevalence Index worksheet:
1	·	<u> </u>		Total % Cover of: Multiply by:
8				$\frac{10}{10} \times 1 = 10$
	10	= Total Cov	er	50 $100$
50% of total cover:5	20% of	total cover:	2	FACW species $25$ $x^2 = 75$
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $x_3 = 75$
Liquidambar styraciflua	10	Yes	FAC	FACU species x 4 =
Pinus taeda	5	Yes	FAC	UPL species $0 \times 5 = 0$
2				Column Totals: <sup>85</sup> (A) <sup>185</sup> (B)
3	·	<u> </u>		
4				Prevalence Index = B/A =2.17
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				
8				
0	15	- Tatal Cau		3 - Prevalence Index is ≤3.0°
		= Total Cov	er 3	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size: 5)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	30	Yes	FACW	be present, unless disturbed or problematic.
<sub>2.</sub> Lyonia lucida	20	Yes	FACW	Definitions of Four Vegetation Strata:
3 Carex prasina	10	No	OBL	
а				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
-	·			height
5	·			noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in height
10	·			neight.
12				
	60	= Total Cov	er	
50% of total cover:30	20% of	total cover:	12	
Woody Vine Stratum (Plot size: 30 )				
1.				
2				
2				
J	·			
4	·			
5	·			Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes Ves No
Remarks: (If observed, list morphological adaptations belo	w)			1
Remarks. (If observed, list morphological adaptations beic	JVV).			

SOIL

Profile Des	cription: (Describe t	o the dep	oth needed to docur	ment the in	dicator	or confirm	the absence of ind	icators.)
Depth	Matrix		Redo	x Features	<b>-</b> 1	. 2		
(inches)	Color (moist)		Color (moist)	%	Type	Loc	Texture	Remarks
0-6	10YR 3/1	100					SL	
6-20	10YR 4/1	93	7.5YR 3/4	7	С	M	SCL	
1	·						2	
Type: C=C	Concentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	Location: PL=Po	ore Lining, M=Matrix.
Hydric Soll	Indicators: (Applica	ible to all	LRRS, unless othe	rwise note	a.)		Indicators for Pro	
Histoso	I (A1)		Polyvalue Be	elow Surfac	e (S8) <b>(L</b>	.RR S, T, U	) 1 cm Muck (A	(LRR O)
HISTIC E	pipedon (A2)		Thin Dark St	Inface (S9)		1, U)	2 cm Muck (A	(LRR S)
Black H	listic (A3)		Loamy Muck	y Mineral (I	F1) (LRR	(0)	Reduced ver	tic (F18) (outside MLRA 150A,B)
Hydroge	en Suitide (A4)		Loamy Gleye	ed Matrix (F	-2)		Pleamont Flo	odpiain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)	<b>-</b>	Depleted Ma	itrix (F3)	2)			right Loamy Solis (F20)
Organic	Bodies (Ab) (LRR P,	1, U) D D T U	Redox Dark	Surface (Ft	) ()		(MLRA 153	iB) Astocial (TEO)
5 cm M	UCKY MINERAL (A7) (LR	R P, I, U	) Depleted Da	rk Surface	(F7)			
	resence (A8) (LRR U)				)		very Shallow	Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, I)	( )	Mari (F10) <b>(L</b>	LRR U)			Other (Explai	n in Remarks)
Depiete	ed Below Dark Surface	e (A11)	Depleted Oc	nric (F11) (		51) 	<b>-)</b> 31	f handlaar hadi a aa aa fa ti ara aa d
	Park Sufface (A12)		Iron-Ivlangan		s (F12) (		i) Indicators c	of nydropnytic vegetation and
	Prairie Redox (A16) (M	ILRA 150		ace (F13) (L		, U)	wetland hy	/drology must be present,
Sandy I	Mucky Mineral (S1) (L	RR 0, S)	Delta Ochric	(F17) (MLF	RA 151)		unless dis	turbed or problematic.
Sandy (	Gleyed Matrix (S4)		Reduced Ve	rtic (⊢18) <b>(</b> N	MLRA 15	0A, 150B)		
Sandy I	Redox (S5)		Piedmont Flo	podplain So	oils (F19)	(MLRA 149	9A)	
Stripped	d Matrix (S6)		Anomalous E	Bright Loam	iy Soils (	F20) <b>(MLR</b>	A 149A, 153C, 153D	)
Dark Su	urface (S7) (LRR P, S,	, T, U)						
Restrictive	Layer (if observed):							
Туре:								· · · · · ·
Depth (in	iches):		<u>.</u>				Hydric Soil Prese	nt? Yes <u> </u>
Remarks:								



Photo 1 Wetland data point wrof004e\_w facing southeast



**Photo 2** Wetland data point wrof004e\_w facing east

Project/Site: Atlantic Coast Pipeline	City/County: R	obeson County	_ Sampling Date: <u>12/14/2015</u>
Applicant/Owner: Dominion		State: NC	_ Sampling Point: wrof004_u
Investigator(s): SH, AS	Section, Towns	ship, Range: <u>No PLSS in this are</u>	ea
Landform (hillslope, terrace, etc.): Terrace	Local relief (co	ncave, convex, none): <u>none</u>	Slope (%): 2
Subregion (LRR or MLRA): P Lat:	34.83357486	Long: <u>-78.99609652</u>	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam		NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes 🧹	_ No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed?	Are "Normal Circumstances"	present? Yes No _
Are Vegetation, Soil, or Hydrology nature	rally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	owing sampling p	point locations, transects	s, important features, etc.

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

Wetland Hydrology Indicators: Second	dary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply) Su	rface Soil Cracks (B6)		
Surface Water (A1) Aquatic Fauna (B13) Sp	Sparsely Vegetated Concave Surface (B8)		
High Water Table (A2) Marl Deposits (B15) (LRR U) Dr	ainage Patterns (B10)		
Saturation (A3) Hydrogen Sulfide Odor (C1) Mo	oss Trim Lines (B16)		
Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dr	y-Season Water Table (C2)		
Sediment Deposits (B2) Presence of Reduced Iron (C4) Cr	ayfish Burrows (C8)		
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Sa	turation Visible on Aerial Imagery (C9)		
Algal Mat or Crust (B4) Thin Muck Surface (C7) Ge	eomorphic Position (D2)		
Iron Deposits (B5) Other (Explain in Remarks) Sh	allow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	C-Neutral Test (D5)		
Water-Stained Leaves (B9) Sp	hagnum moss (D8) <b>(LRR T, U)</b>		
Field Observations:			
Surface Water Present? Yes No <u>&lt;</u> Depth (inches):			
Water Table Present? Yes No 🖌 Depth (inches):			
Saturation Present? Yes No Yes Depth (inches): Wetland Hydrolo (includes capillary fringe)	gy Present? Yes No 🖌		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Sampling Point: wrof004\_u

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4				Demont of Dominant Crossics
5				That Are OBL_FACW_or_FAC' 100 (A/B)
6.				
7.				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
· · · · · · · · · · · · · · · · · · ·	50	= Total Cov	or	OBL species x 1 =0
50% of total covers 25			10	FACW species $30 \times 2 = 60$
So % of total cover.	20% 01		·	FAC species $80 \times 3 = 240$
Sapling/Shrub Stratum (Plot size:)	20	Voc		FACU species $0 \times 4 = 0$
	20			$\frac{1}{1} = 0 \qquad x_5 = 0$
2. Morella cerifera	15	res	FAC	$\begin{array}{c c} \hline & & \\ \hline \\ \hline$
3. Ilex opaca	5	No	FAC	
4				Prevalence Index = $B/A = 2.72$
5				Hydrophytic Vegetation Indicators:
6.				1 - Panid Test for Hydrophytic Vocatation
7				
Q				
0	40	- Tatal Car		Y 3 - Prevalence Index is ≤3.0'
			er 8	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 20	20% of	total cover		
Herb Stratum (Plot size:)	10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Lyonia lucida	10	Yes	FACW	be present, unless disturbed or problematic.
2. Pinus taeda	10	Yes	FAC	Definitions of Four Vegetation Strata:
3				Tree Woody plants, evoluting vince 2 in (7.6 cm) or
4.				more in diameter at breast height (DBH) regardless of
5				height.
6				
7				than 3 in DBH and greater than 3 28 ft (1 m) tall
/				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10	. <u> </u>			Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	20	= Total Cov	er	
50% of total cover: 10	20% of	total cover	. 4	
Woody Vine Stratum (Plot size: 30 )			·	
<sup>1.</sup>				
Z				
3	·			
4				
5				Hydrophytic
	0	= Total Cov	rer	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes Ves No
Remarks: (If observed, list morphological adaptations belo	w)			1
	•••			

Profile Desc	cription: (Describe t	o the depth	needed to docun	nent the indic	cator or cor	onfirm the	e absence	of indicato	ors.)		
Depth	Matrix		Redo	x Features							
(inches)	Color (moist)	%	Color (moist)	<u>% Ty</u>	<u>ype<sup>1</sup> Loc</u>	c <sup>2</sup>	Texture		Remarks	;	
0-8	2.5Y 2.5/1	100					FSL				
8-10	2.5Y 4/3	100					LS				
10-20	2.5Y 5/3	100					SCL				
				·							
<sup>1</sup> Turnet 0-0		tion DM-D	aduaad Matrix, MC				21		ining M-Ma		
Hydric Soil	Indicators: (Applica	ble to all LR	Rs, unless other	wise noted.)	nd Grains.		Indicators	for Proble	matic Hydri	c Soils <sup>3</sup> :	
Histosol Histic E Black H Hydroge Stratified Organic Stratified Huck Pr L 1 cm Mu Depleted Thick Da Coast P Sandy N Sandy C Sandy F L Strippec Dark Su	(A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, ucky Mineral (A7) (LR resence (A8) (LRR U) uck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (M Aucky Mineral (S1) (L Bleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) (LRR P, S,	T, U) R P, T, U) (A11) LRA 150A) RR O, S) T, U)	<ul> <li>Polyvalue Be</li> <li>Thin Dark Su</li> <li>Loamy Mucky</li> <li>Loamy Gleye</li> <li>Depleted Mat</li> <li>Redox Dark S</li> <li>Depleted Dar</li> <li>Redox Depre</li> <li>Marl (F10) (L</li> <li>Depleted Och</li> <li>Iron-Mangane</li> <li>Umbric Surfa</li> <li>Delta Ochric</li> <li>Reduced Ver</li> <li>Piedmont Flo</li> <li>Anomalous B</li> </ul>	low Surface (S rface (S9) <b>(LF</b> / Mineral (F1) d Matrix (F2) trix (F3) Surface (F6) rk Surface (F7 rssions (F8) <b>RR U)</b> nric (F11) <b>(ML</b> ese Masses (f ce (F13) <b>(LRF</b> (F17) <b>(MLRA</b> tic (F18) <b>(MLF</b> podplain Soils sright Loamy S	S8) (LRR S, R S, T, U) (LRR O) F12) (LRR C R P, T, U) 151) RA 150A, 1! (F19) (MLR Soils (F20) (I	5, T, U) O, P, T) 50B) RA 149A) (MLRA 1	1 cm M 2 cm M Reduce Piedmo Anoma (MLR Red Pa Very Sl Other ( <sup>3</sup> Indica weth unle	luck (A9) (L luck (A10) ( ed Vertic (F ont Floodpla lous Bright <b>RA 153B)</b> arent Mater hallow Dark Explain in F ators of hyd ard hydrole ass disturbe	<b>JRR O)</b> ( <b>LRR S)</b> 18) <b>(outside</b> ain Soils (F1 <sup>-</sup> Loamy Soils ial (TF2) (Surface (Tf Remarks) drophytic veg ogy must be red or problem	<ul> <li>MLRA 15</li> <li>9) (LRR P,</li> <li>(F20)</li> <li><sup>-</sup>12)</li> <li><sup>2</sup>getation an present, natic.</li> </ul>	<b>50A,B)</b> , <b>S, T)</b> Id
Restrictive	Layer (if observed):										
Type:	choc):		_				ludric Soil	Procent?	Voc	No	~
Bemarks:	ciles).						iyunc 30li	Fiesent	165		



**Photo 1** Upland data point wrof004\_u facing southeast



**Photo 2** Upland data point wrof004\_u facing east

Project/Site: Atlantic Coast Pipeline	City/County: Robeson		Sampling Date: <u>11/21/2014</u>		
Applicant/Owner: DOMINION		State: NC	Sampling Point: Wr	oc001s_w	
Investigator(s): Team C	Section, Township, Ra	nge: <u>No PLSS in this a</u>	irea		
Landform (hillslope, terrace, etc.): Slight Valley	Local relief (concave, c	convex, none): <u>none</u>	Slope	(%): <u>1</u>	
Subregion (LRR or MLRA): P La	at: <u>34.83375243</u>	_ong: <u>-78.9943071</u>	Datur	m: WGS 1984	
Soil Map Unit Name: Rains sandy loam		NWI class	ification: None		
Are climatic / hydrologic conditions on the site typical for this Are Vegetation, Soil, or Hydrology sig Are Vegetation, Soil, or Hydrology na SUMMARY OF FINDINGS – Attach site map s	time of year? Yes <u>V</u> No gnificantly disturbed? Are aturally problematic? (If ne showing sampling point I	(If no, explain in Normal Circumstances Reded, explain any answ ocations, transec	n Remarks.) s" present? Yes <u>/</u> wers in Remarks.) s <b>ts, important fea</b>	<sup>No</sup> tures, etc.	
Hydrophytic Vegetation Present?Yes✓NoHydric Soil Present?Yes✓NoWetland Hydrology Present?Yes✓No	Is the Sampled within a Wetlan	Area nd? Yes	۷ No		
Remarks: Wetland is in an opening within a Loblolly Pine plantation.					
HYDROLOGY					
Wetland Hydrology Indicators:		Secondary Ind	icators (minimum of tw	/o required)	
Drimony Indicators (minimum of one is required; sheek all th	not apply)	Surface S	oil Crooke (P6)		

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

Sampling Point: wroc001s\_w

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:) 1.	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <sup>3</sup> (A)
2.				()
3				Species Across All Strata: 3 (B)
4				( )
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6		·		Prevalence Index worksheet:
7		·		Total % Cover of: Multiply by:
8		·		$\frac{1}{1000} \frac{1}{1000} \frac{1}{1000$
0	0	= Total Cov	er	EACW species $122 \times 2 = 244$
50% of total cover:	20% of	total cover:		$1 \text{ ACW species} \qquad 20 \qquad x 2 = 60$
Sapling/Shrub Stratum (Plot size: 15 )				$\frac{1}{1} \text{ AC species } \frac{1}{2} \text{ AC species } \frac{1}$
1. Cyrilla racemiflora	40	Yes	FACW	$\begin{array}{c} \text{PACO species} \\ 0 \\ \text{VE = } \\ 0 \\ \text{VE = } \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$
2. Liquidambar styraciflua	10	No	FAC	$\begin{array}{c} \text{OPL species} & \underline{\qquad} & x \ 5 = \underline{\qquad} \\ \text{Column Tatalas} & 157 & (A) & 319 \\ \end{array} $
3. Gordonia lasianthus	7	No	FACW	Column Totals: (A) (B)
4				Prevalence Index = B/A =2.03
5				Hydrophytic Vegetation Indicators:
6		·		1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is $\leq 3.0^1$
	57	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover:	11.4	
Herb Stratum (Plot size: 5 )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Saccharum giganteum	30	Yes	FACW	be present, unless disturbed or problematic.
2. Carex crinita	30	Yes	FACW	Definitions of Four Vegetation Strata:
3. Cyrilla racemiflora	15	No	FACW	<b>Tree</b> – Woody plants, excluding vines 3 in (7.6 cm) or
4. Rubus pensilvanicus	10	No	FAC	more in diameter at breast height (DBH), regardless of
5. <u>Carex stipata</u>	10	No	OBL	height.
6. <u>Scirpus cyperinus</u>	5	No	OBL	Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All berbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Weady vine All weady vince greater than 2.28 ft in
11				height.
12.				, , , , , , , , , , , , , , , , , , ,
	100	= Total Cov	er	
50% of total cover: <sup>50</sup>	20% of	total cover:	20	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
аа				
т Б				
J	0	- Total Cov		Hydrophytic Vegetation
	200/ -		0	Present? Yes <u>No</u>
	20% 0I	total cover.		
Remarks: (IT observed, list morphological adaptations below	v).			

SOIL

Profile Desc	cription: (Describe t	o the dep	th needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Feature	s			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10 YR 2/2	100					SICL	
3-14	10 YR 3/2	75	10 YR 6/1	25	D	М	LS	Stripped areas are about 1/2 inch
				·				
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion, RM:	Reduced Matrix, MS	S=Masked	I Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all	LRRs, unless other	wise not	ed.)		Indicators	for Problematic Hydric Soils':
Histosol	(A1)		Polyvalue Be	low Surfa	ce (S8) <b>(L</b>	RR S, T, U	) 1 cm M	Muck (A9) <b>(LRR O)</b>
Histic E	pipedon (A2)		Thin Dark Su	rface (S9)	) <b>(LRR S,</b>	T, U)	2 cm I	Muck (A10) <b>(LRR S)</b>
Black H	istic (A3)		Loamy Muck	y Mineral	(F1) <b>(LRR</b>	0)	Reduc	ced Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)		Piedm	ont Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			Anom	alous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F	6)		(ML	RA 153B)
5 cm Mi	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Dar	rk Surface	(F7)		Red P	arent Material (TF2)
Muck Pr	esence (A8) (LRR U)		Redox Depre	essions (F	8)		Very S	Shallow Dark Surface (TF12)
1 cm Mi	uck (A9) (LRR P. T)		 Marl (F10) <b>(L</b>	.RR U)	,		Other	(Explain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Ocl	nric (F11)	(MLRA 1	51)		()
Thick D	ark Surface (A12)	()	Iron-Mangan	ese Mass	es (F12) <b>(</b>		T) <sup>3</sup> India	cators of hydrophytic vegetation and
Coast P	rairie Redox (A16) <b>(M</b>	II RA 150	Limbric Surfa	re (F13)		10	we	tland hydrology must be present
Sandy N	Aucky Mineral (S1) (I		Delta Ochric	(E17) <b>(MI</b>	DA 151)	, 0)	unl	less disturbed or problematic
Sandy (	Nucky Milleral (ST) (L	KK 0, 3)	Delta Ochilic	(I I I ) (IVIL tio (E19) (	MIDA 15	04 1500)	un	ess disturbed of problematic.
Sandy C			Reduced Ver			(MI DA 44)	0.4.)	
				ouplain S			9A) A 440A 450C	4620)
Stripped	Matrix (So)	<b>-</b>	Anomalous E	sright Loar	Thy Solis (		A 149A, 153C	<i>,</i> , 153D)
Dark Su		, I, U)					1	
Type:	Layer (if observed):							
Depth (in	ches):						Hydric Soil	l Present? Yes 🖌 No
Remarks:							1	
Hydric soil pr	esent							
riyune son pr								



Photo 1 Wetland data point WROC001s\_w facing north



Photo 2 Wetland data point WROC001s\_w facing east



Photo 3 Wetland data point WROC001s\_w facing south



Photo 4 Wetland data point WROC001s\_w facing west

Project/Site: Atlantic Coast Pipeline	City/County: I	Robeson	Sampling Date: <u>11/21/2014</u>
Applicant/Owner: DOMINION		State: NC	Sampling Point: wroc001_u
Investigator(s): Team C	Section, Towr	nship, Range: <u>No PLSS in this</u>	area
Landform (hillslope, terrace, etc.): Slight Slope	Local relief (c	oncave, convex, none): <u>none</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P Lat:	34.83375609	Long: <u>-78.99451946</u>	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam		NWI class	sification: None
Are climatic / hydrologic conditions on the site typical for this tir	ne of year? Yes 🧹	No (If no, explain i	n Remarks.)
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed?	Are "Normal Circumstance	s" present? Yes 🗹 No
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS – Attach site man sh	owing sampling	point locations transed	ets important features etc

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

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

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
	<ul> <li>Surface Soli Clacks (B0)</li> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>g Roots (C3)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Is (C6)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Sphagnum moss (D8) (LRR T, U)</li> </ul>
Field Observations:	
Surface Water Present? Yes No Cepth (inches):	
Water Table Present? Yes No Country Depth (inches):	_
Saturation Present? Yes No 🖌 Depth (inches):	_ Wetland Hydrology Present? Yes No∕
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp	vections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: No wetland hydrology present	vections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: No wetland hydrology present	vections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: No wetland hydrology present	ections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: No wetland hydrology present	ections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: No wetland hydrology present	vections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: No wetland hydrology present	vections), if available:
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous insp Remarks: No wetland hydrology present	vections), if available:

Sampling Point: wroc001\_u

20	Absolute	Dominant I	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	70	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)
2.				
3				Total Number of Dominant
5		<u> </u>		Species Across Air Strata. (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/B)
6				
7.				Prevalence Index worksheet:
0				Total % Cover of: Multiply by:
0	70		<u> </u>	OBL species $0 \times 1 = 0$
25	10	= Total Cove	er 14	$EACW$ spacing $\frac{20}{x^2} = \frac{40}{x^2}$
50% of total cover:	20% of	total cover:	14	95 <u>285</u>
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $x^3 = 140$
1 Kalmia latifolia	25	Yes	FACU	FACU species $35 \times 4 = 140$
<ul> <li>Liquidambar styraciflua</li> </ul>	15	Yes	FAC	UPL species $0 \times 5 = 0$
2			17.0	Column Totals: 150 (A) 465 (B)
3				
4				Prevalence Index = B/A = 3.1
5.				Hydrophytic Vogotation Indicators:
6		··········	<u> </u>	
··			<u> </u>	1 - Rapid Test for Hydrophytic Vegetation
/				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	40	= Total Cove	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 20	20% of	total cover	8	
Lierh Chreture (Diet eizer 5				
Herb Stratum (Plot size:)	20	Vee		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	20	res	FACW	be present, unless disturbed or problematic.
2. Smilax rotundifolia	10	Yes	FAC	Definitions of Four Vegetation Strata:
3. Festuca rubra	10	Yes	FACU	
1				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
			<u> </u>	height
5				noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb – All herbaceous (non-woody) plants, regardless
9	·			of size, and woody plants less than 3.26 it tall.
10				<b>Woody vine</b> – All woody vines greater than 3.28 ft in
11				height.
12				
	40	- Total Cava	or.	
20			<del>ار</del> 8	
50% of total cover: 20	20% of	total cover:	0	
Woody Vine Stratum (Plot size: 30 )				
1.				
2				
2				
3				
4				
5.				Hydrophytic
	0	= Total Cove	-r	Vegetation
50% of total action 0	2001/ -1		0	Present? Yes <u>No</u>
	20% 01	total cover:		
Remarks: (If observed, list morphological adaptations belo	w).			

Depth Matrix		Redox Features					-	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks	
0-3	10 YR 2/1	100					SICL	
3-14	10 YR 3/1	100					SICL	—
							· · · · · _ ·	
								—
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators: (Applica	ble to all L	RRs, unless other	wise note	ed.)		Indicators for Problematic Hydric Soils <sup>3</sup> :	
<u> </u>	l (A1)		Polyvalue Be	ow Surfa	ce (S8) <b>(L</b>	RR S, T, U	) 1 cm Muck (A9) (LRR O)	
Histic E	pipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm Muck (A10) (LRR S)	
Black H	istic (A3)		Loamy Muck	Mineral	(F1) <b>(LRR</b>	0)	Reduced Vertic (F18) (outside MLRA 1504	4,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (	F2)		Piedmont Floodplain Soils (F19) (LRR P, S	, T)
Stratifie	d Layers (A5)		Depleted Mat	rix (F3)			Anomalous Bright Loamy Soils (F20)	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F	6)		(MLRA 153B)	
5 cm Mi	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Dar	k Surface	(F7)		Red Parent Material (TF2)	
Muck P	resence (A8) (LRR U)	)	Redox Depre	ssions (Fa	8)		Very Shallow Dark Surface (TF12)	
1 cm Muck (A9) (LRR P, T)			Marl (F10) <b>(L</b>	RR U)			Other (Explain in Remarks)	
Deplete	d Below Dark Surface	e (A11)	Depleted Oct	ric (F11)	(MLRA 1	51)		
Thick D	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) <b>(</b>	LRR O, P,	<b>T)</b> <sup>3</sup> Indicators of hydrophytic vegetation and	
Coast P	Prairie Redox (A16) (N	LRA 150A	) Umbric Surfa	ce (F13) <b>(</b>	LRR P, T	, U)	wetland hydrology must be present,	
Sandy N	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) <b>(ML</b>	RA 151)		unless disturbed or problematic.	
Sandy (	Gleved Matrix (S4)		Reduced Ver	tic (F18) <b>(</b>	MLRA 15	0A, 150B)		
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	9A)	
Stripped	d Matrix (S6)		Anomalous B	right Loar	nv Soils (	F20) (MLR)	A 149A. 153C. 153D)	
Dark Su	urface (S7) (LRR P, S	, T, U)					, , , , , , , , , , , , , , , , , , , ,	
Restrictive	Layer (if observed):							
Type:								
Depth (in	iches):						Hydric Soil Present? Yes No	
Remarks:								
No hydric soi	l present							
<b>,</b>								



Photo 1 Upland data point WROC001\_u facing north



Photo 2 Upland data point WROC001\_u facing east



Photo 3 Upland data point WROC001\_u facing south



Photo 4 Upland data point WROC001\_u facing west

Project/Site: Atlantic Coast Pipeline	City/County: Robeson Co	unty	Sampling Date: 12/14/2015	
Applicant/Owner: Dominion			State: NC	Sampling Point: wrof004f_w
Investigator(s): SH, AS		Section, Township, Range	e: No PLSS in this a	area
Landform (hillslope, terrace, etc.): flat		Local relief (concave, con	vex, none): <u>none</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): P	Lat: <sup>34.83</sup>	3391996 Long: -78.99563796 Datum		
Soil Map Unit Name: Rains sandy loan	n		NWI class	ification: None
Are climatic / hydrologic conditions on the Are Vegetation Soil or	he site typical for this time of y	vear? Yes <u>&lt;</u> No <u></u> v disturbed? Are "No	(If no, explain ir	n Remarks.)
Are Vegetation, Soil, or	Hydrology naturally p	roblematic? (If need	ed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS - A	Attach site map showin	g sampling point loc	ations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes <u> </u>	- Is the Sampled A within a Wetland	rea ? Yes	✓ No
NC WAM PFO classification Pine flat	wetland			
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Ind	icators (minimum of two required)
Primary Indicators (minimum of one is	s required; check all that apply	)	Surface S	oil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B	13)	Sparsely \	/egetated Concave Surface (B8)
✓ High Water Table (A2)	5) <b>(LRR U)</b>	Drainage I	Patterns (B10)	
✓ Saturation (A3)	Odor (C1)	Moss Trim	Lines (B16)	
Water Marks (B1)	heres along Living Roots (C	C3) Dry-Seaso	on Water Table (C2)	
Sediment Deposits (B2)	uced Iron (C4)	Crayfish B	Burrows (C8)	
Drift Deposits (B3)	ction in Tilled Soils (C6)	<u> </u>	Visible on Aerial Imagery (C9)	
Algal Mat or Crust (B4)	e (C7)	Geomorph	nic Position (D2)	

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 Ae	erial Imagery (B7)	✓ FAC-Neutral Test (D5)
Water-Stained Leaves (I	B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:		
Surface Water Present?	Yes No 🖌 Depth (inches):	
Water Table Present?	Yes <u>/</u> No Depth (inches): <u>12</u>	
Saturation Present? (includes capillary fringe)	Yes <u>′</u> No Depth (inches): <u>8</u>	Wetland Hydrology Present? Yes No
Describe Recorded Data (str	ream gauge, monitoring well, aerial photos, previous in:	spections), if available:
Remarks:		

Sampling Point: wrof004f\_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:						
Tree Stratum (Plot size:30 )	% Cover	Species?	Status	Number of Dominant Species						
1. Pinus taeda	55	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)						
2				Tatal Number of Deminant						
3.				Species Across All Strata: 4 (B)						
4										
F.				Percent of Dominant Species						
5				That Are OBL, FACW, or FAC:(A/B)						
6		<u> </u>		Prevalence Index worksheet						
7	<u> </u>									
8	<u> </u>			$\frac{20}{20} = 1000$						
	55	= Total Cov	er	$\frac{25}{25} = \frac{50}{50}$						
50% of total cover:27.5	20% of	total cover:	11	FACW species $x^2 = \frac{30}{246}$						
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $32 \times 3 = 240$						
1 Liquidambar styraciflua	15	Yes	FAC	FACU species x 4 =						
2				UPL species $0 \times 5 = 0$						
2				Column Totals: <sup>127</sup> (A) <sup>316</sup> (B)						
3										
4				Prevalence Index = B/A =2.48						
5				Hydrophytic Vegetation Indicators:						
6				1 - Rapid Test for Hydrophytic Vegetation						
7				✓ 2 - Dominance Test is >50%						
8.				$\checkmark$ 2 - Drowelence Index is < 2.0 <sup>1</sup>						
	15	= Total Cov	er	$\frac{1}{2}$ 5 - Flevalence index is $\leq 5.0$						
5.0% of total cover: 7.5	20% of		3	Problematic Hydrophytic Vegetation (Explain)						
	20 /0 01									
Herb Stratum (Plot size:)	20	Vee		<sup>1</sup> Indicators of hydric soil and wetland hydrology must						
		res		be present, unless disturbed or problematic.						
2. Eubotrys racemosa	20	Yes	FACW	Definitions of Four Vegetation Strata:						
3. Ilex opaca	7	No	FAC	<b>Tree</b> – Woody plants, excluding vines, 3 in, (7.6 cm) or						
4. Arundinaria gigantea	5	No	FACW	more in diameter at breast height (DBH), regardless of						
<sub>5.</sub> Pinus taeda	5	No	FAC	height.						
6				Sepling/Shrub Woody planta avaluding visca loss						
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.						
·										
0				Herb – All herbaceous (non-woody) plants, regardless						
9				of size, and woody plants less than 3.28 ft tall.						
10	<u> </u>			Woody vine – All woody vines greater than 3.28 ft in						
11				height.						
12										
	57	= Total Cov	er							
50% of total cover: 28.5	20% of	total cover:	11.4							
Woody Vine Stratum (Plot size: 30)										
1										
2										
3										
4										
5				Hydrophytic						
	0	= Total Cov	er	Vegetation						
50% of total cover: 0	20% of	total cover:	0	Present? Yes <u> </u>						
Remarks: (If observed, list morphological adaptations below	w).									
Profile Des	cription: (Describe t	o the dep	th needed to docum	nent the	indicator	or confirm	the absence	of indicato	ors.)	
-----------------------------	-------------------------------	-------------	----------------------	------------	--------------------	------------------	----------------------------------	----------------------	-----------------------	---------------
Depth	Matrix		Redo	x Feature	S					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-3	2.5 Y 2.5/1	100			<u> </u>		SL			
3-14	2.5 Y 4/1	100					SCL			
14-20	2.5 Y 5/1	95	10 YR 5/6	5	С	М	SCL			
				·						
				·	·					
<sup>1</sup> Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, MS	S=Maske	d Sand Gr	ains.	<sup>2</sup> Location:	PL=Pore L	ining, M=Matrix	ζ.
Hydric Soil	Indicators: (Applica	able to all	LRRs, unless other	wise not	ed.)		Indicators	for Proble	matic Hydric S	ioils³:
Histoso	l (A1)		Polyvalue Be	low Surfa	ice (S8) <b>(L</b>	.RR S, T, U	) 1 cm M	/luck (A9) <b>(L</b>	RR O)	
Histic E	pipedon (A2)		Thin Dark Su	rface (S9	) <b>(LRR S,</b>	T, U)	2 cm N	/luck (A10) <b>(</b>	(LRR S)	
Black H	istic (A3)		Loamy Muck	y Mineral	(F1) (LRF	l O)	Reduc	ed Vertic (F	18) <b>(outside N</b>	ILRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix	(F2)		Piedm	ont Floodpla	ain Soils (F19)	(LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)			Anoma	alous Bright	Loamy Soils (F	20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (I	-6)		(MLRA 153B)			
5 cm Mi	ucky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Dar	k Surface	e (F7)		Red Parent Material (TF2)			
Muck P	resence (A8) (LRR U)		Redox Depre	ssions (F	8)		Very Shallow Dark Surface (TF12)			
1 cm Mi	uck (A9) (LRR P, T)		Marl (F10) <b>(L</b>	RR U)			Other (Explain in Remarks)			
<ul> <li>Deplete</li> </ul>	d Below Dark Surface	e (A11)	Depleted Ocl	nric (F11)	(MLRA 1	51)				
Thick D	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) <b>(</b>	LRR O, P, 1	<b>T)</b> <sup>3</sup> Indic	ators of hyc	drophytic veget	ation and
Coast P	Prairie Redox (A16) <b>(N</b>	ILRA 150	A) Umbric Surfa	ce (F13)	(LRR P, T	, U)	wet	and hydrolo	ogy must be pre	esent,
Sandy M	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (MI	RA 151)		unl	ess disturbe	d or problemat	ic.
Sandy (	Gleyed Matrix (S4)		Reduced Ver	tic (F18)	(MLRA 15	0A, 150B)				
Sandy F	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 149	ÐA)			
Stripped	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (	F20) <b>(MLR</b>	A 149A, 153C	, 153D)		
Dark Su	urface (S7) (LRR P, S	, T, U)		•		, .				
Restrictive	Layer (if observed):									
Туре:										
Depth (in	ches):						Hydric Soil	Present?	Yes 🖌	No
Remarks:										



Photo 1 Wetland data point wrof004f\_w facing southeast



Photo 2 Wetland data point wrof004f\_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: F	obeson County	Sampling Date: <u>12/14/2015</u>
Applicant/Owner: Dominion		State: NC	Sampling Point: wrof004e_w
Investigator(s): SH, AS	Section, Town	ship, Range: <u>No PLSS in this are</u>	ea
Landform (hillslope, terrace, etc.): Flat	Local relief (co	ncave, convex, none): <u>concave</u>	Slope (%): 2
Subregion (LRR or MLRA): P Lat: 2	34.83415426	Long: <u>-78.99482197</u>	Datum: WGS 1984
Soil Map Unit Name: Goldsboro loamy sand, 0 to 2 percent slop	Des	NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typical for this tim	e of year? Yes 🖌	No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology signif	icantly disturbed?	Are "Normal Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology nature	ally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF EINDINGS Attach site man she	wing compling	noint locations transact	important factures ato

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

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

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

Sampling Point: wrof004e\_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 )	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	10	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4.				
5				Percent of Dominant Species
0				That Are OBL, FACW, or FAC: (A/B)
0	·			Prevalence Index worksheet:
1	·	<u> </u>		Total % Cover of: Multiply by:
8				$\frac{10}{10} \times 1 = 10$
	10	= Total Cov	er	50 $100$
50% of total cover:5	20% of	total cover:	2	FACW species $25$ $x^2 = 75$
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $x_3 = 75$
Liquidambar styraciflua	10	Yes	FAC	FACU species x 4 =
Pinus taeda	5	Yes	FAC	UPL species $0 \times 5 = 0$
2				Column Totals: <sup>85</sup> (A) <sup>185</sup> (B)
3	·	<u> </u>		
4				Prevalence Index = B/A =2.17
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				
8				
0	15	- Tatal Cau		3 - Prevalence Index is ≤3.0°
		= Total Cov	er 3	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size: 5)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	30	Yes	FACW	be present, unless disturbed or problematic.
<sub>2.</sub> Lyonia lucida	20	Yes	FACW	Definitions of Four Vegetation Strata:
3 Carex prasina	10	No	OBL	
A.				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
-	·			height
5	·			noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in height
10	·			neight.
12				
	60	= Total Cov	er	
50% of total cover:30	20% of	total cover:	12	
Woody Vine Stratum (Plot size: 30 )				
1.				
2				
2				
J	·			
4	·			
5	·			Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes Ves No
Remarks: (If observed, list morphological adaptations belo	w)			1
Remarks. (If observed, list morphological adaptations beic	JVV).			

SOIL

Profile Des	cription: (Describe t	o the dep	oth needed to docur	ment the in	dicator	or confirm	the absence of ind	icators.)		
Depth	Matrix		Redo	x Features	<b>-</b> 1	. 2				
(inches)	Color (moist)		Color (moist)	%	Type	Loc	Texture	Remarks		
0-6	10YR 3/1	100					SL			
6-20	10YR 4/1	93	7.5YR 3/4	7	С	M	SCL			
1	·						2			
Type: C=C	Concentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	Location: PL=Po	ore Lining, M=Matrix.		
Hydric Soll	Indicators: (Applica	ible to all	LRRS, unless othe	rwise note	a.)		Indicators for Pro			
Histoso	I (A1)		Polyvalue Be	elow Surfac	e (S8) <b>(L</b>	.RR S, T, U	) 1 cm Muck (A	(LRR O)		
HISTIC E	pipedon (A2)		Thin Dark St	Inface (S9)		1, U)	2 cm Muck (A	(LRR S)		
Black H	listic (A3)		Loamy Muck	y Mineral (I	F1) (LRR	(0)	Reduced ver	tic (F18) (outside MLRA 150A,B)		
Hydroge	en Suitide (A4)		Loamy Gleye	ed Matrix (F	-2)		Pleamont Flo	odpiain Soils (F19) (LRR P, S, T)		
Stratifie	d Layers (A5)	<b>-</b>	Depleted Ma	itrix (F3)	2)			right Loamy Solis (F20)		
Organic	Bodies (Ab) (LRR P,	1, U) D D T U	Redox Dark	Surface (Ft	) ()		(MLRA 153	LRA 153B)		
5 cm M	UCKY MINERAL (A7) (LR	R P, I, U	) Depleted Da	rk Surface	(F7)		Red Parent Material (TF2)			
	resence (A8) (LRR U)				)		Very Snallow Dark Surface (TFT2)			
1 cm M	uck (A9) (LRR P, I)	( )	Mari (F10) <b>(L</b>	LRR U)			Other (Explain in Remarks)			
Depiete	ed Below Dark Surface	e (A11)	Depleted Oc	nric (F11) (		51) 	<b>-)</b> 31	f handlaar hadi a aa aa fa ti ara aa d		
	Park Sufface (A12)		Iron-Ivlangan		s (F12) (		i) Indicators c	of nydropnytic vegetation and		
	Prairie Redox (A16) (M	ILRA 150		ace (F13) (L		, U)	wetland hy	/drology must be present,		
Sandy I	Mucky Mineral (S1) (L	RR 0, S)	Delta Ochric	(F17) (MLF	RA 151)		unless dis	turbed or problematic.		
Sandy (	Gleyed Matrix (S4)		Reduced Ve	rtic (⊢18) <b>(</b> N	MLRA 15	0A, 150B)				
Sandy I	Redox (S5)		Piedmont Flo	podplain So	oils (F19)	(MLRA 149	9A)			
Stripped	d Matrix (S6)		Anomalous E	Bright Loam	iy Soils (	F20) <b>(MLR</b>	A 149A, 153C, 153D	)		
Dark Su	urface (S7) (LRR P, S,	, T, U)								
Restrictive	Layer (if observed):									
Туре:								· · · · · ·		
Depth (in	iches):		<u>.</u>				Hydric Soil Prese	nt? Yes <u> </u>		
Remarks:										



Photo 1 Wetland data point wrof004e\_w facing southeast



**Photo 2** Wetland data point wrof004e\_w facing east

Project/Site: Atlantic Coast Pipeline	City/County: R	obeson County	_ Sampling Date: <u>12/14/2015</u>
Applicant/Owner: Dominion		State: NC	_ Sampling Point: wrof004_u
Investigator(s): SH, AS	Section, Towns	ship, Range: <u>No PLSS in this are</u>	ea
Landform (hillslope, terrace, etc.): Terrace	Local relief (co	ncave, convex, none): <u>none</u>	Slope (%): 2
Subregion (LRR or MLRA): P Lat:	34.83357486	Long: <u>-78.99609652</u>	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam		NWI classifi	cation: None
Are climatic / hydrologic conditions on the site typical for this tim	ne of year? Yes 🧹	_ No (If no, explain in F	Remarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed?	Are "Normal Circumstances"	present? Yes No _
Are Vegetation, Soil, or Hydrology nature	rally problematic?	(If needed, explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	owing sampling p	point locations, transects	s, important features, etc.

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

Wetland Hydrology Indicators: Second	dary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply) Su	rface Soil Cracks (B6)			
Surface Water (A1) Aquatic Fauna (B13) Sp	Sparsely Vegetated Concave Surface (B8)			
High Water Table (A2) Marl Deposits (B15) (LRR U) Dr	ainage Patterns (B10)			
Saturation (A3) Hydrogen Sulfide Odor (C1) Mo	oss Trim Lines (B16)			
Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dr	y-Season Water Table (C2)			
Sediment Deposits (B2) Presence of Reduced Iron (C4) Cr	ayfish Burrows (C8)			
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Sa	turation Visible on Aerial Imagery (C9)			
Algal Mat or Crust (B4) Thin Muck Surface (C7) Ge	eomorphic Position (D2)			
Iron Deposits (B5) Other (Explain in Remarks) Sh	allow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	C-Neutral Test (D5)			
Water-Stained Leaves (B9) Sp	hagnum moss (D8) <b>(LRR T, U)</b>			
Field Observations:				
Surface Water Present? Yes No <u>&lt;</u> Depth (inches):				
Water Table Present? Yes No 🖌 Depth (inches):				
Saturation Present? Yes No Yes Depth (inches): Wetland Hydrolo (includes capillary fringe)	gy Present? Yes No 🖌			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:				
Remarks:				

Sampling Point: wrof004\_u

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Pinus taeda	50	Yes	FAC	That Are OBL, FACW, or FAC:5 (A)
2				Total Number of Dominant
3				Species Across All Strata: 5 (B)
4				Demont of Dominant Crossics
5				That Are OBL_EACW or EAC <sup>100</sup> (A/B)
6.				
7.				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
· · · · · · · · · · · · · · · · · · ·	50	= Total Cov	or	OBL species x 1 =0
50% of total covers 25			10	FACW species $30 \times 2 = 60$
So % of total cover.	20% 01		·	FAC species $80$ x 3 = $240$
Sapling/Shrub Stratum (Plot size:)	20	Voc		FACU species $0 \times 4 = 0$
	20			$\frac{1}{1} = 0 \qquad x_5 = 0$
2. Morella cerifera	15	res	FAC	$\begin{array}{c c} \hline & & \\ \hline \\ \hline$
3. Ilex opaca	5	No	FAC	
4				Prevalence Index = $B/A = 2.72$
5				Hydrophytic Vegetation Indicators:
6.				1 - Panid Test for Hydrophytic Vocatation
7				
Q				
0	40	- Tatal Car		Y 3 - Prevalence Index is ≤3.0'
			er 8	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size:)	10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Lyonia lucida	10	Yes	FACW	be present, unless disturbed or problematic.
2. Pinus taeda	10	Yes	FAC	Definitions of Four Vegetation Strata:
3				Tree Woody plants, evoluting vince 2 in (7.6 cm) or
4.				more in diameter at breast height (DBH) regardless of
5				height.
6				
7				than 3 in DBH and greater than 3 28 ft (1 m) tall
/				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10	. <u> </u>			Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	20	= Total Cov	er	
50% of total cover: 10	20% of	total cover	. 4	
Woody Vine Stratum (Plot size: 30 )			·	
<sup>1.</sup>				
Z				
3	·			
4				
5				Hydrophytic
	0	= Total Cov	rer	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes Ves No
Remarks: (If observed, list morphological adaptations belo	w)			1
	•••			

Profile Desc	cription: (Describe t	o the depth	needed to docun	nent the indic	cator or cor	onfirm the	e absence	of indicato	ors.)		
Depth	Matrix		Redo	x Features							
(inches)	Color (moist)	%	Color (moist)	<u>% Ty</u>	<u>ype<sup>1</sup> Loc</u>	c <sup>2</sup>	Texture		Remarks	;	
0-8	2.5Y 2.5/1	100					FSL				
8-10	2.5Y 4/3	100					LS				
10-20	2.5Y 5/3	100					SCL				
				·							
<sup>1</sup> Turnet 0-0			aduce a Matrix MC				21		ining M-Ma		
Hydric Soil	Indicators: (Applica	ble to all LR	Rs, unless other	wise noted.)	nd Grains.		Indicators	for Proble	matic Hydri	c Soils <sup>3</sup> :	
Histosol Histic E Black H Hydroge Stratified Organic Stratified Huck Pr L 1 cm Mu Depleted Thick Da Coast P Sandy N Sandy C Sandy F L Strippec Dark Su	(A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, ucky Mineral (A7) (LR resence (A8) (LRR U) uck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (M Aucky Mineral (S1) (L Bleyed Matrix (S4) Redox (S5) d Matrix (S6) Irface (S7) (LRR P, S,	T, U) R P, T, U) (A11) LRA 150A) RR O, S) T, U)	<ul> <li>Polyvalue Be</li> <li>Thin Dark Su</li> <li>Loamy Mucky</li> <li>Loamy Gleye</li> <li>Depleted Mat</li> <li>Redox Dark S</li> <li>Depleted Dar</li> <li>Redox Depre</li> <li>Marl (F10) (L</li> <li>Depleted Och</li> <li>Iron-Mangane</li> <li>Umbric Surfa</li> <li>Delta Ochric</li> <li>Reduced Ver</li> <li>Piedmont Flo</li> <li>Anomalous B</li> </ul>	low Surface (S rface (S9) <b>(LF</b> / Mineral (F1) d Matrix (F2) trix (F3) Surface (F6) rk Surface (F7 rssions (F8) <b>RR U)</b> nric (F11) <b>(ML</b> ese Masses (f ce (F13) <b>(LRF</b> (F17) <b>(MLRA</b> tic (F18) <b>(MLF</b> podplain Soils sright Loamy S	S8) (LRR S, R S, T, U) (LRR O) F12) (LRR C R P, T, U) 151) RA 150A, 1! (F19) (MLR Soils (F20) (I	5, T, U) O, P, T) 50B) RA 149A) (MLRA 1	1 cm M 2 cm M Reduce Piedmo Anoma (MLR Red Pa Very Sl Other ( <sup>3</sup> Indica weth unle	luck (A9) (L luck (A10) ( ed Vertic (F ont Floodpla lous Bright <b>RA 153B)</b> arent Mater hallow Dark Explain in F ators of hyd ard hydrole ass disturbe	<b>JRR O)</b> ( <b>LRR S)</b> 18) <b>(outside</b> ain Soils (F1 <sup>-</sup> Loamy Soils ial (TF2) (Surface (Tf Remarks) drophytic veg ogy must be red or problem	<ul> <li>MLRA 15</li> <li>9) (LRR P,</li> <li>(F20)</li> <li><sup>-</sup>12)</li> <li><sup>2</sup>getation an present, natic.</li> </ul>	<b>50A,B)</b> , <b>S, T)</b> Id
Restrictive	Layer (if observed):										
Type:	choc):		_				ludric Soil	Procent?	Voc	No	~
Bemarks:	ciles).						iyunc 30li	Fiesent	165		



**Photo 1** Upland data point wrof004\_u facing southeast



**Photo 2** Upland data point wrof004\_u facing east

Project/Site: Atlantic Coast Pipeline	City/County: Robeson County			_ Sampling Date: <u>12/14/2015</u>			
Applicant/Owner: Dominion		St	ate: NC	Sampling	Point: wrof	003f_w	
Investigator(s): SH, AS		Section, Township	o, Range: <u>No F</u>	PLSS in this are	ea		
Landform (hillslope, terrace, etc.): flat		Local relief (conca	ive, convex, no	one): microtopo	ography	_ Slope (%	<u>): 1</u>
Subregion (LRR or MLRA): P	Lat: <u>34.83</u>	330025	Long: <u>-78</u>	.99650933		Datum:	WGS 1984
Soil Map Unit Name: Rains sandy loam				_ NWI classifi	cation: PFC	D1C	
Are climatic / hydrologic conditions on the site typical for t	his time of y	ear?Yes 🖌	No (If	no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly	y disturbed?	Are "Normal C	ircumstances"	present?	Yes	No 🖌
Are Vegetation, Soil, or Hydrology	_naturally pr	roblematic?	(If needed, exp	olain any answ	ers in Rema	arks.)	
SUMMARY OF FINDINGS – Attach site map	o showing	g sampling poi	int location	s, transect	s, import	ant featu	ires, etc.
Hydrophytic Vegetation Present? Yes 🖌	No	Is the Sam	pled Area				
Hydric Soil Present? Yes <u>✓</u>	No	within a W	etland?	Yes 📕	No_		
Wetland Hydrology Present? Yes <u>Yes</u>	No	-					
Remarks: Wetland is in a pine plantation. NC WAM classification as	s a pine flat v	wetland.					
HYDROLOGY							
Wetland Hydrology Indicators:			<u>S</u>	econdary Indic	ators (minin	num of two	required)

wenanu nyurology mulcators.	<u>Occondary indicators (minimum or two required)</u>
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
✓ High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living R	oots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (	C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🔽 Depth (inches):	
Water Table Present? Yes <u>V</u> No Depth (inches): $\frac{3}{2}$	
Saturation Present? Yes <u>V</u> No Depth (inches): U (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect	ions), if available:
Remarks:	

Sampling Point: wrof003f\_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:30)	% Cover	Species?	Status	Number of Dominant Species
1. Pinus taeda	70	Yes	FAC	That Are OBL, FACW, or FAC: 7 (A)
2				Total Number of Deminent
3.				Species Across All Strata: 7 (B)
4				
т				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				
	70	= Total Cov	rer	OBL species $x_1 = \frac{36}{18}$
50% of total cover:35	20% of	total cover	14	FACW species $x^2 = \frac{360}{360}$
Sapling/Shrub Stratum (Plot size: 15)				FAC species $x_3 = 309$
Acer rubrum	20	Yes	FAC	FACU species x 4 =0
Liquidambar styraciflua	10	Yes	FAC	UPL species $0 \times 5 = 0$
Z. Maralla corifora				Column Totals: 141 (A) 405 (B)
	5			(-)
4. Ilex opaca	5	NO	FAC	Prevalence Index = B/A =2.87
5. Vaccinium corymbosum	3	No	FACW	Hydrophytic Vegetation Indicators:
6				1 - Ranid Test for Hydronhytic Vegetation
7				
8				
0	43	- Tatal Car		<u> </u>
21.5		= Total Cov	ver 8.6	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover	0.0	
Herb Stratum (Plot size: 5)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Lyonia lucida	10	Yes	FACW	be present, unless disturbed or problematic.
<sub>2.</sub> Arundinaria gigantea	5	Yes	FACW	Definitions of Four Vegetation Strata:
3 Pinus taeda	5	Yes	FAC	
۰	5	Yes	FAC	<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
- Smilax rotundifolia	3	No	FAC	height
5			170	noight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9.				of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in
10				neight.
12				
	28	= Total Cov	er	
50% of total cover:14	20% of	total cover	5.0	
Woody Vine Stratum (Plot size: 30 )				
1.				
2				
2				
4				
5				Hydrophytic
	0	= Total Cov	rer	Vegetation
50% of total cover:0	20% of	total cover	0	Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations below	N)			
	••).			

Profile Desc	cription: (Describe t	o the dept	n needed to docum	ent the indicator	or confirm	the absence of indicators.)
Depth	Matrix		Redox	Features		
(inches)	Color (moist)	%	Color (moist)	<u>%</u> Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
0-2	10 YR 2/1	100				LFS
2-20	10 YR 5/2	40				SL
	10 YR 4/2	60				SL
$\frac{1}{1}$ Type: C=C	oncentration D=Depl	etion RM=	Peduced Matrix MS	-Masked Sand Gr	aine	<sup>2</sup> Location: PL=Pore Lining M=Matrix
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless otherv	vise noted.)	uiii3.	Indicators for Problematic Hydric Soils <sup>3</sup> :
<ul> <li> Histosol</li> <li> Histosol</li> <li> Histic E</li> <li> Black H</li> <li> Hydroge</li> <li> Stratifie</li> <li> Organic</li> <li> 5 cm Mu</li> <li> 1 cm Mu</li> <li> 1 cm Mu</li> <li> Deplete</li> <li> Thick Data</li> <li> Coast P</li> <li> Sandy N</li> <li> Sandy C</li> <li> Sandy F</li> <li> Stripped</li> </ul>	(A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, ucky Mineral (A7) (LR resence (A8) (LRR U) uck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (N Aucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	T, U) R P, T, U) (A11) ILRA 150A) RR O, S)	<ul> <li>Polyvalue Bela</li> <li>Thin Dark Suri</li> <li>Loamy Mucky</li> <li>Loamy Gleyed</li> <li>Depleted Matr</li> <li>Redox Dark S</li> <li>Depleted Dark</li> <li>Redox Depress</li> <li>Marl (F10) (LF</li> <li>Depleted Ochin</li> <li>Iron-Mangane</li> <li>Umbric Surface</li> <li>Delta Ochric (I</li> <li>Reduced Verti</li> <li>Piedmont Floor</li> <li>Anomalous Br</li> </ul>	ow Surface (S8) (L face (S9) (LRR S, Mineral (F1) (LRR d Matrix (F2) rix (F3) urface (F6) solution (F8) RR U) ric (F11) (MLRA 19) se Masses (F12) ( ce (F13) (LRR P, T F17) (MLRA 151) ic (F18) (MLRA 151) odplain Soils (F19) right Loamy Soils (	RR S, T, U T, U) O) LRR O, P, <sup>-</sup> , U) 0A, 150B) (MLRA 149 -20) (MLR/	<ul> <li>1 cm Muck (A9) (LRR O)</li> <li>2 cm Muck (A10) (LRR S)</li> <li>Reduced Vertic (F18) (outside MLRA 150A,B)</li> <li>Piedmont Floodplain Soils (F19) (LRR P, S, T)</li> <li>Anomalous Bright Loamy Soils (F20)</li> <li>(MLRA 153B)</li> <li>Red Parent Material (TF2)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> </ul> T) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. 9A) A 149A, 153C, 153D)
Restrictive	Layer (if observed):	, 1, 0)				
Туре:	- ·					
Depth (in	ches):					Hydric Soil Present? Yes <u></u> No
Remarks:						·



Photo 1 Wetland data point wrof003f\_w facing west



Photo 2 Wetland data point wrof003f\_w facing south

Project/Site: Atlantic Coast Pipeline	City/County: Robeson (	County	Sampling Date: 12/14/2015
Applicant/Owner: Dominion		State: NC	Sampling Point: wrof003_u
Investigator(s): SH, AS	Section, Township, Rar	nge: <u>No PLSS in this area</u>	
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, co	onvex, none): <u>none</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): P Lat: 34.833	345832 L	ong: <u>-78.99625718</u>	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam		NWI classifica	ation: None
Are climatic / hydrologic conditions on the site typical for this time of y	ear? Yes 🖌 No	(If no, explain in Re	emarks.)
Are Vegetation, Soil, or Hydrology significantly	/ disturbed? Are "I	Normal Circumstances" pr	resent? Yes No _
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If ne	eded, explain any answer	s in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point lo	ocations, transects,	important features, etc.

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

Wetland Hydrology Indicate	ors:			Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)				Surface Soil Cracks (B6)
Surface Water (A1)	Surface Water (A1) Aquatic Fauna (B13)			Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	Marl De	eposits (B15) (LRR U)		Drainage Patterns (B10)
✓ Saturation (A3)	Hydrog	en Sulfide Odor (C1)		Moss Trim Lines (B16)
Water Marks (B1)	Oxidize	d Rhizospheres along Living Ro	oots (C3)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Presen	ce of Reduced Iron (C4)		Crayfish Burrows (C8)
Drift Deposits (B3)	Recent	Iron Reduction in Tilled Soils (C	C6)	Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Mu	uck Surface (C7)		Geomorphic Position (D2)
Iron Deposits (B5)	Other (I	Explain in Remarks)		Shallow Aquitard (D3)
Inundation Visible on Ae	ial Imagery (B7)			✓ FAC-Neutral Test (D5)
Water-Stained Leaves (E	39)			Sphagnum moss (D8) (LRR T, U)
Field Observations:				
Surface Water Present?	Yes No 🔽 De	pth (inches):		
Water Table Present?	Yes No 🖌 De	pth (inches):		
		10		
Saturation Present? (includes capillary fringe)	Yes Vo De	pth (inches):	Wetland H	lydrology Present? Yes <u>V</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes <u>Yes</u> No <u>De</u> eam gauge, monitoring well,	aerial photos, previous inspecti	Wetland F	lydrology Present? Yes <u>V</u> No ilable:
Saturation Present? (includes capillary fringe) Describe Recorded Data (stro	Yes <u>V</u> No <u>Pe</u>	pth (inches):	Wetland F ions), if ava	lydrology Present? Yes <u>V</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stre Remarks:	Yes <u>V</u> No <u>Pe</u>	pth (inches):	Wetland F	lydrology Present? Yes <u>v</u> No <u></u> ilable:
Saturation Present? (includes capillary fringe) Describe Recorded Data (stre Remarks:	Yes <u>V</u> No <u>De</u> eam gauge, monitoring well,	pth (inches):aerial photos, previous inspecti	Wetland H	lydrology Present? Yes <u>v</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stro Remarks:	Yes <u>Yes</u> No <u></u> De	pth (inches):aerial photos, previous inspecti	Wetland F	lydrology Present? Yes <u>v</u> No <u></u> ilable:
Saturation Present? (includes capillary fringe) Describe Recorded Data (stro Remarks:	Yes <u>Yes</u> No <u></u> De	pth (inches):	Wetland F	lydrology Present? Yes <u>v</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stre Remarks:	Yes <u>Yes</u> No <u></u> De	pth (inches):	Wetland H	lydrology Present? Yes <u>v</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stro Remarks:	Yes <u>Yes</u> No <u>Pe</u>	pth (inches):	Wetland H	lydrology Present? Yes <u>v</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stro Remarks:	Yes <u>Yes</u> No <u></u> De	pth (inches):	Wetland H	lydrology Present? Yes <u>v</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stro Remarks:	Yes <u>Yes</u> No <u></u> De	pth (inches):	Wetland H	lydrology Present? Yes <u>v</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stro Remarks:	Yes <u>Yes</u> No <u></u> De	pth (inches):	Wetland H	lydrology Present? Yes <u>v</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stro Remarks:	Yes <u>Yes</u> No <u></u> De	pth (inches):	Wetland H	lydrology Present? Yes <u>v</u> No
Saturation Present? (includes capillary fringe) Describe Recorded Data (stre Remarks:	Yes <u>Yes</u> No <u>Pe</u>	pth (inches):	Wetland H	lydrology Present? Yes <u>v</u> No

Sampling Point: wrof003\_u

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Pinus taeda	<u> </u>	Tes		That Are OBL, FACW, or FAC:4 (A)
2. Liquidambar styracifiua		NO	FAC	Total Number of Dominant
3				Species Across All Strata:4 (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:
· ·	65	= Total Cov	or	OBL species x 1 =0
50% of total cover: 32.5	20% of	total covor:	13	FACW species $20$ x 2 = $40$
So // Or total cover.	20 % 01		·	FAC species $x_3 = 390$
Sapling/Shrub Stratum (Plot size:)	30	Ves	FAC	FACU species $0 \times 4 = 0$
1. Liquidambar styraciflua	10	No		UPL species $0 \times 5 = 0$
	10		FAC	$\begin{array}{c} 1 \\ 150 \\ 150 \\ 150 \\ 150 \\ 100 \\ 1$
3. Vaccinium corymbosum	10	No	FACW	
4. Morella cerifera	10	No	FAC	Prevalence Index = B/A = 2.86
5				Hydrophytic Vegetation Indicators:
6				1 - Ranid Test for Hydronhytic Vegetation
7.				✓ 2 Deminance Test is >50%
8				$\sim$ 2 - Dominance results >50%
0	60	= Total Cov		
500% of total covery 30	200/ of		12	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size:)	10	Ma a		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
	10	Yes	FACW	be present, unless disturbed or problematic.
2. Ilex opaca	10	Yes	FAC	Definitions of Four Vegetation Strata:
3. Pinus taeda	5	No	FAC	<b>Tree</b> – Woody plants, excluding vines, 3 in, (7.6 cm) or
4. Chimaphila maculata	3	No		more in diameter at breast height (DBH), regardless of
5				height.
6.				Sanling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				
11			<u> </u>	<b>Woody vine</b> – All woody vines greater than 3.28 ft in
10				neight.
12	10			
14	10	= Total Cov	er F 6	
50% of total cover:14	20% of	total cover:	5.0	
Woody Vine Stratum (Plot size: 30 )				
1				
2				
3.				
4				
5				
	0	- Total Cav		Hydrophytic Vegetation
			0	Present? Yes <u>No</u>
	20% of	total cover:		
Remarks: (If observed, list morphological adaptations below	w).			

Profile Desc	cription: (Describe	to the dep	th needed to docur	nent the	indicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-5	2.5Y 2.5/1	100					FSL	
5-7	2.5Y 4/3	100					LS	
7-20	2.5Y 5/3	95	10YR 5/6	5	С	М	SCL	
					·			
1						<u> </u>	2	
Type: C=C	oncentration, D=Dep	letion, RM:	Reduced Matrix, M	S=Masked	d Sand Gra	ains.	Location:	PL=Pore Lining, M=Matrix.
						прети		
HISTOSO	ninodon (A2)		Polyvalue Be	elow Sulta	ice (58) (L	кк 5, 1, 0 т 11\	)1 Cm W	uck (A9) (LRR U)
Black H	$p_{1}p_{2}p_{1}p_{2}p_{3}p_{3}p_{3}p_{3}p_{3}p_{3}p_{3}p_{3$			v Mineral	(E1) (I RR	0)	2 CII W	All Vertic (E18) (outside MI RA 150A B)
Hydroge	n Sulfide (A4)		Loamy Gleve	d Matrix /	(F2)	0)	Reduce	ant Eloodolain Soils (E19) (I RR P S T)
Stratifie	d Lavers (A5)		Depleted Ma	trix (E3)	(1 2)		Anoma	lous Bright Loamy Soils (F20)
Organic	Bodies (A6) <b>(I RR P</b>	τ.υ)	Bedox Dark	Surface (F	-6)		(MI R	(A 153B)
<u> </u>	ucky Mineral (A7) (I F	RPTU	Depleted Da	rk Surface	• (F7)		Red Pa	arent Material (TE2)
0 cm Muck Pi	resence (A8) <b>(I RR II</b>	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Redox Depre	esions (F	2 (1 <i>7 )</i> 28)		Verv St	hallow Dark Surface (TE12)
		)	Marl (E10) (		0)		Very Si	Explain in Pomarks)
T chi Mit	d Rolow Dark Surface	- (A11)		.KK UJ bric (E11)		:4)		
Depiete	ark Surface (A12)	- (711)					T) <sup>3</sup> Indice	ators of hydrophytic vegetation and
	ark Surface (A12)						i) indica	and hydrology must be present
Coast P	Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, I, U)				, 0)	weu	and hydrology must be present,	
Sandy (	Nucky Mineral (ST) (L Cloved Matrix (S4)	.KR 0, 5)	Deita Ochic	(F17) <b>(IVIL</b> tic (E18)	LKA 151) (MI DA 15	0A 150B)	unie	iss disturbed of problematic.
Sandy C	Dedex (SE)		Reduced ver	uc (F 10)		UA, 1300) /MI DA 44	0.4.)	
Sanuy r				Duplain C			9A) A 440A 452C	452D)
Suipped Dark Su	urface (S7) <b>(I RR P. S</b>	тш		Signi Lua	iny Solis (r		A 149A, 155C,	1550)
Restrictive	Laver (if observed):	, 1, 0)						
Type:								
Depth (in	ches):						Hydric Soil	Present? Yes No 🔽
Remarks:								



**Photo 1** Upland data point wrof003\_u facing south



Photo 2 Upland data point wrof003\_u facing east

Project/Site: Atlantic Coast Pipeline	City/County:	Robeson County	Sampling Date: <u>12/12/2015</u>	
Applicant/Owner: Dominion		State: NC	Sampling Point: wrof002e_w	
Investigator(s): SH, AS	Section, Tow	nship, Range: <u>No PLSS in this are</u>	a	
Landform (hillslope, terrace, etc.): Swale	Local relief (c	oncave, convex, none): <u>concave</u>	Slope (%): <u>1</u>	
Subregion (LRR or MLRA): <u>P</u> Lat: <u>34</u>	1.83233817	Long: <u>-78.99853037</u>	Datum: WGS 19	984
Soil Map Unit Name: Rains sandy loam		NWI classific	cation: None	
Are climatic / hydrologic conditions on the site typical for this time	of year? Yes 🔽	No (If no, explain in R	Remarks.)	
Are Vegetation, Soil, or Hydrology signific	antly disturbed?	Are "Normal Circumstances"	present? Yes No	/
Are Vegetation, Soil, or Hydrology natural	ly problematic?	(If needed, explain any answe	ers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map show	ving sampling	point locations, transects	s, important features, et	: <b>C</b> .

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

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

Sampling Point: wrof002e\_w

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	% Cover	<u>Species?</u>	Status	Number of Dominant Species That Are OBL, FACW, or FAC: (A)
23.				Total Number of Dominant Species Across All Strata: 2 (B)
4.				
5				That Are OBL, FACW, or FAC: (A/B)
0 7			·	Prevalence Index worksheet:
/				Total % Cover of:Multiply by:
o	0	- Total Car		OBL species 0 x 1 = 0
	2001/ -4		0	FACW species $0   x 2 = 0$
Su% of total cover:	20% 01	total cover:		FAC species $85 \times 3 = 255$
<u>Sapling/Snrub Stratum</u> (Plot size:)	10	Ves	FAC	FACU species $15 \times 4 = 60$
	10	103	TAO	UPL species $0 \times 5 = 0$
2				Column Totals: (A) (B)
4				Prevalence Index = B/A =3.15
5	. <u> </u>			Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
- -	10	= Total Cove	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover: 5	20% of	total cover:	2	
Herb Stratum (Plot size: 5) 1. Panicum virgatum	75	Yes	FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Eupatorium capillifolium	15	No	FACU	Definitions of Four Vegetation Strata:
3.				
4	. <u> </u>			<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or
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 9.				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12.	90	- Total Cov		
EOW of total acuary 47.5			-19	
	20% 0	total cover.		
Woody Vine Stratum (Plot size:)				
1				
2	·			
3				
4				
5				Hydrophytic
	0	= Total Cove	er	Vegetation Present? Ves V
50% of total cover:0	20% of	total cover:	0	
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL

Profile Desc	cription: (Describe to	o the dep	th needed to docu	nent the i	ndicator	or confirm	the absence	of indicators.)
Depth	Matrix		Redo	x Features	S	2		
(inches)	Color (moist)		Color (moist)	%	Type'		Texture	Remarks
0-0	10 fR 2/1	100					5L	
6-20	10 YR 4/1	95	10 YR 5/4	5	C	Μ	SCL	
							<u> </u>	
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM	=Reduced Matrix, M	S=Masked	I Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	ble to all	LRRs, unless othe	rwise note	ed.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	elow Surfa	ce (S8) <b>(L</b>	RR S, T, U)	1 cm M	/luck (A9) <b>(LRR O)</b>
Histic E	pipedon (A2)		Thin Dark Sι	urface (S9)	(LRR S,	T, U)	2 cm M	/luck (A10) <b>(LRR S)</b>
Black H	istic (A3)		Loamy Muck	y Mineral	(F1) <b>(LRR</b>	0)	Reduc	ed Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)		Piedmo	ont Floodplain Soils (F19) <b>(LRR P, S, T)</b>
Stratifie	d Layers (A5)	<b>T</b> 11	Depleted Ma	itrix (F3) Surface (F	·c)		Anoma	alous Bright Loamy Soils (F20)
Organic	Bodies (Ab) (LRR P,	I, U) В В Т III	Redox Dark	Sufface (F	0) (E7)		(IVILF Dod D	XA 153B) aront Material (TE2)
Muck Pi	resence (A8) (I RR U)	ις Γ, Γ, <b>Ο</b> )	Redox Depre	essions (Fi	(1 <i>7)</i> B)		Verv S	hallow Dark Surface (TE12)
1 cm Mi	uck (A9) (LRR P. T)		Marl (F10) (L	_RR U)	0)		Other (	(Explain in Remarks)
Deplete	d Below Dark Surface	(A11)	Depleted Oc	hric (F11)	(MLRA 1	51)		( F
Thick D	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) <b>(</b>	LRR O, P, 1	<b>Γ)</b> <sup>3</sup> Indic	ators of hydrophytic vegetation and
Coast P	rairie Redox (A16) (M	LRA 150	A) Umbric Surfa	ace (F13) <b>(</b>	LRR P, T	, U)	wet	land hydrology must be present,
Sandy M	/lucky Mineral (S1) <b>(Ll</b>	RR O, S)	Delta Ochric	(F17) <b>(ML</b>	.RA 151)		unle	ess disturbed or problematic.
Sandy C	Gleyed Matrix (S4)		Reduced Ve	rtic (F18) <b>(</b>	MLRA 15	0A, 150B)		
Sandy F	Redox (S5)		Piedmont Flo	oodplain S	oils (F19)	(MLRA 149	9A)	
Stripped	Matrix (S6)	<b>-</b> 10	Anomalous E	Bright Loar	ny Soils (I	F20) (MLRA	A 149A, 153C	, 153D)
Dark Su	Inface (S7) (LRR P, S,	I, U)						
Turney	Layer (if observed):							
Type:								
Depth (in	cnes):						Hydric Soil	Present? Yes <u>No</u> No
Remarks:								



Photo 1 Wetland data point wrof002e\_w facing east



Photo 2 Wetland data point wrof002e\_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: F	Robeson County	_ Sampling Date: <u>12/12/2015</u>
Applicant/Owner: Dominion		State: NC	_ Sampling Point: wrof002_u
Investigator(s): SH, AS	Section, Towr	ship, Range: <u>No PLSS in this ar</u>	ea
Landform (hillslope, terrace, etc.): Rise	Local relief (co	oncave, convex, none): <u>convex</u>	Slope (%): <u>1</u>
Subregion (LRR or MLRA): P Lat: .	34.83220479	Long: <u>-78.99857497</u>	Datum: WGS 1984
Soil Map Unit Name: Rains sandy loam		NWI classif	ication: None
Are climatic / hydrologic conditions on the site typical for this tin	ne of year? Yes 🧹	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology signi	ficantly disturbed?	Are "Normal Circumstances"	present? Yes No _
Are Vegetation, Soil, or Hydrology natu	rally problematic?	(If needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	owing sampling	point locations, transect	s, important features, etc.

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

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)       Aquatic Fauna (B13)         High Water Table (A2)       Marl Deposits (B15) (LRR U)         Saturation (A3)       Hydrogen Sulfide Odor (C1)         Water Marks (B1)       Oxidized Rhizospheres along Living F         Sediment Deposits (B2)       Presence of Reduced Iron (C4)         Drift Deposits (B3)       Recent Iron Reduction in Tilled Soils (         Algal Mat or Crust (B4)       Thin Muck Surface (C7)         Iron Deposits (B5)       Other (Explain in Remarks)         Mundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)	<ul> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Sphagnum moss (D8) (LRR T, U)</li> </ul>
Field Observations:         Surface Water Present?       Yes No _       Depth (inches):         Water Table Present?       Yes No _       Depth (inches):         Saturation Present?       Yes No _       Depth (inches):         (includes capillary fringe)       No _       Depth (inches):         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspect Saturation at 18 inches	Wetland Hydrology Present? Yes No tions), if available:
Remarks:	

Sampling Point: wrof002\_u

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:3(A)
2.				()
3				Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: $60$ (A/B)
6				Provalence Index worksheet:
7				Total % Cover of: Multiply by:
8				$\frac{1}{10000000000000000000000000000000000$
0	0	= Total Cov	er	$\frac{0}{2} = \frac{0}{2}$
50% of total cover:	20% of	total cover:	0	FAC species $23$ x 2 - $69$
Sapling/Shrub Stratum (Plot size: 15 )	_			FAC species $28$ x 4 = 112
1. Pinus taeda	5	Yes	FAC	FACO species $x 4 = $
2. Rubus missouricus	3	Yes	FACU	OPL species $33 \times 5 = 191$
3. Liquidambar styraciflua	3	Yes	FAC	Column Totals: (A) (B)
4. Quercus stellata	2	No	UPL	Prevalence Index = B/A =3.6
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>
	13	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:6.5	20% of	total cover:	2.6	
Herb Stratum (Plot size: 5 )				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Eupatorium capillifolium	25	Yes	FACU	be present, unless disturbed or problematic.
2. Smilax rotundifolia	10	Yes	FAC	Definitions of Four Vegetation Strata:
3. Panicum virgatum	5	No	FAC	
4				<b>Tree</b> – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Conting/Charte Weeds plants evaluating since lass
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				
	40	= Total Cov	er	
50% of total cover: 20	20% of	total cover:	8	
Woody Vine Stratum (Plot size: 30 )				
1				
2				
3				
4.				
5.				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes Ves No
Remarks: (If observed, list morphological adaptations belo	w)			

Profile Desc	ription: (Describe to	o the depth ne	eded to docun	nent the i	ndicator	or confirm	the absence o	f indicato	rs.)	
Depth	Matrix		Redox	k Features	6					
(inches)	Color (moist)	% C	olor (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks	
0-4	10 YR 3/1	100					SL			
4-7	10 YR 4/2	100					SL			
7-20	10 YR 5/2	100					SCL			
		tion RM=Red	uced Matrix MS		Sand Gra	line	<sup>2</sup> Location: E	Pl=Pore li	ning M=Matrix	,
Hydric Soil	Indicators: (Applica	ble to all LRR	s, unless other	wise note	ed.)		Indicators for	or Problen	natic Hydric S	oils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	low Surfac	ce (S8) <b>(L</b>	RR S, T, U)	1 cm Mu	uck (A9) <b>(L</b>	RR O)	
Histic Ep	pipedon (A2)		_ Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm Mu	uck (A10) <b>(</b>	LRR S)	
Black Hi	stic (A3)		_ Loamy Mucky	/ Mineral (	(F1) (LRR	0)	Reduced	d Vertic (F	18) <b>(outside N</b>	ILRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleve	d Matrix (I	F2)		Piedmor	nt Floodpla	in Soils (F19)	(LRR P, S, T)
Stratified	Lavers (A5)		Depleted Mat	rix (F3)	,		Anomalo	ous Briaht I	Loamv Soils (F	-20)
Organic	Bodies (A6) (LRR P.	т. U) —	Redox Dark S	Surface (F	6)		(MLRA	A 153B)		/
5 cm Mu	icky Mineral (A7) (LR	., ., ., R P, T, U)	Depleted Dar	k Surface	(F7)		Red Par	ent Materia	al (TF2)	
Muck Pr	esence (A8) (LRR U)		Redox Depre	ssions (F8	3)		Very Sh	allow Dark	Surface (TF12	2)
1 cm Mu	ick (A9) (LRR P, T)		Marl (F10) (L	RR U)			Other (E	xplain in R	Remarks)	
Depleted	d Below Dark Surface	(A11)	Depleted Och	nric (F11)	(MLRA 15	51)				
Thick Da	ark Surface (A12)	. , _	Iron-Mangane	ese Masse	es (F12) <b>(I</b>	_RR O, P, T	) <sup>3</sup> Indica	tors of hyd	rophytic veget	ation and
Coast P	rairie Redox (A16) (M	LRA 150A)	Umbric Surfa	ce (F13) <b>(</b>	LRR P. T.	U)	, wetla	ind hydrolo	ay must be pr	esent.
Sandv M	luckv Mineral (S1) <b>(L</b>	RR O. S)	Delta Ochric	(F17) (ML	RA 151)	,	unles	s disturbe	d or problemat	ic.
Sandy G	Gleved Matrix (S4)		Reduced Ver	tic (F18) (	MLRA 15	0A. 150B)				
Sandy R	Redox (S5)		Piedmont Flo	odplain Se	oils (F19)	(MLRA 149	A)			
Stripped	Matrix (S6)		Anomalous B	right I oan	nv Soils (F	20) (MLRA	149A. 153C. <sup>•</sup>	153D)		
Dark Su	rface (S7) <b>(LRR P, S</b> ,	T, U)					,,	,		
Restrictive I	Layer (if observed):									
Туре:										
Depth (inc	ches):						Hydric Soil P	Present?	Yes	No
Remarks:										



Photo 1 Upland data point wrof002\_u facing south



Photo 2 Upland data point wrof002\_u facing west

Project/Site: Atlantic Coast Pipeline	City/County: F	Robeson County	Sampling Date: <u>12/12/2015</u>
Applicant/Owner: Dominion		State: NC	Sampling Point: wrof001e_w
Investigator(s): SH, AS	Section, Town	ship, Range: <u>No PLSS in this a</u>	area
Landform (hillslope, terrace, etc.): depression	Local relief (co	oncave, convex, none): <u>concave</u>	e Slope (%): 0
Subregion (LRR or MLRA): P	at: <u>34.83027717</u>	Long: <u>-79.00231465</u>	Datum: WGS 1984
Soil Map Unit Name: Lakeland sand, 0 to 6 percent slopes		NWI class	ification: PFO4B
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes	No (If no, explain ir	n Remarks.)
Are Vegetation <u> </u>	gnificantly disturbed?	Are "Normal Circumstances	s" present? Yes No
Are Vegetation, Soil, or Hydrology na	aturally problematic?	(If needed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS – Attach site map s	showing sampling	point locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? Yes <u>v</u> No Hydric Soil Present? Yes <u>v</u> No Wetland Hydrology Present?	Is the s	Sampled Area a Wetland? Yes	✓ No

Yes 🖌 No \_\_\_\_\_

### HYDROLOGY

Remarks:

Wetland Hydrology Present?

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
<ul> <li>Surface Water (A1)</li> <li>Aquatic Fauna (B13)</li> <li>High Water Table (A2)</li> <li>Marl Deposits (B15) (LRR U)</li> <li>Saturation (A3)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Water Marks (B1)</li> <li>Oxidized Rhizospheres along</li> <li>Sediment Deposits (B2)</li> <li>Presence of Reduced Iron (C4</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Imagery (B7)</li> <li>Water-Stained Leaves (B9)</li> </ul>	
Field Observations:	
Surface Water Present?       YesNo Depth (inches):         Water Table Present?       YesNo Depth (inches):         Saturation Present?       YesNo Depth (inches):         (includes capillary fringe)       VesNo Depth (inches):         Describe Recorded Data (stream cauge monitoring well aerial photos previous)	Wetland Hydrology Present? Yes <u>V</u> No
Areas of open water present.	
Remarks:	

Sampling Point: wrof001e\_w

	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) 1	<u>% Cover</u>	Species?	Status	Number of Dominant Species That Are OBL, FACW, or FAC:4 (A)
2				Tatal Number of Dominant
3				Species Across All Strata: 4 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC:100 (A/B)
6	<u> </u>	·		Prevalence Index worksheet:
7		. <u> </u>		Total % Cover of: Multiply by:
8		·		$\frac{1}{0} \frac{1}{0} \frac{1}$
0	0	= Total Cov	ver o	$\frac{55}{55} \times 2 = 110$
50% of total cover:	20% of	total cover		$\frac{20}{20} \times 3 = \frac{60}{100}$
Sapling/Shrub Stratum (Plot size: 15 )	_			$\frac{1}{1} = \frac{1}{1} = \frac{1}$
1. Ilex opaca	5	Yes	FAC	$\begin{array}{c} \text{FACO species} \\ \text{IDL energies} \\ 0 \\ \text{VE = } \\ 0 \\ 0 \\ \text{VE = } \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\$
2. Acer rubrum	5	Yes	FAC	$\begin{array}{c} \text{OPL species} \\ \text{OPL species} \\ \hline 75 \\ \text{OPL species} \\ \hline 170 \\ \text{OPL species} \\ \hline 75 \\ $
3				Column Totals: (A) (B)
4				Prevalence Index = $B/A = 2.26$
5				Hydrophytic Vegetation Indicators:
6				1 - Ranid Test for Hydronhytic Vocatation
7.				$\checkmark$ 2 Deminance Test is $> 50\%$
8				$\sim$ 2 - Dominance Test is >50%
···	10	= Total Cov		· 3 - Prevalence Index is ≤3.0
50% of total cover: 5	20% of	total cover	. 2	Problematic Hydrophytic Vegetation* (Explain)
Lierh Stretum (Plet eizer 5	20 /0 01		·	
Fubotrys racemosa	25	Ves	FACW	Indicators of hydric soil and wetland hydrology must
	15	Voc	EACW/	be present, unless disturbed of problematic.
2. <u>Itex grabia</u>	10			Definitions of Four Vegetation Strata:
3. Quercus launifolia				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
	<u> </u>		FAC	more in diameter at breast height (DBH), regardless of
5. <u>Ilex opaca</u>	5	NO	FAC	neight.
6. Magnolia virginiana	5	No	FACW	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.				
	65	= Total Cov	ver	
50% of total cover: 32.5	20% of	total cover	. 13	
Woody Vine Stratum (Plot size: 30 )			·	
1				
2				
2				
4				
5				Hydrophytic
0		= Total Cov	ver o	Present? Yes No
50% of total cover:	20% of	total cover	:	
Remarks: (If observed, list morphological adaptations belo	w).			

Profile Desc	ription: (Describe t	o the dept	n needed to docum	nent the i	ndicator	or confirm	the absence of indicators.)				
Depth	Matrix		Redo	x Features	S						
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks				
0-4	10 YR 2/1	100					SL				
5-8	10 YR 3/1	100					SL				
8-20	10 YR 5/1	100					SCL				
						·					
								—			
1 <del></del>							21 11 DI D. 11 1 11 11	—			
Type: C=Co	oncentration, D=Depl	etion, RM=I	Reduced Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location: PL=Pore Lining, M=Matrix.				
Hydric Soll	indicators: (Applica	able to all L	RRS, UNIESS Other	wise note	ea.)		Indicators for Problematic Hydric Solis":				
Histosol	(A1)		Polyvalue Be	low Surfa	ce (S8) <b>(L</b>	RR S, T, U	I) 1 cm Muck (A9) (LRR O)				
Histic Ep	pipedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm Muck (A10) <b>(LRR S)</b>				
Black Hi	stic (A3)		Loamy Muck	y Mineral	(F1) <b>(LRR</b>	0)	Reduced Vertic (F18) (outside MLRA 150A	,B)			
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (	F2)		Piedmont Floodplain Soils (F19) (LRR P, S,	T)			
Stratified	d Layers (A5)		Depleted Mar	trix (F3)			Anomalous Bright Loamy Soils (F20)				
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark \$	Surface (F	6)		(MLRA 153B)				
5 cm Mu	icky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Dar	k Surface	(F7)		Red Parent Material (TF2)				
Muck Pr	esence (A8) (LRR U)		Redox Depre	ssions (Fa	8)		Very Shallow Dark Surface (TF12)				
1 cm Mu	ick (A9) <b>(LRR P, T)</b>		Marl (F10) <b>(L</b>	RR U)			Other (Explain in Remarks)				
Depleted	d Below Dark Surface	e (A11)	Depleted Ocl	nric (F11)	(MLRA 1	51)					
Thick Da	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) <b>(</b> I	LRR O, P,	<b>T)</b> <sup>3</sup> Indicators of hydrophytic vegetation and				
Coast P	rairie Redox (A16) <b>(N</b>	ILRA 150A)	Umbric Surfa	ce (F13) <b>(</b>	LRR P, T	, U)	wetland hydrology must be present,				
Sandy M	lucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) <b>(ML</b>	RA 151)		unless disturbed or problematic.				
Sandy G	Bleved Matrix (S4)		Reduced Ver	tic (F18) <b>(</b>	MLRA 15	0A. 150B)	·				
Sandy R	Redox (S5)		Piedmont Flo	odplain S	oils (F19)	(MLRA 14	9A)				
Stripped	Matrix (S6)		Anomalous P	right Loar	nv Soils (I	=20) (MLR)	A 149A, 153C, 153D)				
Dark Su	rface (S7) (LRR P, S	, T, U)									
Restrictive I	Layer (if observed):										
Туре:											
Depth (in	ches):						Hydric Soil Present? Yes No	_			
Remarks:											



Photo 1 Wetland data point wrof001e\_w facing west



Photo 2 Wetland data point wrof001e\_w facing northeast

Project/Site: Atlantic Coast Pipeline	City/County: F	Robeson County	_ Sampling Date: <u>12/12/2015</u>
Applicant/Owner: Dominion		State: NC	_ Sampling Point: wrof001_u
Investigator(s): SH, AS	Section, Town	ship, Range: <u>No PLSS in this ar</u>	ea
Landform (hillslope, terrace, etc.): slight slope	Local relief (co	ncave, convex, none): <u>convex</u>	Slope (%): <u>3</u>
Subregion (LRR or MLRA): P	_at: <u>34.83007967</u>	Long: <u>-79.00244357</u>	Datum: WGS 1984
Soil Map Unit Name: Lakeland sand, 0 to 6 percent slopes		NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for thi	s time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrologys	significantly disturbed?	Are "Normal Circumstances'	' present? Yes No
Are Vegetation, Soil, or Hydrology I	naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS - Attach site man	showing sampling	noint locations transact	s important features atc

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

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

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

Sampling Point: wrof001\_u

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 50 )	% Cover	Species?	Status	Number of Dominant Species
1		·		That Are OBL, FACW, or FAC: $2$ (A)
2		. <u> </u>		Total Number of Dominant
3	. <u> </u>			Species Across All Strata: <u>5</u> (B)
4				Percent of Dominant Species
5		·		That Are OBL, FACW, or FAC: 40 (A/B)
6				Provolonce Index worksheet:
7				Tatal % Cover of:
8				
	0	= Total Cov	rer	$\begin{array}{c} \text{OBL species} \\ \hline 25 \\ \hline 50 \\ \hline \end{array}$
50% of total cover:0	20% of	total cover	0	FACW species $22 = 36$
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $35$ $x^3 = 140$
1. Quercus falcata	15	Yes	FACU	FACU species $33$ x 4 = $140$
2. Liquidambar styraciflua	5	Yes	FAC	UPL species $\frac{0}{72}$ x 5 = $\frac{0}{226}$
3.				Column Totals: (A) (B)
4.	,			Provolonce Index = P/A = 3.13
5.				
6				nyuropnytic vegetation indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
o				2 - Dominance Test is >50%
8	20	- Tatal Car		3 - Prevalence Index is ≤3.0'
<b>5</b> 00/ - 64-4-4 10	000/ - 6		4	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover	<u> </u>	
Herb Stratum (Plot size:)	25	Vee		<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		Yes		be present, unless disturbed or problematic.
2. Eupatorium capililitolium	10	Yes	FACU	Definitions of Four Vegetation Strata:
3. Phytolacca americana	10	Yes	FACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Smilax rotundifolia	5		FAC	more in diameter at breast height (DBH), regardless of
5. Liquidambar styraciflua	2	No	FAC	neight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	52	= Total Cov	rer	
50% of total cover: <sup>26</sup>	20% of	total cover	10.4	
Woody Vine Stratum (Plot size: 30 )				
1				
2				
	·			
4				
5			·	
- J	0	- Total Oct		Hydrophytic Vegetation
			or n	Present? Yes No
	20% of	total cover		
Remarks: (If observed, list morphological adaptations belo	w).			

Profile Desc	ription: (Describe t	o the depth	needed to docun	nent the in	ndicator	or confirm	the absence	of indicators.)		
Depth	Matrix		Redo	K Features	6					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Rem	narks	
0-8	10 YR 3/1	100					S			
8-20	10 YR 5/3	100					S			
					·					
<sup>1</sup> Type: C=Co	oncentration, D=Deple	etion, RM=Re	educed Matrix, MS	S=Masked	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M	=Matrix.	
Hydric Soil I	indicators: (Applica	ble to all LR	Rs, unless other	wise note	ed.)		Indicators	for Problematic H	ydric Solls":	
Histosol	(A1)		Polyvalue Be	low Surfac	ce (S8) <b>(L</b>	RR S, T, U) 	1 cm M	luck (A9) (LRR O)		
Histic Ep	opedon (A2)		Thin Dark Su	rface (S9)	(LRR S,	T, U)	2 cm M	luck (A10) (LRR S)		
Black Hi	Stic (A3)		Loamy Mucky	/ Mineral (	(F1) <b>(LRR</b>	0)	Reduce	ed Vertic (F18) (out	tside MLRA 150A,B)	
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (I	-2)		Piedmo	ont Floodplain Soils	s (F19) <b>(LRR P, S, T)</b>	
Stratified	Layers (A5)		Depleted Mat	rix (F3)			Anoma	lous Bright Loamy	Soils (F20)	
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F	6)		(MLR	(A 153B)		
5 cm Mu	cky Mineral (A7) <b>(LR</b>	R P, T, U)	Depleted Dar	k Surface	(F7)		Red Parent Material (TF2)			
Muck Pr	esence (A8) <b>(LRR U)</b>		Redox Depre	ssions (F8	3)		Very SI	hallow Dark Surfac	e (TF12)	
1 cm Mu	ck (A9) <b>(LRR P, T)</b>		Marl (F10) <b>(L</b>	RR U)			Other (	Explain in Remarks	S)	
Depleted	Below Dark Surface	(A11)	Depleted Och	nric (F11) (	(MLRA 1	51)				
Thick Da	ark Surface (A12)		Iron-Mangane	ese Masse	es (F12) <b>(</b>	LRR O, P, 1	r) <sup>3</sup> Indica	ators of hydrophytic	c vegetation and	
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)				wetland hydrology must be present,						
Sandy M	lucky Mineral (S1) <b>(L</b> l	RR O, S)	Delta Ochric	(F17) <b>(ML</b>	RA 151)		unle	ess disturbed or pro	blematic.	
Sandy G	leyed Matrix (S4)		Reduced Ver	tic (F18) <b>(I</b>	MLRA 15	0A, 150B)				
Sandy R	edox (S5)		Piedmont Flo	odplain So	oils (F19)	(MLRA 149	A)			
Stripped	Matrix (S6)		Anomalous B	right Loan	ny Soils (I	- 	149A, 153C,	153D)		
Dark Su	rface (S7) (LRR P, S,	T, U)								
Restrictive I	_ayer (if observed):									
Туре:			_							
Depth (ind	ches):						Hydric Soil	Present? Yes	No	
Remarks:										



**Photo 1** Upland data point wrof001\_u facing south



Photo 2 Upland data point wrof001\_u facing east

Project/Site: Atlantic Coast Pipeline		City/County: Robeson County			_ Sampling Date: <u>12/15/2015</u>		
Applicant/Owner: Dominion			State: <u>NC</u>	Sampling	Point: wrof005f_w		
Investigator(s): SH, AS		Section, Towns	ship, Range: <u>1</u>	No PLSS in this are	a		
Landform (hillslope, terrace, etc.): depression		Local relief (co	ncave, convex	, none): <u>concave</u>		_ Slope (%): <u>1</u>	
Subregion (LRR or MLRA): P	Lat: 34.827	80601	Long:	-79.00492065		Datum: WGS 1984	
Soil Map Unit Name: McColl loam				NWI classific	cation: PFC	94B	
Are climatic / hydrologic conditions on the site typical for	this time of ye	ear?Yes 🖌	No	(If no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrology	significantly	disturbed?	Are "Norm	al Circumstances"	present? Y	′es 🖌 No	
Are Vegetation, Soil, or Hydrology	naturally pro	oblematic?	(If needed,	explain any answe	ers in Rema	rks.)	
SUMMARY OF FINDINGS – Attach site ma	ap showing	g sampling p	oint locati	ons, transects	s, importa	ant features, etc.	
Hydrophytic Vegetation Present?YesHydric Soil Present?YesWetland Hydrology Present?Yes	No No No	Is the S within a	ampled Area a Wetland?	Yes	, No		
Remarks: Wetland is located within a pine plantation. NCWAM cla	assification is a	a Pine Flat.					

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (	(C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🔽 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes <u></u> No <u>Depth</u> (inches): <u>8</u>	Wetland Hydrology Present? Yes 🗹 No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

Sampling Point: wrof005f\_w

30	Absolute	Dominant	Indicator	Dominance Test worksheet:				
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species				
1. Philus taeda	10	Tes		That Are OBL, FACW, or FAC:6 (A)				
2. <u>Quercus nigra</u>	10	NO	FAC	Total Number of Dominant				
3				Species Across All Strata: 6 (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:				
·	60	= Total Cov	er	OBL species x 1 =0				
50% of total cover: 30	20% of	total covor	12	FACW species $20$ x 2 = $40$				
Sapling/Shrub Stratum (Blat aiza: 15	20 /0 01			FAC species $120   x 3 = 360$				
<u>Sapiing/Sillub Silatum</u> (Piol size)	20	Ves	FACW	FACU species $0 \times 4 = 0$				
1. Sympleces tineteria		Voc		UPL species $0 \times 5 = 0$				
	10	165	FAC	$\begin{array}{c} 140 \\$				
3. Quercus nigra	15	Yes	FAC					
4. Liquidambar styraciflua	15	Yes	FAC	Prevalence Index = B/A = 2.85				
5. Ilex opaca	5	No	FAC	Hydrophytic Vegetation Indicators:				
6.				1 Panid Test for Hydrophytic Vegetation				
7								
8								
0	70	- Total Cav		$\checkmark$ 3 - Prevalence Index is $\leq 3.0^{\circ}$				
50% (1.1.1			14	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)				
50% of total cover:	20% of	total cover:						
Herb Stratum (Plot size:)	10			<sup>1</sup> Indicators of hydric soil and wetland hydrology must				
1. Symplocos tinctoria	10	Yes	FAC	be present, unless disturbed or problematic.				
2				Definitions of Four Vegetation Strata:				
3				<b>Tree</b> – 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 Weady plants evaluating vince loss				
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								
	10	= Total Cov	er					
50% of total cover: 5	20% of	total cover:	2					
Woody Vine Stratum (Plot size: 30)								
1								
··			·					
2			·					
3								
4								
5				Hydrophytic				
	0	= Total Cov	er	Vegetation				
50% of total cover:0	20% of	total cover:	0	Present? Yes No				
Remarks: (If observed, list morphological adaptations below	w).							
	,							
Profile Desc	ription: (Describe t	o the depti	n needed to docur	nent the i	ndicator	or confirm	the absence	of indicators.)
-------------------------	------------------------------	--------------	-------------------	-------------------------------	-------------------	----------------------	------------------------	---
Depth	Matrix		Redo	x Features	\$			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-4	2.5 Y 2.5/1	100					LS	
4-7	2.5 Y 4/1	100					S	
7-17	10 YR 4/2	100					LCOS	
17-20	10 YR 6/1	100					COS	
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Lining, M=Matrix.
Hydric Soil I	ndicators: (Applica	ble to all L	RRs, unless othe	rwise note	ed.)		Indicators	for Problematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Be	low Surface	ce (S8) <b>(L</b>	RR S, T, U)	) 1 cm M	Muck (A9) <b>(LRR O)</b>
Histic Ep	pipedon (A2)		Thin Dark Sι	irface (S9)	(LRR S,	T, U)	2 cm I	Muck (A10) <b>(LRR S)</b>
Black Hi	stic (A3)		Loamy Muck	y Mineral (	(F1) <b>(LRR</b>	0)	Reduc	ed Vertic (F18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)		Piedm	iont Floodplain Soils (F19) (LRR P, S, T)
Stratified	l Layers (A5)		Depleted Ma	trix (F3)			Anom	alous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F	6)		(ML	RA 153B)
5 cm Mu	cky Mineral (A7) (LR	R P, T, U)	Depleted Da	rk Surface	, (F7)		Red P	arent Material (TF2)
Muck Pr	esence (A8) (LRR U)		Redox Depre	essions (F8	3)		Verv S	Shallow Dark Surface (TF12)
1 cm Mu	ck (A9) (LRR P. T)		Marl (F10) (L	RR U)	- /		Other	(Explain in Remarks)
✓ Depleter	Below Dark Surface	(A11)	Depleted Oc	hric (F11)	(MI RA 1	51)		
Thick Da	ark Surface (A12)	()	Iron-Mangan	ese Masse	(F12) (		r) <sup>3</sup> India	cators of hydrophytic vegetation and
Coast P	rairie Redox (A16) <b>(M</b>	I RA 150A)	Umbric Surfa	Ce (F13)		11)	., max	tland bydrology must be present
Coast I I	lucky Minoral (S1) (I		Dolta Ochric	(E17) (MI	DA 151)	, 0)	we unl	liand hydrology must be present,
Sandy N	loved Metrix (S4)	KK 0, 3)	Deita Ochilic	(I I / ) (IVIL tio (E19) (	MI DA 15	04 1500)	un	ess distarbed of problematic.
Sandy B			Reduced Ver			(MI DA 440		
Sanuy R	euux (SS)						9A) Naana afac	4620)
Suipped	TVIALTIX (50)	<b>T</b> 11)		singrit Loar	ny Solis (i	-20) <b>(IVILR</b> #	A 149A, 153C	, 155D)
Dark Su	aver (if observed)	, 1, 0)						
Type <sup>.</sup>								
Denth (in								
Depth (Ind	cnes):						Hydric Sol	Present? fes No
Remarks:								



Photo 1 Wetland data point wrof005f\_w facing west



Photo 2 Wetland data point wrof005f\_w facing south

Project/Site: <u>Atlantic Coast Pipeline</u>	City/County: F	Robeson County	Sampling Date: <u>12/15/2015</u>
Applicant/Owner: Dominion		State: NC	Sampling Point: wrof005_u
Investigator(s): SH, AS	Section, Towr	ship, Range: <u>No PLSS in this a</u>	rea
Landform (hillslope, terrace, etc.): slight slope	Local relief (co	oncave, convex, none): <u>convex</u>	Slope (%): <u>2</u>
Subregion (LRR or MLRA): P Lat	34.82779336	Long: <u>-79.0051615</u>	Datum: WGS 1984
Soil Map Unit Name: Wagram loamy sand, 0 to 6 percent slop	bes	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for this t	ime of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrologysig	nificantly disturbed?	Are "Normal Circumstances"	" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology nat	urally problematic?	(If needed, explain any answ	vers in Remarks.)

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

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

#### HYDROLOGY

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

Sampling Point: wrof005\_u

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
1. Pinus taeda	65	res	FAC	That Are OBL, FACW, or FAC:4 (A)
2				Total Number of Dominant
3				Species Across All Strata: 4 (B)
4				Demont of Dominant Chaption
5				That Are OBL_EACW or EAC <sup>100</sup> (A/B)
6.				
7.				Prevalence Index worksheet:
8	·			Total % Cover of: Multiply by:
· · · · · · · · · · · · · · · · · · ·	85	= Total Cov		OBL species x 1 =0
50% of total agreer 42.5	20% of		17	FACW species $\begin{array}{c} 0 \\ x 2 = \\ \end{array}$
So% of total cover.	20% 0	total cover.		FAC species $160 \times 3 = 480$
Sapling/Shrub Stratum (Plot size:)	30	Voc	EAC	FACU species $0$ x 4 = $0$
	30	Vee		$\begin{array}{c} 1 \text{ IPI species} \\ 0 \\ x 5 \\ z \\ 0 \\ z \\ \\ 0$
2. Quercus nigra	10	res	FAC	$\begin{array}{c} 160 \\ 160 \\ 160 \\ 160 \\ 160 \\ 160 \\ 160 \\ 100 \\$
3. Ilex opaca	5	No	FAC	(A)(B)
4				Prevalence Index = $B/A = 3$
5				Hydrophytic Vegetation Indicators:
6				1 - Ranid Test for Hydronhytic Vocatation
7				
8				
0	45	- Total Cav		Y 3 - Prevalence Index is ≤3.0
500 (11) 225			9	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover:		
Herb Stratum (Plot size:)			540	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Symplocos tinctoria	25	Yes	FAC	be present, unless disturbed or problematic.
2. Ilex opaca	5	No	FAC	Definitions of Four Vegetation Strata:
3				<b>Tree</b> – Woody plants, excluding vines, 3 in, (7.6 cm) or
4.				more in diameter at breast height (DBH), regardless of
5				height.
6				One l'en s(Ohensha) Manchanta analusiana da sa
7				Sapling/Shrub – Woody plants, excluding vines, less than 3 in DBH and greater than 3 28 ft (1 m) tall
· · · · · · · · · · · · · · · · · · ·				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	30	= Total Cov	er	
50% of total cover: <sup>15</sup>	20% of	total cover:	6	
Woody Vine Stratum (Plot size: 30)				
l				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes <u>Ves</u> No
Remarks: (If observed, list morphological adaptations below	M)			
	••).			

Profile Desc	ription: (Describe t	o the depth	needed to docum	ent the i	ndicator	or confirm t	he absence	of indicato	rs.)
Depth	Matrix		Redox	Features	s				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0-4	2.5 Y 3/1	100					LS		
4-7	2.5 Y 5/3	100					LCOS		
7-18	10 YR 5/4	100					SC		
<sup>1</sup> Type: C=Co	oncentration, D=Depl	etion, RM=Re	educed Matrix, MS	=Masked	I Sand Gra	ains.	<sup>2</sup> Location:	PL=Pore Li	ning, M=Matrix.
Hydric Soil	Indicators: (Applica	able to all LR	Rs, unless other	wise note	ed.)		Indicators	for Problem	natic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Bel	ow Surfa	ce (S8) <b>(L</b>	RR S, T, U)	1 cm M	Muck (A9) <b>(L</b>	RR O)
Histic Ep	oipedon (A2)		Thin Dark Sur	face (S9)	) (LRR S,	T, U)	2 cm M	Muck (A10) (	LRR S)
Black Hi	stic (A3)		Loamy Mucky	Mineral	(F1) <b>(LRR</b>	0)	Reduc	ed Vertic (F	18) (outside MLRA 150A,B)
Hydroge	n Sulfide (A4)		Loamy Gleye	d Matrix (	F2)		Piedm	ont Floodpla	in Soils (F19) (LRR P, S, T)
Stratified	l Layers (A5)		Depleted Mat	rix (F3)			Anoma	alous Bright	Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F	6)		(ML	RA 153B)	
5 cm Mu	icky Mineral (A7) (LR	R P, T, U)	Depleted Darl	< Surface	(F7)		Red P	arent Materia	al (TF2)
Muck Pr	esence (A8) (LRR U)	, , =,	Redox Depres	ssions (F	8)		Verv S	Shallow Dark	Surface (TE12)
1 cm Mu	ick (A9) (I RR P T)		Marl (F10) (II		•)		Other	(Explain in F	emarks)
Penleter	A Below Dark Surface	Δ11)	Depleted Och	ric (F11)	(MI RA 14	51)			
Depicted	ark Surface (A12)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			oc (F12) (		<sup>3</sup> India	cators of hyd	rophytic vegetation and
	rairia Daday (A12)		IIOII-Mangane	(E12)				land hydrole	av must be present
Coast Pl	airie Redox (ATO) <b>(Iv</b>	ILRA 150A)	Official Surface	E (F IS) (	LKK P, I	, 0)	we		gy must be present,
Sandy iv		RR 0, 5)	Delta Ochric (	F17) (ML	.RA 151)		uni	ess disturbe	d or problematic.
Sandy G	leyed Matrix (S4)		Reduced Vert	IC (F18) (	MLRA 15	0A, 150B)			
Sandy R	ledox (S5)		Piedmont Floe	odplain S	oils (F19)	(MLRA 149/	4)		
Stripped	Matrix (S6)		Anomalous B	right Loar	my Soils (I	=20) <b>(MLRA</b>	149A, 153C	i, 153D)	
Dark Su	rface (S7) (LRR P, S	, T, U)							
Restrictive	_ayer (If observed):								
Type:			_				Uvdria Cail	Dressmt?	Yes No V
Depth (Inc	cnes):		_				Hydric Soli	Present?	
Remarks.									



**Photo 1** Upland data point wrof005\_u facing east



**Photo 2** Upland data point wrof005\_u facing north

Project/Site: Atlantic Coast Pipeline	(	City/County: Robeson County			Sampling Date: <u>12/15/2015</u>		
Applicant/Owner: Dominion			St	State: NC San		ampling Point: wrof006f_w	
Investigator(s): SH, AS		Section, Township, Range: No PLSS in this area					
Landform (hillslope, terrace, etc.): <u>flat</u>	I	Local relief (concave, convex, none): microtopography Slop					տ)։ <u>1</u>
Subregion (LRR or MLRA): P I	Lat: <u>34.8274</u>	3354	Long: <u>-79</u>	.00615668		Datum:	WGS 1984
Soil Map Unit Name: Wagram loamy sand, 0 to 6 percent s	slopes			NWI classifi	cation: Non	е	
Are climatic / hydrologic conditions on the site typical for thi	is time of yea	ar?Yes 🖌	No (If	no, explain in F	Remarks.)		
Are Vegetation, Soil, or Hydrologys	significantly of	disturbed?	Are "Normal C	Circumstances"	present? Y	es 🖌	No
Are Vegetation, Soil, or Hydrology r	naturally prol	blematic?	(If needed, ex	plain any answe	ers in Rema	rks.)	
SUMMARY OF FINDINGS – Attach site map	showing	sampling	point location	is, transects	s, importa	ant featu	ires, etc.
Hydrophytic Vegetation Present?       Yes _ ✓       N         Hydric Soil Present?       Yes _ ✓       N         Wetland Hydrology Present?       Yes _ ✓       N	lo lo	Is the s within	Sampled Area a Wetland?	Yes	<u>No</u>		
Remarks:		I					
Wetland is in a pine plantation, NCWAM classification is a	pine flat.						
HYDROLOGY							

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
✓ Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres along Living F	Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (	(C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches): 18	
Saturation Present? Yes <u>&lt;</u> No <u>Depth</u> (inches): <u>8</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>V</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	

Sampling Point: wrof006f\_w

Tree Stratum (Plot size:30) 1 Pinus taeda	Absolute % Cover 85	Dominant Species? Yes	Indicator Status FAC	Dominance Test worksheet:           Number of Dominant Species           That Are OBL_EACW or EAC:         6
2 3				Total Number of Dominant     6     (B)
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7	<u> </u>			Total % Cover of: Multiply by:
8	85		<u> </u>	OBL species $0$ $x = 0$
42.5		= Total Cov	er 17	FACW species $0$ x 2 = $0$
50% of total cover:	20% of	total cover:		FAC species $111 \times 3 = 333$
Sapling/Shrub Stratum (Plot size:15 )	10	Vec	FAC	FACU species $0 \times 4 = 0$
		Voc		UPL species $0 \times 5 = 0$
		165	FAC	Column Totals: $111$ (A) $333$ (B)
3				
4				Prevalence Index = B/A =3
5	<u> </u>			Hydrophytic Vegetation Indicators:
6	·			1 - Rapid Test for Hydrophytic Vegetation
7			·	✓ 2 - Dominance Test is >50%
8	13		·	$\checkmark$ 3 - Prevalence Index is ≤3.0 <sup>1</sup>
65		= Total Cov	er 26	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
50% of total cover:	20% of	total cover:	2.0	
Herb Stratum (Plot size: 5)	-		FAC	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
		Yes	FAC	be present, unless disturbed or problematic.
2. Chasmanthium sessilitiorum	5	Yes	FAC	Definitions of Four Vegetation Strata:
3. Smilax rotundifolia	3	Yes	FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				neight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9			·	of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
65		= Total Cov	er 26	
50% of total cover: 0.5	20% of	total cover:	2.0	
Woody Vine Stratum (Plot size: 30 )				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? fes <u>No</u> No
Remarks: (If observed, list morphological adaptations below	w).			

Profile Desc	cription: (Describe to	o the dep	oth needed to docum	nent the i	ndicator	or confirm	the absence of i	ndicators.)	
Depth	Matrix		Redox	k Features	s				
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	<u>.</u>
0-3	2.5 Y 3/1	100					SCL		
3-8	2.5 Y 3/1	95	7.5 YR 3/4	5	С	PL	SL		
8-20	2.5 Y 5/1	100					SC		
<sup>1</sup> Type: C=C	oncentration, D=Deple	etion, RM	=Reduced Matrix, MS	S=Masked	I Sand Gra	ains.	<sup>2</sup> Location: PL=	=Pore Lining, M=Mat	rix.
Hydric Soil	Indicators: (Applica	ble to all	LRRs, unless other	wise note	ed.)		Indicators for	Problematic Hydric	Soils <sup>3</sup> :
Histosol Histic E Black H Hydroge Stratifier Organic Granic Grani	(A1) pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) Bodies (A6) (LRR P, Jacky Mineral (A7) (LRI resence (A8) (LRR U) Jack (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) rairie Redox (A16) (M Aucky Mineral (S1) (LI Belyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR P, S,	T, U) R P, T, U) (A11) LRA 150 RR O, S) T, U)	<ul> <li>Polyvalue Be</li> <li>Thin Dark Su</li> <li>Loamy Mucky</li> <li>Loamy Gleye</li> <li>Depleted Mat</li> <li>Redox Dark S</li> <li>Depleted Dar</li> <li>Redox Depre</li> <li>Marl (F10) (L</li> <li>Depleted Och</li> <li>Iron-Mangane</li> <li>Mumbric Surfa</li> <li>Delta Ochric</li> <li>Reduced Ver</li> <li>Piedmont Flo</li> <li>Anomalous B</li> </ul>	low Surface rface (S9) / Mineral ( d Matrix ( rix (F3) Surface (F k Surface (F k Surface ssions (F8 <b>RR U)</b> nric (F11) ese Masse ce (F13) ( (F17) (ML tic (F18) ( odplain S right Loar	ce (S8) (L (LRR S, (F1) (LRR F2) 6) (F7) 8) (MLRA 15 (LRR P, T, (MLRA 151) (MLRA 151) (MLRA 150) (MLRA 150) (MLRA 150) (MLRA 150) (MLRA 150) (MLRA 150)	RR S, T, U) T, U) O) -RR O, P, 1 U) 0A, 150B) (MLRA 149 -20) (MLRA	<ul> <li>1 cm Muck</li> <li>2 cm Muck</li> <li>Reduced V</li> <li>Piedmont I</li> <li>Anomalous</li> <li>(MLRA 1</li> <li>Red Paren</li> <li>Very Shalk</li> <li>Other (Exp</li> </ul> T) <sup>3</sup> Indicator <ul> <li>wetland</li> <li>unless of</li> </ul>	(A9) <b>(LRR O)</b> (A10) <b>(LRR S)</b> /ertic (F18) <b>(outside</b> Floodplain Soils (F19 s Bright Loamy Soils ( <b>53B)</b> It Material (TF2) ow Dark Surface (TF olain in Remarks) rs of hydrophytic vegu hydrology must be p disturbed or problem <b>3D)</b>	MLRA 150A,B) (IRR P, S, T) (F20) 12) etation and present, atic.
Restrictive	Layer (if observed):								
Depth (in	ches):						Hvdric Soil Pre	sent?Yes 🗸	No
Remarks:									



Photo 1 Wetland data point wrof006f\_w facing west



Photo 2 Wetland data point wrof006f\_w facing north

Project/Site: Atlantic Coast Pipeline	City/County: F	Robeson County	Sampling Date: <u>12/15/2015</u>
Applicant/Owner: Dominion		State: NC	Sampling Point: wrof006_u
Investigator(s): SH, AS	Section, Town	ship, Range: <u>No PLSS in this a</u>	rea
Landform (hillslope, terrace, etc.): slight slope	Local relief (co	oncave, convex, none): <u>convex</u>	Slope (%): 2
Subregion (LRR or MLRA): P La	t: <u>34.82698246</u>	Long: <u>-79.0061529</u>	Datum: WGS 1984
Soil Map Unit Name: Wagram loamy sand, 0 to 6 percent slo	pes	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for this t	time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed?	Are "Normal Circumstances	" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology na	turally problematic?	(If needed, explain any answ	vers in Remarks.)
		• • • • •	

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

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

#### HYDROLOGY

Wetland Hydrology Indicate	ors:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum	of one is rec	Surface Soil Cracks (B6)	
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Ae</li> <li>Water-Stained Leaves (B</li> </ul>	rial Imagery 39)	<ul> <li>Aquatic Fauna (B13)</li> <li>Marl Deposits (B15) (LRR U)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils</li> <li>Thin Muck Surface (C7)</li> <li>Other (Explain in Remarks)</li> </ul>	<ul> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Sphagnum moss (D8) (LRR T, U)</li> </ul>
Field Observations: Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe)	Yes Yes Yes	No         ✓         Depth (inches):	 Wetland Hydrology Present? Yes No∕
Describe Recorded Data (str No hydrology present. Remarks:	eam gauge,	monitoring well, aerial photos, previous inspe	pections), if available:

Sampling Point: wrof006\_u

30	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:)	<u>% Cover</u>	Species?	<u>Status</u>	Number of Dominant Species
	35	Ves	FACU	That Are OBL, FACW, or FAC: (A)
		163	1 400	Total Number of Dominant
3				Species Across All Strata: 5 (B)
4				Percent of Dominant Species
5	. <u> </u>			That Are OBL, FACW, or FAC: 80 (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				1000000000000000000000000000000000000
	80	= Total Cov	er	
50% of total cover:40	20% of	total cover:	16	FACW species $32$ $x^2 = 279$
Sapling/Shrub Stratum (Plot size: 15 )				FAC species $35$ $x^3 = 140$
1. Liquidambar styraciflua	15	Yes	FAC	FACU species $33$ x 4 = $140$
2. Symplocos tinctoria	15	Yes	FAC	UPL species $0$ $x 5 = 0$
3. Ilex opaca	5	No	FAC	Column Totals: (A) (B)
4.				Prevalence index = $B/A = 3.27$
5.				Hydrophytic Vegetation Indicators:
6				1 - Ranid Test for Hydrophytic Vegetation
7.				Perinanaa Taatia > 50%
8				$\frac{1}{2}$ 2 - Dominance rest is >50%
	35	= Total Cov	er	$3 - \text{Prevalence index is } \le 3.0$
50% of total cover: 17.5	20% of	total cover	7	Problematic Hydrophytic Vegetation (Explain)
Horb Stratum (Plot size: 5 )	2070.01			1
	10	Yes	FAC	Indicators of hydric soil and wetland hydrology must
o Smilax glauca	3	No	FAC	Definitions of Four Verstation Strate:
2. Chimanbila maculata	3	No		Demnitions 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	·			neight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
	16	= Total Cov	er	
50% of total cover: <sup>8</sup>	20% of	total cover:	3.2	
Woody Vine Stratum (Plot size: 30 )				
1.				
2				
3	·			
4	·			
5				
	0	- Total Cov		Hydrophytic Vegetation
E0% of total power: 0	20% of		0	Present? Yes <u>No</u> No
	20% 01			
Remarks: (If observed, list morphological adaptations belo	w).			

Profile Desc	ription: (Describe t	o the depth	needed to docum	ent the i	ndicator	or confirm t	he absence	of indicator	·s.)
Depth	Matrix		Redox	Features	S				
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Remarks
0-2	10 YR 4/1	100					COS		
2-16	10 YR 4/2	100					COS		
16-18	10 YR 5/4	100					COS		
		etion RM=6	Peduced Matrix MS	=Masked	Sand Gr		<sup>2</sup> Location:	PI =Pore Lir	ning M=Matrix
Hydric Soil	Indicators: (Applica	able to all L	RRs, unless other	vise note	ed.)	uiii5.	Indicators	for Problem	natic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Polyvalue Bel	ow Surfa	ce (S8) <b>(L</b>	RR S, T, U)	1 cm I	Muck (A9) <b>(LF</b>	RR O)
Histic Ep	pipedon (A2)		Thin Dark Sur	face (S9)	(LRR S,	T, U)	2 cm I	Muck (A10) (L	_RR S)
Black Hi	stic (A3)		Loamy Mucky	Mineral	(F1) <b>(LRR</b>	0)	Reduc	ed Vertic (F1	8) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleyed	d Matrix (	F2)		Piedm	ont Floodplai	in Soils (F19) (LRR P, S, T)
Stratified	d Layers (A5)		Depleted Mat	rix (F3)			Anom	alous Bright L	_oamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark S	Surface (F	6)		 (ML	RA 153B)	
5 cm Mu	ucky Mineral (A7) (LR	R P. T. U)	Depleted Darl	< Surface	, (F7)		Red P	arent Materia	al (TF2)
Muck Pr	esence (A8) (LRR U)	, , , ,	Redox Depres	ssions (F	8)		Verv S	Shallow Dark	Surface (TE12)
1 cm Mi	ick (A9) (I RR P T)		Marl (F10) (L		-		Other	(Explain in R	emarks)
Denleter	d Below Dark Surface	(A11)	Depleted Och	ric (F11)	(MI RA 14	51)			emanoy
Depicted	ark Surface (A12)	, (, (, , , )	Iron-Mangane	ee Mass	es (F12) (		<sup>3</sup> Indi	cators of hydr	conductic vegetation and
Thick Da	rairia Poday (A12)			(E13)				tland hydrolog	av must be present
	August Minerel (C4) (I	ILKA ISUAJ			LKK F, I	, 0)	we		gy must be present,
		RR 0, 5)		F17) (IVIL	.RA 151)		uni	ess disturbed	f or problematic.
Sandy G	Bleyed Matrix (S4)		Reduced Vert	IC (F18) (	MLRA 15	0A, 150B)			
Sandy F	Redox (S5)		Piedmont Floo	odplain S	oils (F19)	(MLRA 149/	A)		
Stripped	l Matrix (S6)		Anomalous Bi	right Loar	ny Soils (I	=20) <b>(MLRA</b>	149A, 153C	C, 153D)	
Dark Su	rface (S7) (LRR P, S	, T, U)							
Type	Layer (if observed):								
Depth (in	chec):						Hydric Soil	Procont?	Ves No 🗸
Bemarke:	ciles).							i riesent:	
Remarks.									



Photo 1 Upland data point wrof006\_u facing east



Photo 2 Upland data point wrof006\_u facing south

Project/Site: Atlantic Coast Pipeline	City/County: Ro	beson	Sampling	_ Sampling Date: 11/22/2014			
Applicant/Owner: DOMINION				State: NC	Sampling	Point: wroc	003f_w
Investigator(s): Team C	_ Section, Townsl	hip, Range: <u>N</u>	o PLSS in this a	area			
Landform (hillslope, terrace, etc.): Slight slope		Local relief (con	cave, convex,	none): <u>none</u>		_ Slope (%	): <u>2</u>
Subregion (LRR or MLRA): P	Lat: 34.82	518413	Long:	79.00750206		Datum:	WGS 1984
Soil Map Unit Name: Bibb soils				NWI class	ification: PFC	01/4A	
Are climatic / hydrologic conditions on the site typical for Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS – Attach site ma	this time of y _ significantly _ naturally pr <b>p showin</b> y	y disturbed? roblematic?	No Are "Normal (If needed, e oint locatio	(If no, explain ir Circumstances explain any ans ons, transec	n Remarks.) s" present? wers in Rema	∕es _ ✔ rks.) ant featu	No res, etc.
Hydrophytic Vegetation Present?YesHydric Soil Present?YesWetland Hydrology Present?Yes	No No No	- Is the Sa	ampled Area Wetland?	Yes	🖌 No _		
Remarks: PFO wetland associated with a historic stream channel.							
HYDROLOGY							
Wetland Hydrology Indicators:				Secondary Ind	icators (minin	num of two	required)

welland frydrology mulcators.		Secondary indicators (minimum or two required)
Primary Indicators (minimum of one i	s required; check all that apply)	Surface Soil Cracks (B6)
<ul> <li>Surface Water (A1)</li> <li>High Water Table (A2)</li> <li>Saturation (A3)</li> <li>Water Marks (B1)</li> <li>Sediment Deposits (B2)</li> <li>Drift Deposits (B3)</li> <li>Algal Mat or Crust (B4)</li> <li>Iron Deposits (B5)</li> <li>Inundation Visible on Aerial Image</li> <li>Water-Stained Leaves (B9)</li> </ul>	<ul> <li>Aquatic Fauna (B13)</li> <li>Marl Deposits (B15) (LRR U)</li> <li>Hydrogen Sulfide Odor (C1)</li> <li>Oxidized Rhizospheres along Living F</li> <li>Presence of Reduced Iron (C4)</li> <li>Recent Iron Reduction in Tilled Soils ( Thin Muck Surface (C7)</li> <li>Other (Explain in Remarks)</li> </ul>	<ul> <li>Sparsely Vegetated Concave Surface (B8)</li> <li>Drainage Patterns (B10)</li> <li>Moss Trim Lines (B16)</li> <li>Dry-Season Water Table (C2)</li> <li>Crayfish Burrows (C8)</li> <li>Saturation Visible on Aerial Imagery (C9)</li> <li>Geomorphic Position (D2)</li> <li>Shallow Aquitard (D3)</li> <li>FAC-Neutral Test (D5)</li> <li>Sphagnum moss (D8) (LRR T, U)</li> </ul>
Field Observations:		
Surface Water Present? Yes	No 🖌 Depth (inches):	
Water Table Present? Yes	No 🖌 Depth (inches):	
Saturation Present? Yes _ (includes capillary fringe)	No <u>V</u> Depth (inches):	Wetland Hydrology Present? Yes <u>V</u> No
Remarks: wetland hydrology present		

Sampling Point: wroc003f\_w

The Obstance (Distring 30	Absolute	Dominant	Indicator	Dominance Test worksheet:
Cvrilla racemiflora	<u>% Cover</u> 45	<u>Species</u> ? Yes	FACW	Number of Dominant Species
<ul> <li>Liquidambar stvraciflua</li> </ul>	25	Yes	FAC	That Are OBL, FACW, of FAC: (A)
2. Acer rubrum	10	No	FAC	Total Number of Dominant
3. 1001 100100			TAU	Species Across All Strata: (B)
4	. <u> </u>		. <u> </u>	Percent of Dominant Species
5				That Are OBL, FACW, or FAC:(A/B)
6				Prevalence Index worksheet:
/			<u> </u>	Total % Cover of: Multiply by:
8	80		·	$\frac{1}{OBL \text{ species}} \qquad 0 \qquad x = 0$
40		= Total Cov	er 16	FACW species $90$ x 2 = $180$
50% of total cover:	20% of	total cover:		FAC species $65 \times 3 = 195$
Sapling/Shrub Stratum (Plot size: 15 )	20	Voo	EAC	FACU species $0$ $x = 0$
1. Acer rubrum	15	Vee		$\begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 $
	15	res	FACW	$\frac{155}{155}$
3. Cyrilla racemiflora	10	No	FACW	
4				Prevalence Index = B/A =2.41
5			<u> </u>	Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is $\leq 3.0^1$
	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)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
1. Saccharum giganteum	10	Yes	FACW	be present, unless disturbed or problematic.
2. Smilax laurifolia	10	Yes	FACW	Definitions of Four Vegetation Strata:
3				Tree Mandy planta availuding vince 2 in (7.6 am) or
4.				more in diameter at breast height (DBH), regardless of
5.				height.
6.				Sanling/Shrub - Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9	. <u> </u>			of size, and woody plants less than 3.28 ft tall.
10			·	
10				Woody vine – All woody vines greater than 3.28 ft in
12	·			neight.
12	20	- Total Cov		
FOW of total accurate 10	2001/ -#		4	
50% of total cover:	20% 01	total cover:		
Woody Vine Stratum (Plot size:30)				
1	·			
2				
3				
4				
5			<u> </u>	Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover:0	20% of	total cover:	0	Present? resNo
Remarks: (If observed, list morphological adaptations belo	w).			•

Profile Des	cription: (Describe	o the dep	oth needed to docur	nent the	indicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Feature	S			
(inches)	Color (moist)	<u>%</u>	Color (moist)	<u>%</u>	<u>Type'</u>	Loc <sup>2</sup>	Texture	Remarks
0-4	10 YR 2/1	95	10 YR 3/6	5	С	PL	SIL	
4-14	2.5 Y 3/2	80	2.5 Y 6/1	20	D	М	LS	Stripped areas are about 1/2 inch
					<u></u>			
					·	<u> </u>		
	anoantration D-Dan	otion DM			d Sand Cr	aine	<sup>2</sup> Location:	
Hydric Soil	Indicators: (Application)	able to all	I RRs. unless other	wise not	ed.)	airis.	Indicators	s for Problematic Hydric Soils <sup>3</sup>
Histoso			Polyvalue Be	low Surfa	(S8) (I	PP S T I		
Histic F	ninedon (A2)		Thin Dark Su	Inface (S9		T. U)	2 cm	Muck (A10) (I BR S)
Black H	listic (A3)		Loamv Muck	v Mineral	(F1) (LRR	(0)	Reduc	ced Vertic (F18) (outside MLRA 150A.B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (	(F2)	- /	Piedm	nont Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)	. ,		Anom	alous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F	=6)		(ML	.RA 153B)
5 cm M	ucky Mineral (A7) <b>(LR</b>	R P, T, U	) Depleted Dar	rk Surface	e (F7)		Red F	Parent Material (TF2)
Muck P	resence (A8) (LRR U	)	Redox Depre	essions (F	8)		Very S	Shallow Dark Surface (TF12)
1 cm M	uck (A9) (LRR P, T)		Marl (F10) <b>(L</b>	.RR U)			Other	(Explain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Ocl	nric (F11)	(MLRA 1	51)	<b></b> 31	
	Park Surface (A12)	U D A 150	Iron-Iviangan		es (F12) (		i) indi	cators of hydrophytic vegetation and
Sandy M	Mucky Mineral (S1) <b>(I</b>	RR O SI	A) Oniblic Suna Delta Ochric	(F13) (F17) <b>(MI</b>	(LKK F, I RA 151)	, 0)	we	less disturbed or problematic
Sandy (	Gleved Matrix (S4)		Reduced Ver	tic (F18)	(MLRA 15	0A. 150B)	un	
Sandy F	Redox (S5)		Piedmont Flo	odplain S	Soils (F19)	(MLRA 14	9A)	
<ul> <li>Stripped</li> </ul>	d Matrix (S6)		Anomalous E	Bright Loa	my Soils (	, F20) <b>(MLR</b>	A 149A, 1530	C, 153D)
Dark Su	urface (S7) (LRR P, S	, T, U)	—	U		<i>,</i> , ,		
Restrictive	Layer (if observed):							
Туре:								
Depth (in	iches):						Hydric Soi	l Present? Yes 🖌 No
Remarks:								
Hydric soil pr	resent							
•								



Photo 1 Wetland data point WROC003f\_W facing north



Photo 2 Wetland data point WROC003f\_W facing east



Photo 3 Wetland data point WROC003f\_W facing south



Photo 4 Wetland data point WROC003f\_W facing west

Project/Site: Atlantic Coast Pipeline		City/County: Robeson		Sampling Date: <u>11/22/2014</u>
Applicant/Owner: DOMINION			State: NC	Sampling Point: wroc003_u
Investigator(s): Team C		Section, Township, Range	: No PLSS in this a	rea
Landform (hillslope, terrace, etc.): Hill Slope		Local relief (concave, conv	vex, none): <u>none</u>	Slope (%): <u>5</u>
Subregion (LRR or MLRA): P	Lat: 34.825	526006 Lon	g: <u>-79.00726732</u>	Datum: WGS 1984
Soil Map Unit Name: Bibb soils			NWI classi	fication: None
Are climatic / hydrologic conditions on the site ty Are Vegetation, Soil, or Hydrolog Are Vegetation, Soil, or Hydrolog SUMMARY OF FINDINGS – Attach s	pical for this time of ye gy significantly gy naturally pr site map showing	ear? Yes <u></u> No <u></u> v disturbed? Are "No oblematic? (If neede g sampling point loca	(If no, explain in rmal Circumstances ed, explain any answ <b>ations, transec</b>	Remarks.) " present? Yes <u></u> No <u></u> vers in Remarks.) ts, important features, etc.
Hydrophytic Vegetation Present?       Yes         Hydric Soil Present?       Yes         Wetland Hydrology Present?       Yes         Remarks:       Upland point located downslope of a agricultural	No <u>v</u> No <u>v</u> No <u>v</u>	Is the Sampled Ar within a Wetland?	rea Yes	No

#### HYDROLOGY

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

Sampling Point: wroc003\_u

30	Absolute	Dominant	Indicator	Dominance Test worksheet:	
<u>Iree Stratum</u> (Plot size:)	<u>% Cover</u> 50	Species? Yes	<u>Status</u>	Number of Dominant Species	( <b>.</b> )
Ouercus alba	20	Yes	FACU	That Are OBL, FACW, or FAC: (	(A)
				Total Number of Dominant	
3				Species Across All Strata:5 (	(B)
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 40 (	(A/B)
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	
8	70			$\begin{array}{c} \hline \hline \\ OBL species \\ 0 \\ x 1 = \\ 0 \\ \end{array}$	
35	70	= Total Cov	er 14	EACW species $0$ $x 2 = 0$	
50% of total cover:	20% of	total cover		EAC species $75 \times 3 = 225$	
Sapling/Shrub Stratum (Plot size: 15)	20	Vee	FAC	EACLI species $60 \times 4 = 240$	
		Yes	FAC	$\frac{1}{1} \frac{1}{1} \frac{1}$	
2. Quercus alba	10	Yes	FACU	$\begin{array}{c} 135 \\ 135 \\ 135 \\ 135 \\ 135 \\ 135 \\ 135 \\ 135 \\ 135 \\ 135 \\ 100 \\$	(P)
3. Ilex opaca	5	No	FAC		(В)
4				Prevalence Index = B/A =3.44	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8				3 - Prevalence Index is ≤3.0 <sup>1</sup>	
	35	= Total Cov	er	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	)
50% of total cover:17.5	20% of	total cover	7		,
Herb Stratum (Plot size: 5)				<sup>1</sup> Indicators of hydric soil and wetland hydrology mu	ist
1. Lonicera japonica	30	Yes	FACU	be present, unless disturbed or problematic.	101
2				Definitions of Four Vegetation Strata:	
3				The Medualente evolution video 2 in (7.0 er	
4.				more in diameter at breast height (DBH) regardles	n) or ss of
5.				height.	
6.				Sapling/Shrub - Woody plants, excluding vines, h	220
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	633
8					
a				Herb – All herbaceous (non-woody) plants, regard of size, and woody plants less than 3 28 ft tall	less
10					
11				Woody vine – All woody vines greater than 3.28 fl	t in
12				neight.	
12	30	- Total Ca			
500/ at tatal any 15			6		
50% of total cover:	20% of	total cover:			
Woody Vine Stratum (Plot size:)					
1					
2					
3					
4					
5				Hydrophytic	
	0	= Total Cov	er	Vegetation	
50% of total cover:0	20% of	total cover	0		
Remarks: (If observed, list morphological adaptations below	w).				

SOIL

Profile Desc	cription: (Describe t	o the dep	th needed to docur	ment the i	ndicator	or confirm	the absence of	of indicators.)
Depth	Matrix		Redo	x Features	S			
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-14	2.5 Y 4/3	93	10 YR 4/6	7	С	PL/M	LS	
		·				·	·	
		<u> </u>			·		<u> </u>	
	anoantration D-Don	ation DM	Doduced Metrix M				<sup>2</sup> Leastion:	- Doro Lipipa M-Matrix
Type. C=C	Indicators: (Applic	ellon, Rivis	Reduced Matrix, Ma	S=Iviaskeu		ains.	Indicators f	or Problematic Hydric Soils <sup>3</sup> :
Hydric Soli					eu.)			
Histosol	(A1)		Polyvalue Be	elow Surfa	ce (S8) (L	.RR S, T, U	) 1 cm Mu	JCK (A9) (LRR O)
Histic E	pipedon (A2)		Thin Dark Su	urface (S9)	) (LRR S,	T, U)	2 cm Mu	JCK (A10) (LRR S)
	ISTIC (A3)		Loamy Muck	y Mineral	(F1) <b>(LRF</b>	(0)	Reduce	d Vertic (F18) (outside MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gleye	ed Matrix (	F2)			nt Floodplain Soils (F19) (LRR P, S, I)
	d Layers (A5)		Depleted Ma	itrix (F3)			Anomalo	ous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (H	6)		(MLR/	A 153B)
5 cm Mi	ucky Mineral (A7) (LR	R P, T, U)	Depleted Da	rk Surface	(⊢7)		Red Par	rent Material (TF2)
Muck Pi	resence (A8) (LRR U		Redox Depre	essions (Fa	8)		Very Sh	allow Dark Surface (TF12)
1 cm Mu	uck (A9) (LRR P, T)		Marl (F10) <b>(L</b>	RR U)			Other (E	xplain in Remarks)
Deplete	d Below Dark Surface	e (A11)	Depleted Oc	hric (F11)	(MLRA 1	51)	3	
Thick D	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) <b>(</b>	LRR O, P,	T) <sup>°</sup> Indica	tors of hydrophytic vegetation and
Coast P	rairie Redox (A16) <b>(N</b>	ILRA 150/	A) Umbric Surfa	ace (F13) <b>(</b>	LRR P, T	', U)	wetla	and hydrology must be present,
Sandy N	Mucky Mineral (S1) <b>(L</b>	RR O, S)	Delta Ochric	(F17) <b>(ML</b>	.RA 151)		unles	ss disturbed or problematic.
Sandy C	Gleyed Matrix (S4)		Reduced Ver	rtic (F18) <b>(</b>	MLRA 15	60A, 150B)		
Sandy F	Redox (S5)		Piedmont Flo	oodplain S	oils (F19)	(MLRA 149	9A)	
Stripped	d Matrix (S6)		Anomalous E	Bright Loar	ny Soils (	F20) <b>(MLR</b> /	A 149A, 153C, <sup>•</sup>	153D)
Dark Su	Irface (S7) (LRR P, S	, T, U)						
Restrictive	Layer (if observed):							
Туре:								
Depth (in	ches):						Hydric Soil F	Present? Yes No
Remarks:								
No hydric soi	l present							
	. p. coont							



Photo 1 Upland data point WROC003\_U facing west



Photo 2 Upland data point WROC003\_U facing south



Photo 3 Upland data point WROC003\_U facing north

WETLAND DETERMINATION DATA FORM - Atlantic and	Gulf Coastal Plain Region
Project/Site. Arminity ACP	
Applicant/Owner: Damin ida	Sampling Date: Wroh0184
Investigator(s): DD (JP8- (CPP)	State: NC Campling Point: 9/11/14
Landform (hillslope terrace etc.): Atting of the section, Township, Range:	
Subregion (I RR or MI RA)	x, none): (01Cave Slope (%): 0-2%
Soil Man Unit Name: Jub octrop	79°01'08.544" Datum 084
Are climatic / bydrologic conditions on the standard standa	NWI classification: PFO
Are Vegetation Solution = Solution = to this line of year? Yes No	(If no, explain in Remarks.)
Are Vegetation Soil, or Hydrology significantly disturbed? Are "Norm	al Circumstances" present? Yes No
Change and the second s	, explain any answers in Remarks.)
SUMMARY OF FINDINGS Attach site map showing sampling point locat	ions, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	
Hydric Soil Present? Yes X No Is the Sampled Area	
Remarks: No Ves <u>No</u> Within a Wetland?	Yes 🗶 No
Wathed Chandrastics als 1 0 19 0	
and showed a six pe	2. ^/
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Surface Water (A1)	Surface Soil Cracks (B6)
High-Water Table (A2)	Sparsely Vegetated Concave Surface (B8)
Saturation (A3)	Drainage Patterns (B10)
Water Marks (B1) Oxidized Rhizospheres along Livian Roots (C2)	Moss Trim Lines (B16)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Cravitsh Burrows (C8)
L Drift Deposits (B3)	Saturation Visible on Aerial Imagery (C9)
Iron Denosits (85)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (87)	Shallow Aquitard (D3)
Water-Stained Leaves (B9)	L FAC-Neutral Test (D5)
Field Observations:	Sphagnum moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (inches): 1" to 2" See whe	2
Water Table Present? Yes No Depth (inches): 4"	
Saturation Present? Yes Vo Depth (inches): Surface Wetland	Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
Remarks.	a
factor of stending water within data	plot
	A
Walland hydrology preser	
	and the second

US Army Corps of Engineers

VEGETATION (Four Strata) - Use scientific names of plants. Sampling Point: Wroholsf\_w Absolute Dominant Indicator Tree Stratum (Plot size; Dominance Test worksheet: % Cover Species? Status Flo, Number of Dominant Species aDa C 15 FAC That Are OBL, FACW, or FAC: inderlas 2. 35 MAW choliz Virniniana Total Number of Dominant 25 FACW Species Across All Strata ( er 4 പ് \_5 NIM 5. Percent of Dominant Species That Are OBL, FACW, or FAC 6 7 Prevalence Index worksheet: 8. Total % Cover of: Multiply by: 80 x 1 = OBL species = Total Cover 50% of total cover: 40 20% of total cover: 8 FACW species \_\_\_\_\_ × 2 = \_\_\_\_ Sapling/Shrub Stratum (Plot size: 30-FAC species \_\_\_\_ · } x 3 = 1 100 XrCo 25 FACU species x 4 = 25 UPL species AC x 5 = \_\_\_\_\_ CIN der wi potera 10 Column Totals: FACU (A) \_\_\_ (B) 840 FAC Prevalence index = B/A = 10  $\sim$ FH Hydrophytic Vegetation Indicators: 6 5 FACE 1 - Rapid Test for Hydrophytic Vegetation J.1617-61 20 FACW 2 - Dominance Test is >50% 8 3 - Prevalence Index is ≤3.0' 135 = Total Cover Problematic Hydrophytic Vegetation<sup>4</sup> (Explain) % of total cover: 67.5 20% of total cover: 27 Herb Stratum (Plot size, 1.1. 6 Indicators of hydric soil and wetland hydrology must Cernus 081 be present, unless disturbed or problematic. d.h. 2 hoe FACH e.f. . Definitions of Four Vegetation Strata: mundastrum connancement 3 FACU 4 Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or scolla Μη Ν FACW more in diameter at breast height (DBH), regardless of 5 argudus 30 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 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 37.5 40 = Total Cover 15 50% of total cover: 20% of total cover: Woody Vine Stratum (Plot size 201 rolund; fol: VITIS 1 3 milas rola 2 4 Hydrophytic 40 20 = Total Cover 🖌 Vegetation Yes \_\_\_\_\_ No \_\_\_\_\_ 50% of total cover 35 Present? 20% of total cover: 🌆 Reinarks (If observed, list morphological adaptations below). Wetland veg. present US Army Corps of Engineers

Atlantic and Gulf Coastal Plain Region - Version 2.0



Sampling Point: USOHO 18F-W

Image: Second	$\frac{C}{2/1} \frac{100}{100}$ $\frac{2}{2/1} \frac{100}{100}$ $\frac{C}{2/1} \frac{100}{100}$ $\frac{C}{2/1} \frac{100}{100}$ $\frac{C}{2} \frac{2}{100}$ $\frac{C}{2} \frac{100}{100}$ $\frac{C}{2} \frac{100}$	Reduced Matrix, MS=Masked Sand Grains. Reduced Matrix, MS=Masked Sand Grains. LRRs, unless otherwise noted.) Polyvalue Below Surface (S8) (LRR S, T, U) Loamy Mucky Mineral (F1) (LRR O) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, Umbric Surface (F13) (LRR P, T, U) Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 14 Anomalous Bright Loamy Soils (F20) (MLRA	A. J.K.         A. J.K.         A. J.K.         A. J.K.         2Location: PL=Pore Lining, M=Matrix.         Indicators for Problematic Hydric Soils <sup>3</sup> :         J)       1 cm Muck (A9) (LRR O)         2 cm Muck (A10) (LRR S)         Reduced Vertic (F18) (outside MLRA 150A, E         Piedmont Floodplain Soils (F19) (LRR P, S, T         Anomalous Bright Loamy Soils (F20)         (MLRA 153B)         Red Parent Material (TF2)         Very Shallow Dark Surface (TF12)         Other (Explain in Remarks)         T) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present. unless disturbed or problematic.         (ISA)         :A 149A, 153C, 153D)
<sup>1</sup> Type: C=Concentrati Hydric Soil Indicator Hislosol (A1) Hisloc Epipedon (/ Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (/ 5 cm Mucky Min Depleted Below ID Thick Dark Surfac Coast Prairie Red Sandy Mucky Min Sandy Gleyed Ma Sandy Redox (S5 Stripped Matrix (S Dark Surface (S7) Restrictive Layer (If C	on, D=Depletion, RM= on, D=Depletion, RM= s: (Applicable to all L A2) (A4) A5) (A4) A5) (A4) A5) (A7) (LRR P, T, U) ral (A7) (LRR P, T, U) ral (A7) (LRR P, T, U) ark Surface (A11) e (A12) ox (A16) (MLRA 150A eral (S1) (LRR O, S) trix (S4) ) 6) (LRR P, S, T, U)	Reduced Matrix, MS=Masked Sand Grains. LRRs, unless otherwise noted.) Polyvalue Below Surface (S8) (LRR S, T, U) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, Umbric Surface (F13) (LRR P, T, U) Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 14 Anomalous Bright Loamy Soils (F20) (MLRA	2Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils <sup>3</sup> : J) 1 cm Muck (A9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLRA 150A,I Piedmont Floodplain Soils (F19) (LRR P, S, T Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) T) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present. unless disturbed or problematic. I9A) A 149A, 153C, 153D)
<sup>1</sup> Type: C=Concentrati Hydric Soil Indicator Histosol (A1) Histic Epipedon (/ Black Histic (A3) Hydrogen Sulfide Stratified Layers ( Organic Bodies (/ 5 cm Mucky Mine Muck Presence (/ 1 cm Muck (A9) (I Depleted Below D Thick Dark Surfac Coast Prairie Red Sandy Mucky Min Sandy Gleyed Ma Sandy Redox (S5 Stripped Matrix (S) Dark Surface (S7) Restrictive Layer (If C	on, D=Depletion, RM= s: (Applicable to all L A2) (A4) A5) (A6) (LRR P, T, U) ral (A7) (LRR P, T, U) (A8) (LRR U) .RR P, T) ark Surface (A11) e (A12) ox (A16) (MLRA 150A eral (S1) (LRR O, S) trix (S4) ) 6) (LRR P, S, T, U)	Reduced Matrix, MS=Masked Sand Grains. LRRs, unless otherwise noted.) Polyvalue Below Surface (S8) (LRR S, T, U) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, Umbric Surface (F13) (LRR P, T, U) Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 14 Anomalous Bright Loamy Soils (F20) (MLRA	<ul> <li><sup>2</sup>Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils<sup>3</sup>:</li> <li>J) 1 cm Muck (A9) (LRR O)</li> <li>2 cm Muck (A10) (LRR S)</li> <li>Reduced Vertic (F18) (outside MLRA 150A, Piedmont Floodplain Soils (F19) (LRR P, S, T</li> <li>Anomalous Bright Loamy Soils (F20)</li> <li>(MLRA 153B)</li> <li>Red Parent Material (TF2)</li> <li>Very Shallow Dark Surface (TF12)</li> <li>Other (Explain in Remarks)</li> <li>T) <sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present. unless disturbed or problematic.</li> <li>(9A)</li> </ul>
Trestrictive cayor (If (			
Cepth (inches).			Hydric Soil Present? Yes No
1 'yori	z 50, l	plesset	

# wroh018f\_w



Wetland data point wroh018f\_w facing north



Wetland data point wroh018f\_w facing south

# wroh018 soils



Wetland (wroh018f)/upland soils

Protects to	WETLAND DETERMINATION DATA FORM – Atlantic a	nd Gulf Coastal Plain Region
Contact Norman	Project/Site, ACP	
and/orm filiality:       Dimersion       Strate:       M	Applicant/Owner: Deminica	Sampling Date: <u>II Sept 2014</u>
andioum (hillshoe, terrace, etc.), Success, Button Loose like (concerv, convex, none), Cancerka Store (M) 22, barnegion (LRR or MLRA):	Investigator(s): DD INTRSt	State: Sampling Point: <u>wroh0185</u> _ v
Subsection       Cost of set (Consequence, none), Consequence, None, Consequence, None, Consequence, Cons	Landform (hillslope, terrace, etc.) Successor, Buttern Section, Township, Ran	ge:
Soli Map Unit Name:	Subregion (I RR or MI RA)	Shope (%): $2$
An and an Antime       COCKS, STEX.         We vegatation	Soil Man Unit Name: Tr) 1	ong: 19 01 08,985 Datum: 06589
We unmark / nycrology conductors on the site typical for his time of year? Yes No (If needed, explain in Remarks.)           We VegetationSolior Hydrologysignificantly disturbed?         Are "Normal Cocumisations" means, is           SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.           Hydrophytic Vegetation Fresen?         YesNo	Are alimeted by the second sec	NWI classification:753
rer Vegetation       Soll       or Hydrology       sentializative and problematic?       Are Hormal Circumstances' present? Yes No         With revegetation       Soll       or Hydrology       naturally problematic?       (ff ineedod, explain any nerwers in Remarks.)         Without OF Fishing Soll       No	Are climatic r hydrologic conditions on the site typical for this time of year? Yes No	(If no, explain in Remarks.)
view Vegelation	Are Vegetation Soil, or Hydrology significantly disturbed? Are "h	vormal Circumstances" present? Yes No
SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.         Hydrophylo Vagalation Present?       Yes       No       Is the Sampled Area         Witch Soil Present?       Yes       No       Is the Sampled Area         Witch Soil Present?       Yes       No       Is the Sampled Area         Witch Soil Present?       Yes       No       Is the Sampled Area         Witch Area       Yes       No       Is the Sampled Area         Witch Soil Present?       Yes       No       Is the Sampled Area         Wetland Hydrology Indicators:       Surface Soil Crack (B)       Surface Soil Crack (B)         Surface Water (A1)       Aquatic Fauna (S13)       Surface Soil Crack (B)       Surface Soil Crack (B)         Surface Water (A1)       Obdiget Brites Glob       Drainage Patiens (B10)       Drainage Patiens (B10)         Water Marks (B1)       Obdiget Brites Glob       Drainage Patiens (B10)       Drainage Patiens (B10)         Water Marks (B1)       Obdiget Brites Glob (ICR V)       Presence of Reduce (C1)       Drainage Patiens (B10)         Water Marks (B1)       Obdiget Brites Glob (ICR V)       Presence of Reduce (C1)       Drainage Patiens (B10)         Water Marks (B1)       Obdiget Brites Glob (ICR V)       Recent ton Reduce (C1)       Saturation Present?	Are Vegetation, Soil, or Hydrology naturally problematic? (If net	eded, explain any answers in Remarks.)
Hydrox Soil Prosent?       Yes       No       Is the Sampled Area         Wetland Hydroxley Present?       Yes       No       Image: Sampled Area         Wotland Hydroxley Present?       Yes       No       Image: Sampled Area         Watter (A1)       Aquatic Fauna (B13)       Surface Soil Crocks (B4)       Surface Soil Crocks (B4)         Hing Water Table (N2)       Aquatic Fauna (B13)       Surface Soil Crocks (B4)       Drainage Breterias (B10)         Saturation (R3)       Oxidrated Rhizospheres along Living Roots (C3)       Crayfield Butrows (C3)       Crayfield Butrows (C3)         Saturation Visible on Aerial Imagery (B7)       Oxidrate (R10)       Saturation Visible on Aerial Imagery (C9)       Saturation Visible on Aerial Imagery (C9)       Saturation Visible on Aerial Imagery (B7)       No       Depth (nches): ± ± 1       No       No       Saturation Visible on Aerial Imagery (B7)       No       Depth (nches): ± ± 1       No       No       Depth (nches): ± ± 1       N	SUMMARY OF FINDINGS - Attach site map showing sampling point lo	cations, transects, important features, etc.
WHAW Dress T         YDROLOGY         Wattand Hydrology Indicators:         Imary Indicators (minimum of one is required; check all that apply)         Surface Water (A1)         Aquatic Fauna (B13)         Hoh Water Table (A2)         Hof Water Table (A2)         Hof Water Marks (B1)         Oxidace Water (A1)         Generation (A3)         Hof Water Table (A2)         Hof Water Marks (B1)         Oxidace Concern (B4)         Oxidace Marks (B1)         Oxidace Marks (B1)         Oxidace Concern (B6)         Saturation (A3)         Hof Water Marks (B1)         Oxidace Concern (B6)         Ballow Acrist (B4)         Into Deposits (B3)         Recent Iron Reduction in Tiled Solis (C3)         Into dation Visible on Aerial Imagery (B7)         Water Table Present?         Yes       No         Depth (Inches): Sufface         Sutration Visible on Aerial Imagery (B7)         Water Table Present?       Yes         No       Depth (Inches): Sufface         Sutration Visible on Aerial Imagery (B7)       Wetand Hydrology Present?         Sutration Visible on Aerial Imagery (B7)       No         Depth (Inches): Sufface       <	Hydrophytic Vegetation Present?       Yes No       Is the Sampled         Hydric Soil Present?       Yes No       Is the Sampled         Wetland Hydrology Present?       Yes No       within a Wetlan         Remarks:       No	Area d? Yes <u>No</u>
WPROLOGY         Wetland Hydrology Indicators:         Primary Indicators (minimum of one is required; check all that apply)         Surface Water (A1)         High Water Table (A2)         High Water Table (A2)         High Water Table (A2)         Water Marks (B1)         Water Saler Saler Crust (B2)         Water Saler Saler Saler Crust (B2)         Water Saler Saler Crust (B2)         Water Saler Saler Crust (B2)         Water Saler Crust (B2)	Wotland present	
Wetland Hydrology Indicators:       Sacondarv Indicators (minimum of two required)         Primary Indicators (minimum of one is required; check all that apply)       Surface Water (A1)         Surface Water (A1)       Aquatic Fauna (B13)         Hejh Water Table (A2)       Mant Deposits (B15) (LRR U)         Saturation (A3)       Hydrogen stifted Odor (C1)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)         Primary Barbon (A3)       Recent Iron Reduction in Tailed Soils (C6)         Tifn Deposits (B2)       Presence of Reduced Iron (C4)         Tin Deposits (B3)       Recent Iron Reduction in Tailed Soils (C6)         Inondation Visible on Aerial Imagery (B7)       Saturation Visible on Aerial Imagery (B7)         Water Statined Leaves (B9)       Thin Muck Surface (C7)         Surface Water Present?       Yes         No       Depth (inches): £ 2 /         Water Table Present?       Yes         No       Depth (inches): £ 2 /         Water Table Present?       Yes         No       Depth (inches): £ 2 /         Water Table Present?       Yes         No       Depth (inches): £ 2 /         Water Table Present?       Yes         No       Depth (inches): £ 2 /         Water Table Present?       Yes	HYDROLOGY	
Primary Indicators (minimum of one is required: check all that apply)       Secondary indicators (minimum of two required)         Surface Water (A1)       Aquatic Fauna (B13)       Sparsely Vegetated Conceve Surface (B8)         Saturation (A3)       Hydrogen Sulface Odor (C1)       Sparsely Vegetated Conceve Surface (B8)         Saturation (A3)       Hydrogen Sulface Odor (C1)       Main Deposits (B2)       Presence of Reduced Iron (C4)         Dnft Deposits (B2)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Geomorphic Positin (D2)       Other (Explain in Remarks)       Saturation Visible on Aerial Imagery (C9)         Inondation Visible on Aerial Imagery (B7)       Water Table (C2)       Shallow Aquitard (D3)         Water Staned Leaves (B6)       FAC-Neutral Test (D5)       Splagnum moss (D8) (LRR T, U)         Sutration Present?       Yes       No       Depth (inches): ± Z *         Vater Able Recorded Date (stream gauge, monitoring well, serial photos, previous inspections), if available:       Remarks:	Wetland Hydrology Indicators:	Q
Water Water (A1)       Aquatic Fauna (B13)       Saturation (A2)       Mail Deposits (B15) (LRR U)         Saturation (A3)       High Water Table (A2)       Mail Deposits (B15) (LRR U)       Most Time Lines (B10)         Saturation (A3)       Dytrogen Sulface Odor (C1)       Dox/Season Water Table (C2)       Most Time Lines (B10)         Saturation (A3)       Dytrogen Sulface Odor (C1)       Dytrogen Sulface Odor (C1)       Most Time Lines (B10)         Onto Deposits (B2)       Presence of Reduced Iron (C4)       Recent Iron Reduction in Tilled Soils (C6)       Saturation Visible on Aerial Imagery (C9)         Charled Covers (B3)       Thim Muck Surface (C7)       Saturation Visible on Aerial Imagery (C9)         Water Table Present?       Yes       No       Depth (inches): + 2          Water Table Present?       Yes       No       Depth (inches): Surface Water Present?       Yes         Vater Table Present?       Yes       No       Depth (inches): Surface       Wetland Hydrology Present?       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Mod clock	Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum of two required)
High Water Table (A2)       Harl Deposits (B15) (LRR U)       Drainage Patterns (B10)         Saturation (A3)       Hydrogen Sulfide Odor (C1)       Moss Tim Lines (B16)         Water Marks (B1)       Oxidized Rhizospheres along Living Roots (C3)       Dry-Season Water Table (C2)         Ortil Deposits (B3)       Presence of Reduced Iron (C4)       Dry-Season Water Table (C2)         Crayfish Burrows (C8)       Presence of Reduced Iron (C4)       Saturation Visible on Aerial Imagery (C9)         Adgal Mat or Crust (B4)       Thin Muck Surface (C7)       Saturation Visible on Aerial Imagery (C9)         Inundation Visible on Aerial Imagery (B7)       Water-Stained Leaves (B9)       FAC-Neutral Test (D5)         Sphagnum moss (D8) (LRR T, U)       Sphagnum moss (D8) (LRR T, U)       FAC-Neutral Test (D5)         Sufface Water Present?       Yes       No       Depth (inches): £C?       Vertace Mater Present? Yes       No         Saturation Present?       Yes       No       Depth (inches): £C?       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge: monitoring well, aerial photos, previous inspections), if available:       Remarks:	X Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
Astitution (As)       Hydrogen Sulfide Odor (C1)       Moss Trim Lines (B16)         Water Marks (B1)       Cravits Barrows (C8)       DrSeason Water Table (C2)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Cravits Burrows (C8)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Water-Stained Leaves (B9)       Present?       Yes         Field Observations:       Surface Water Present?       Yes         Surface Water Present?       Yes       No       Depth (inches): ± ± 1         Water Asign and Leaves (B9)       Depth (inches): ± ± 1       Wetland Hydrology Present?       No         Saturation Present?       Yes       No       Depth (inches): ± ± 1       No         Water Asign and Leaves (B9)       Depth (inches): ± ± 1       Wetland Hydrology Present?       No       Mo         Saturation Present?       Yes       No       Depth (inches): ± ± 1       No       No       Mo         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Moderdegy       No	High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
Sediment Deposits (B2)       Dift Deposits (B2)       Presence of Reduced Iron (C4)       Dr.f. Season Water Table (C2)         Crayfish Burrows (C8)       Crayfish Burrows (C8)       Saturation Visible on Aerial Imagery (C9)         I non Deposits (B5)       Dift Deposits (B5)       Dift Deposits (B5)       Geomorphic Position (D2)         I non Deposits (B5)       Dift Caves (B9)       Saturation Visible on Aerial Imagery (B7)       Saturation Visible on Aerial Imagery (C9)         Vater-Stained Leaves (B9)       Field Observations:       Softenent?       Softenent?         Suter Torseent?       Yes       No       Depth (inches): ± Z '         Water Table Present?       Yes       No       Depth (inches): Softener         Vater Softener       Yes       No       Depth (inches): For Carl       Wetland Hydrology Present?       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks       Mudardegy Present	Water Marks (B1)	Moss Trim Lines (B16)
Drift Deposits (B3)       Recent Iron Reduced in (C4)       Craytish Burrows (C8)         Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Saturation Visible on Aerial Imagery (C9)         Iron Deposits (B5)       Other (Explain in Remarks)       Saturation Visible on Aerial Imagery (C9)         Water-Stained Leaves (B9)       FAC-Neutral Test (D5)       Sphagnum moss (D8) (LRR T, U)         Surface Water Present?       Yes       No       Depth (inches): $\pm Z^{-1}$ Water Table Present?       Yes       No       Depth (inches): $\pm Z^{-1}$ Water Table Present?       Yes       No       Depth (inches): $\pm Z^{-1}$ Water Table Present?       Yes       No       Depth (inches): $\pm Z^{-1}$ Water Table Present?       Yes       No       Depth (inches): $\pm Z^{-1}$ Water Table Present?       Yes       No       Depth (inches): $\pm Z^{-1}$ Water Add Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:         Remarks:       Mydsclcgy       Present?	Sediment Deposits (B2)	(C3) Dry-Season Water Table (C2)
Algal Mat or Crust (B4)       Thin Muck Surface (C7)       Geomorphic Position (D2)         Inon Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitar (D3)         Inundation Visible on Aerial Imagery (B7)       FAC-Neutral Test (D5)         Water-Stained Leaves (B9)       Depth (inches): + Z 1         Statustion Present?       Yes       No         Depth (inches):       Software         Saturation Present?       Yes       No         Depth (inches):       Software         Water Table Present?       Yes       No         Depth (inches):       Software         Water Table Present?       Yes       No         Depth (inches):       Software         Wetland Hydrology Present?       Yes       No         Depth (inches):       Software         Wetland Hydrology Present?       Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:	Drift Deposits (B3)	Crayfish Burrows (C8)
Iron Deposits (B5)       Other (Explain in Remarks)       Shallow Aquitard (D3)         Inundation Visible on Aerial Imagery (B7)       Shallow Aquitard (D3)         Water-Stained Leaves (B9)       FAC-Neutral Test (D5)         Surface Water Present?       Yes       No         Depth (inches):       Surface Water Present?       Yes         No       Depth (inches):       Surface Water Present?       Yes         No       Depth (inches):       Surface Water Present?       Yes         No       Depth (inches):       Surface Water Present?       Yes         Saturation Present?       Yes       No       Depth (inches):       Surface Water Present?       Yes         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       No       No         Remarks:       Mydsclcgy       Present       Mydsclcgy       Present	Algal Mat or Crust (B4)	Seconomic Position (D2)
Inundation Visible on Aerial Imagery (B7)       Imagery (B7)         Water-Stained Leaves (B9)       Imagery (B7)         Field Observations:       Sphagnum moss (D8) (LRR T, U)         Surface Water Present?       Yes         No       Depth (inches):         Saturation Present?       Yes         No       Depth (inches):         Saturation Present?       Yes         No       Depth (inches):         Socrace       Wetland Hydrology Present? Yes         Includes capillary fringe)       No         Describe Recorded Data (stream gauge. monitoring well, aerial photos, previous inspections). If available:         Remarks:	Iron Deposits (B5)	Shallow Aguitard (D3)
Water-Stained Leaves (B9)       Sphagnum moss (D8) (LRR T, U)         Field Observations:       Surface Water Present? Yes       No       Depth (inches): #Z 1         Water Table Present? Yes       No       Depth (inches): Surface       Wetland Hydrology Present? Yes       No         Saturation Present? Yes       No       Depth (inches): Surface       Wetland Hydrology Present? Yes       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks         Remarks       Mydsclcgy       Present	L Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Surface Water Present? Yes   No Depth (inches):   Yes No   Depth (inches): Sicket   Wetland Hydrology Present? Yes No Depth (inches): Sicket Wetland Hydrology Present? Yes No Present? No Present? No Present? No Present? Yes No Present? No Present? Yes No Present? No Present? Yes No Present? Present? No Present?	X Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Sundace Water Table Present?       Yes       No       Depth (inches): Successful wetland Hydrology Present?       Yes       No	Field Observations:	
Saturation Present? Yes   No Depth (inches): SUCHIE   Wetland Hydrology Present? Yes No Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks: Mydsclcgy Present	Water Table Present? Yes No Depth (inches): + 2	
(includes capillary fringe)	Saturation Present? Yes I No Dopth (inches): Sochace	
Remarks: Wydrology Present	(includes capillary fringe)	tland Hydrology Present? Yes No
Remarks hydrology Present	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections)	, if available:
hydrology Present	Remarks	
hydrology Present		
	hydrology Poppent	
	de de la costa	
	1	

Sampling Point: Work@185-W

I tree Stratum (Plot size 50	Absolute	Dominant Indicator	Dominance Test worksheet:
1. Liridendron tuliaifoca	<u>% Cover</u>	Species? Status	Number of Dominant Species
2	>	- MCY	That Are OBL, FACW, or FAC: (A)
3			Total Number of Dominant
4			Species Across All Strata:
5			Percent of Dominant Species
6			That Are OBL, FACW, or FAC:
7			Prevalence Index worksheet:
8			Total % Cover of: Multiply by
	5	= Total Course	OBL species x 1 =
50% of total cover: $2$	-5 20% of		FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30)			FAC species x 3 =
1. Iley glaba	40	Y FACW	FACU species x 4 =
2. Lindendron tulip. Free	20	Y FACU	UPL species x 5 =
3. Acer rubrum		Y. FAC	Column Totals: (A) (B)
4. <u>morpha certera</u>	0	N FAC	Prevalence Index = B/A -
0			Hydrophytic Vegetation Indicatore
7			1 -Rapid Test for Hydrophytic Vegetation
8			2 - Dominance Test is >50%
			$3$ - Prevalence Index is $\leq 3.0^{1}$
50% of lotal	<u> </u>	= Total Cover	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
Herb Stratum (Plot size 30, 20)	20% 01	total cover: 10	
1. Incha latifalia	$\sim$ )	V CR	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
2. Junius effusus	-20	$\frac{1}{V} = \frac{OOL}{EACU/}$	be present, unless disturbed or problematic.
3- Clarker		FIREW	Definitions of Four Vegetation Strata:
4 Mikphia Schndeus	(D	y FACh	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5.		t	i neiont.
56 		(	Sapling/Shrub Woody plants, excluding vines less
5 6 7 8	······	{ 	Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
5 6 7 8 9 10			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.
56 7 8 9 10 11	· · · · · · · · · · · · · · · · · · ·		Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tail. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tail. Woody vine - All woody vines greater than 3.28 ft in beint
56 67 8 9 10 11 12			Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine All woody vines greater than 3.28 ft in height.
5 6 8 9 10 11 12 27.5	<u> </u>		Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tail. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine - All woody vines greater than 3.28 ft in height.
5 6 8 9 10 11 12 27.5 50% of total cover: 4	<b>5</b> <b>5</b> <b>20%</b> of	= Total Cover	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.
56 6 78 910 1011 12 12 50% of total cover: Woody Vine Stratum (Plot size. 30.936)	<b>35</b> 20% of	= Total Cover	Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine All woody vines greater than 3.28 ft in height.
5. 6 7 8. 9. 10. 11 12 27.5 50% of total cover: <u>Woody Vine Stratum</u> (Plot size <u>30936</u> ) 1 <u>5 m: Grt Jauri felia</u>	<b>55</b> 20% of 30	= Total Cover total cover:	Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Horb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine All woody vines greater than 3.28 ft in height.
5 6 8 9 10 11 12 $27.5$ 50% of total cover: $27.5$ 50% of to	<b>5</b> <b>5</b> <b>20% of</b> <b>30</b>	= Total Cover total cover:	Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine All woody vines greater than 3.28 ft in height.
5. 6 7 8. 9. 10. 11 12 27.5 50% of total cover: Woody Vine Stratum (Plot size 30,936) 1 Smilay Totundifelia 2. Marchandrice 30,936) 1 Smilay Totundifelia	<b>3</b> 0 <b>1</b> 0	= Total Cover Itotal cover:	Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine All woody vines greater than 3.28 ft in height.
5. 6 7 8. 9. 10. 11 12 27.5 50% of total cover: <u>Woody Vine Stratum</u> (Plot size <u>30936</u> ) 1 <u>Smilgt Jaurifelia</u> 2. <u>Montestratum</u> (Plot size <u>30936</u> ) 1 <u>Smilgt Jaurifelia</u> 3. <u>Smilat rotundifelia</u> 4. <u>Lyonic</u> <u>Jacida</u>	<b>3</b> 0 <b>1</b> 0 <b>1</b> 0	= Total Cover total cover:	Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine All woody vines greater than 3.28 ft in height.
5. 6 7 8. 9. 10. 11 12 27.5 50% of total cover: $27.5$ 50% of total cover	<b>3</b> 0 <b>1</b> 0 <b>1</b> 0 <b>1</b> 0	= Total Cover total cover:	Height.         Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tail.         Herb All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.         Woody vine All woody vines greater than 3.28 ft in height.
5. 6 7 8. 9. 10. 11. 12. 27.5 50% of total cover: Woody Vine Stratum (Plot size30930) 1 Smilay Totundi telia 2. Smilay Totundi telia 4. Lyonia funcida 5. 50% of total cover: 30.930	30 30 10 10 30 30 30 30 30 30 30 30 30 30 30 30 30	= Total Cover total cover:	Hydrophytic Vegetation Present?
5. 6 7 8. 9. 10. 11 12 27.5 50% of total cover: Woody Vine Stratum (Plot size 30.9.30) 1 Smilgy Taurifelia 2. Model Cover: 3. Smilay rotundifelia 4. Lyonic Jucida 5. Som fotal cover: 8. 5. 2. 50% of total cover: 8. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5	<b>3</b> 0 <b>3</b> 0 <b>6</b> <b>1</b> 0 <b>1</b> 0 <b>5</b> <b>5</b> 0 20% of	= Total Cover Total cover:	Height.         Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Hørb - 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
5. 6 7 8. 9. 10. 11 12 27.5 50% of total cover: Woody Vine Stratum (Plot size 30, 9.36) 1 Smilay laurificia 2. Modeline Stratum (Plot size 30, 9.36) 1 Smilay laurificia 2. Smilay rotundificia 3. Smilay rotundificia 4. Lyonic function 5. So% of total cover: Remarks (II observed. list morphological adaptations be	<b>3</b> 0 <b>3</b> 0 <b>1</b> 0 <b>1</b> 0 <b>3</b> 0 <b>3</b> 0 <b>3</b> 0 <b>3</b> 0 <b>3</b> 0 <b>3</b> 0 <b>3</b> 0 <b>3</b>	= Total Cover total cover: 911 FACW FACW FACU FACU Total Cover total cover: 10	Height.         Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Hørb - 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
5. 6 7 8. 9. 10. 11. 12. Woody Vine Stratum (Plot size	30 30 10 10 20% of elow).	= Total Cover total cover:	Height.         Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tail.         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         Yes       No
5 6 9 10 11 12 $27.5$ 50% of total cover: $27.5$ 30% of total cover: $27.550%$ of total cover: $27.5$	30 30 10 10 30 20% of elow).	= Total Cover total cover: 9 FAC FAC FAC FAC FAC FAC FAC FAC	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 Present?         Yes       No
5. 6 7 8. 9. 10. 11 12 27.5 50% of total cover: Woody Vine Stratum (Plot size 30,930) 1 Smilay Taurifelia 2. Model and the line 3. Smilay Totundifelia 4. Lyonia funcida 5 Remarks (II observed. list morphological adaptations be Nydcophytic	30 30 10 10 30 10 10 3 20% of elow).	= Total Cover Total cover Total cover FAC FAC FAC FAC FAC FAC FAC FAC	Height.         Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Hørb - 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         ESE h.t
5. 6 7 8. 9. 10. 11. 12. 27.5 50% of total cover: Woody Vine Stratum (Plot size 30.9.36) 1 Smilay Taurifelia 2. Modeline Stratum (Plot size 30.9.36) 1 Smilay Taurifelia 3. Smilay Totundifelia 4. Lyonic Inciden 5. So% of total cover: Remarks (If observed. list morphological adaptations be hydrophytic	30 30 10 10 20% of elow).	= Total Cover total cover: FACW FACW FACW FACW FACU Total cover total cover: Total cover total cover: Total Cover	Height.         Sapling/Shrub Woody plants, excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tall.         Hørb - 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         ESE M.T
5. 6 7 8. 9. 10. 11. 12. 27.5 50% of total cover: Woody Vine Stratum (Plot size 30,936) 1 Smiley Totolfa 2. Woody Vine Stratum (Plot size 30,936) 1 Smiley Totolfa 2. Smiley Totolfa 4. Lyonic Jucida 5. Solver Stratum (Plot size 30,936) 1 Smiley Totolfa 2. Smiley Totolfa 5. Solver Stratum (Plot size 30,936) 1 Smiley Totolfa 2. Solver Stratum (Plot size 30,936) 1 Smiley Totolfa 5. Solver Stratum (Plot size 30,936) 1 Smiley Totolfa 1 S	30 30 10 10 10 10 10 10 10 10 10 10 10 10 10	= Total Cover total cover:	Height.         Sapling/Shrub Woody plants. excluding vines less than 3 in. DBH and greater than 3.28 ft (1 m) tail.         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         ESE https://www.nesentroline.com/second

# SOIL

# Sampling Point: Wrohars- W

(inches)	Matrix		Rede	N Festura	e		in the absence of t		
	Color (moist)	%	Color (moist)	. <u>%</u>	Type'	Loc <sup>2</sup>	Texture	Remarks	S
0-6	TOTILZA						Muck_		
6-14	104KZ/1	100_					Mucky loan	^	
		1. 1. at an - 10 color supported in the second							
				-	······				
Type: C=Co Tydric Soil	oncentration, D=De	pletion, RM=	Reduced Matrix, M	<u>S=Maskec</u>	Sand Gr	ains.	<sup>2</sup> Location: PL	=Pore Lining, M=Ma	atrix.
Histosol	(A1)	cable to all L	RRs, unless othe	rwise not	ed.)		Indicators for	Problematic Hydri	ic Soils <sup>3</sup> :
Histic Ep	nipedon (A2)		Thin Dark St	elow Surta urface (S9)	ce (S8) (L I (LRR S.	RRS,Τ, Υ.Π.		k (A9) (LRR O)	
Black Hi	stic (A3) o Sulfido (A4)		Loamy Muck	y Mineral	(F1) (LRF	(0)	Reduced V	√ertic (F18) (outsid	e MLRA 150A,B)
Stratifiec	Layers (A5)		Loamy Gley     Depleted Ma	ed Matrix ( utrix (E3)	F2)		Piedmont	Floodplain Soils (F1	9) (LRR P, S, T)
Organic	Bodies (A6) (LRR	P, T, U)	Redox Dark	Surface (F	6)	Silli	Anomalou	s Bright Loamy Soil. 153B)	s (F20)
Muck Pr	esence (A8) (LRR	.RR P, T, U) U)	Depleted Da	rk Surface	(F7)	¥	Red Parer	nt Material (TF2)	
1 cm Mu	ck (A9) (LRR P, T)		Marl (F10) (L	-RR U)	0)	in r. X. j	Very Shall	low Dark Surface (T plain in Remarks)	F12)
Thick Da	Below Dark Surfa ark Surface (A12)	ce (A11)		hric (F11)	(MLRA 1	51)		source and the source of the s	
Coast Pr	airie Redox (A16)	(MLRA 150A	) Numbric Surf:	iese Mass ice (F13) (	es (F12) ( I RR P T	LRR O, P	, T) <sup>3</sup> Indicator	rs of hydrophytic ve	getation and
Sandy M	lucky Mineral (S1)	(LRR O, S)	Delta Ochric	(F17) (NIL	.RA 151)	, 0)	unless	disturbed or probler	natic.
Sandy R	edox (S5)		Reduced Ve	rtic (F18) (	MLRA 15	0A, 150B	)		
Stripped	Matrix (S6)		Anomalous (	Bright Loar	ny Soils (	(MLRA 1 F20) (MLI	49A) RA 149A, 153C, 15	(3D)	
Dark Sur Restrictive (	aver (If observed	<u>S, Y, U)</u>	······································					,	
Туре:								7.	
Depth (ind	ches).						Hydric Soll Pre	V sent? Yes	No
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