

Non-water data point NONRE003 facing east (within inundated wetland)



Non-water data point NONRE003 facing west (within inundated wetland)

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	C	sity/County: Halifa	X Sam	pling Date: 1110116
Applicant/Owner: Domi	nipn		State: NC Sam	pling Point: nphloDD1
Investigator(s): EST-M	ickham Ropers	Section Township Range	none	
hivestigator(s).	Floodalain	east solicit (concerve, conver	manal (DD/A)	1P. Shana 1961: 7-31
Landform (nillslope, terrace, etc.		Local relief (concave, convex	, none):	UC Slope (%). C III
Subregion (LRR or MLRA): _L	KK F Lat: 36.5	11367 Long:	-11.33 190	Datum: VV0007
Soil Map Unit Name:	Jacla loam, 0 to 1 % slope	s, occ. flooded	NWI classification:	NH
Are climatic / hydrologic conditio	ins on the site typical for this time of yea	r? Yes No	(If no, explain in Remark	ks.)
Are Vegetation, Soil	, or Hydrology significantly d	listurbed? Are "Norm	al Circumstances" preser	nt? Yes No
Are Vegetation, Soil	, or Hydrology naturally prob	olematic? (If needed,	explain any answers in F	Remarks.)
SUMMARY OF FINDING	S – Attach site map showing	sampling point locat	ions, transects, im	portant features, etc.
Hydrophytic Vegetation Preser Hydric Soll Present? Wetland Hydrology Present? Remarks:	11? Yes No Yes No Yes No	Is the Sampled Area within a Wetland?	Yes	No
HYDROLOGY			Service and the service of the	
Wetland Hydrology Indicato	rs:		Secondary Indicators	minimum of two required)
Primary Indicators (minimum o	of one is required; check all that apply)		Surface Soil Crack	ks (B6)
Surface Water (A1)	Aquatic Fauna (B13)	Sparsely Vegetate	ed Concave Surface (B8)
K High Water Table (A2)	Marl Deposits (B15)	(LRR U)	Drainage Patterns	; (B10)
X Saturation (A3)	Hydrogen Sulfide Of	dor (C1)	Moss Trim Lines (B16)
Water Marks (B1)	Oxidized Rhizosphe	res along Living Roots (C3)	Dry-Season Wate	r Table (C2)
Sediment Deposits (B2)	Presence of Reduce	ed Iron (C4)	Crayfish Burrows	(C8)
Drift Deposits (B3)	Recent Iron Reducti	ion in Tilled Soils (C6)	Saturation Visible	on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Thin Muck Surface	(C7)	Geomorphic Posit	tion (D2)
Iron Deposits (B5)	Other (Explain in Re	emarks)	Shallow Aquitard	(D3)
Inundation Visible on Aeri	al Imagery (B7)		FAC-Neutral Test	(D5)
Water-Stained Leaves (B	3)		Sphagnum moss	(D8) (LRR T, U)
Field Observations:	7	.10		
Surface Water Present?	Yes No Depth (inches):			
Water Table Present?	Yes <u>No</u> Depth (inches):			./
Saturation Present? (includes capillary fringe)	Yes X No Depth (inches):	: <u>10</u> Wetland	I Hydrology Present?	Yes <u>V</u> No
Describe Recorded Data (stre	am gauge, monitoring well, aerial photo:	s, previous inspections), if a	vailable:	
Remarks:				
and the second second				
				1 N N N N
And the second sec				

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

Sampling Point: nph/o 001

,,,	Abcoluto	Dominant	Indicator I	Dominance Test worksheet:
Tree Stratum (Plot size: 15f4 x 30ft)	% Cover	Species?	Status	Number of Demisent Preside
1 Ecoxinus Denosition	30	Y	FAID	That Are OBL EACING FAC: 7 (A)
1. Traditios pervisy variates	25	Ý	FAI	
2. Acer rubrum	- 00		EN	Total Number of Dominant
3. Liquidambar Styracitlua	10	_N	FAC	Species Across All Strata: (B)
4. Platanus occidentalis	20	1	FHUN	Percent of Dominant Species
5.	11 2201			That Are OBL FACW or FAC: 87.5 (A/B)
6				
7			A STATISTICS	Prevalence Index worksheet:
1		11/11/00/1975	1000 C	Total % Cover of: Multiply by:
8	00	1111100-00		OBL species x 1 =
	83	= Total Cov	/er	FACW species x2=
50% of total cover: <u>42.</u>	> 20% of	total cover	:	
Sapling/Shrub Stratum (Plot size: 15F+ x 3DF+)				
1. Platanus occidentalis	20	Y	FALW	FACU species x 4 =
2 Arer rubrum	40	Y	FAC	UPL species x 5 =
2 Anita parviflara	2	N	FACH	Column Totals: (A) (B)
. Astrainade participante	5	/	FRUI	
4. USTIYA VIIGIPIIANA		-14-	EN	Prevalence Index = B/A =
5. Liquerrun Sinense	5	N	PHC	Hydrophytic Vegetation Indicators:
6	CNSS-1-	Same Sugar		#- Rapid Test for Hydrophytic Vegetation
7.	A MARINE			2 - Dominance Test is >50%
8		THE WAR	P. Shiring	2 - Dominiance reschi - Solvi
	77	- Total Co		5 - Prevalence index is \$5.0
34		- Total Co	14.4	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover: <u>50</u>	20% of	total cover	<u> </u>	
Herb Stratum (Plot size: 15++ x 30++)				¹ Indicators of hydric soil and wetland hydrology must
1. Saururus Lernuus	ID	Y,	OBL	be present, unless disturbed or problematic.
2. Erigeron strigosus	1	N	FAC	Definitions of Four Vegetation Strata:
3		STACKS?		
5	1000 TUTO		Territoria C.	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4			1 - 1	more in diameter at breast height (DBH), regardless of beight
5	-			neight.
6	and a stand	and and and		Sapling/Shrub - Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Harb All bethaceous (non woody) plants regardless
0	0.05 37 40	ALSS AND	Sec	of size and woody plants less than 3.28 ft tall.
			Contraction of the second	
10	-			Woody vine - All woody vines greater than 3.28 ft in
11	Navi Alegaria	And the second second		height.
12	C. L. Linka	Section 1	Sand and shift	
	11	= Total Co	ver	a desired a second desired desired and the second sec
50% of total cover: 5.5	5 20% 0	f total cove	2.2	그렇게 그 가슴 옷 다 집에서 그 것 같아요. 가지 않는 것
Woody Vine Stratum (Plot size: 1564, 3054)				김태씨는 그 것은 것이 같은 것이 가지? 않는 것 같은 것이 봐.
(Woody vine Stratum (Pict size: 157 + X 501)	2	V	EN	
1. Jumpsis radicans			E ITU	
2. Lonicera japonica	10		FACU	
3	18. 2. 1. 19			e d'a d'Anna 1910 a taoinn a tha an taoinn a tha
4.		1. 1. 1.		
5				thudeeshutte
	12	- Tetal Co		Vegetation
1- c		= Total Co	2 6	Present? Yes No
50% of total cover: 10.	20% 0	f total cove	r:	
Remarks: (If observed, list morphological adaptations bel	ow).	18 19 19	1.1210140	water and the second
	and and	hand a strength	a March	

hlabol

OIL	Addie Bronding			Barrishines.		and the second	and the second second	Sampling	Pant: nontouv
Profile Desc	cription: (Describe	to the depi	th needed to docu	iment the In	dicator	or confirm	the absence o	f Indicators.)	a series and the series of
Depth	Matrix	1	Red	ox Features	1.1.5%				
(inches)	Color (moist)		Color (moist)		Type'	Loc	Texture	Rem	arks
0-4	101K 43	100	Maria	the fact and the second	and the second		SiL		
4-14	1012 4/3	bo	101R4/6	40	C	M	CL		
4-20	IDYR 4/4	90	10424/2	5	D	M	CL		
Tell they de			540 4/4	5	С.	M		10.45 14 19 10	
		-					training to the	A second s	
and south the	The second secon	- Information	and the second s	and the second second					an a
100.000352	<u> </u>	-			- 1	<u> </u>			
. Chullinha					AP ASSI	and the second s	his address of		alshirida balaa i
Type: C=C	oncentration, D=Dep	pletion, RM=	Reduced Matrix, N	MS=Masked	Sand Gr	ains.	² Location: I	L=Pore Lining, M	=Matrix.
lydric Soll	Indicators: (Applic	cable to all	LRRs, unless oth	erwise note	d.)		Indicators f	or Problematic H	ydric Solls ^a :
Histosol	(A1)	1.1	Polyvalue E	Below Surfac	e (S8) (I	RR S, T, L	J) 1 cm M	Jck (A9) (LRR O)	
Histic E	pipedon (A2)		Thin Dark S	Surface (S9)	(LRR S,	T, U)	2 cm M	Jck (A10) (LRR S)	
Black H	istic (A3)		Loamy Muc	ky Mineral (F1) (LRF	(0)	Reduce	d Vertic (F18) (out	SIDE MLRA 150A, B
Hydroge	d Lovers (A5)		Loamy Gle	yed Matrix (F	-2)		Pleamo	ous Bright Loamy	(F19) (LKK F, S, 1) Soils (F20)
Organic	Bodies (A6) (LRR F	P. T. UN	Depieted W	Surface (Fi	6)		(MLR	A 153B)	0013 (1 20)
5 cm M	ucky Mineral (A7) (L	RR P. T. U)	Depleted D	ark Surface	(F7)		Red Pa	rent Material (TF2)	
Muck P	resence (A8) (LRR I	U)	Redox Dep	ressions (F8	3)		Very Sh	allow Dark Surface	e (TF12)
1 cm M	uck (A9) (LRR P, T)		Marl (F10)	(LRR U)			Other (I	Explain in Remarks	5)
Deplete	d Below Dark Surfac	ce (A11)	Depleted O	chric (F11) (MLRA 1	51)			
Thick D	ark Surface (A12)		Iron-Manga	inese Masse	es (F12)	(LRR O, P,	T) ³ Indica	tors of hydrophytic	vegetation and
Coast P	Prairie Redox (A16) (MLRA 150/	A) Umbric Sur	face (F13) (LRR P, T	r, U)	weth	and hydrology mus	it be present,
Sandy r	Nucky Mineral (S1) (LKR U, S)	Delta Ochri Beduced V	C (F17) (WL entic (E18) (I	MI PA 1	50A 150B	unie	ss disturbed of pro	biematic.
Sandy F	Redox (S5)		Reduced V	Icodolain Se	oils (F19	(MLRA 14	(A9)		
Stripped	Matrix (S6)		Anomalous	Bright Loan	ny Soils	(F20) (MLF	RA 149A, 153C,	153D)	
Dark Su	urface (S7) (LRR P,	S, T, U)							AREN'S CONTRACTOR
Restrictive	Layer (If observed)):		1	(1. C.	vena grada	d an starte		
Type:	all a training and	din shirth	<u></u>				AN CARL		V
Depth (in	iches):						Hydric Soll	Present? Yes_	No
Remarks:		and a strate	A second se			1.1.1.1.1.1.1.1			
			-						

Environmental Field Surveys Non-water Point Photo Page



Non-water point nohlo001 facing west. (NWI, not a wetland)



Non-water point nohlo001 facing south. (NWI, not a wetland)

Photo Sheet 1 of 1

WETLAND DETERMINATION DATA FORM	I – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP City/C	ounty: Halifan Sampling Date: 10/08/2014
Applicant/Owner: Daninisn	State: NC Sampling Point: nohlh 305
Investigator(s): DOWest Section	n, Township, Range:
Landform (hillstone terrace etc.): Flood Plaine Local	relief (concave, convex, none); NONE Slope (%); O
Subragian (I BD as MI DA):	2 016" Long 77° 72' 74 191" Datum W/2 84
Subregion (LRR of MLRA): Lat: 36 A7 2	<u>A, 010</u> Long: <u>7733377,776</u> Datum. <u>6-0-0-(</u>
Soil Map Unit Name: Kiverview	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturb	ped?₩∞ Are "Normal Circumstances" present? Yes <u>×</u> No
Are Vegetation, Soil, or Hydrology naturally problema	itic? \mathcal{M} (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 Remarks: No No	Is the Sampled Area within a Wetland? Yes No
The sampling point is not	located within a wetland.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aduatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR	RU) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (0	C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres a	long Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced Iro	n (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)	Ceomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	(s) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	AC-Neutral Test (D5)
vvater-Stained Leaves (B9)	
Surface Water Present? Ver No X Donth (inches):	
Water Table Present? Ves No Ver Depth (inches):	
Saturation Present? Yes No Z Depth (inches):	Watland Hydrology Brosent? Yes X
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), ir available:
Remarks:	
Hydrology present.	

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

	Absolute D	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 36)	% Cover	Species?	Status	Number of Dominant Spacing
1 Fraxing Approximation	20	Y	FAUN	That Are OBL FACW or FAC: (A)
A a a a a a a a a a a a a a a a a a a a	20	V	EN	
2. ficer regundo	20		LAU.	Total Number of Dominant
3. Platanus Occidentalis	20	1.	FROW	Species Across All Strata: (B)
4				
5			×	Percent of Dominant Species -0 (A/P)
				That Are OBL, FACIV, of FAC(A'B)
6				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				Total % Cover of. Indutipity by.
	60 =	Total Cove	er	OBL species x 1 =
50% of total cover: 3	0 20% of to	ntal cover:	12	FACW species x 2 =
Sanling/Shruh Stratum (Dist size)	2070 01 10	otal cover.		FAC species x 3 =
Sapling/Shrub Stratum (Plot size:)	70	V	FA	FACU species x 4 =
1. Ligustrum Sinense	20	1	110	
2. Liquidambar styracitlua	10	Y_1	FAC	
3. Acer negundo.	10	Y	FAMU	(B)
4				Developed Index - B/A -
5				
0,				Hydrophytic Vegetation Indicators:
6	-			1 - Rapid Test for Hydrophytic Vegetation
7				∠2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	40 =	Total Cov	er	Drahlematic Hudrophytic Vegetation ¹ (Evaluin)
EDV of total cover: 74	> 20% of t	atal cover	8	Problematic Hydrophytic Vegetation (Explain)
50% of total cover:	20% 0110	otal cover.		
Herb Stratum (Plot size:)	74	V	TA	¹ Indicators of hydric soil and wetland hydrology must
1. Commelina Communis	30	1	FAC	be present, unless disturbed or problematic.
2. Microstesium Vimineum	10	Y	FAL	Definitions of Four Vegetation Strata:
3 Lubus aroutis	10	4	FAC	
A decision and party				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				height
5				Theight.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.				Hart All berbassous (non-woody) plants, regardless
0				of size and woody plants less than 3.28 ft tall
5				
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	50 =	Total Cov	er	
50% of total cover: 2	5 20% of t	otal cover	10	
	2070011	otal covel.		
(Plot size:)	10	Y.	FALL	
1. Lonicera Japonica	10	/	1001	
2				
3				
4				
5	-			
0	100			Hydrophytic
	=	Total Cov	er	Present? Vec V
50% of total cover: 5	20% of to	otal cover:	6	
Remarks: (If observed, list morphological adaptations bel	ow).			
				1
I Inchatic upoptation	. 15	do	minal	ht.
Typorophy Cegerano		0 1		
		and the second second second	And the second second second second	

SOIL

Sampling Point: Noh 14 00 5

Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type' Loc ²	Texture Remarks
0-10 104K414 80 54K 416 20	loan
10->18 7.54K4/4 85 54K 46 15	loan
	and the second
Provide a second s	
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains,	² Location: PL=Pore Lining, M=Matrix,
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O)
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U)	2 cm Muck (A10) (LRR S)
Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depieted Matrix (F3)	Anomalous Bright Loamy Solis (F20)
5 cm Mucky Mineral (A7) (LRR P. T. U) Depleted Dark Surface (F7)	Red Parent Material (TE2)
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) ³ Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR 0, S) Delta Ocnric (F17) (MLRA 151) Sandy Gleved Matrix (S4) Reduced Vertic (E18) (MLRA 150A 150B)	unless disturbed or problematic.
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149	94)
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLR/	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydysic Soil	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No <u>×</u>
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No <u>×</u>
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydrsc Soil is not present -	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No <u>×</u> _
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No <u>×</u>
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydrsc Soil is not present -	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes <u>No </u>
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydrsc Soil is not present-	Hydric Soil Present? Yes <u>No X</u>
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes <u>No </u>
Dark Surface (ST) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (inches): Remarks: Hydric Soil is not present -	Hydric Soil Present? Yes No
Dark Surface (ST) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydrsh Soil is not preset-	Hydric Soil Present? Yes No
Dark Surface (ST) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydrsh Soil is not preset-	Hydric Soil Present? Yes No _X
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (Inches): Remarks: Hydric Soil is not present-	Hydric Soil Present? Yes No X
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (If observed): Type: Depth (Inches): Remarks: Hydric Soil is not present-	Hydric Soil Present? Yes No X
Dark Surface (ST) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: Hydrs 50:1 is not present -	Hydric Soil Present? Yes No



Non-Waterbody nohlh005 facing north.



Non-Waterbody nohlh005 facing south



Non-Waterbody nohlh005 facing east

nohlhooy

Date: 10/68 / 2014	Project/Site:	ACP	Latitude: 260	446.116"	
Evaluator: DDWest	County: Hal	Fax	Longitude: 77º 34'41, 978"		
Total Points:Stream is at least intermittentif \geq 19 or perennial if \geq 30*	Stream Determin Ephemeral Inter	nation (circle one) mittent Perennial	Other No-n-Wate e.g. Quad Name: Pint		
A. Geomorphology (Subtotal =)	Absent	Weak	Moderate	Strong	
1 ^a . Continuity of channel bed and bank	0	(1)	2	3	
2. Sinuosity of channel along thalweg	0	0	2	3	
 In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 	0	1	2	3	
4. Particle size of stream substrate	0	0	2	3	
5. Active/relict floodplain	0	1	2	3	
6. Depositional bars or benches	0	1	2	3	
7. Recent alluvial deposits	0	1	2	3	
8. Headcuts	0	O	2	3	
9. Grade control	0	0.5	1	1.5	
10. Natural valley	0	0.5	1	1.5	
11. Second or greater order channel	No	€D	Yes	= 3	
^a artificial ditches are not rated; see discussions in manual					
B. Hydrology (Subtotal =)					
12. Presence of Baseflow	\bigcirc	1	2	3	
13. Iron oxidizing bacteria	(0)	1	2	3	
14. Leaf litter	1.5		0.5	0	
15. Sediment on plants or debris	0	0.5	1	1.5	
16. Organic debris lines or piles	0	0.5	1	1.5	
17. Soil-based evidence of high water table?	No	Ð	Yes	= 3	
C. Biology (Subtotal = 0.75)					
18. Fibrous roots in streambed	3	2	1	0	
19. Rooted upland plants in streambed	3	2	1	0	
20. Macrobenthos (note diversity and abundance)	Ó	1	2	3	
21. Aquatic Mollusks	Ó	1	2	3	
22. Fish	Q	0.5	1	1.5	
23. Crayfish	\bigcirc	0.5	1	1.5	
24. Amphibians	Q	0.5	1	1.5	
25. Algae	0	0.5	1	1.5	
26. Wetland plants in streambed		FACW = (0.75) OB	L = 1.5 Other = (0	
*perennial streams may also be identified using other method	ds. See p. 35 of manua	I			
Notes:					
Sketch:		> D: + cb	No	OHUM	
	-11-	-p	ownline		



Non-Waterbody nohlh004 facing south.



Non-Waterbody nohlh004 facing north



Non-Waterbody nohlh004 facing east

nohlhooz

NC DWQ Stream Identification Form Version 4.11 10/06/14 Latitude: 36° 22/6.567 Date: Project/Site: ACP DDWest Evaluator: Longitude: 77°36' 26.222" County: **Total Points:** 18 Stream Determination (circle one) Other Stream is at least intermittent Ephemeral Intermittent Perennial if \geq 19 or perennial if \geq 30* A. Geomorphology (Subtotal = Absent Weak 1^{a.} Continuity of channel bed and bank 0 (1 2. Sinuosity of channel along thalweg 0 1 3. In-channel structure: ex. riffle-pool, step-pool. 0 1 ripple-pool sequence

e.g. Quad Name: Moderate Strong 2 3 2 3 2 3 4. Particle size of stream substrate 0 1 03 5. Active/relict floodplain 0 1 2 3 6. Depositional bars or benches 0 $\overline{\mathbf{T}}$ 2 3 7. Recent alluvial deposits 0 (2)1 3 8. Headcuts 0 (1) 2 3 9. Grade control 0 0.5 1 1.5 10. Natural valley 0 0.5 1 1.5 11. Second or greater order channel No = 0 Yes = 3^a artificial ditches are not rated; see discussions in manual B. Hydrology (Subtotal = 5 12. Presence of Baseflow (1)0 2 3 13. Iron oxidizing bacteria 0 1 2 3 14. Leaf litter 1.5 1 0.5 0 15. Sediment on plants or debris 0 0.5 1 1.5 16. Organic debris lines or piles 0 0.5 1 1.5 17. Soil-based evidence of high water table? No = 0Yes = 3 C. Biology (Subtotal = 18. Fibrous roots in streambed 3 2 0 1 19. Rooted upland plants in streambed 3 2 A 0 20. Macrobenthos (note diversity and abundance) 0 1 2 3 21. Aquatic Mollusks 6 1 2 3 22. Fish 0 0.5 1 1.5 23. Crayfish (0.5) 0 1 1.5 24. Amphibians Ő 0.5 1 1.5 25. Algae 0 0.5 1.5 26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other € 0 *perennial streams may also be identified using other methods. See p. 35 of manual. Notes: down -15 Flow 1 Sketch: Up line



Non-Waterbody nohlh003 facing north.



Non-Waterbody nohlh003 facing south



Non-Waterbody nohlh003 facing east



Non-water point nohlf001 facing north



Non-water point nohlf001 facing south



Non-water data point nohlb051 facing west



Non-water data point NOHLB050 facing northwest

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
Project/Site: SP Reliebility City/County: HALLFox Sampling Date: 7-10-14
Applicant/Owner: Dominion State: WZ Sampling Point NOHLG OD
Investigator(s): DDCOEST Section, Township, Range: NA
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): S(until Concrete (%):
Subregion (LRR or MLRA): Lat: 261926.404.0ng: 773849.49.400 "Datum:
Soil Map Unit Name: _ Goldsboro fine small form 0-2 NWI classification: _N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Is the Sampled Area Hydric Soil Present? Yes No within a Wetland? Yes No Wetland Hydrology Present? Yes No Yes No Yes Yes
Depressional area directly adjacent to large canal
COLL C. D. C. C. H. C. C. C.
effectively drained Dominated with upland ucgeration
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) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Arl Deposits (B15) (LRR U) Drainage Patterns (B10)
Saturation (A3)
Sediment Deposits (B2)
Drift Deposits (B3)
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 (B/) Average (B) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRB T 11)
Field Observations:
Surface Water Present? Yes No Depth (inches):
Water Table Present? Yes No X Depth (inches):
Saturation Present? Yes No Depth (inches): Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
Remarks:
By Small depressional carea with relict hydric
Soils and dominated by uptond vegetation
Effectively drained by large adjacent canal ditch

NOHLG DOI

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	No na stani ta matangi mananan nakara sa ta sa sa	That Are OBL, FACW, or FAC: (A)
216		
3 0000		Total Number of Dominant
		Species Across All Strata.
4		Percent of Dominant Species 5
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence Index worksheet
7		Total % Cover of
8		Iotal % Cover of Multiply by
	= Total Cover	OBL species $x_1 = \frac{1}{2}$
50% of total cover:	20% of total cover:	FACW species $42 \times 2 = 64$
Sapling/Shrub Stratum (Plot size:		FAC species $x_3 = 6$
		FACU species 50 x4 = 200
1. 		UPL species $2 \times 5 = 10$
2		Column Totals: 96 (A) 300 (B)
3		
4		Prevalence Index = B/A = $3(25)$
5		Hydrophytic Vegetation Indicators:
6		1 - Ranid Test for Hydrophytic Vegetation
7.		
8		
0		3 - Prevalence Index is ≤3.0'
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size:)	000	¹ Indicators of hydric soil and wetland hydrology must
1. Consyling canadansis	30 V FRU	be present, unless disturbed or problematic.
2. Eupstorium capillitolisum	10 FACU	Definitions of Four Vegetation Strata:
3. Echnichlon crusali	40 V FACW	
A Ambrozic artemizizoliz	5 EACU	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH) regardless of
E THACHE TPAULS	2 FAV	height.
	7	
6. Les pour en virginica		Sapling/Shrub – Woody plants, excluding vines, less
7. Sollougo altissima		
8. Holygonin hydropiparonales	FACK	Herb – All herbaceous (non-woody) plants, regardless
9. And Contraction	<u> </u>	of size, and woody plants less than 3.28 ft tall.
10		Woody vine - All woody vines greater than 3.28 ft in
11.		height.
12		Part Charles
	9/2 - Total Cover	
50% stables 40		
50% of total cover: <u>r c</u>		
Woody Vine Stratum (Plot size:)		
1		
2		
3. 10.		
4.		
5.		Undre abortie
	= Total Cover	Vegetation
50% of total cover	20% of total cover	Present? Yes No X
Su% of total cover:		
Remarks: (If observed, list morphological adaptations belo	w).	A
(bactution chill.	to no me	X Los C
releVANNON ZNIALIN	ig to more	a upland species.

SOIL

								Sampling Font:
Profile Des	cription: (Describe t	o the dep	oth needed to docur	nent the i	ndicator	or confirm	the absence of ind	icators.)
(inches)	Color (moist)	%	Color (moist)	x Features %	s Type ¹	Loc ²	Texture	Remarks
17-6	7 SY 5/4						1. ref M	
1 111	DEV KI		INVR 514	777	6	M	ilian langu	
@ 14	121-21-		10/11 5/0	100	1	11		<u> </u>
				·				
			-					
	<u></u>							
¹ Type: C=C	oncentration, D=Depl	etion, RM	=Reduced Matrix, M	S=Masked	Sand Gr	ains.	² Location: PL=P	ore Lining, M=Matrix.
Hydric Soil	Indicators: (Applica	ble to all	LRRs, unless othe	rwise note	ed.)		Indicators for Pr	oblematic Hydric Soils ³ :
Histoso	I (A1)		Polyvalue Be	low Surfa	ce (S8) (l	RR S, T, U) 1 cm Muck (A	A9) (LRR O)
	pipedon (A2)		Thin Dark Su	Irface (S9)	(LRR S,	T, U)	2 cm Muck (A	A10) (LRR S)
	istic (A3) en Sulfide (A4)			y Mineral d Matrix ((F1) (LRF F2)	(0)		odplain Soils (F19) (I RR P S T)
Stratifie	d Layers (A5)		Depleted Ma	trix (F3)	(2)		Anomalous B	Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR P,	T, U)	Redox Dark	Surface (F	6)		(MLRA 153	3B)
5 cm M	ucky Mineral (A7) (LR	R P, T, U) Depleted Da	rk Surface	(F7)		Red Parent N	Material (TF2)
	resence (A8) (LRR U)		Redox Depre	PP III	8)		Other (Explain	Dark Surface (1+12)
Deplete	d Below Dark Surface	(A11)	Depleted Oc	hric (F11)	(MLRA 1	51)		
Thick D	ark Surface (A12)		Iron-Mangan	ese Mass	es (F12) (LRR O, P,	T) ³ Indicators (of hydrophytic vegetation and
Coast F	Prairie Redox (A16) (N	ILRA 150	A) Dumbric Surfa	ace (F13) (LRR P, 1	r, U)	wetland h	ydrology must be present.
Sandy I	Mucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (ML	.RA 151)		unless dis	turbed or problematic.
Sandy C	Sleyed Matrix (S4) Sedox (S5)			nic (F18) (MLKA 1	(MI RA 149	94)	
Stripped	d Matrix (S6)		Anomalous B	Bright Loar	my Soils (F20) (MLR/	A 149A, 153C, 153D))
Dark Su	urface (S7) (LRR P, S	, T, U)	-	5			3	
Restrictive	Layer (if observed):							
Type:								\checkmark
Depth (in	iches):						Hydric Soil Prese	ent? Yes // No
Remarks:								
	11		· n c	ſ		F3	- A 0 4 0 10 (L
	Hydri	2 50	or ina	ccett	01-	1 0	preserve	·
	1	~ ^	0	and	Aic	ima	entration	ten ob n
	Howe	ver	RECIOX (W	iorp	140			\bigcirc
	0.11	1	0.020.00	Low	non	ries	& Thore	free
	exhile	sit (ynnube	PUT			a muc	1016,
	these	cro	e relict	hy	drie	501	s. Addi	tional eviden
	5) 60	lich	+ conditu	- SNS	D	ant	(MIMUM	the bounded
	D		C			r tr ()	Contractor	
	wit	ł,	20 hand	Vecia	tat	100		
	00.11			ge	-1.1			
	The	he	dolar	hia	< he	2011	e Alectr	vely removed
	1	1		1000	5		0	5
	De	g a	djacent	Can	al	dite	ik	



NOHLG001 – Facing West Non-Wetland



NOHLG001 – Facing East Non-Wetland



NOHLG001 – Relic Hydric Soils



Waterbody NOHLB100 facing east



Non-water data point NOHLE001 facing east (within inundated wetland)



Non-water data point NOHLE001 facing west (within inundated wetland)

NONAOOL_J

	ATA FORM – Atlantic a	nd Gulf Coastal Pl	ain Region
Project/Site:	City/County:	: <u>/</u>	Sampling Date: 1772//
Applicant/Owner:		State: <u>NC</u>	Sampling Point: nonag001
Investigator(s):	Section, Township, Ran	ge: <u>NA</u>	······································
Landform (hillslope, terrace, etc.):	Local relief (concave, co	nvex, none):	Slope (%):
Subregion (LRR or MLRA):	36°08'42.200"L	ong: <u>77° 47' 43</u>	<u>.457</u> Datum:
Soil Map Unit Name: OR Contraction Contraction	Congaree	NWI classific	ation:
Are climatic / hydrologic conditions on the site typical for this time	e of year? Yes 🔀 No	(If no, explain in R	emarks.)
Are Vegetation, Soil, or Hydrology signifi	cantly disturbed? Are "N	lormal Circumstances" p	present? Yes X No
Are Vegetation, Soil, or Hydrology natura	ally problematic? (If nee	, ded, explain any answe	rs in Remarks.)
SUMMARY OF FINDINGS – Attach site map sho	wing sampling point lo	cations, transects	, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled A within a Wetland	Area 1? Yes	NoX
Wot three parisme	bers presert		
HYDROLOGY			······································
Wetland Hydrology Indicators:		Secondary Indicat	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	oply)	Surface Soil (Cracks (B6)
High Water Table (A2)	a (B13)	Sparsely Veg	etated Concave Surface (B8)
Saturation (A3)	(B15) (LRR U)	Drainage Pati	terns (B10)
Water Marks (B1)	ilde Odor (C1) ospheres along Living Poots //	Moss Trim Lir	nes (B16)
Sediment Deposits (B2)	Reduced Iron (C4)	Cravifish Burr	vater Table (C2)
Drift Deposits (B3)	eduction in Tilled Soils (C6)	Saturation Vis	sible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	rface (C7)	Geomorphic F	Position (D2)
Iron Deposits (B5) Uther (Explain	n in Remarks)	Shallow Aquit	ard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral	lest (D5)
Field Observations:		Sphagnum me	oss (D8) (LRR T, U)
Surface Water Present? Yes No	chos);		
Water Table Present? Yes No Depth (in			
Saturation Present? Yes No X Depth (in	ches): 7/711 Wetla	nd Hydrology Procent	2 Van Na X
includes capillary fringe)		and Hydrology Fresent	
sesche Recorded Data (stream gauge, monitoring well, aerial j	photos, previous inspections), i	f available:	
Remarks:			
No hydrola	gy present)-	

NONA001_u

Trop Structure (DL) (Absolute	Dominant	Indicator	Dominance Test workshoot
(Plot size:)	% Cover	Species?	Status	Number of David to a
1 TAU PUS DEMAILEJONIA	Ð		FACIN	That Are OBLE FACING on FACING
2. Ducrus alia	20		PACI	(A)
Fagus granditaln	30	$\overline{\checkmark}$	FACU	Total Number of Dominant
5	······································			Percent of Dominant Species That Are OBL, FACW, or FAC: (A/
7				Provolonce Index
				Total % Owner (
				OPI tracio
500 ALL	<u> </u>	Total Cov	er	
50% of total cover: <u>55</u>	_ 20% of t	otal cover:	14_	FACW species x 2 =
(Plot size:)	10	. [FAC species x 3 =
rugis grandingia	10		FACU	FACU species x 4 =
Contract of Contract	<u> </u>	¢		UPL species x 5 =
Carpinus caroliniana	10	\checkmark	FAC	Column Totals: (A) (B
-				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
· · · · · · · · · · · · · · · · · · ·	-			1 - Rapid Test for Hydrophytic Vegetation
		·		2 - Dominance Test is >50%
				3 - Prevalence Index is ≤3.0 ¹
50% - (L)	=	Total Cove	^{er} / /	Problematic Hydrophytic Vegetation ¹ (Explain)
erb Stratum (Plot size:	_ 20% of to	otal cover:		
Contacting (Flot size.	10	./	1	, ¹ Indicators of hydric soil and wetland bydrology must
Lindera Denzoin _	<u> </u>	<u> </u>	FACU	be present, unless disturbed or problematic.
	<u>_</u>			Definitions of Four Vegetation Strata:
_ hasmanthum sessilitorum_	10		FAL	
				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of
				height.
				Sapling/Shrub - Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
				Woody vine - All woody vince an etc. the cook
				height.
-	<u>20</u> =1	otal Cover	r , /	
50% of <u>to</u> tal cover: _/ ()	20% of to	tal cover:	41	
ody Vine Stratum (Plot size: 30)				
Lanker LOOKE	15	\checkmark	THAT	
<u> </u>			LUC	
		<u> </u>		
				Hydrophytic
	IS_ =⊺	otal Cover		Vegetation
50% of total cover: $7-5$	20% of tot	al cover:	3	Present? Yes No
narks: (If observed, list morphological adaptations below).				

NONA OOL_ J

SOIL

							Sampling Point:	
Profile Des	cription: (Describe i	to the depth n	eeded to document t	the indicator	or confirm	the absence of	of indicators.)	
Depth (inches)	Color (moist)	_%	Redox Fea Color (moist) %	tures 6 Type ¹	Loc ²	Texture	Remarks	
		<u> </u>			<u> </u>			<u> </u>
¹ Type: C=C	oncentration, D=Deple	etion, RM=Rec	luced Matrix, MS=Mas	ked Sand Gra	ins.	² Location: F	PL=Pore Lining, M=Matrix	
Hydric Soil	Indicators: (Applica	ble to all LRR	s, unless otherwise	noted.)		Indicators f	or Problematic Hydric Soils ³ :	
Histosof Histic E Black Hi Hydroge	Dipedon (A2) stic (A3) In Sulfide (A4) I Layers (A5)		Polyvalue Below So Thin Dark Surface of Loamy Mucky Mine Loamy Gleyed Matri	urface (S8) (Lf (S9) (LRR S, 1 eral (F1) (LRR rix (F2)	RR S, T, U) ſ, U) O)	1 cm Mu 2 cm Mu Reduced Piedmor	uck (A9) (LRR O) uck (A10) (LRR S) d Vertic (F18) (outside MLRA 1 ht Floodplain Soils (F19) (LRR P)	50A,B) , S, T)
Organic	Bodies (A6) (LRR P, icky Mineral (A7) (LR	т, u) [в.р. т. u) [Redox Dark Surface	e (F6)			A 153B)	
	esence (A8) (LRR U)	10,,,,_, j	Redox Depressions	s (F8)		Very Shi	ent Material (TF2) allow Dark Surface (TF12)	
	Below Dark Surface	(A11)	Depleted Ochric (F	11) (MLRA 15	1)	J_J Other (E	xplain in Remarks)	
Coast Pi	airie Redox (A16) (Mi	LRA 150A)	Umbric Surface (F1	asses (F12) (L 3) (LRR P, T,	RR O, P, T) U)	Indical °Indical	ors of hydrophytic vegetation an nd hydrology must be present,	d
Sandy R	leyed Matrix (S4)	(K 0, S) [Belta Ochric (F17) (Reduced Vertic (F1	(MLRA 151) 8) (MLRA 150	A, 150B)	unles	s disturbed or problematic.	l
Sandy R	edox (S5) Matrix (S6)		Piedmont Floodplair Anomalous Bright L	n Soils (F19) (I oamy Soils (F:	MLRA 149A 20) (MLRA	4) 149A, 153C, 1	53D)	
Dark Su	face (S7) (LRR P, S,	T, U)					,	
Tupol	ayer (if observed):							
Depth (inc	hes):					Hudria Sall D		/
Remarks:					I	nyunc Soli P	No No	<u> </u>

nonag001



Upland data point nonag001 facing east



Upland data point nonag001 facing north

nonag001 soils



Wetland/upland soils



Non-water data point NONAE001 facing northwest



Non-water data point NONAE001 facing southeast

NONAHOOS

Date: 10/06/2014	Project/Site:	+CV	Latitude: 36°08 23.91		
Evaluator: DDWest	County: Nas	,L	Longitude: 77°48'05		
Total Points: Stream is at least intermittent $if \ge 19$ or perennial if $\ge 30^*$	Stream Determin	nation (circle one) rmittent Perennial	Other CHAT to e.g. Quad Name:		
A Geomorphology (Subtotal - C)	Abcout	NA/I-			
1 ^a Continuity of channel had and hank	Absent	weak	Moderate	Strong	
Sinuasity of channel along the war	0	0	2	3	
In-channel structure: av riffle pool aton pool	0	1	2	3	
ripple-pool sequence	0	(1)	2	3	
. Particle size of stream substrate	0		2	2	
. Active/relict floodplain	0		2	3	
. Depositional bars or benches		1	2	3	
. Recent alluvial deposits		ß	2	3	
. Headcuts	0	1	2	3	
. Grade control	0	0.5	1	15	
0. Natural valley	0	0.5	1	1.5	
1. Second or greater order channel	No	No = 0		Yee = 3	
artificial ditches are not rated; see discussions in manual		Ů –	103	- 5	
3. Hydrology (Subtotal =)					
2. Presence of Baseflow	0	(1)	2	3	
3. Iron oxidizing bacteria	G	1	2	3	
4. Leaf litter	1.5	(h)	0.5	0	
5. Sediment on plants or debris	0	05	1	1.5	
6. Organic debris lines or piles	0	0.0	1	1.5	
7. Soil-based evidence of high water table?	No = 0		Yes = 3)		
C. Biology (Subtotal = 4)				9	
8. Fibrous roots in streambed	3	2	A	0	
9. Rooted upland plants in streambed	3	2	X	0	
0. Macrobenthos (note diversity and abundance)	0	1		3	
1. Aquatic Mollusks	0	1	2	3	
2. Fish	6	0.5	1	1.5	
23. Crayfish	0	0.5	1	1.5	
4. Amphibians	0	0.5	1	1.5	
5. Algae		0.5	1	1.5	
0.5 Wetland plants in streambed EACW = 0.75; OBL 61 5, Other = 0					
*perennial streams may also be identified using other method	ds. See p. 35 of manual	171011 0.70, 001)	
lotes:		•			
Sketch:					
		ponah O	05		

Difch w/out OHWM

nonah005



Non-Waterbody nonah005 facing east.



Non-Waterbody nonah005 facing west

nonah005



Non-Waterbody nonah005 facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: 32RP	City/County: NAS	10- Sampling D	Date: 7-24-14			
Applicant/Owner: Domunan		State: NC Sampling P	WONALDO			
Investigator(s): DAUEST	Section, Township, Range:	NA				
Landform (hillslope terrace etc.): Texna (3)	Local relief (concave, conv		Slone (%): @ -2			
Subregion (I BR or MI BA):	26° NH' 47 157° Long	77051 70.890'				
Call Man Unit Name:						
Soli Map Unit Name: Suchs Ber & June	-sprey loam_	NWI classification:				
Are climatic / hydrologic conditions on the site typical for this ti	ne of year? Yes <u>No</u>	(If no, explain in Remarks.)	1			
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed? Are "Norr	nal Circumstances" present? Ye	es <u> </u>			
Are Vegetation, Soil, or Hydrology national statements of the second statement of th	Irally problematic? (If needer	d, explain any answers in Remark	(S.)			
SUMMARY OF FINDINGS – Attach site map sh	owing sampling point loca	tions, transects, importa	nt features, etc.			
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Are within a Wetland?	a Yes No	\succ			
Wetland Hydrology Present? Yes No _						
HYDROLOGY			<u> </u>			
Wetland Hydrology Indicators:		Secondary Indicators (minimu	Im of two required)			
Primary Indicators (minimum of one is required; check all tha	(apply)	Surface Soil Cracks (B6)				
High Water Table (A2)	una (B13) site (B15) (I PP II)	Drainage Batterne (B10)	ave Surface (B8)			
Saturation (A3)	Aril Deposits (B15) (LRR U)					
Water Marks (B1)	hizospheres along Living Roots (C3) Dry-Season Water Table	(C2)			
Sediment Deposits (B2)	of Reduced Iron (C4)	Crayfish Burrows (C8)	()			
Drift Deposits (B3)	n Reduction in Tilled Soils (C6)	Saturation Visible on Aeri	ial Imagery (C9)			
Algal Mat or Crust (B4)	Geomorphic Position (D2)				
Iron Deposits (B5)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test (D5)				
Light Observations:		Sphagnum moss (D8) (LI				
Surface Water Present? Vos No	(inches);					
Water Table Present? Yes No Depth	(inches):					
Saturation Present? Yes No Depth	(inches): Wetlan	d Hydrology Present? Yes	No			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aer	ial photos, previous inspections), if a	available:				
Remarks:)o hydroloe	ing preser	Ð			
NONAHOOI

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

Sampling Point:

Tree Stratum (Plot size:) 1. <u>hcor oulnum</u> 2. <u>Querus allon</u> 3. <u>Linodenclantulphera</u> 4. <u>hizudanbor stypeculue</u> 5 6 7	Absolute Dominant Indicator % Cover Species? Status 2.5 / FAC 2.5 / FAC 2.5 / FAC	Dominance Test worksheet: 7 Number of Dominant Species 7 That Are OBL, FACW, or FAC: 9 Total Number of Dominant 9 Species Across All Strata: (B) Percent of Dominant Species 78 That Are OBL, FACW, or FAC: 78 Percent of Dominant Species 78 Prevalence Index worksheet: (A/B)
8	$\frac{90}{20\%} = \text{Total Cover}$ $\frac{30}{20\%} = \text{Total Cover}$ $\frac{30}{20\%} = \frac{1}{10\%} = \frac{1}{10\%}$ $\frac{30}{20\%} = \frac{1}{10\%} = \frac{1}{10\%}$	Total % Cover of: Multiply by: OBL species x 1 = FACW species x 2 = FAC species x 3 = FACU species x 4 = UPL species x 5 = Column Totals: (A)
5 6 7 8 50% of total cover: <u>L/D</u> <u>Herb Stratum</u> (Plot size:)	$\frac{30}{20\% \text{ of total Cover}} = \text{Total Cover}$	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation' (Explain) ¹Indicators of hydric soil and wetland hydrology must
1. <u>Agisman Thym 5P55/i Torum</u> 2. <u>Clethin a hidda</u> 3. <u>Uitis Notunei Julia</u> 4 5 6 7 8	8 50 , FAC 25 , FAC 3 , FAC 	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
9	$\frac{50}{20\% \text{ of total cover}} = 100\%$	 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.
1. Uiti's rotuno, Fila 2. 3. 4. 5. 50% of total cover: 10	20 FA-C	Hydrophytic Vegetation Present? Yes <u>No</u>
Remarks: (If observed, list morphological adaptations below	w).	

SOIL

NONAHOO (Sampling Point:

	Sampling Form.
Profile Description: (Describe to the depth needed to document the indicator or confirm	the absence of indicators.)
Depth Matrix Redox Features	·
(inches) Color (moist) % Color (moist) % Type ¹ Loc ²	Texture Remarks
1-5 INVR 21/7	
	SKIngyloran
$5-16 1048 \times 13$	cm & la lovan
	3 BUS POBM
	C C
	······································
Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Delvvalue Below Surface (S8) (LRR S. T. U	1) \Box 1 cm Muck (A9) (LBR O)
Histic Eningdon (A2)	
	Reduced Vertic (F18) (outside MLRA 150A,B)
Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5) Depleted Matrix (F3)	L Anomalous Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Very Shallow Dark Surface (TE12)
1 cm Muck (A9) (I RR P T)	Other (Evolain in Remarks)
Depleted Balow Dark Surface (A11)	
Depieted Below Dark Surface (ATT)	_
Inick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P,	T) Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present.
Sandy Mucky Mineral (S1) (LRR O, S) 📃 Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B)	
Sandy Redox (S5)	94)
Stripped Matrix (S6)	A 440A 462C 462D)
	A 149A, 155C, 155D)
Restrictive Layer (if observed):	
Restrictive Layer (if observed): Type:	
Restrictive Layer (if observed): Type:	
Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No 🔀
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No 🔀
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO Medic Soid P	Hydric Soil Present? Yes <u>No</u>
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAic Soid P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAiC SoiD P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO Agatic Soid P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAric Sord P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO Mod	Hydric Soil Present? Yes <u>No</u>
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO Agatic Soid P	Hydric Soil Present? Yes <u>No</u>
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO Agatic Sol P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAric Soil P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAic Soid P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAic Soid P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO Mytic Soil P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAic Sol P	Hydric Soil Present? Yes <u>No</u>
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO Agatic Soid P	Hydric Soil Present? Yes <u>No</u>
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAC Sol P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyArc Sol P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAic Soid P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MgAic Sold P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAic Sold P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAC Sol P	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No X
Restrictive Layer (if observed): Type: Depth (inches): Remarks: NO MyAic Soid P	Hydric Soil Present? Yes No X

nonah001



Non-water data point nonah001 facing east



Non-water data point nonah001 facing south

nonah001 soils



upland soils

WETLAND DETERMINATION DATA FOR	RM – Atlantic and Gulf Coastal Plain Region
Project/Site:	NHSH 7-24-14
Applicant/Ourper: DODD / 444 500	Sampling Dates (
$\frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}$	
Landform (hillologi damon sta)	tion, Township, Range: <u>NA</u>
Canorom (missiope, terrace, etc.): Deleterune Loc	al relief (concave, convex, none): Slope (%):
Subregion (LRR or MLRA): Lat: Lat:	123.163 Long: $1231.73.073$ Datum:
	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of year?	Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly dist	urbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problem	matic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No Yes	Is the Sampled Area within a Wetland? Yes No
Cow persture	
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)	BR II) Sparsely Vegetated Concave Surface (B8)
Saturation (A3)	(C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres	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)
Iron Deposits (B5)	arks) 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>No</u> Depth (inches):	Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Remarks: No hydrology	present
L	

NONAHOOZ

Sampling Point: _____

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

Absolute Dominant Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size:) Of <u>% Cover</u> <u>Species?</u> <u>Status</u>	Number of Dominant Species
1. Liqued Amber Stypacithea D V FAC	That Are OBL, FACW, or FAC: (A)
2	
3	Species Across All Strate:
4.	
5	Percent of Dominant Species 22
	That Are OBL, FACW, or FAC: (A/B)
6.	Desvelance Index we due to sto
7	
8	I otal % Cover of: Multiply by:
= Total Cover	OBL species x 1 =
50% of total cover: 2, 5 20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:	FAC species x 3 =
1	FACU species x 4 =
3	UPL species x 5 =
	Column Totals: (A) (B)
3	
4	Prevalence Index = B/A =
5	Hydrophytic Vegetation Indicators:
6	1 - Rapid Test for Hydrophytic Vegetation
7	\square 2 - Dominance Test is >50%
8	\square 3 - Prevalence Index is $\leq 3.0^{1}$
= Total Cover	
50% of total cover: 20% of total cover:	Problematic Hydrophytic Vegetation (Explain)
Herb Stratum (Plot size:	
$\frac{1}{1} \frac{1}{1} \frac{1}$	Indicators of hydric soil and wetland hydrology must
" <u>Handdago Dirginica</u> <u>20</u> <u>FALU</u>	be present, unless disturbed or problematic.
2. Faspalien notation 15 / FACU	Definitions of Four Vegetation Strata:
3. Appodon datylon, 60 V FACU	Tree Meady plants evoluting vince 2 in (7.6 cm) or
4. Caidosculios stimulosus Z UPL	more in diameter at breast height (DBH) regardless of
5. DITTALA HEIRS 3 FLACU	height.
6	
7	Sapling/Shrub – Woody plants, excluding vines, less
	than 3 m. DBH and greater than 3.28 it (1 m) tail.
8	Herb – All herbaceous (non-woody) plants, regardless
9	of size, and woody plants less than 3.28 ft tall.
10	Woody vine - All woody vinos greater than 2.28 ft in
11	height.
12	
50% of total cover: ≤ 0 20% of total cover: ZQ	
Woody Vine Stratum (Plot size:	
1	
2	
2	
J	
4	
5	Hydrophytic
= Total Cover	Vegetation
50% of total cover: 20% of total cover:	Present? Yes No /
Remarks: (If observed, list morphological adaptations below).	L
Cow pasture	
and the second	

NONAH002 Samr"

~~	
SOL	11
$\sim \sim$	

3012	Sampling Point:
Profile Description: (Describe to the depth needed to document the indicator or confirm	n the absence of indicators.)
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc ²	Texture Remarks
0-7 104R 4/2	Stondy lover
7.17 LOYR 5/2	- muli longo
$\frac{1}{17} \frac{1}{11 + 1510} \frac{1}{510}$	Elsner Lonovie
$\frac{12}{16} \frac{10}{10} \frac{1}{16} \frac{1}{16}$	<u>>CL</u>
	antine particular and a second a second a second
¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U	J) 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)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
I muck Presence (A8) (LRR U) I Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
Depleted Deleve Date Surface (A11)	Uther (Explain in Remarks)
Thick Dark Surface (A12)	T) ³ Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MI RA 150A) Umbric Surface (E13) (I RP P. T. II)	T) Indicators of hydrophytic vegetation and wetland bydrophytic vegetation and wetland bydrophytic vegetation.
Sandy Mucky Mineral (S1) (I RR O S) Delta Ochric (E17) (MI RA 151)	unless disturbed or problematic
Sandy Gleved Matrix (S4)	uncas databés of problematic.
Sandy Redox (S5)	9A)
Stripped Matrix (S6)	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches):	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks:	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Audor: Soid P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorc Sor P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorc Soi P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorr Sor P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorr Sor P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorc SoiQ P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorc SoiQ P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorc SoiQ P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorc SoiQ P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorc SoiQ P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorr SoiQ P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorr SoiQ P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorr Sor P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD MyDoriz SoiQ P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD MyDor Soil P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayor Soi P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorc Sort P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD Ayorr Sor P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD NOD Aggloriz Soil	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: NOD NOD AggOric Soil P	Hydric Soil Present? Yes No
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Remarks: No Aydor: Soil P	Hydric Soil Present? Yes No

nonah002



Non-water data point nonah002 facing east



Non-water data point nonah002 facing south

nonah002 soils



upland soils

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region 👩 🔑 171
Project/Site: SERP	NYKH OTTO
Applicant/Owner Domitning	Stata: A Sampling Date:
Investigator(s).	Townshin Range: NA
Landform (hillslope, terrace, etc.)	relief (concave convex none)
Subregion (LRR or MLRA))7.866 Long 7754'35.500 "Datum -
Soil Map Unit Name Rains	NWI classification
Are climatic / hydrologic conditions on the site typical for this time of year? Y	es X No (If no. explain in Remarks.)
Are Vegetation Soil or Hydrology significantly distur	ped? 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.
state of the state	
Hydrophytic Vegetation Present? Yes X No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks (1	
1357,00 theo on	A A A A A A A A A A A A A A A A A A A
por all use pr	minuters preserve
HYDROLOGY	
Wetland Hydrology Indicators:	Cocooder (Indicators (minimum of two commed)
Primary Indicators (minimum of one is required; check all that apply)	Secondary indicators (minimum of two required)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRF	t U) Drainage Patterns (B10)
Saturation (A3)	(1) Moss Trim Lines (B16)
Sediment Deposits (B2)	\Box (C4) \Box Cravfish Burrows (C8)
Drift Deposits (B3)	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	Geomorphic Position (D2)
Inundation Visible on Aerial Imagery (87)	s) Shallow Aquitard (D3)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No X Depth (inches):	
Water Table Present? Yes No X Depth (inches)	
(includes capillary fringe)	wetland Hydrology Present? Yes No Z
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre-	vious inspections), if available:
Remarks	
Il Culton A	
Myonology preservi	s than occurrence
A H I I I	N i
a with no durati	on lie due to presence
of working sould	``
D Friend sources.	
-	

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NONIAHOOL

Sampling Point: _____

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

Tree Stratum (Plot size)	Absolute	Dominant	Indicator	Dominance Test worksheet:	
1 (Frot size.)	<u>% Cover</u>	<u>Species</u> ?	Status	Number of Dominant Species	
Dug Turn Land		-4	FAR	That Are OBL, FACW, or FAC: <u>11</u>	(A)
2. Crucicus Kaurebolig	40	-4	-FACI	Total Number of Dominant	
3 _ gustander Sty Heither	40		FR	Species Across All Strata:	(B)
4. I Kon opala	20		FAX		
5			V ·	That Are OBL EACW or EAC	(4/8)
6					(A/D)
7				Prevalence Index worksheet:	
8.				Total % Cover of: Multiply by:	-
	95	= Total Cov		OBL species x 1 =	_
50% of total agrees 647	5000		"19	FACW species x 2 =	_
Sanling/Shruh Stratum (Plot size:	20% 01	totar cover:	<u>+-</u>	FAC species x 3 =	-
1 (Defendent (* for size)	20	sh.	1-141	FACU species x 4 =	-
Hot Million	55	\rightarrow	FIAC	UPL species x 5 =	-
2 Tor mag	1	- 4	FAC		- (B)
3 - Hen opaca	-D	<u> </u>	THE		(0)
4.				Prevalence Index = B/A =	_
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7				2 - Dominance Test is >50%	
8				\square 3 - Prevalence Index is <3.0	
	<u>_55</u> :	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain	
50% of total cover: 27.	\$ 20% of	total cover:	11		')
Herb Stratum (Plot size:)					
1. Avenance in contra	10		FACH	be present, unless disturbed or problematic	ust
2. Anomenca triph gilum	5		FAL	Definitions of Four Vegetation Strata:	
3.					
4.				Tree – Woody plants, excluding vines, 3 in. (7.6 c	m) or
5.				height,	SS OF
6.					
7				Sapling/Shrub – Woody plants, excluding vines,	less
8					
0	······			Herb - All herbaceous (non-woody) plants, regard	dless
J.				of size, and woody plants less than 3.28 ft tall.	
				Woody vine - All woody vines greater than 3.28	ft in
10	<u> </u>			height.	
12	-15	· ,			
7	<u></u> :	= Total Cove	*~		
50% of total cover:	20% of	total covera			
Woody Vine Stratum (Plot size:)	10	, /	1-0C		
1 Loniegre appriced	10		FAR		
2. Smilling - Toturdute he.	K		FAC		
3					
4					
5				Hydrophytic	
	<u>-20</u> =	- Total Cove	er al	Vegetation	
50% of total cover: <u> </u>	_ 20% of	total cover:	4	Present? Yes X No	
Remarks: (If observed, list morphological adaptations below	/).	**			
					,

NONDAHOOU

Sampling Point:

SOIL		Sampling Point:
Profile Description: (Describe to the depth	needed to document the indicator or confirm	the absence of indicators.)
Depth <u>Matrix</u>	Redox Features	
N-4 INAR L/2	Color (moist) % Type Loc	Texture Remarks
U-14+INVR 518 -		
<u> </u>		<u>SCL</u>
		••••••••••••••••••••••••••••••••••••
¹ Type: C=Concentration, D=Depletion, RM=R	educed Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all Lr	Rs, unless otherwise noted.)	Indicators for Problematic Hydric Soils':
Histic Epipedon (A2)	Thin Dark Surface (S9) (LRR S. T. U)) \square 1 cm Muck (A9) (LRR O) \square 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)
Croanic Bodies (A6) (LRR P. T. U)	Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F20)
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)
L 1 cm Muck (A9) (LRR P, T)		Uther (Explain in Remarks)
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P, T	C) ³ Indicators of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 149	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLRA	A 149A, 153C, 153D)
Dark Surface (S7) (LRR P, S, T, U)		
Kestrictive Layer (if observed):		
Depth (inches):	_	Hvdric Soil Present? Yes No
Remarks:		
	f .	$\hat{}$
	Non hulor	
	NU Myonic	sof present
	\mathcal{O}	
		I

nonah004



Non-water data point nonah004 facing east



Non-water data point nonah004 facing south

nonah004 soil



Upland soils



Non-water data point NONAE003 facing southeast – No water channel within wetland

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: <u>Nash</u>	Sampling Date: 1/27/2015
Applicant/Owner: Dominion	State: N	C Sampling Point: <u>nonab100</u>
Investigator(s): TP, AS	Section, Township, Range: <u>No PLSS in th</u>	is area
Landform (hillslope, terrace, etc.): drainage way	Local relief (concave, convex, none): <u>concav</u>	Ve Slope (%): <u>2</u>
Subregion (LRR or MLRA): P Lat: 35.952	72 Long: <u>-77.943272</u>	Datum: WGS 1984
Soil Map Unit Name: Bibb loam, 0 to 2 percent slopes, frequer	ntly flooded NWI c	lassification: PFO1A
Are climatic / hydrologic conditions on the site typical for this tir	me of year? Yes 🔽 No (If no, expla	in in Remarks.)
Are Vegetation, Soil, or Hydrology sign	ificantly disturbed? Are "Normal Circumstan	nces" present? Yes 🗹 No
Are Vegetation, Soil, or Hydrology natu	Irally problematic? (If needed, explain any	answers in Remarks.)

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

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

HYDROLOGY

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

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

Sampling Point: nonab100

		Absolute	Dominant In	ndicator	Dominance Test worksheet:
Tree Stratum (Plot size: 3	0)	% Cover	Species?	Status	Number of Dominant Species
1 Liquidambar styraciflua		25	Yes	FAC	That Are OBL FACW or FAC: 2 (A)
Acer rubrum		10	Yes	FAC	
2					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					
7					Prevalence Index worksheet:
··		35	Tatal Original		Total % Cover of: Multiply by:
			= Total Cove	r 7	OBL species 0 x1 = 0
5	0% of total cover:	20% of	total cover:	1	
Sapling/Shrub Stratum (Plot size:	15)				FACW species $x 2 = 0$
1 Ligustrum sinense		15	Yes	FACU	FAC species 35 x 3 = 105
1. <u> </u>		10	Vaa	EACU	60 x_{4} 240
2. <u>11ex Opaca</u>		10	165	TACU	
3.					UPL species $x = 0$
4					Column Totals: 95 (A) 345 (B)
4					
5					Prevalence Index = $B/A = 3.63$
6					Hydrophytic Vegetation Indicators:
7.					
				······	1 - Rapid Test for Hydrophytic Vegetation
8				<u> </u>	2 - Dominance Test is >50%
9					$3 - \text{Prevalence Index is } \leq 3.0^{1}$
		25	= Total Cove	r	
5	0% of total cover: 12.5	20% of	total cover:	5	4 - Morphological Adaptations' (Provide supporting
5	5	20 /0 01			data in Remarks or on a separate sheet)
Herb Stratum (Plot size:	<u> </u>				Problematic Hydrophytic Vegetation ¹ (Explain)
1. Hedera helix		35	Yes	FACU	
2					
Z					¹ Indicators of hydric soil and wetland hydrology must
3					be present, unless disturbed or problematic.
4.					Definitions of Four Vegetation Strate:
5					Deminitions of Four vegetation Strata.
J					Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
6					more in diameter at breast height (DBH), regardless of
7.					height.
8					
0					Sapling/Shrub – Woody plants, excluding vines, less
9					than 3 in. DBH and greater than or equal to 3.28 ft (1
10					m) tall.
11					
····		35			Herb – All herbaceous (non-woody) plants, regardless
			= Iotal Cove	r –	of size, and woody plants less than 3.28 ft tail.
5	0% of total cover: 17.5	20% of	total cover:	1	Woody vine All woody vines greater than 2.28 ft in
Woody Vine Stratum (Plot size:	30)				beight
1	,				
1					
2					
3					
4					
4					Hydrophytic
5					Vegetation
		0	= Total Cove	r	Present? Yes No
5	0% of total cover: 0	20% of	total cover:	0	
Remarks: (Include photo numbers	s here or on a separate s	heet.)			

Profile Desc	cription: (Describe to	o the depth	needed to docun	nent the ir	ndicator o	or confirm	the absence of indi	cators.)	
Depth	Matrix		Redo	x Features	1	2			
(inches)	Color (moist)	<u>%</u>	Color (moist)	%	Type'	Loc ²	<u>Texture</u>	Remarks	
0-7	10YR 5/6	100					SL		
7-12	10YR 4/4						SCL		
. 				. <u> </u>					
							<u> </u>		
	. <u> </u>								
Type: C=C	oncentration, D=Deple	etion, RM=R	educed Matrix, MS	S=Masked	Sand Gra	ains.	Location: PL=Pore	Lining, M=Matrix.	3
Hydric Soil	Indicators:						Indicators to	or Problematic Hydric Soils	;-1
<u> </u>	I (A1)		Dark Surface	(S7)			2 cm Mu	ick (A10) (MLRA 147)	
Histic E	pipedon (A2)		Polyvalue Be	low Surfac	e (S8) (M	LRA 147,	148) Coast Pr	airie Redox (A16)	
Black H	istic (A3)		Thin Dark Su	rface (S9)	(MLRA 1	47, 148)	(MLR.	A 147, 148)	
Hydroge	en Sulfide (A4)		Loamy Gleye	d Matrix (F	-2)		Piedmor	t Floodplain Soils (F19)	
Stratifie	d Layers (A5)		Depleted Mat	trix (F3)			(MLR.	A 136, 147)	
2 cm Mi	uck (A10) (LRR N)		Redox Dark S	Surface (F	6)		Very Sha	allow Dark Surface (TF12)	
Deplete	d Below Dark Surface	(A11)	Depleted Dar	k Surface	(F7)		Other (E	xplain in Remarks)	
Thick D	ark Surface (A12)		Redox Depre	ssions (F8	5)				
Sandy M	Mucky Mineral (S1) (L l	RR N,	Iron-Mangan	ese Masse	s (F12) (l	_RR N,			
MLR	A 147, 148)		MLRA 13	6)					
Sandy C	Gleyed Matrix (S4)		Umbric Surfa	ce (F13) (I	MLRA 13	6, 1 22)	³ Indicators	of hydrophytic vegetation an	d
Sandy F	Redox (S5)		Piedmont Flo	odplain Sc	oils (F19)	(MLRA 14	wetland h	ydrology must be present,	
Stripped	d Matrix (S6)		Red Parent N	Aaterial (F2	21) (MLR/	A 127, 147	unless dis	sturbed or problematic.	
Restrictive	Layer (if observed):								
Type:			_						
Depth (in	ches):		_				Hydric Soil Prese	nt? Yes No	,
Remarks:									



Photo 1 Non-water point nonab100 facing east



Photo 2 Non-water point nonab100 facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP		City/County:	Nash		Sampling Date: 💆	1/30/14
Applicant/Owner: Dominion			State	NC	Sampling Point: r	ionao OOI
Investigator(s): ESI-15,N	WIPhrey	Section, Towr	nship, Range:/A	\		
Landform (billslope, terrace, etc.):	inslope	Local relief (c	oncave, convex, none): CUNVR.	Slope	(%):2-4
Subregion (LRR or MLRA): LR	د العلن العلن	35.81449	Long:-78	,03644	Datu	m: W6584
Soil Map Unit Name: Rams	Sondy Wor	· · · · · · · · · · · · · · · · · · ·		NWI classific	ation: NA	
Are climatic / hydrologic conditions (on the site typical for this tir	ne of year? Yes	No (If no	, explain in Re	emarks.)	_
Are Vegetation , Soil	, or Hydrology sign	ificantly disturbed?	Are "Normal Circ	umstances" p	resent? Yes	No
Are Vegetation, Soil	, or Hydrology natu	rally problematic?	(If needed, expla	in any answe	rs in Remarks.)	
SUMMARY OF FINDINGS -	• Attach site map sh	owing sampling	point locations	transects	, important fea	itures, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks:	Yes No _ Yes No _ Yes No _	Is the within	Sampled Area a Wetland?	Yes	No	
HYDROLOGY						
Wetland Hydrology Indicators: Primary Indicators (minimum of or Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5) Inundation Visible on Aerial I Water Table Present? Y Water Table Present? Y Saturation Present? Y includes capillary fringe) Describe Recorded Data (stream	1e is required: check all that Aquatic Fa Oxidized F Presence Recent Iro Thin Muck Other (Exp Magery (B7) Yes No Depti Yes No Depti Yes No Depti Aquatic Pa Aquatic Pa Aquatic Pa Aquatic Pa No	at apply) auna (B13) sists (B15) (LRR U) Sulfide Odor (C1) Rhizospheres along Li of Reduced Iron (C4) on Reduction in Tilled c Surface (C7) plain in Remarks) h (inches): <u>NÅ</u> h (inches): <u>NÅ</u> h (inches): <u>ZQ''</u> erial photos, previous	ving Roots (C3)	condary Indica Surface Soil Sparsely Ve Drainage Pa Moss Trim L Dry-Season Crayfish Bur Saturation V Geomorphic Shallow Aqu FAC-Neutra Sphagnum I Sphagnum I	ators (minimum of t Cracks (B6) getated Concave S itterns (B10) ines (B16) Water Table (C2) Water Table (C2) Trows (C8) fisible on Aerial Ima Position (D2) uitard (D3) I Test (D5) moss (D8) (LRR T,	vo required) urface (B8) igery (C9) U)
Remarks:			<u> </u>			

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

Sampling Point: <u>nonao0</u>01

2.)[22.][Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 20 × 30) 1. L. (guidombor StabociFina	<u>SO</u>	<u>Species?</u> M	<u>Status</u> FAC	Number of Dominant Species (A)
2 Pinus talea	50	~1	FAC	
3 Duercus Falcata	5	N	FACH	Species Across All Strata:
· LirioLadron tulifiFera	5	N	FACH	
5. Prunus servina	1	\overline{N}	FACU	Percent of Dominant Species / 00 That Are OBL, FACW, or FAC: (A/B)
6				Provalance Index worksheet:
7	·			Total % Cover of: Multiply by:
8			·	
	_8	= Total Cov	er o	
50% of total cover: <u>40</u>	, <u>5</u> 20% of	total cover	lleion	FAC w species X 2 =
Sapling/Shrub Stratum (Plot size: (5'X15))				FAC species X 3 =
1. Liquidambar Styracifluo	<u> 10 </u>	<u> </u>	FAC	FACU species x 4 =
2. Quercus nigra	5	<u>N</u>	FAC	UPL species x 5 =
3.		ŀ		Column Totals: (A) (B)
4.				Prevalence Index = B/A =
5.				
6.				Hydrophytic Vegetation indicators:
7				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	15			3 - Prevalence Index is ≤3.0'
7	5	= Total Co	ver 、 イ	Problematic Hydrophytic Vegetation' (Explain)
50% of total cover:	20% 0	t total cover	<u> </u>	
Herb Stratum (Plot size: ウズ5))				¹ Indicators of hydric soil and wetland hydrology must
1. none			·	be present, unless disturbed or problematic.
2		. <u></u> -		Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines 3 in (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5.				height.
6.				Senting/Shrub - Woody plants excluding vines less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
0				of size, and woody plants less than 3 28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11		-		neight.
12				
		= Total Co	ver	
50% of total cover:	20% (of total cove	er:	
Woody Vine Stratum (Plot size: 30'X30')	_	N	. .	
1. <u>Smilax</u> rotundifolia		<u> </u>	<u>FAC</u>	
2. Vitis rotundifolia	5	<u> Y </u>	FAC	
3.				
4.				
5		_		-
··	- 10	= Total C		Vegetation
50% of total covor: C	20%	_ = Total o		Present? Yes No
	2070		=	-
remarks: (ii observed, list morphological adaptations be	now).			

,

SOIL

Sampling Point: <u>NONAOOO</u>

Profile Desc	cription: (Describe	to the depth ne	eeded to docu	ment the indicator	or confirm th	ne absence	of indicators.	.)	
Depth	Matrix		Redu	ox Features	1 c 2	Town		Domortes	
(nches)	$\frac{\text{Color}(\text{moist})}{ (\cdot) \cdot D < \cdot L}$	<u> </u>	Joior (moist)	<u>%</u>	<u>LOC</u>		<u> </u>	rtemarks	
	W DE LA	- 40 0	.n<111	- <u>)</u> ()		<u>~</u> ~	on is cont	matrix	
10-20	104K3/3	<u> </u>	<u>1K-14</u>	<u> </u>	·	<u> </u>	MIXED	IT IDH (1)	<u>`</u>
					, <u> </u>				
¹ Tyne: C=C	oncentration D=Dev		duced Matrix M	S=Masked Sand G		² Location:	PL=Pore Lini	ng, M=Matrix	
Hydric Soil	Indicators: (Applic	able to all LRF	Rs, unless othe	erwise noted.)		Indicators	for Problema	itic Hydric Sc	oils ³ :
Histoso	(A1)	[Polyvalue B	elow Surface (S8) (LRR S, T, U)	1 cm 🕅	Muck (A9) (LR	R 0)	
Histic E	pipedon (A2)	Ì	Thin Dark S	urface (S9) (LRR S	, T, U)		Muck (A10) (Ll	RR S)	 .
Black H	fistic (A3)	Į	Loamy Muc	ky Mineral (F1) (LR	R 0)		ced Vertic (F18	3) (outside ML	.RA 150A,B)
Hydrog	en Sumde (A4)	ļ	Loamy Gley	yeo wat⊓x (E2) atrix (E3)			alous Bright L	i 3005 (F19) (I 2amv Soile /F1	_rtr f, 5, 1) 20)
Oroanie	: Bodies (A6) (LRR I	ν, Τ, U)	Redox Dark	Surface (F6)			RA 153B)		-*;
5 cm M	ucky Mineral (A7) (L	RR P, T, U)	Depleted Da	ark Surface (F7)			arent Material	(TF2)	
📙 Muck F	resence (A8) (LRR I	ນ)]	Redox Dep	ressions (F8)			Shallow Dark S	Surface (TF12))
	luck (A9) (LRR P, T)	20 (414)	Marl (F10) ((LRR U)	154)	Uther 🖵	' (Explain in R€	emarks)	
	eu delow Dark Suffa)ark Surface (A12)	ue (ATT)	L Depieted O	nese Masses /F12\	іот) (LRR О. Р. Т) ³ Indi	cators of hydro	ophytic veneta	tion and
Coast I	Prairie Redox (A16) ((MLRA 150A)	Umbric Sur	face (F13) (LRR P.	T, U)	,	tland hydrolog	y must be pre	sent,
Sandy	Mucky Mineral (S1)	(LRR 0, S)	🔲 Delta Ochri	c (F17) (MLRA 151)	un	less disturbed	or problemation	э.
Sandy	Gleyed Matrix (S4)	ł	Reduced V	ertic (F18) (MLRA 1	50A, 150B)	•			
Stringer	Redox (S5) d Matrix (S6)	١	Anomalous	Bright Loamy Soils (F1)	の(MLRA 149. (F20) / MI PA	M) 1494 1520	C. 153D)		
Dark S	urface (S7) (LRR P.	S, T, U)		- angin coarriy 3015	e =oj (mertA		-,		
Restrictive	Layer (if observed):			Γ				
Type:			-						
Depth (i	inches):		_			Hydric Soi	il Present?	Yes	No
Remarks:									
1									
	•								
1									
1									
1									
			•						

Environmental Field Surveys Non-Waterbody Photo Page



Non-waterbody nonao001 facing west (NWI, not wetland)

nowio001

WETLAND DETERMINATION DATA	FORM – Atl	antic and G	ulf Coastal Pl	ain Region
Project/Site: <u>ACP</u>	_ City/County: _	Wilson	(0	Sampling Date: 7 July 2014
Applicant/Owner: Dominion			State: NC	Sampling Point: now 000
Investigator(s): T. Gau	_ Section, Town	iship, Range:	NA	
Landform (hillslope, terrace, etc.): To (Cacy	_ Local relief (co	oncave, convex,	none): Flat	Slope (%): >1
Subregion (LRR or MLRA): PLat: 35	5.74617	Long:	78 0699	2 Datum: W65'-1984
Soil Map Unit Name: Wedowee COarse sand.	y loam		NWI classific	cation: NA
Are climatic / hydrologic conditions on the site typical for this time of y	t vear? Yes	No	(if no, explain in R	Remarks.)
Are Vegetation Soil or Hydrology significant	iv disturbed?	Are "Norma	l Circumstances" (present? Yes No
Are Vegetation, Soil, or Hydrology naturally p	problematic?	(If needed,	explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	ig sampling	point locati	ons, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: NWI mapping Indicates PFO	- Is the within et land, lo	Sampled Area a Wetland? -CCS hydu	Yes	No
HYDROLOGY		······		J
Wetland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	v)(_	Surface Soi	I Cracks (B6)
Surface Water (A1)	313)		Sparsely Ve	egetated Concave Surface (B8)
High Water Table (A2)	15) (LRR U)			atterns (B10)
Saturation (A3)	e Odor (C1) nheres along Liv	(int Roots (C3)		Lines (B16) Water Table (C2)
Sediment Deposits (B2)	luced iron (C4)	(00)	Cravfish Bu	irrows (C8)
Drift Deposits (B3)	uction in Tilled S	Soils (C6)	Saturation \	Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	ce (C7)		Geomorphi	c Position (D2)
Iron Deposits (B5)	n Remarks)		Shallow Aq	uitard (D3)
I Inundation Visible on Aerial Imagery (B7)			Sphagnum	mose (D8) (LRR T 1)
Field Observations:				(1035 (20) (ERR 1, 0)
Surface Water Present? Yes No Depth (inch	ies): <u>NP</u>			
Water Table Present? Yes No Depth (inch	ies): <u>730</u>			
Saturation Present? Yes No Depth (inch	nes): <u>>30</u>	Wetland	l Hydrology Prese	ent? Yes No_/
Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous i	nspections), if a	vailable:	
Remarks:				
			•	

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

Sampling Point: NOW10001

	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30×30)	% Cover	Species?	Status	Number of Deminent Species
1 Marse Cillion	20	V	FACH	That Are OBL FACW or FAC: (A)
2 Lioi day hat a fatto feet	20	<u>_{j</u>	FACU	
2 CINICCENCIEN FUILPIFEIN	70	- <u>7</u>	FAC	Total Number of Dominant
3. Hralia Svinosa	~~~	<u></u>	<u> </u>	Species Across All Strata: (B)
4. Ligustrom Dinenge	10	_/~	<u>PAC</u>	Percent of Dominant Species 3 7
5	<u>.</u>		·	That Are OBL, FACW, or FAC: (A/B)
6				
7.				Prevalence index worksheet:
8				Total % Cover of: Multiply by:
U	120	- Total Ca		OBL species x 1 =
			14	FACW species x 2 =
50% of total cover:	20% 0	t total cove	r: <u>· (</u>	FAC species x 3 =
<u>Sapling/Shrub Stratum</u> (Plot size: $\sum \times 12$)		· 1 ·	5 4 0	
1. Ligustrum Sinense	60	<u> </u>	FAC	rAco species x4
2. Aralia Spinosa	20	<u> </u>	PAC	UPL species x 5 =
3 Liquidembar styracifieda	5	Ń	FAC	Column Totals: (A) (B)
M Charles Charles	<u> </u>	~)	EMU	
4. TADTUS, TUDTA		- ! ¥	- Fur of	Prevalence Index = B/A =
ნ	·	•		Hydrophytic Vegetation Indicators:
6	·			1 - Rapid Test for Hydrophytic Vegetation
7	·			2 - Dominance Test is >50%
8				3 - Prevalence index is $\leq 3.0^{1}$
	90	= Total Co	over	Broblematic Hydrophytic Vegetation ¹ (Evplain)
50% of total cover:	5 20% o	f total cove	ar: 14	Problematic Hydrophytic Vegetation (Explain)
			··· · · p	
	~		EAN	Indicators of hydric soil and wetland hydrology must
1. Kubus argutus		· /*	<u> </u>	be present, unless disturbed or problematic.
2. Aralia Spinosa		<u> </u>	FAC	Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in, (7.6 cm) or
4.				more in diameter at breast height (DBH), regardless of
5				height.
o	_			
				then 3 in DBH and creater than 3 28 ft (1 m) tail
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		_		
12	3			-
		= rotar C		
50% of total cover:	20%	of total cov	er:	-
Woody Vine Stratum (Plot size: 10×17)	11	N.		
1. Smilax cotund; PO1.9	10	<u> </u>	<u>FAC</u>	
2 Vitis cotundifolia	5	- I Y	FAC	-
3 Longitate Sc Douite		N	FAC	-
S. <u>Lonicara</u> John Mill				-
4				-
5				– Hydrophytic
	16	_ = Total C	Cover	Vegetation
50% of total cover:	20%	of total cov	ver: 3 2	Present? Yes No No
Remarks: (If observed list morphological adaptations be	- low).			
Tremanas, (in observed, inst morphological adaptations be				
-				

.

SOIL

Sampling Point: nowio 001

Profile Desc	ription: (Describe	to the depth	n needed to docu	ment the i	ndicator	or confirm	the absence	of indicate	rs.)	
Depth (inches)	Matrix Color (moist)		Color (moist)	ox Features %	s Type ¹	Loc ²	Texture		Remarks	X
11-24	1012 3/1	Inut -					S/	27	reated	San
24-30	1049 4/1	_ <u>//0077</u>			····		<u> </u>			
are JU					<u> </u>		34	<u> </u>		
	·				·			_		
		- -			·		<u> </u>			<u> </u>
					·					······
					· <u> </u>	<u> </u>				
Type: C=Co	oncentration, D=De	pletion, RM=F	Reduced Matrix, M	IS=Masked	Sand Gr	ains.	² Location:	PL=Pore L	ining, M=Ma	atrix.
Hydric Soll	Indicators: (Applie	cable to all L	RKS, unless othe	erwise not	ea.)	996 T I		for Proble	matic Hydri	c Soils":
	(AT) bipedon (A2)		Thin Dark S	Surface (S9)) (LRR S.	.кк з, г, ц Т. U)		Muck (A9) (I Muck (A10)	LRR S)	
Black Hi	stic (A3)		Loamy Muc	ky Mineral	(F1) (LRF	20)	Reduc	ed Vertic (F	18) (outsid	e MLRA 150A,B)
Hydroge	en Sulfide (A4)		Loamy Gley	ed Matrix ((F2)		Piedm	ont Floodpl	ain Soils (F1	19) (LRR P, S, T)
Stratified	J Layers (A5) Redies (A6) (LPP I	р т ну	Depleted M	atrix (F3) (Surface /F	-6)		Anom	alous Brighi	Loamy Soil	s (F20)
5 cm Mi	icky Mineral (A7) (L	.RR P, T, U)		ark Surface				arent Mater	ial (TF2)	
Muck Pr	esence (A8) (LRR	U) ,	Redox Dep	ressions (F	8)		Very S	Shallow Dar	k Surface (T	F12)
	uck (A9) (LRR P, T)		Marl (F10)	(LRR U)	/MI 754 - 4	E4)	U Other	(Explain in	Remarks)	
Thick Da	d Below Dark Suna ark Surface (A12)	ce (A11)		inese Mass	(M⊆RA 1 ses (F12) (51) (LRR O. P.	.T) ³ Indi	cators of hy	drophytic ve	getation and
Coast P	rairie Redox (A16)	(MLRA 150A) Umbric Sur	face (F13)	(LRR P, T	r, U)	, . ,	tland hydro	logy must be	e present,
Sandy N	lucky Mineral (S1)	(LRR 0, S)	Delta Ochri	ic (F17) (MI	LRA 151)		. un	less disturb	ed or proble	matic.
Sandy C	Bleyed Matrix (S4)		Reduced V	ertic (F18)	(MLRA 1) Soile (E10)	50A, 150B) 40A)			
Stripped	Matrix (S6)			Bright Loa	imy Soils (F15)	(MERA 19) (MER	→ <i>5/1)</i> RA 149A, 153(C, 153D)		
Dark Su	irface (S7) (LRR P,	S, T, U)		-	-			•		
Restrictive	Layer (if observed):								
Type:										·
Depth (in	ches):						Hydric So	I Present?	Yes _*	No
Remarks:										
1										

Environmental Field Surveys Non-water Point Photo Page



Non-water Point nowio001 facing north. (NWI, not wetland)

Environmental Field Surveys Non-water Point Photo Page



Non-water Point nowio002 facing southeast. (NHD – not stream, part of wetland wwio008)



Non-water Point nowio002 facing east. (NHD – not stream, part of wetland wwio008)

Photo Sheet 1 of 1



Non-water data point NOWIA001 facing northeast



Non-water data point NOWIA001 facing southwest

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline	City/County:	ohnston	Sampling Date: 1/14/2016	
Applicant/Owner:		State: NC	Sampling Point: nojoe001	
Investigator(s): CG, AS	Section, Town	ship, Range:		
Landform (hillslope, terrace, etc.): toe of slope	Local relief (co	ncave, convex, none): <u>none</u>	Slope (%): 2	
Subregion (LRR or MLRA): La	t: <u>35.58734528</u>	'34528 Long: -78.20702271 Datu		
Soil Map Unit Name:		NWI class	ification:	
Are climatic / hydrologic conditions on the site typical for this	ime of year? Yes 🧹	_ No (If no, explain ir	Remarks.)	
Are Vegetation, Soil, or Hydrology sig	nificantly disturbed?	Are "Normal Circumstances	s" present? Yes 🔽 No	
Are Vegetation, Soil, or Hydrology na	turally problematic?	(If needed, explain any ans	wers in Remarks.)	
SUMMARY OF FINDINGS Attach site man s	howing compling	oint locations transos	te important foaturos 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>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 F Sediment Deposits (B2) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils of Algal Mat or Crust (B4) Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	 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)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No 🖌 Depth (inches):	
Saturation Present? Yes No <u>/</u> Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No
	tiona) if available:
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	lions), il avallable.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec No hydrology present	uons), ii available.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec No hydrology present Remarks:	uons), ii available.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec No hydrology present Remarks:	uons), ii avaliable.
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec No hydrology present Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec No hydrology present Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec No hydrology present Remarks:	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec No hydrology present Remarks:	

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

Sampling Point: _____

	Absoluto	Dominant	Indicator	Dominanco Tost workshoot:
Tree Stratum (Plot size: 30)	% Cover	Species?	Status	Dominance rest worksneet.
Liriodendron tulinifera	60	Yes	FACU	Number of Dominant Species
	25			That Are OBL, FACW, or FAC: (A)
2. Liquidambar styracifiua	25	Yes	FAC	Total Number of Dominant
3. Acer rubrum	10	No	FAC	Species Across All Strata: 6 (B)
4				· · · · · · · · · · · · · · · · · · ·
r				Percent of Dominant Species
5		<u> </u>		That Are OBL, FACW, or FAC: (A/B)
6				
7.				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
0	95			OBL species $0 x 1 = 0$
47.5		= Total Cov	er 10	$EACW$ species $\frac{30}{30}$ x 2 - $\frac{60}{30}$
50% of total cover:	20% of	total cover:	19	57 171
Sapling/Shrub Stratum (Plot size: 15)				FAC species $x 3 = \frac{111}{25}$
1 Liaustrum sinense	10	Yes	FAC	FACU species $\frac{75}{2}$ x 4 = $\frac{300}{2}$
	10	Vaa	FAC	UPL species $0 \times 5 = 0$
2. <u>Carpinus caroliniana</u>	10	165	FAC	$\frac{162}{162}$
3				
				3.27
-				Prevalence Index = $B/A = \frac{3.27}{1000000000000000000000000000000000000$
D				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7.				
o	20			3 - Prevalence Index is ≤3.0 ¹
	20	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: ¹⁰	20% of	total cover:	4	
Herb Stratum (Plot size: 5)				
	30	Ves	FACW	Indicators of hydric soil and wetland hydrology must
		103		be present, unless disturbed of problematic.
2. Lonicera japonica	10	Yes	FACU	Definitions of Four Vegetation Strata:
_{З.} Lonicera japonica	10	Yes	FACU	Trans Manda and a such dia such as (7.0 and) as
⊿ Allium canadense	3	No	FACU	I ree – woody plants, excluding vines, 3 in. (7.6 cm) or
- Smilay rotundifolia	2	No	FAC	height
				hoight.
6. Smilax rotundifolia	2	No	FAC	Sapling/Shrub – Woody plants, excluding vines, less
7. Polystichum acrostichoides	2	No	FACU	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
0				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3 28 ft in
11.				height
12				
12	47			
	4/	= Total Cov	er	
50% of total cover: 23.5	20% of	total cover:	9.4	
Woody Vine Stratum (Plot size: 30)				
(interest)				
1		<u> </u>		
2				
3.				
1				
5				Hydrophytic
	0	= Total Cov	er	Vegetation
50% of total cover: 0	20% of	total cover	0	Present? Yes <u> </u>
Demontos (lf channed list manufal sized adaptations hals				
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL

(inchoo)	Matrix		Redox Features				Toxturo	Demerica	
				2	C			Rema	IIKS
0-15	10 YR 4/3	98	10 YR 4/4						
				·					
				·					
Type: C=C	oncentration, D=Depl	letion, RM	=Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL:	=Pore Lining, M=	Matrix.
Histosol Histosol Histic E Black Hi Hydroge Stratified Organic Organic 5 cm Mu Muck Pr 1 cm Mu Depletee Thick Da Sandy N Sandy N Sandy F 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) (N Mucky Mineral (S1) (L Gleyed Matrix (S4) Redox (S5) I Matrix (S6) rface (S7) (LRR P, S	, T, U) R P, T, U (A11) MLRA 150 .RR O, S)	Polyvalue Be Thin Dark Su Loamy Muck Loamy Gleye Depleted Ma Redox Dark Depleted Da Redox Depre Marl (F10) (L Depleted Oc Iron-Mangan Delta Ochric Reduced Ve Piedmont Flo Anomalous E	elow Surface Inface (S9) y Mineral (ed Matrix (I trix (F3) Surface (F rk Surface essions (F8 .RR U) hric (F11) ese Masse ace (F13) ((F17) (ML tric (F18) (podplain So Bright Loar	 (LRR S, (LRR S, (F1) (LRR S, (F1) (LRR S, (F1)) (MLRA 19) (MLRA 19) (MLRA 19) (MLRA 151) MLRA 150 (MLRA 150) (MLRA 150) (F19) (MLRA 150) 	RR S, T, U T, U) O) LRR O, P, T , U) 0A, 150B) (MLRA 149 F20) (MLR <i>I</i>	 1 cm Mucł 2 cm Mucł Reduced V Piedmont Anomalou: (MLRA 1 Red Parer Very Shall Other (Exp T) ³ Indicator wetlanc unless 	k (A9) (LRR O) k (A10) (LRR O) vertic (F18) (outs Floodplain Soils (s Bright Loamy S 153B) nt Material (TF2) low Dark Surface plain in Remarks) rs of hydrophytic d hydrology must disturbed or prob	ide MLRA 150A,E (F19) (LRR P, S, T) oils (F20) (TF12) vegetation and be present, lematic.
Type: Depth (in	Layer (if observed):						Hvdric Soil Pre	esent? Yes	No
Remarks:	-1						,		-



Photo 1 Non-water data point nojoe001 facing east



Photo 2 Non-water data point nojoe001 facing south

Environmental Field Surveys Non-Waterbody Photo Page



Non-waterbody nojop001 facing east (NHD, not stream)

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

` | .

Project/Site: ACP	City/County: Johnston Sampling Date: 7-21-14						
Applicant/Owner: Dominium	State: <u>N</u> Sampling Point: <u>nojop002</u>						
Investigator(s): J. Harbour	Section, Township, Range: <u>N A</u>						
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, convex, none): Ful At Slope (%): 12						
Subregion (I RR or MI RA): LRR P Lat: 35.	53506 Long: 78,24480 Datum: W6584						
Soil Man Unit Name: 6007400 Silt 1000	NWI classification: N/A						
Are climatic / bydrologic conditions on the site typical for this time of v	ear? Yes No (If no explain in Remarks.)						
Are Vegetation Soil or Hydrology significantly	v disturbed? Are "Normal Circumstances" present? Yes No						
Are Vegetation, Soil, or Hydrology naturally pr	roblematic? (If needed, explain any answers in Remarks.)						
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.						
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: No No	Is the Sampled Area within a Wetland? Yes No						
Remarks.							
HYDROLOGY							
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)						
Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6)						
Surface Water (A1)	13) Sparsely Vegetated Concave Surface (B8)						
High Water Table (A2)	15) (LRR U)						
Saturation (A3)	Codor (C1) Moss Thm Lines (B10)						
Sediment Denosite (B2)	used from (C4) \Box Cravitish Burrows (C8)						
Drift Deposits (B3)	Local Ion (C4) Solis (C6) Saturation Visible on Aerial Imagery (C9)						
Algal Mat or Crust (B4)	ce (C7) Geomorphic Position (D2)						
Iron Deposits (B5) Other (Explain in	Remarks) , Shallow Aquitard (D3)						
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)						
U, Water-Stained Leaves (B9)	Śphagnum moss (D8) (LRR T, U)						
Field Observations:	NA						
Surface Water Present? Yes No Depth (inche	es):						
Water Table Present? Yes No Depth (inche	es):						
(includes capillary fringe)							
Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspections), if available:						
Remarks:							
	·						

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

Sampling Point: nojo p 002

2102211	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size:)	<u>% Cover</u>	<u>Species?</u>	<u>Status</u>	Number of Dominant Species
1. Liriodandhan tulipitan	<u>40</u>	$-\frac{\gamma}{1}$	TAC	That Are OBL, FACW, or FAC: (A)
2. Magnulia virginiana	<u> </u>	<u>_N</u> _	FACW	Total Number of Dominant
3. Pinus treda	<u> </u>	\overline{N}	FAC	Species Across All Strata:
4. Acer rubrum	10	N_{-}	FAC	
5.			`	That Are OBL EACINI or EAC: (JUD)
6			·	
7	<u></u>			Prevalence Index worksheet:
0	•			Total % Cover of:Multiply by:
8	TOD			OBL species x 1 =
2/1			^{/er} ι	FACW species x 2 =
50% of total cover: $\underline{\mathcal{D}}$	20% of	total cover	: <u>12</u>	FAC species x3 =
Sapling/Shrub Stratum (Plot size: 50 × 30 ·)	2-	17	TACH	
1. <u>Alethra</u> Mnitulia	30	<u> </u>	<u>+</u> <u>T</u> CW	
2. Liquistrum Sinense	10	<u> </u>	TAC	OPL species X5 =
3. Magnolia virniniana	<u> </u>		FACW	Column Totals: (A) (B)
4				Prevalence Index = B/A =
5.				
ĥ.				Denid Test for Hydronbulie Menotation
7				
0				2 - Dominance Test is >50%
8	45	- Tetel Or		3 - Prevalence Index is ≤3.0
20	<u> </u>	= 101a1 Co	ver Q	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: <u>よみ</u>	<u></u> 20% o	t total cover	·:	
Herb Stratum (Plot size: 50 × 30)	~	N	⊢ ⊾ (¹ Indicators of hydric soil and wetland hydrology must
1. Arndinarra gigantea		. <u> </u>	<u>++</u>	be present, unless disturbed or problematic.
2. Woodwadua areplata		<u> </u>	ORI	Definitions of Four Vegetation Strata:
3. Microstegium vimenium		<u> </u>	FAC	Tree Weedy plants, evaluating vines 3 in (7.6 cm) or
4.	- 	· · · · · · · · · · · · · · · · · · ·		more in diameter at breast height (DBH), regardless of
5.				height.
6				Carling/Chrub Meady plants avaluding vince loss
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				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	12	= Total Co	over	
50% of total cover: 7,	<u>5</u> 20% a	of total cove	er: <u>'S</u>	
Woody Vine Stratum (Plot size: 30 × 30')				
1. Lonicha japonsca	10	У	FAC	
2 Toticodination radizing	5		FAC	
2				· .
4				
5				Hydrophytic
	< <u>''</u>	_ = Total Co	over	Present? Yes No
50% of total cover: //				
Remarks: (If observed, list morphological adaptations be	low).			
1				
			•	
SOIL

Sampling Point: nojop002

Ł

Profile Desc	cription: (Describe t	to the depth	needed to docur	ment the i	ndicator	or confirm	the absence of i	indicators.)
Depth	Matrix		Redo	x Feature	S Turnel	1.002	Tostura	Pomorka
$\frac{(\text{incres})}{(2 - \sqrt{2})}$	$\frac{1}{10000000000000000000000000000000000$	<u></u>	COIDE ((MOISE)		<u>iype</u>			Remarks
$\frac{0}{\sqrt{20}}$	$\frac{109KV5}{1000000000000000000000000000000000000$	$\frac{100}{100}$	7.0511					·····
2-20	10414 2/2		JYKJG			<u> </u>		
		. <u></u>						
		. <u> </u>						
1		·				. <u> </u>	2	
Type: C=C	oncentration, D=Dep	etion, RM=Re	educed Matrix, Mi	S=Masker	d Sand Gr	ains.	² Location: PL	-=Pore Lining, M=Matrix.
	Indicators: (Applic		Rs, unless one	olow Surfe	.eu.)	PPCTU		
Histoso	ninedon (A2)		Thin Dark St	urface (S9) (LRR S.	T. U)		ck (A10) (LRR S)
Black H	istic (A3)		Loamy Muck	cy Mineral	(F1) (LRF	., c, ₹O)	Reduced	Vertic (F18) (outside MLRA 150A,B)
Hydrog	en Sulfide (A4)		Loamy Gley	ed Matrix	(F2)	•	Piedmont	Floodplain Soils (F19) (LRR P, S, T)
Stratifie	d Layers (A5)		Depleted Ma	atrix (F3)			L Anomalou	us Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	, T, U)	Redox Dark	Surface (F6)			153B)
Muck B	ucky Mineral (A7) (Li	κκ Ρ, Ι, U) Ν		ark Sunace	e (F7) =8)			ent Material (TF2) Now Dark Surface (TE12)
	uck (A9) (LRR P. T)	')	Marl (F10) (LRR U)	0,		Other (E)	xplain in Remarks)
Deplete	ed Below Dark Surfac	e (A11)	Depleted Oc	chric (F11)	(MLRA 1	51)	<u> </u>	. ,
Thick D	ark Surface (A12)		Iron-Mangai	nese Mas	ses (F12)	(LRR O, P,	T) ³ Indicate	ors of hydrophytic vegetation and
Coast I	Prairie Redox (A16) (I	MLRA 150A)		ace (F13)	(LRR P, 1	ſ, U}	wetlar	nd hydrology must be present,
	Mucky Mineral (S1) (I	LRR O, S)		C (F17) (M ortio (E19)	LRA 151) /MLDA 1	50A 150D)	uniess	s disturbed or problematic.
Sandy Sandy	Gleyed Malinx (54) Redox (S5)			ioodolain :	Soils (F19	MLRA 14	9A)	
Strippe	d Matrix (S6)		Anomalous	Bright Loa	amy Soils	(F20) (MLR	A 149A, 153C, 1	53D)
Dark S	urface (S7) (LRR P, S	S, T, U)						
Restrictive	Layer (if observed)	:						
Type: _							1	. /
Depth (i	nches):						Hydric Soil P	resent? Yes V No
Remarks:								
1								



Non-waterbody nojop002 facing north

NC Division of Water Quality – Methodology for Identification of Internitient and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Ideminication 7 03	Project/Site:	Latitude: Longitude: Other e.g. Quad Name:		
Date: 8 1 19	County:			
Total Points: Stream is at least intermittent if ≥ 19 or perennial if ≥ 30*	Stream Determi Ephemeral Inte			
A Geomorphology (Subtotal = 4)	Absent	Weak	Moderate	Stron
1 ^a Continuity of channel bed and bank	0	1	2	Í
2. Sinuosity of channel along thalweg	0	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool,	0	1	2	3
A Particle size of stream substrate		1	2	3
5. Active/relict floodplain		1	2	3
6. Depositional bars or benches	<u> </u>	1	2	3
7. Recent alluvial deposits	0	Ō	2	3
3. Headcuts	Ø	1	2	3
9. Grade control	Q	0.5	1	1.5
10. Natural valley		0.5	1	1.5
artificial ditches are not ented and discussions in manual			Yes =	3
B Hydrology (Subtotal = 4 5)				
12 Presence of Baseflow		• 1	<u>a</u> T	
13. Iron oxidizing bacteria		1	2	3
14. Leaf litter	1.5		(15)	3
15. Sediment on plants or debris	0	(0.5)		15
16. Organic debris lines or piles	0	0.5	1	. 1.5
17. Soil-based evidence of high water table?	No	= 0	Yes = 3	3
C. Biology (Subtotal =)				
18. Fibrous roots in streambed	3	2	<u> </u>	0
20 Macrobenthos (note diversity and shundance)			1	0
21 Aquatic Mollusks	Ö		2	3
22. Fish	<u> </u>	0.5	1	<u>3</u>
23. Crayfish	Ø	0.5	1	1.5
24. Amphibians	0	0.5	1	1.5
25. Algae		0.5 EACW=0.75: OB	1	1.5
20. Wetland plants III streambed	ods. See p. 35 of manual.	17401 - 0.10, OBL =	1.5 Other = 0	1000
Notes: - Vanar see at f Willy by	much - dua.	ditch conversion	<u> </u>	
From adjacent as fields -	Non jurgediction	and ditil lan	- deidler	fer
		Substrate cai	sist of me	<u> </u>
Skeich.	1			
the second secon	Ele ditch	•		
/ / [±]	1			
	/			
T SB / Jun	155			



Non-water point NOJOB011 facing northwest



Non-water point NOJOB010 facing south

NC Division of Water Quality – Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11						
Date: 7(31)14	Project/Site:	ERP Dominion	Latitude: 35, 48() 278			
Evaluator: Tubs Preuninger	County:	shaston	Longitude: 78, 304444			
Total Points:Stream is at least intermittentif \geq 19 or perennial if \geq 30* $3, 25$	Stream Determ Ephemeral Inte	ination (circle one) ermittent Perennial	Other e.g. Quad Name:	Other e.g. Quad Name:		
a. 3 5 dues swe						
A. Geomorphology (Subtotal = <u>3, 5</u>)	Absent	Weak	Moderate	Strong		
1 ^a Continuity of channel bed and bank	0	1	2	→> 3		
2. Sinuosity of channel along thalweg	<u> </u>	1	2	3		
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	1	2	3		
4. Particle size of stream substrate	~ 0	1	2	3		
5. Active/relict floodplain	0		2	3		
6. Depositional bars or benches	0	1	2	3		
7. Recent alluvial deposits	0	1	2	3		
8. Headcuts	<u>(</u> 0>	1	2	3		
9. Grade control	0	0.5	1	1.5		
10. Natural valley	Ó	0.5	1	1.5		
11. Second or greater order channel		0=0	Yes = 3			
^a artificial ditches are not rated; see discussions in manual	ەمەرى _{تى}					
B. Hydrology (Subtotal =)						
12. Presence of Baseflow		1	2	3		
13. Iron oxidizing bacteria	0	1	2	3		
14. Leaf litter	1.5	\bigcirc	0.5	0		
15. Sediment on plants or debris	Ó	0.5	1	1.5		
16. Organic debris lines or piles	0	0.5		1.5		
17. Soil-based evidence of high water table?	No = 0		Yes = 3			
C. Biology (Subtotal = <u>, , , , , , ,)</u>			1000 p.			
18. Fibrous roots in streambed	3	2	\odot	0		
19. Rooted upland plants in streambed	3	2	1	0		
20. Macrobenthos (note diversity and abundance)	Ø	1	2	3		
21. Aquatic Mollusks	0>	1	2	3		
22. Fish	©	0.5	1	1.5		
23. Crayfish	02	0.5	11	1.5		
24. Amphibians	<u>م</u>	0.5	1	1.5		
25. Algae	0	0.5	1	1.5		
26. Wetland plants in streambed FACW = 0.75; OBL = 1.5 Other = 0						
*perennial streams may also be identified using other methods.	See p. 35 of manua	al.				
Notes: Drainage suche (dug) conveying water from adjacent field						
Sketch: N/A						



Non-water point NOJOB009 facing southeast



Non-water point nojoo002 facing south. (NHD, not stream)



Non-water point nojoo002 facing north. (NHD, not stream)



Non-water point nojoo003 facing southeast. (NHD, not stream)



Non-water point nojoo003 facing northwest. (NHD, not stream)



Non-water data point NOJOE002 facing northwest (within inundated wetland)



Non-water data point NOJOE002 facing southeast (within inundated wetland)



Non-water point NOJOB006 facing southeast



Non-water point NOJOB005 facing north



Non-water point NOJOB004 facing north



Non-water point NOJOB007 facing east



Non-water point NOJOB003 facing north

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form	m Version 4.11	NOJOE	3002			
Date: 7/28/14	Project/Site:	ERP Dominio	Latitude: 35	Latitude: 35, 390833		
Evaluator: TODD Freuninger	County: John	iston Countu	Longitude:	Longitude: 78, 370276		
Total Points: \bigcirc Stream is at least intermittent if \ge 19 or perennial if \ge 30* \land \land 3	Stream Determi Ephemeral Inte	nation (circle one) rmittent Perennia	Other I e.g. Quad Name	Other e.g. Quad Name:		
	- Csee n	ister - draina	ae sattern i	in wetland		
A. Geomorphology (Subtotal = 5)	Absent	Weak	Moderate	Strong		
1 ^a Continuity of channel bed and bank	0 4	(1)	2	3		
2. Sinuosity of channel along thalweg	0	1	2	3		
 In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence 	0	1	2	3		
4. Particle size of stream substrate	0	ð	2	3		
5. Active/relict floodplain	0	1	2	3		
6. Depositional bars or benches	\bigcirc	1	2	3		
7. Recent alluvial deposits	0	\odot	2	3		
8. Headcuts	\odot	1	2	3		
9. Grade control	0	0.5	1	1.5		
10. Natural valley	0	0.5	1	1.5		
11. Second or greater order channel	No	o = 0	Yes	Yes = 3		
^a artificial ditches are not rated; see discussions in manual						
B. Hydrology (Subtotal = <u>5</u>)						
12. Presence of Baseflow	Ø	1	2	3		
13. Iron oxidizing bacteria	O	1	2	3		
14. Leaf litter	1.5	(1)	0.5	0		
15. Sediment on plants or debris	0	0.5	1	1.5		
16. Organic debris lines or piles	0	0.5	1	1.5		
17. Soil-based evidence of high water table?	N	No = 0		(Yes = 3		
C. Biology (Subtotal = <)	·		· · · · · · · · · · · · · · · · · · ·			
18. Fibrous roots in streambed	3	2	\bigcirc	0		
19. Rooted upland plants in streambed	3	(2)	1	0		
20. Macrobenthos (note diversity and abundance)	\odot	1	2	3		
21. Aquatic Mollusks	Ø	1	2	3		
22. Fish	0	0.5	1	1.5		
23. Crayfish	0	0.5	1	1.5		
24. Amphibians	0	0.5	1	1.5		
25. Algae	0	0.5	1	1.5		
26. Wetland plants in streambed		FACW = 0.75; C	DBL = 1.5 Other =	0		
*perennial streams may also be identified using other meth	ods. See p. 35 of manua	al.				
Notes: Stream depicted on USGS.	- actually m	vultiple drain	age pattern	is in wetlan		
Evaluated main flow pattern for subjectivity to # Tuffind Note. Heavy raine						
in last 24 hours, no water present / CR J						
Sketch:						
150 DP A wetland WTOA009						
FIGN						



Non-water point NOJOB002 facing north



Non-water point NOJOB001 facing southeast



Non-water point NOJOB101 facing east



Non-water point NOJOB101 facing north



Non-water data point NOJOE003 facing north (within inundated wetland)



Non-water data point NOJOE003 facing south (within inundated wetland)



Waterbody NOJOB100 facing north



Non-water data point NOJOE005 facing northwest (within inundated wetland)



Non-water data point NOJOE005 facing southeast (within inundated wetland)



Non-water point nojoq001 facing north. (NHD, not stream)



Non-water point nojoq001 facing south. (NHD, not stream) Photo Sheet 1 of 1



Non-water data point NOJOA002 facing east



Non-water data point NOJOA002 facing west



Non-water point nojoq002 facing east. (NHD feature, not a stream)



Non-water point nojoq002 facing west. (NHD feature, not a stream)



Non-Waterbody nosao004 facing northwest.



Non-Waterbody nosao004 facing southeast.



Non-Waterbody nosao004 facing northeast.



Non-Waterbody nosao003 facing northwest.



Non-Waterbody nosao003 facing southeast.