

Upland data point wsup016_u facing northwest.



Upland data point wsup016_u facing southwest.

Photo Sheet 3 of 3

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline			County: City of Suffolk	_ Sampling Date: 2/26/2016					
Applicant/Owner: DOMINION					_ Sampling Point: wsuc112e_w				
Investigator(s): Team C									
Landform (hillslope, terrace, etc.)	Floodplain	Local	relief (concave, conve	x, none): <u>none</u>	Slope (%): <u>2</u>				
Subregion (LRR or MLRA): T		Lat: <u>36.79527715</u>	Long:	-76.55484209	Datum: WGS 1984				
Soil Map Unit Name: Bohicket si					ication: E1UBL, E2EM1P				
Are climatic / hydrologic condition									
Are Vegetation, Soil	, or Hydrology	significantly distur	bed? Are "Norn	nal Circumstances"	present? Yes 🖌 No				
Are Vegetation, Soil	, or Hydrology	_naturally problema	atic? (If needed	l, explain any answ	ers in Remarks.)				
SUMMARY OF FINDINGS	SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present Hydric Soil Present? Wetland Hydrology Present? Remarks: Wetland within the floodplain of	Yes 🖌	No	Is the Sampled Area within a Wetland?		∕ No				
HYDROLOGY									
Wetland Hydrology Indicators	;:			Secondary Indic	ators (minimum of two required)				
Primary Indicators (minimum of	one is required; check a	ll that apply)		Surface Soi	l Cracks (B6)				
Surface Water (A1)		ic Fauna (B13)			egetated Concave Surface (B8)				
High Water Table (A2)		Deposits (B15) (LRI		-	atterns (B10)				
Saturation (A3)	Hydro	gen Sulfide Odor (0	C1)	Moss Trim I	Lines (B16)				
Water Marks (B1)	Oxidiz	ed Rhizospheres a	long Living Roots (C3)	Dry-Seasor	Water Table (C2)				

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
	Crayfish Burrows (C8)
Field Observations:	
Surface Water Present? Yes No Depth (inches): 6 Water Table Present? Yes No Depth (inches): 6 Saturation Present? Yes No Depth (inches): 0 Cincludes capillary fringe) No Depth (inches): 0 Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspective Remarks: Wetland hydrology present	Wetland Hydrology Present? Yes <u>V</u> No tions), if available:

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

Sampling Point: wsuc112e_w

Tree Stratum (Plot size:30) 1.		er Species?		Dominance Test worksheet:
2 3 4			Status	Number of Dominant Species
3 4				That Are OBL, FACW, or FAC:1 (A)
3 4				Total Number of Dominant
4				Total Number of Dominant Species Across All Strata: 1 (B)
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by: OBL appaging 90 x 1 = 90
	0	= Total Cov		OBL species $x_1 = 000$
50% of total cover:	0 20%	of total cover	. 0	FACW species x 2 =
Sapling/Shrub Stratum (Plot size:15				FAC species $0 x 3 = 0$
	/			FACU species x 4 =0
1				UPL species $0 \times 5 = 0$
2				90 90
3				Column Totals: (A) (B)
4				Prevalence Index = B/A =1
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				✓ 3 - Prevalence Index is $\leq 3.0^1$
	0	_ = Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	0 20%	of total cover	. 0	
	20%		·	
	90	Vee		¹ Indicators of hydric soil and wetland hydrology must
1. Schoenoplectus pungens	80	Yes	OBL	be present, unless disturbed or problematic.
2. Juncus effusus	10	No	OBL	Definitions of Four Vegetation Strata:
3				Tree Meedu plante evoluting vince 2 in (7.0 em) er
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				5
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12	·			
	90	= Total Cov	rer	
50% of total cover: _	⁴⁵ 20%	of total cover:	18	
Woody Vine Stratum (Plot size: 30)				
(
1				
2				
3				
4				
				I hadro whati's
		= Total Cov		Hydrophytic Vegetation
5				
				Present? Yes No

SOIL

Profile Desc	cription: (Describe t	o the deptl	n needed to docum	nent the i	ndicator	or confirm	the absence	e of indicators.)
Depth	Matrix		Redo	x Features	S			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10 YR 3/2	100					SCL	Mucky mineral
	·			·		·		
	·			·	·			·
						· <u> </u>		
				·	·			
¹ Type: C=C	oncentration, D=Deple	etion RM=	Reduced Matrix MS	S=Masked	Sand Gra	ains	² Location	: PL=Pore Lining, M=Matrix.
	Indicators: (Applica							s for Problematic Hydric Soils ³ :
•			Polyvalue Be			прети		
Histosol	()							Muck (A9) (LRR O)
	pipedon (A2)		Thin Dark Su					Muck (A10) (LRR S)
	istic (A3)		Loamy Muck			0)		ced Vertic (F18) (outside MLRA 150A,B)
, ,	en Sulfide (A4)		Loamy Gleye		F2)			nont Floodplain Soils (F19) (LRR P, S, T)
	d Layers (A5)		Depleted Ma	, ,				alous Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,		Redox Dark	•	,		•	.RA 153B)
5 cm Mu	ucky Mineral (A7) (LR	R P, T, U)	Depleted Dar	k Surface	(F7)			Parent Material (TF2)
Muck Pr	resence (A8) (LRR U)		Redox Depre		8)			Shallow Dark Surface (TF12)
1 cm Mu	uck (A9) (LRR P, T)		Marl (F10) (L				Other	(Explain in Remarks)
Deplete	d Below Dark Surface	(A11)	Depleted Ocl	nric (F11)	(MLRA 1	51)		
Thick Da	ark Surface (A12)		Iron-Mangan	ese Masse	es (F12) (LRR O, P, 1	ī) ³ Indi	cators of hydrophytic vegetation and
Coast P	rairie Redox (A16) (M	LRA 150A)	Umbric Surfa	ce (F13) (LRR P, T	, U)	we	etland hydrology must be present,
Sandy M	/lucky Mineral (S1) (L	RR O, S)	Delta Ochric	(F17) (ML	.RA 151)		un	less disturbed or problematic.
Sandy C	Gleyed Matrix (S4)		Reduced Ver			0A, 150B)		
-	Redox (S5)		Piedmont Flo				A)	
	Matrix (S6)		Anomalous E					C. 153D)
	Inface (S7) (LRR P, S,	т. U)						-,,
	Layer (if observed):	., .,						
	Luyer (il observeu).							
Туре:								· · · · · · · · · · · · · · · · · · ·
Depth (in	ches):						Hydric Soi	il Present? Yes 🦯 No
Remarks:								
Hydric soil pro	esent							
5								



Photo 1 Wetland data point WSUC112e_w facing north



Photo 2 Wetland data point WSUC112e_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline	City/County: Ci	ity of Suffolk	Sampling Date: 2/26/2016		
Applicant/Owner: DOMINION		State: VA	_ Sampling Point: wsuc112_u		
Investigator(s):	Section, Towns	ship, Range: <u>No PLSS in this ar</u>	ea		
Landform (hillslope, terrace, etc.): Hill slope		ncave, convex, none): <u>none</u>			
Subregion (LRR or MLRA): T Lat: 36.	79528153	Long: <u>-76.55470508</u>	Datum: WGS 1984		
Soil Map Unit Name: Bohicket silty clay loam		NWI classif	cation: None		
Are climatic / hydrologic conditions on the site typical for this time o	f year? Yes 🔽	_ No (If no, explain in I	Remarks.)		
Are Vegetation, Soil, or Hydrology significa	ntly disturbed?	Are "Normal Circumstances"	present? Yes 🖌 No		
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed, explain any answ	ers in Remarks.)		
SUMMARY OF FINDINGS – Attach site map show	ing sampling p	ooint locations, transect	s, important features, etc.		

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

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRR U) Saturation (A3) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres along Living R Sediment Deposits (B2) Presence of Reduced Iron (C4) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks) Mater-Stained Leaves (B9) Water-Stained Leaves (B9)	 Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8)
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
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks: No hydrology indicators present	

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

Sampling Point: <u>wsuc112_u</u>

Tree Stratum (Plot size:30)	Absolute % Cover	Dominant I Species?	ndicator Status	Dominance Test worksheet:
1. Quercus falcata	60	Yes	FACU	Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
2. Quercus nigra	10	No	FAC	
3				Total Number of Dominant Species Across All Strata: 2 (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)
6				
7				Prevalence Index worksheet:
8.				Total % Cover of: Multiply by:
	70	= Total Cove	er	OBL species $x_1 = 0$
50% of total cover:35	20% of	total cover:	14	FACW species $x^2 = \frac{0}{150}$
Sapling/Shrub Stratum (Plot size: 15)				FAC species $x^3 = 240$
1				FACU species $\frac{60}{0}$ x 4 = $\frac{240}{0}$
2				UPL species $0 \times 5 = 0$
3.				Column Totals: (A) (B)
4				Prevalence Index = B/A = 3.54
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is $\leq 3.0^{1}$
	0	= Total Cove	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:0	20% of	total cover:	0	
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must
1. Ilex opaca	40	Yes	FAC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3.				
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight
	40	= Total Cove	er	
50% of total cover:20		total cover:	•	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				
		= Total Cove		Hydrophytic Vegetation
50% of total cover:0				Present? Yes No 🖌
Remarks: (If observed, list morphological adaptations belo	JW).			

SOIL

Depth	Matrix		Redo	x Features	s			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-8	10 YR 3/3	100					SL	
8-18	2.5 Y 6/3	100					S	
		·						
		·						
		·						
		·						
¹ Type: C=C	oncentration, D=Depl	etion. RM=	Reduced Matrix. M	 S=Masked	Sand Gr	ains.	² Location: PL=Pore Lining, M=Matri	 X.
	Indicators: (Applica						Indicators for Problematic Hydric	
Black H Hydroge Stratifie Organic 5 cm Mu Muck Pr 1 cm Mu Deplete Thick Da Coast P Sandy M Sandy O	pipedon (A2) istic (A3) en Sulfide (A4) d Layers (A5) b Bodies (A6) (LRR P, ucky Mineral (A7) (LR resence (A8) (LRR U) uck (A9) (LRR P, T) d Below Dark Surface ark Surface (A12) Prairie Redox (A16) (N Mucky Mineral (S1) (L Gleyed Matrix (S4)	R P, T, U) (A11) ILRA 150A	Delta Ochric	urface (S9) y Mineral ed Matrix (trix (F3) Surface (F rk Surface essions (F4) LRR U) hric (F11) hric (F13) ((F17) (ML rtic (F18) () (LRR S, (F1) (LRR F2) 6) (F7) 8) (MLRA 1 (LRR P, T .RA 151) MLRA 15	T, U) ≿ O) 51) LRR O, P, , U) 0A, 150B)	 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside M Piedmont Floodplain Soils (F19) Anomalous Bright Loamy Soils (F19) MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF1 Other (Explain in Remarks) T) ³ Indicators of hydrophytic veget wetland hydrology must be prunless disturbed or problemation.	(LRR P, S, T) F20) 2) tation and resent,
	Redox (S5) d Matrix (S6)		Piedmont Flo	•	,	•	A 149A, 153C, 153D)	
	urface (S7) (LRR P, S	, T, U)					,,,	
	Layer (if observed):							
Type:								
Depth (in	iches):						Hydric Soil Present? Yes	No 🖌
Remarks:								



Photo 1 Upland data point WSUC112_u facing south



Photo 2 Upland data point WSUC112_u facing north

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/Co	unty: SUFFal	k CO.	Sampling Date: 9/8/16
Applicant/Owner: Dominion			State: VA	Sampling Point: WS40043e-w
Investigator(s): EST LE. LT	Section	Township, Range:	none	and the second second second second second
Landform (hillslope terrace etc.): +PARTALE	Local r	elief (concave, convex	none): fla	Slope (%): 0-21
Subregion (LRR or MLRA): <u>LRR</u> T	Lat: 36. 784	14 Long:	-76.531	10 Datum: WGS 84
Soil Map Unit Name: Tomotley 100	540	the state of the s	NWI classifi	cation: PEM
			(If no, explain in F	
Are climatic / hydrologic conditions on the site typical			al Circumstances"	present? Yes No
Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology			explain any answe	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site r	nap showing sam	oling point locat	ions, transects	s, important features, etc.
		Is the Sampled Area within a Wetland?	NEW YORK CONTRACTOR OF A STREET OF A ST	No
Remarks: Pain within 24 h	ours, main	Haived po	werline	easement.
HYDROLOGŸ				the second second
Wetland Hydrology Indicators:			1.1711 months' resultant are than the about the factor of the factor	ators (minimum of two required)
Primary Indicators (minimum of one is required: cher				I Cracks (B6) egetated Concave Surface (B8)
E C	ualic Fauna (B13)			atterns (B10)
	arl Deposits (B15) (LRR rdrogen Sulfide Odor (C		Moss Trim I	
	dividized Rhizospheres alo		A CONTRACTOR AND A CONTRACT AND A CONTRACTACT AND A CONTRACT AND A CONT	Water Table (C2)
the second se	esence of Reduced Iron		Crayfish Bu	
	ecent Iron Reduction in 1			/isible on Aerial Imagery (C9)
	in Muck Surface (C7)		Geomorphic	c Position (D2)
	her (Explain in Remarks	•)	Shallow Aq	A REAL PROPERTY AND A REAL PROPERTY OF A RE
Inundation Visible on Aerial Imagery (B7)			FAC-Neutra	
Water-Stained Leaves (B9)	and and finder and	and and the second and	Sphagnum	moss (D8) (LRR T, U)
Field Observations:	-	10		
Surface Water Present? Yes No 🔀	_ Depth (inches):N	2		
Water Table Present? Yes No X	_ Depth (inches): >	Caco Walland	Hydrology Prese	ent? Yes X No
Saturation Present? Yes <u>Ves</u> No <u>Ves</u>	_ Depth (inches): SUC	race wetand	Hydrology Frese	
Describe Recorded Data (stream gauge, monitoring	well, aerial photos, prev	ious inspections), if a	vailable:	
Remarks:		and the second second second	- ctine	and the first of the second second second second second
Remarks: Could not auger past	12 inches o	due to comp	paction	
				· 11
		· ·		
				Section and the second second
			and a second second	and the second second second second second second

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Sampling Point: WSU0043e.w

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

Tree Stratum (Plot size: <u>20 × 30 ++</u>) 1. NOVE	% Cover	Species	nt Indicator ? Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:
2	不可能的现在分子			Total Number of Dominant Species Across All Strata:(B)
3				
5			- All March 199	That Are OBL, FACW, or FAC: 75% (A/B)
6	THE WAY AND A REAL	2403235353,4955		Prevalence Index worksheet:
7	terrest and		-	Total % Cover of: Multiply by:
8	0	= Total Co	over	OBL species x1 =
50% of total cover:	Constraint State American Street	Constrainty Street	association of the second	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 × 30 A+)			and the second se	FAC species x 3 =
1. none		Hardler		FACU species x 4 =
2.				UPL species x 5 = Column Totals: (A) (B)
3.		- Alexandra	-	
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8	0			3 - Prevalence Index is ≤3.0 ¹
	tor konstantik ekikeetsi (K	FARMAR AND	영양(1993) 2011년 12년 12년 12년 12년 12년 12년 12년 12년 12년	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: Herb Stratum (Plot size: 30 × 304+)	_ 20% of	total cove	er:	the second s
1. Lespedeza Coneata	20	N	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2 JUNCUS EFFUSUS	10	N	OBL	Definitions of Four Vegetation Strata:
3. Aruntinaria aigantea	15	N	FACW	
4. Dichanthelium auminatum	20	Y	FAL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of more in diameter at breast height (DBH), regardless of
5. Eupatorium capillifolium	10	N	FACU	height.
6. FUBUS arautus	20	Y	FAC	Sapling/Shrub - Woody plants, excluding vines, less
7. Paspalin dissectum	30	Y	OBL	than 3 In. DBH and greater than 3.28 ft (1 m) tall.
8	2010/07/07/07/07/07/07			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	1.0.6.6.0.0.0.1 1.0.4.0.0.0.0.0.0		in and a start of the start of	height.
12	175	= Total Co	and and the second s	and the second
50% of total cover: 67.				and the second
Woody Vine Stratum (Plot size: 30 x 30 ft.)	<u> </u>	total cove	: <u>- 6- 0</u>	
1. NONC				
2.	The second s	To de transmissiones care		
3.	and the second second			
4.				
5	orte constant			Hydrophytic
		= Total Co	over	Vegetation
50% of total cover:	ind to double whether which			Present? Yes No
			andri radiona di Mga sa sa sa sa	
Remarks: (If observed, list morphological adaptations below			104-10-13	

US Army Corps of Engineers

ampling Point	NSUD	04	Se	-W
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color (moist) % Color (moist) % Type ¹ Loc ² Texture Remarks 1 - 3 10 Y # 3/1 100 SL SL SL 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Color (moist) SL 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Color (moist) SL 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Color (moist) SL 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Color (moist) SL 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Color (moist) SL 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Color (moist) SL 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Color (moist) SL 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Klastice 10 K 2 - 12 10 Y # 4/1 90 10 Y # 4/5 10 Y # 4/5 10 Y # 4/5 2 - 12 10 Y # 4/5 10 Y # 4/5 10 Y # 4/5 10 Y #	Depth			epth neede				or contirm	the absence of in	(dicators)
1-3 10 YF. 3/1 100 SL 5-12 10 YF. 4/1 90 10 YF. 4/5 10 A 5L 5-12 10 YF. 4/1 90 10 YF. 4/5 10 C A 5L 5-12 10 YF. 4/1 90 10 YF. 4/5 10 C A 5L 5-12 10 YF. 4/1 90 10 YF. 4/5 10 C A 5L 5-12 10 YF. 4/1 90 10 YF. 4/5 10 C A 5L 5-12 10 YF. 4/1 90 10 YF. 4/15 10 10 YF. 4/15 10	inchas			Color		Features %	Type	Loc ²	Texture	Remarks
ype: 10 YE 4/1 90 10 YE 4/5 10 C M SL ype: 0-12 10 YE 4/1 90 10 YE 4/5 10 C M SL ype: 0-12 10 YE 4/1 90 10 YE 4/5 10 C M SL ype: 0-12 10 YE 4/1 90 10 YE 4/5 10	V-mountain - 20 - a door /*	A second at move of the protect, shall be	pander, and available of the party		((1)0131)		1105		North Contractor (States and States)	
Ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. *Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils*: Histos (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Black Histic (A3) Dopleted Matrix (F3) Reduced Vertic (F18) (outside MLRA 150A; F) Stratified Layers (A5) Dopleted Matrix (F3) Anomalous Bright Loamy Soils (F19) (LRR P, S, T, U) Stratified Layers (A5) Depleted Matrix (F3) Redox Dark Surface (F7) Muck (A9) (LRR P, T, U) Depleted Matrix (F3) Redox Depressions (F8) Muck (A9) (LRR P, T, T) Depleted Matrix (F3) Red Parent Material (TF2) Muck (A9) (LRR P, T, T) Depleted Cork (F11) (MLRA 151) Red Parent Material (TF2) Muck (A9) (LRR P, T) Depleted Orbic (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Depleted Orbic (F13) (LRR P, T, U) Sandy Redx (A15) Sandy Mucky Mineral (S1) (LRR O, S) Deta Orbic (F13) (MLRA 150A, 150B) Sandy Redx (S5) Sandy Gleyed Matrix (S4) Reduced Vertic (F13) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Sandy Redx (S5)	<u>u</u>	A CONTRACTOR OF THE OWNER OF THE OWNER OF	0.0	Lova	11/5	10		10	51	
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Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type:				section from a state of the			Car Barger Stranger March		unless	disturbed or problematic.
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Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (if observed): Type: Depth (inches): emarks:				F	Piedmont Floo	odplain So	oils (F19)	(MLRA 14	9A)	1201
estrictive Layer (if observed):	Contraction and a second	A REAL PROPERTY AND A REAL		ЦA	Inomalous Bi	right Loan	ny Soils (F20) (MLR	A 149A, 153C, 15	130)
Type:	and the second s	the state of the second s	and the second se				Contraction and a		Store in the second second	
Depth (inches): Hydric Soll Present? Yes / No emarks: Image: Solid Present? Yes / No									Section Provides	\sim
emarks:	Contraction of the second states of the second	Collins of the State of the State of the State							Hydric Soll Pr	esent? Yes 🔨 No
			an an ann an	an inclusion			n in the second s	開発になったの	THE REAL PROPERTY.	And all the state of the state of the state of the state of the
* could not auger below 12 inches due to compaction	THE OWNER WATER OF THE									
	*	covid v	not a	uger	below	12	Inc	nes d	ve to	compaction
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Wetland data point wsuo043e_w facing east.



Wetland data point wsuo043e_w facing northeast.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP City/C	County: <u>SUFFOIK CO</u> Sampling Date: <u>9/8/16</u> State: <u>VA</u> Sampling Point: <u>WSu0043F-</u> W
Applicant/Owner:	State: V R Sampling Fount.
Investigator(s): ESI, LP, LJ Section	on, Township, Range: <u>NONE</u>
Landform (hillslope, terrace, etc.): <u>terrace</u> Local	relief (concave, convex, none): +12-T Slope (%): 0 0
Subregion (LRR or MLRA): LRFT Lat: 36.78	93 Long: - (6, 35411 Datum: W0384
Soil Map Unit Name: Tomotley loam	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soll, or Hydrology naturally problem.	이번 것 같은 것 같
SUMMARY OF FINDINGS – Attach site map showing san	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes <u>No</u>
Remarks: Rain within 24 hours NCWAM: Hardwood Flat	
HYDROLOGÝ	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apoly)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR	
Saturation (A3)	
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2)	
Drift Deposits (B3)	Geomorphic Position (D2)
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
Iron Deposits (B5) Under (Explain In Remark	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No K Depth (inches): N	J/A
Water Table Present? Yes No K Depth (inches): 2	20
Saturation Present? Yes X No Depth (inches): SVY	Face Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evicus inspections), if available:
Describe Recorded Data (stream gauge, monitoring weil, aenai protos, pre	
Remarks:	
Terraria.	
	and the second

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Sampling Point: WS40043F-W

	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30ft × 30ft)	% Cover			Number of Dominant Species
1. Liquidambar styracifiva	40	yes	FAC	That Are OBL, FACW, or FAC: (A)
2 Pinus taeda			FAC	Total Number of Dominant
3 Acer rubrum	20	yes	FAC	Species Across All Strata: (B)
4		1		Percent of Dominant Species
5			-	That Are OBL, FACW, or FAC: (A/B)
6.		and a second	and the second second	a to fail and the basel
7.	Section.	a factoria a		Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
and the second	60	= Total Co	ver	OBL species x1 =
50% of total cover: 30				FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30F+ × 30F+)				FAC species x 3 =
1. Ligustrum sinense	10	Y	FAC	FACU species x 4 =
2 Pinus taeda	E	N	FAC	UPL species x 5 =
	5	N	FAC	Column Totals: (A) (B)
3. Liquidambar styracitiva	10	V	FAC	
4. Acer subrum	10		Avertal adult Sile	Prevalence Index = B/A =
5	Constantine and a second			Hydrophytic Vegetation Indicators:
6		「そうしん」と言語になったのであるというです。		1 - Rapid Test for Hydrophytic Vegetation
7	Charles and	Con Marine		2 - Dominance Test is >50%
8		Contraction of the second		□ 3 - Prevalence Index is ≤3.0 ¹
	30	The state of the ball of the	entering and a section	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 15	20% of	total cover	0	
Herb Stratum (Plot size: 30F+ x 30F+)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea	15	Y	FACW	be present, unless disturbed or problematic.
1. Arundinaria gigantea 2. Demundastrum cinnamemeu	010	Y	FACH	Definitions of Four Vegetation Strata:
3.				- Inter the back and ution times 2 in (7.6 cm) or
4.		Constant and the second se		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
	1947 - 온영하는 1948년 87			height.
5				Sapling/Shrub - Woody plants, excluding vines, less
6.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11.		2 - AL MENTAL POST OF A 99 5		height.
12	The second			
the second s	25	= Total Co	ver	
50% of total cover: 12.5			PERMIT OF A PROPERTY OF	
Woody Vine Stratum (Plot size: 30F+ x 30F+)		10101 00 401	Segment of a	
ALL CONTRACT AND A REAL PROPERTY AND A REAL PR				
1. <u>NONE</u> ,	Constant real	Contraction of the	The state of	
2	1000 00 000 00 00 00 00 00 00 00 00 00 0	T REAL TRACT	And substances	
3	Treasure in the	and services		
4	Trees respired	The Part Start	HARLING CONTRACTOR	
5			Salat and a la	Hydrophytic
	0	= Total Co	ver	Vegetation Present? Yes X No
50% of total cover:	20% of	total cover	C	
Remarks: (If observed, list morphological adaptations belo	9W).			

SOIL	s	OI	L
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Depth	Matrix		1000		Redox	Feature	s	and the second		ce of indicators.) Remarks
(inches)	Color (moist)	%	Col	lor (mo	pist)	%	Type'	Loc	Texture	Kemarks
0-7	10YR 3/2					-	-		SE	A second s
1-20	IOYE HI	90	101	(R	4/5	10	C	M	51-	
			100		1000	and a galarian Arrange and			- Alberta and	The second secon
	And		Supplied a	1		The second second	- interest of	All and a set		 An provide contract of the second seco
	All And the second	terre and a second	2. (1996) - 1996	i de la color Contractorio				Alexandras North	• <u>200</u> 1222020	
	A CONTRACTOR OF THE OWNER	a te Nel (Base month)	Alexandres Alexandres Alexandres			-	-			
Type: C=C	oncentration, D=D	epletion, RM=	Reduc	ced Ma	atrix, MS	=Maske	d Sand Gr	ains.	² Locatio	on: PL=Pore Lining, M=Matrix.
lydric Soil	Indicators: (Appl	licable to all	LRRs,	unles	s other	wise no	ted.)			ors for Problematic Hydric Solls ³ :
Histoso							ice (S8) (I			m Muck (A9) (LRR O) m Muck (A10) (LRR S)
	pipedon (A2)		H) (LRR S, (F1) (LRF		T Re	duced Vertic (F18) (outside MLRA 150A,E
	listic (A3) en Sulfide (A4)		H			d Matrix		(0)	L Pie	dmont Floodplain Soils (F19) (LRR P, S, T
	d Layers (A5)		X		ted Mat		· -/			omalous Bright Loamy Soils (F20)
Organic	Bodies (A6) (LRR					Surface (MLRA 153B)
	ucky Mineral (A7) (H			k Surfac				d Parent Material (TF2) ry Shallow Dark Surface (TF12)
	resence (A8) (LRR uck (A9) (LRR P, T		H		(F10) (L	ssions (F RR (I)	-6)			ner (Explain in Remarks)
	d Below Dark Surf						(MLRA 1	51)		
Contraction Contractions of Articipation	ark Surface (A12)		1	Iron-I	Mangan	ese Mas	ses (F12)	(LRR O, F	°, T) ³ ∣	ndicators of hydrophytic vegetation and
	Prairie Redox (A16)		*) []				(LRR P, T			wetland hydrology must be present, unless disturbed or problematic.
	Mucky Mineral (S1)		H				LRA 151) (MLRA 1			unless distanced of problematic.
	Gleyed Matrix (S4) Redox (S5)		H				Soils (F19)			
	d Matrix (S6)		Π	Алоп	nalous E	right Loa	my Soils	(F20) (ML	RA 149A, 1	53C, 153D)
Dark Si	urface (S7) (LRR P				Sec. 1		and the second			And Andrew Westmann and Andrew Street and Andr
Restrictive	Layer (if observe	d):								
Restrictive Type:			<u></u>						Hydric	Soll Present? Yes X No
Restrictive Type: Depth (ir	Layer (if observe						and an a far star		Hydric	Soll Present? Yes X No
Restrictive Type: Depth (ir									Hydric	Soll Present? Yes <u>No</u> No
Restrictive Type: Depth (ir									Hydric	Soll Present? Yes <u>No</u> No
Restrictive Type: Depth (ir									Hydric :	Soll Present? Yes <u>No</u> No
Restrictive Type: Depth (ir									Hydric	Soll Present? Yes <u>No</u> No
Restrictive Type: Depth (ir							<u></u>		Hydric :	Soll Present? Yes <u>No</u> No
Restrictive Type: Depth (ir									Hydric	Soll Present? Yes <u>No</u>
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Restrictive Type: Depth (ir									Hydric :	Soll Present? Yes <u>No</u>
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Restrictive Type: Depth (ir									Hydric :	Soll Present? Yes <u>No</u> No
Restrictive Type: Depth (ir									Hydric :	Soll Present? Yes X No



Wetland data point wsuo043f_w facing northeast.



Wetland data point wsuo043f_w facing east.

E I HEI HIT	City/County SULF	OK CO. Sampling Date: 9/8/16
Project/Site: <u>ACP</u> Applicant/Owner: <u>Dominion</u>	City/county	State: VA Sampling Point: WSU0043_
	J Section, Township, Rang	
Investigator(s): <u>LOL</u> , <u>LF</u> , <u>E</u>	CALL R Local relief (concave, con	nvex, none): flat Slope (%): 0-7
	Lat 3/2 7891 3	ng: -76-53412 Datum: W658
Subregion (LRR or MLRA):	Lat. <u>26-70463</u> Lo	NWI classification: N/A
Soil Map Unit Name: Tomotley		
	te typical for this time of year? Yes X No	
Are Vegetation, Soil, or Hydro		ormal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydro	ST S	ded, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attac	h site map showing sampling point loo	cations, transects, important features, etc.
Hydrophytic Vegetation Present? Y Hydric Soil Present? Y	res No X	
easemen+		
HYDROLOGY	and the second second second	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators:		Secondary indicators (minimidant of the region
Policy of the Handson Aminimum of and in man	lead, aback all that apply	Construction of the second
Primary Indicators (minimum of one is requ		Surface Soil Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U)	C. S. L. M. Market and A. Market and Annual Methods and Annual An
The second second sector of the second s	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1)	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16)
Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1)	Aquatic Fauna (B13) Ari Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) Dry-Season Water Table (C2)
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 Surface Water (A1) High Water Table (A2) Saturation (A3) Water Marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) 	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7)	 Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
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 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) 	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks)	 Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3)
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 Imagery (B Water-Stained Leaves (B9) Field Observations:	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37)	 Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37)	 Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5)
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No <u>></u> Depth (inches): <u>N/A</u> No <u>></u> Depth (inches): <u>>5</u>	 Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2) Shallow Aquitard (D3) FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No <u>Depth (inches): <u>N/A</u> No <u>Depth (inches): <u>>5</u> Weth</u></u>	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) 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) and Hydrology Present? Yes No
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No <u>></u> Depth (inches): <u>N/A</u> No <u>></u> Depth (inches): <u>>5</u>	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) 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) and Hydrology Present? Yes No
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Gaturation Present? Yes Cincludes capillary fringe) Describe Recorded Data (stream gauge, m	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No Depth (inches): No Depth (inches) (inch	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) 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) and Hydrology Present? Yes No if available:
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Saturation Present? Yes Gaturation Present? Yes Cincludes capillary fringe) Describe Recorded Data (stream gauge, m	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No Depth (inches): No Depth (inches) (inch	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) 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) and Hydrology Present? Yes No if available:
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Describe Recorded Data (stream gauge, m	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No <u>Depth (inches): <u>N/A</u> No <u>Depth (inches): <u>>5</u> Weth</u></u>	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) 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) and Hydrology Present? Yes No if available:
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Describe Recorded Data (stream gauge, m	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No Depth (inches): No Depth (inches) (inch	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) 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) and Hydrology Present? Yes No if available:
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Describe Recorded Data (stream gauge, m	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No Depth (inches): No Depth (inches) (inch	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) 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) and Hydrology Present? Yes No if available:
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 Imagery (B Water-Stained Leaves (B9) Field Observations: Surface Water Present? Yes Water Table Present? Yes Saturation Present? Yes Describe Recorded Data (stream gauge, m	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Living Roots (Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils (C6) Thin Muck Surface (C7) Other (Explain in Remarks) 37) No Depth (inches): No Depth (inches) (inch	Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) C3) 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) and Hydrology Present? Yes No if available:

•

Sampling Point. WSUD043.

VEGETATION	(Four Strata)	 Use scientific nam 	es of plants.
------------	---------------	--	---------------

200		Contraction of the second second	t Indicator	Dominance Test worksheet:		STORE T
Tree Stratum (Plot size: 30F+ x 30F+	% Cover	another the second wa	? Status	Number of Dominant Species 2 That Are OBL, FACW, or FAC:	2	(A)
2				Total Number of Dominant L Species Across All Strata:	f	(B)
3				-	-	(-)
5	and the second se	and the second second second second		Percent of Dominant Species	D	(A/B)
6.					na sella	
7.				Prevalence Index worksheet:		
8				Total % Cover of: Multip	DIV DV:	-
A STREET, STRE	0	= Total Co	over	OBL species x1 =	50	-
50% of total cover:	20% of	total cove	er:	FACW species 40 x 2 =		
Sapling/Shrub Stratum (Plot size: 30f+ x 30 (4)	ward office the			FAC species $x_3 = $ FACU species $85 \times 4 = $	340	-
1. Salix nigra	5	Y	OBL	A STATE AND A STATE AN	-10	÷.
2		Service and		UPL species x 5 = Column Totals:(A)	425	(B)
3.		The Lot			Constraints of 1	_ (¤)
4.			a series and a series	Prevalence Index = $B/A = \frac{3}{2}$,	2+	<u> </u>
5				Hydrophytic Vegetation Indicators:	observer se	1.1.1
6.				1 - Rapid Test for Hydrophytic Vege	etation	
7				2 - Dominance Test is >50%		
8.				3 - Prevalence Index is ≤3.0 ¹		
		= Total Co		Problematic Hydrophytic Vegetation	n' (Explai	in)
50% of total cover: 7.	5 20% of	total cove	r:	and the state of the state of the state		
Herb Stratum (Plot size: 30 ft x 30 ft)				¹ Indicators of hydric soil and wetland hy	drology r	nust
1. Lespedeza cuneata	40	Y	FACU	be present, unless disturbed or problem		Cardin d
2. Arundinaria gigantea		N	FACIN	Definitions of Four Vegetation Strata	:	
3. Eupatorium capillifolium	15	N	FACU	Tree - Woody plants, excluding vines, 3	3 in. (7.6	cm) or
4. Paspalum notatum	30	4	FALL	more in diameter at breast height (DBH)), regardl	ess of
5. Bidens frondosa	30	Y	FACW	height.		
6			A. M. Martin	Sapling/Shrub - Woody plants, exclud	ing vines	less
7.				than 3 in. DBH and greater than 3.28 ft	(1 m) tall	
8.			And the second second	Herb - All herbaceous (non-woody) pla	nts, rega	rdless
9.	ALC: NO. LODGE SERVICES AND ALC: N			of size, and woody plants less than 3.28	3 ft tall.	
10				Woody vine - All woody vines greater	than 3.28	B ft in
11.	STAR OF STREET			height.		
12.	a grande part al.			a state of the second se		
	125	= Total Co	over		All only the s	112.55 (1969) 14.555 (1979) 14.555 (1979)
50% of total cover: 62	.5 20% of	total cove	1: 25			
Woody Vine Stratum (Plot size: 20 4+ x 30 4-)						
1. NOVIE	a and a later	ALL BURNES	in the shift			
2						
3						
4						
5				Hydrophytic		
	0	= Total Co	ver	Vegetation	×	
. 50% of total cover:	Charles the same data with a	total cove		Present? Yes No.	<u>×</u>	
	Annual States and	total cove			Respectively.	11, 11, 11, 11
Remarks: (If observed, list morphological adaptations bel	uw).					
roadside						

S	OI	L
-	~	_

Depth (inches)	Matrix	and the second second	Redo	x Features	and there		the absence of	Remarks	
- Museum distance interest in a result in	Color (moist)	in the accent spendt undeficit skratur its	Color (moist)	_%	Type'			and an and set of the state of the set of the set of the set of the	
1-5	10YB 3/2							gravel layer	
ydric Soll Histoso Histic E Black H Hydrog Stratifie Organic 5 cm M Muck P 1 cm M Depleta Thick D Coast F Sandy I Sandy I Strippe	pipedon (A2) fistic (A3) en Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR F ucky Mineral (A7) (L resence (A8) (LRR C uck (A9) (LRR P, T) ed Below Dark Surface Oark Surface (A12) Prairie Redox (A16) (Mucky Mineral (S1) (Gleyed Matrix (S4) Redox (S5) d Matrix (S6)	cable to all LRR P, T, U) RR P, T, U) J) ce (A11) (LRR 0, S)	s, unless other Polyvalue Be Thin Dark Su Loamy Mucky Loamy Gleye Depleted Mai Redox Dark S Depleted Dar Redox Depre Marl (F10) (L Depleted Oci Iron-Mangan Umbric Surfa Delta Ochric Reduced Ver Piedmont Fic	wise note low Surface (S9) y Mineral (ed Matrix (trix (F3) Surface (F rk Surface essions (Fl .RR U) hric (F11) ese Mass- loce (F13) ((F17) (ML tric (F18) (podplain S	ed.) ee (S8) (L (LRR S, F1) (LRF F2) 6) (MLRA 1 es (F12) (LRR P, T RA 151) MLRA 15 oills (F19)	RR S, T, U T, U) t O) 51) LRR O, P, ; U) 50A, 150B) (MLRA 14	Indicators fo Indicators fo I cm Mu 2 cm Mu Reduced Piedmor Anomalo (MLRA Red Par Very Shi Other (E T) ³ Indica wetla unles	L=Pore Lining, M=Matri or Problematic Hydric ck (A9) (LRR O) ck (A10) (LRR S) I Vertic (F18) (outside I it Floodplain Solls (F19) ous Bright Loamy Solls (A 153B) ent Material (TF2) allow Dark Surface (TF1 xplain in Remarks) tors of hydrophytic vege nd hydrology must be p as disturbed or problema (153D)	Soils ³ : MLRA 150A,E (LRR P, S, T F20) 2) tation and resent,
estrictive	urface (S7) (LRR P, Layer (if observed)):						an and a second s	~
type:	and the second						Hydric Soil F	resent? Yes	No A
Depth (in	ncnes):		Service statistics		al es el la com 19 de la companya 19 de la companya		A STREET OF COMPANY		a find and against
lemarks:	nches):								
temarks:		ivger b	elow E	Sincl	res	due t	-o grav	el layar a	long
emarks:	ild not a	ivger b	elow E	5 incl	res	dve t	ro grav	el lagar a	lony
emarks:	ild not a	ivger b	elow E	5 incl	res	dve t	o grav	el lagar a	lony
emarks:	ild not a	ivger b	elow E	5 incl	res	due t	ro grav	el lagar a	lony
emarks:	ild not a	ivger b	elow E	5 incl	res	dve t	ro grav	el lagar a	lony
emarks:	ild not a	ivger b	elow E	5 incl	res	dve t	ro grav	el layar a	long
Remarks:	ild not a	ivger b	elow E	5 incl	res	dve t	ro grav	el lagar a	lony
Remarks:	ild not a	ivger b	elow E	5 incl	res	dve t	ro grav	el lagar a	lony
temarks:	ild not a	ivger b	elow E	5 incl	res	dve t	ro grav	el lagar a	lony



Upland data point wsuo043_u facing east.



Upland data point wsuo043_u facing north.

WETLAND DETERMINATION DATA					
Project/Site: ACP	_ City/County:	18801	12	Sampling Date: _	8/2/16
Applicant/Owner: DOMINION			State: VM	Sampling Point:	NSU0018F_U
ovestigator(s): ESI-S, BILLION, IL, MUY PHILE	Section, Township	, Range: _	NA		Same and the second second
andform (hillslope, terrace, etc.): DePression	Local relief (conca	ve, convex	none): (000	CAVE Slop	e (%): <u>0-2</u>
Subregion (LRR or MLRA): LRK Lat: 36	.78625	Long: _	-76.530	72 Dat	um: <u>~165 8</u>
Soil Map Unit Name: TOMO +164 (USM		/		ification: <u>P+C</u>)
Are climatic / hydrologic conditions on the site typical for this time of	year? Yes V	No	(If no, explain in	Remarks.)	/
Are Vegetation, Soil, or Hydrology significan		Are "Norma	I Circumstance	s" present? Yes	No
Are Vegetation, Soil, or Hydrology naturally	problematic?	(If needed,	explain any ans	wers in Remarks.)	
SUMMARY OF FINDINGS - Attach site map showing	ng sampling poi	int locati	ons, transed	sts, important fe	atures, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	within a W		Yes _	No	-
Remarks: NCWAM: Bottomland havdwood	solest		and the second se		
NCWAIN: DITORT					
IYDROLOGY			Secondary In	licators (minimum of	two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required: check all that appl	v)		CO COMPANY AND AND ADDRESS OF ADDRESS OF ADDRESS ADDRE	oil Cracks (B6)	Contraction of the second
Surface Water (A1)		TSNI TRAM		Vegetated Concave	Surface (B8)
High Water Table (A2) Marl Deposits (E			Contraction and the state of the second s	Patterns (B10)	
Saturation (A3)				n Lines (B16)	
	pheres along Living F	Roots (C3)	The second se	on Water Table (C2) Burrows (C8)	
Sediment Deposits (B2) Presence of Rec Drift Deposits (B3) Recent Iron Rec	fuction in Tilled Soils	(C6)		n Visible on Aerial Im	nagery (C9)
Algal Mat or Crust (B4)			A REAL PROPERTY AND REAL PROPERTY AND A REAL P	hic Position (D2)	
Iron Deposits (B5) Other (Explain in	n Remarks)		CONTRACTOR AND ADDRESS OF	Aquitard (D3)	C.C. S. S.S.
Inundation Visible on Aerial Imagery (B7)			 A second state of the second state state 	tral Test (D5) m moss (D8) (LRR T	· m
Water-Stained Leaves (B9)	And Article and Article	and the second		m moss (Do) (LKK I	,0)
Field Observations: Surface Water Present? Yes No Depth (inch	ies): NA				/
	nes): 720			1/	
Saturation Present? Yes No Depth (inch		Wetland	Hydrology Pre	sent? Yes	No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	otos, previous inspec	tions), if av	ailable:	ality and the solution of the	
				and a second	an a
Remarks:	an aktor i ser far her al a		n yn yn yn men	Contraction of the second s	and the second second
the second s	kiya ang kabupatén ng k	William Constant	and the second second for		

Sampling Point: WS40018 f. w

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

VEGETATION (Four Strata) – Ose scientific flar	Strangen and a second second	Colored Concerns of the	and an	Samping Fond
Tree Stratum (Plot size: 308+X308+) 1. NCEY YUDIUM		Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: (A)
2. Liquidambar Styraciflua	20	Y	FAC	Total Number of Dominant
3. Nyssa sylvatica	10	N	FAC	Species Across All Strata: (B)
4				Percent of Dominant Species 10090 (A/B)
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	60	= Total Cov	ver	OBL species x1 =
50% of total cover: 30	20% of	total cover	: 12	FACW species x 2 =
Casting Charles Distance 3054 X 3054		\checkmark	FAC	FAC species x 3 = FACU species x 4 =
1. Liquidambar styracisting			FAC	UPL species x5 =
2	A MAR SOLLARD	Sector Sector		Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is $\leq 3.0^{1}$
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 2.5	_ 20% of	total cover	-	
Herb Stratum (Plot size: 305+X205+) 1. JUNCUS EFFUSUS	(0	Y	OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of height.
5				
6				Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10.				Woody vine – All woody vines greater than 3.28 ft in
11		132302		height.
12				
	A CARDON AND THE STREET	= Total Cov	\sim	[10] M. M. Markan, C. M. M. Karaka, and A. Markan, and A. Markan, and A. Markan, "Phys. Rev. Lett. 10, 1000 (1997).
50% of total cover:	_ 20% of	total cover	d	
Woody Vine Stratum (Plot size: 305+)(305-1)	C	V	FAC	
1. Smilat roundisolia			FIL	
2	na ana ana ang	A CE AND AND A	The second second	
			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
4			(all she she she she	11. deservation
5	5	= Total Co	ver .	Hydrophytic Vegetation
50% of total cover: 2.	Statute and a state of the state	total cover	Medilities of the Chi	Present? Yes No
Remarks: (If observed, list morphological adaptations below	and a prophylicity and			

C	n	1
Э		-

Sampling Point: WSUDD18f.W

	cription: (Describe t	to the dep				or confirm	the absence of ir	idicators.)
Depth (inches)	Matrix Color (moist)	%	Color (moist)	Features %	Type'	Loc ²	Texture	Remarks
0-8	104B 3/2	90	104R4/6	10	C	M	SL	
8-20	104R6/1	95	104R GH	5	C	m	SL	
0	1001100/			and the second second				
and the second second		- The second second		The second second				
	A standard and standard date				1111	Constant of		
		-	A state of the second second second		-	in the second se	100 100 TO	
1992 - 1992 - 1993 - 19	A Contraction of the second	The Conversion		-		AND THE PARTY OF		
and a second			Deduced Methic MS	-Maskad		aine	² Location: PL	Pore Lining, M=Matrix.
Type: C=C Hydric Soil	oncentration, D=Dep Indicators: (Application)	able to all	LRRs, unless other	wise not	ed.)	ans.	Indicators for	Problematic Hydric Soils ³ :
Histoso			Polyvalue Be			RR S, T, U	1 cm Muck	
	pipedon (A2)		Thin Dark Su				2 cm Muck	(A10) (LRR S)
	listic (A3)		Loamy Mucky			20)	Reduced V	/ertic (F18) (outside MLRA 150A,B Floodplain Soils (F19) (LRR P, S, T)
	en Sulfide (A4) ed Layers (A5)		Depleted Mal		F2)			s Bright Loamy Soils (F20)
	Bodies (A6) (LRR P	T. U)	Redox Dark S	the second s	6)		(MLRA 1	153B)
	ucky Mineral (A7) (LF							t Material (TF2)
and the second sec	resence (A8) (LRR U)	Redox Depre		8)			ow Dark Surface (TF12) blain in Remarks)
	uck (A9) (LRR P, T) ed Below Dark Surface	a (A11)	Marl (F10) (L Depleted Oct		(MLRA 1	51)		
	ark Surface (A12)		Iron-Mangan				T) ³ Indicator	rs of hydrophytic vegetation and
	Prairie Redox (A16) (M	ILRA 150					wetland	hydrology must be present,
	Mucky Mineral (S1) (I	RR O, S)	Delta Ochric				unless	disturbed or problematic.
	Gleyed Matrix (S4) Redox (S5)		Reduced Ver				9A)	
	d Matrix (S6)		Anomalous E	Bright Loa	my Soils	(F20) (MLR.	A 149A, 153C, 15	3D)
Dark S	urface (S7) (LRR P, S							All the second second second second
	Layer (if observed)						No. Acht	/
Type:							Hydric Soil Pro	esent? Yes No
an and the set of the	nches):		<u></u>		1.4 1.9 13 D.C.	Anno de servit	Tiyane contra	
Remarks:								
Sec. Sec.								



Wetland data point wsuo018f _w facing northeast.



Wetland data point wsuo018f_w facing southeast.

Photo Sheet 1 of 2

WETLAND DETERMINATION DATA FORM	
ACP	ounty: <u>MFFOIK</u> Sampling Date: <u>11/3/15</u>
	State: VA Sampling Point: WSU0018e-W
Applicant/Owner: DUMINIUM	
	n, Township, Range: NA
Landform (hillslope, terrace, etc.): POWONINE EOOMINT Local re	
Subregion (LRR or MLRA): LRRT Lat: 36.7	184483 Long: -76, 520769 Datum: WGS94
Soil Map Unit Name: Torhunta loam	NWI classification: PEM
Are climatic / hydrologic conditions on the site typical for this time of year? Ye	es X No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed	
Are Vegetation, Soil, or Hydrology naturally problemat	
SUMMARY OF FINDINGS – Attach site map showing samp	
Hydrophytic Vegetation Present? Yes X ? No	
Hydrophytic Vegetation Present? Yes? No Hydric Soil Present? YesNo	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes <u>No</u>
Remarks:	
powerline easement	
POWERTING EASETTERT	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR	U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odor (C	1) Moss Trim Lines (B16)
Water Marks (B1)	
Sediment Deposits (B2) Presence of Reduced Iron	
Drift Deposits (B3) Recent Iron Reduction in T	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	J
Surface Water Present? Yes <u>No</u> Depth (inches):	
Water Table Present? Yes No Depth (inches):	
Saturation Present? Yes <u>No</u> Depth (inches): <u>(</u> (includes capillary fringe)	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previ	ious inspections), if available:
Remarks:	

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20N 20-C+	Absolute	Dominant		Dominance Test worksheet:
ree Stratum (Plot size: <u>30X30ft</u>) NONE				Number of Dominant Species 3 (A)
				Total Number of Dominant Species Across All Strata: (B)
				Percent of Dominant Species (A/B That Are OBL, FACW, or FAC: (A/B
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
				OBL species x 1 =
		= Total Cov	er	FACW species x 2 =
50% of total cover:	20% of	total cover:		FAC species x 2 =
ling/Shrub Stratum (Plot size: 30X307)				FACU species x 4 =
none				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				V2 - Dominance Test is >50%
				$3 - \text{Prevalence Index is } \le 3.0^1$
	0 :	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:				
<u>b Stratum</u> (Plot size: <u>30×30F4</u>) Saccharum giganteum	20	N	THC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
	40	Y.	FACIN	Definitions of Four Vegetation Strata:
Arundinaria gigantea Rhexia sp.	5	N	FACWI	Demittoris of Pour Vegetation Strata.
-Urox (CP.	6	N	FACINI	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) o
and the second se	2.0	<u>N</u>	dandana and a second second	more in diameter at breast height (DBH), regardless of height.
	30	7	FAC	neight.
Setaria pumila	10	11	FAC	Sapling/Shrub - Woody plants, excluding vines, less
Jun CUS effusus	<u>40</u>	1	OBL	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		· · · ·		Herb - All herbaceous (non-woody) plants, regardless
				of size, and woody plants less than 3.28 ft tall.
-				Woody vine - All woody vines greater than 3.28 ft in
				height.
	150 =	= Total Cov	er	
50% of total cover:75	20% of	total cover:	30	
ody Vine Stratum (Plot size: 30 × 30 T1)				
none				
		Para de la competencia de la		
				Indee built
	0 -	= Total Cov	er	Hydrophytic Vegetation
50% of total cover:				Present? Yes No
		total cover:		
marks: (If observed, list morphological adaptations belo	<i>w</i>).			

Totle Description: (Description to the depth needed to document the indicator or confirm the absence of indicators.) Order (Indicators) Sector (Indicators) Open (Indicators) Sector (Indicators) Description Description Description	OIL								S	ampling Point:	NSUDOlbe.
Color (moist) % Color (moist) % Type' Loc'' Texture Remarks 0 - 0	Profile Desc	cription: (Describe	e to the depth	n needed to docum	nent the Ind	licator	or confirm	the absence o	f Indicato	ors.)	
Image: Section of the sectend of the section of the section of the section of th	Depth (inches)					Turnel	1002	Taxtura		Demarke	
Type: C = Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ³ Location: PL=Pore Lining, M=Matrix. Type: C = Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ³ Location: PL=Pore Lining, M=Matrix. Indicators (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ³ : Histos (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histos (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 2 cm Muck (A10) (LRR O) Histos (A1) Learny Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, E Hydrogen Sulfide (A4) Learny Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (LRR P, S, T Stratified Layers (A5) Depleted Datrix (F3) Anormalous Bright Learny Solis (F20) Organic Bodies (A6) (LRR P, T, U) Redox Depressions (F6) (MLRA 153B) Stratified Layers (A5) Depleted Datrix Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T, U) Redox Depressions (F8) Uvery Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mart (F10) (LRR U) Other (Explain in Remarks) Depleted Datrix Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Sandy Mucky				Color (moist)		туре	LUC			Kentarks	
Ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 2 cm Muck (A10) (LRR O) Histosol (A1) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, E Black Histic (A2) Loamy Gleyed Matrix (F2) Pledmont Floodplain Solis (F19) (LRR P, S, T Stratified Layers (A5) Depleted Datrix (F3) Anormalous Bright Learny Solis (F20) Organic Bodies (A5) (LRR P, T, U) Redox Depressions (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Redox Depressions (F6) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Matrix (F10) (LRR V) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Very Shallow Dark Surface (TF12) 1 cm Muck (A10) (LRR O, S) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) 1 cm Muck (A10) (LRR O,	2-70	1011		10100 50110		N	K				
ydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ⁹ : _ Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) _ Histo Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, E	0-20	TURMIT	99	IVIR ofle	0	<u>C</u>	FL	<u> </u>			
ydric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ⁹ : 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, E Hydrogen Sulfide (A4) Loamy Gieyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) 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 (F13) (MLRA 150A, 150B) sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark S											
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, E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Redox Depressions (F6) (MLRA 153B) 5 cm Mucky Almeral (A7) (LRR P, T, U) Redox Depressions (F6) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mart (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thino-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F18) (MLRA 150A, 150B) unless disturbed or problematic. Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) testrictive Layer (If observed): Type: Hydric Soil Present? Yes No <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ins.</td> <td></td> <td></td> <td></td> <td></td>							ins.				
Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, E Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T Organic Bodies (A6) (LRR P, T, U) Redox Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Depressions (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (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 wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) unless disturbed or problematic. Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type: Muck Soil Present? Yes No Type: Depth (inches): Hydric Soil Present? Yes No							RR S, T, U				
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) testrictive Layer (If observed): Type:	Histic Ep	pipedon (A2)									
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Type:	Black Hi	istic (A3) en Sulfide (A4)		Loamy Gleye	d Matrix (F2		0)	Piedmon	t Floodpla	ain Soils (F19)	(LRR P, S, T)
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic 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) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Hydric Soil Present? Yes No No	_ Organic	Bodies (A6) (LRR I	P, T, U)					(MLRA	153B)		
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and 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) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) stripped Matrix (S6) Jark Surface (S7) (LRR P, S, T, U) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) estrictive Layer (If observed): Type:						7)					
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type: Depth (inches):					• •						2)
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and vetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) nomalous Bright Loamy Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type:						10445	41	Other (E	xplain in F	(emarks)	
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) ness disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Yes No Type:	-		ce (A11)					T) ³ Indicat	ors of hyd	trophytic vegel	ation and
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type:			MLRA 150A)						-		
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Bestrictive Layer (If observed): Type: Hydric Soil Present? Yes No				a desta de la companya de la compa			0)		-		
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) 			,,,				A, 150B)				
Stripped Matrix (S6)Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)								9A)			
Itestrictive Layer (if observed): Type:	Stripped	Matrix (S6)							53D)		
Type:	Dark Sur	rface (S7) (LRR P,	S, T, U)								
Depth (inches): No	lestrictive l	Layer (if observed)	:								
	Type:									\vee	
temarks:	Depth (ind	ches):						Hydric Soll P	resent?	Yes	No
	emarks:										
											20



Wetland data point wsuo018e_w facing northwest.



Wetland data point wsuo018e_w facing west.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region City/County: SUFFOIK AUP Sampling Date: Project/Site: Applicant/Owner: DOMINION Sampling Point: WS40 0185-W State: Investigator(s): L . Ro Der NI Section, Township, Range: _ Landform (hillslope, terrace, etc.): Powerlin ement Local relief (concave, convex, none): _ NOND 520981 784244 36 Subregion (LRR or MLRA): Long: Datum: Lat: Soil Map Unit Name: NWI classification: Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation _____, Soil , or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes , or Hydrology _____ naturally problematic? Are Vegetation _____, Soil ____ (If needed, explain any answers in Remarks.) SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? No Is the Sampled Area Hydric Soil Present? No No____ within a Wetland? Wetland Hydrology Present? Yes No Remarks: disturbances. powerline silviculture HYDROLOGY Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) _ Surface Soil Cracks (B6) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8) High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10) Saturation (A3) Moss Trim Lines (B16) Hydrogen Sulfide Odor (C1) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Algal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) FAC-Neutral Test (D5) Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Depth (inches): Water Table Present? Depth (inches) Saturation Present? Wetland Hydrology Present? Depth (inches) No (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:

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		Gamping Fomt.
Tree Stratum (Plot size: 30×30F7)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
1. NON-C		Number of Dominant Species 3 (A)
2		Total Number of Dominant 2
3		Species Across All Strata: (B)
4		Percent of Dominant Species
5		Percent of Dominant Species
6		
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
U	= Total Cover	OBL species x 1 =
		FACW species x 2 =
50% of total cover:	20% of total cover:	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30×3077)	HO 11 :-11d	
1. PINUS taeda	TO Y FAC	FACU species x 4 =
2. Magnolia Wrginiana	S N FACH	UPL species x 5 =
3.		Column Totals: (A) (B)
4		
		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is $\leq 3.0^1$
Herb Stratum (Plot size: 30 × 30 × 100 of total cover: 37	75 = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover 3	- 520% of total cover: 19	Problematic Hydrophytic Vegetation (Explain)
Hash Stratum (Distainer 30 X30 FL)	207001101a1100001.	
1. Arundinaria gigantea	30 Y FACW	¹ Indicators of hydric soil and wetland hydrology must
1. In an an an an an anna	30 1 .104	be present, unless disturbed or problematic.
2. Rubus argutus	10 Y FAC	Definitions of Four Vegetation Strata:
3. Scirpus cyperinus	5 N OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4		more in diameter at breast height (DBH), regardless of
5		height.
6		Sapling/Shrub – Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10		
11		Woody vine – All woody vines greater than 3.28 ft in height.
		noight.
12	1.5	
07	_ <u>46</u> = Total Cover	
50% of total_cover:22	5 20% of total cover:	
Woody Vine Stratum (Plot size: 50% of total cover: 22)		A
1. NONE		
2		
3		
4		
5		Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations be		1
	/1	
US Army Corps of Engineers		Atlantic and Gulf Coastal Plain Region - Version 2.0

VEGETATION (Four Strata) - Use scientific names of plants

Sampling Point: WSU00185_W

ωμ

OIL								Sa	mpling Point:	WSU00185.
Profile Descript	ion: (Describe t	to the dept	h needed to docum	nent the Ir	ndicator	or confirm	the absence of			
Depth (inches)	Matrix Color (moist)	%	Color (moist)	K Features %	Type ¹	Loc ²	Texture		Remarks	
0-10 11	YR21.	100			Type		L		Remarks	
0-20	OV. K GL	qg	IOYR5/4	2	0	M				
<u>v</u> <u> </u>	o th off		1011 of u	2	C	1/1				
				<u> </u>						
Type: C=Conce	ntration, D=Depl	etion, RM=	Reduced Matrix, MS	=Masked	Sand Gr	ains.	² Location: PL			
ydric Soil Indi	cators: (Applica	able to all L	.RRs, unless other	wise note	d.)		Indicators for	r Problen	natic Hydric S	Solls ³ :
_ Histosol (A1)			Polyvalue Bel							
 Histic Epiped Black Histic 			Thin Dark Sui Loamy Mucky				2 cm Muc			
_ Hydrogen St			Loamy Gleye			. 0)				ILRA 150A,B) (LRR P, S, T)
Stratified La			X Depleted Mat		_/		Anomalou			
	ies (A6) (LRR P,		Redox Dark S	Surface (F6	6)		(MLRA			
	Mineral (A7) (LR		Depleted Darl				Red Pare			
	nce (A8) (LRR U) A9) (LRR P, T)		Redox Depres	•	5)		Very Shal		•	2)
	low Dark Surface	(A11)	Depleted Och		MLRA 1	51)	Other (Ex	plain in R	emarks)	
	Surface (A12)		Iron-Mangane				r) ³ Indicato	ors of hydr	ophytic veget	ation and
) Umbric Surfac			, U)	wetlan	d hydrolo	gy must be pr	esent,
	y Mineral (S1) (L	RR O, S)	Delta Ochric (unless	disturbed	or problemat	ic.
Sandy Gleye Sandy Redo	d Matrix (S4)		Reduced Vert							
Stripped Mat							149A, 153C, 1	53D)		
	(S7) (LRR P, S	, T, U)	_	J			,, .	,		
estrictive Laye	r (if observed):									
Туре:									11	
Depth (inches):						Hydric Soll Pre	esent?	Yes <u>X</u>	No
emarks:										
					5) -					



Wetland data point wsuo018s_w facing south.



Wetland data point wsuo018s_w facing east.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ALP	City/County: Suffolk Sampling Date: 5/2/16
Applicant/Owner: Dominion	State: VA Sampling Point: WSUD18f-w
Investigator(s): L. Roper, J. Benton	Section, Township, Range: NONC
Landform (hillslope, terrace, etc.):	Local relief (concave, convex, none): <u>none</u> Slope (%): <u>D-Z</u>
Landorm (missippe, terrace, etc.)	78843 Long: -76.53132 Datum: W6584
Soil Map Unit Name: Tomotley loam	
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes <u>No</u>
Remarks:	
NLWAM: Hardwood Flat	
HYDROLOGÝ	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	
Surface Water (A1)	
High Water Table (A2)	
Saturation (A3)	Odor (C1) Moss Trim Lines (B16)
	neres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Redu	ced Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3)	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	NA
Surface Water Present? Yes No Depth (inches	s):
Water Table Present? Yes No Depth (inches	
Saturation Present? Yes Ves Depth (inches (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial phot	os, previous inspections), if available:
Remarks:	
2	,

I

Sampling Point:

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

	Abaaluta	Deminen	4 Indiantas	Dominance Test worksheet:
Tree Stratum (Plot size: 30F+ x 30F+)			t Indicator <u>Status</u>	ACTION AND A CONTRACT AND
1. Liguidambar Styraciflua		Y	FAC	Number of Dominant Species 7 (A)
1. <u>E. Coroani Dan Stract root</u>	10	Ý	FAC	
2. Aver rubrum				Total Number of Dominant
3. Pinus taeda	10		FAC	Species Across All Strata: (B)
4				Percent of Dominant Species
5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				
				Prevalence Index worksheet:
7				Total % Cover of: Multiply by:
8				OBL species x 1 =
	35	= Total Co	over	
50% of total cover: 17.	5 20% of	total cove	er: 7	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30ft x 30ft)				FAC species x 3 =
1. ALEr rubrum	10	V	FAL	FACU species x 4 =
				UPL species x 5 =
2				Column Totals: (A) (B)
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				- Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	10	= Total Co	over	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 5	20% of	total cove	er: 2	
Herb Stratum (Plot size: 30F+ x 30F+)				Iterations of hudsin call and watland hydrology must
1. Arundinaria gigantea	312	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Arvhomaria giganica				•
2. Clethra alnifolia	10		FACW	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				than 5 m. Don and greater than 5.20 m (1 m) tak
8				Herb - All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Mandustra All woods vices greater than 2.29 ft in
11				Woody vine – All woody vines greater than 3.28 ft in height.
				neight.
12	HD			
		= Total Co	6	
50% of total cover: 2 C	20% of	total cove	er: 0	
Woody Vine Stratum (Plot size: 30ft x 30ft)		0.0		
1. Smilax rotundifolia	15	У	FAC	
2				
3		-		
4				
5.				Hydrophytic
	15	= Total Co	over	Vegetation
50% of total cover: 7.5				Present? Yes No
		total cove	ar	
Remarks: (If observed, list morphological adaptations belo	w).			

SOIL

Sampling Point: _____018f_w

Profile Desc	cription: (Describe	to the depth	needed to docum	nent the is	ndicator	or confirm	the absence	of indicators	5.)	
Depth	Matrix			x Features	-	1.2	Tester		Demode	
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²		k.	Remarks	
0-14	104231	100	7 6 4 0 61		0			mucky	preser	ue
14-20	IDTR31	9.0	7,51R 5/8	10	C	M	CL			
	-				-					
							21 11	PL=Pore Lin	ing MaMatrix	
Type: C=C	oncentration, D=Dep Indicators: (Applic	pletion, RM=1	Reduced Matrix, MS	S=Masked	Sand Gr	ains.		for Problem		
		cable to all L	Polyvalue Be			RRSTI		Muck (A9) (LR		
Histoso	pipedon (A2)		Thin Dark Su					Muck (A10) (L		
	istic (A3)		Loamy Muck				Redu	ed Vertic (F1	8) (outside M	LRA 150A,B)
	en Sulfide (A4)		Loamy Gleye				-	nont Floodplai		
	d Layers (A5)		Depleted Ma					alous Bright L	oamy Soils (F	20)
	Bodies (A6) (LRR I		Redox Dark					RA 153B) Parent Materia	I (TE2)	
	ucky Mineral (A7) (L resence (A8) (LRR I		Redox Depre					Shallow Dark		2)
	uck (A9) (LRR P, T)		Marl (F10) (L	•				(Explain in R		
Deplete	d Below Dark Surfa		Depleted Oc	hric (F11)						
	ark Surface (A12)		Iron-Mangan		• •	-		cators of hydr tland hydrolog		
	Prairie Redox (A16) (Mucky Mineral (S1)) Umbric Surfa					less disturbed		
	Gleyed Matrix (S4)	(LKK 0, 3)	Reduced Ve							
	Redox (S5)		Pjedmont Flo	odplain S	oils (F19) (MLRA 14	49A)			
Strippe	d Matrix (S6)		Anomatous I	Bright Loan	my Soils	(F20) (MLF	A 149A, 153	C, 153D)		
	urface (S7) (LRR P,						1			
	Layer (if observed):								
Type:							Hydric So	il Present?	Yes	No
	nches):						inguno do			
Remarks:										
1										



Wetland data point wsuo018f_w facing south.



Wetland data point wsuo018f_w facing east.

Photo Sheet 1 of 1

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
ACP	County: <u>SUFFOIK</u> Sampling Date: 11/3/15
Project/Site: City/	County: <u>CUTTOK</u> Sampling Date: <u>11/3/15</u>
Applicant/Owner: DOMINION	State: VA Sampling Point: W340018-4
Investigator(s): L. ROPLY, C. TOFETA Section	ion, Township, Range: NA
Landform (hillslope, terrace, etc.): Powerline easement Loca	I relief (concave, convex, none): <u>1000</u> Slope (%): 0 2
	784193 Long: - 76, 520667 Datum: W6.592
Soil Map Unit Name: Torhunta loam	NWI classification: UPland
Are climatic / hydrologic conditions on the site typical for this time of year?	res No (If no, explain in Remarks.)
Are Vegetation K, Soil K, or Hydrology significantly distu	rbed? Are "Normal Circumstances" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology naturally problem	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing sar	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	
Hydrophytic Vegetation Present? Yes <u>No</u> Hydric Soil Present? Yes No	Is the Sampled Area
Wetland Hydrology Present? Yes No	within a Wetland? Yes No
Remarks:	I
fill material Gr road	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Iro	
Drift Deposits (B3) Recent Iron Reduction in Algal Mat or Crust (B4) Thin Muck Surface (C7)	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remark	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches):	NA
Water Table Present? Yes No X Depth (inches):	
Saturation Present? Yes No Z Depth (inches): 2	Wetland Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	evious inspections), if available:
Remarks:	
remarks.	
Could not auger such 4" due	to acculat and
Could not auger past 4" due	in graver road
	0
× ·	
- 22	

21) VODEL	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30 X30-F</u> f	% Cover Species? Status	Number of Dominant Species 3 (A
2		
3		Total Number of Dominant Species Across All Strata: (B
4		
5		Percent of Dominant Species That Are OBL, FACW, or FAC:(0 0 1. (A
6		
7		Prevalence Index worksheet:
8		Total % Cover of:Multiply by:
	= Total Cover	OBL species x 1 =
50% of total cover;	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X30 TF)	FAC species x 3 =
1. Liguidambar styranit	1495 Y FAC	FACU species x 4 =
	5 Y FAC	UPL species x 5 =
3	-	Column Totals: (A) (A)
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6.		1 - Rapid Test for Hydrophytic Vegetation
7		\sim 2 - Dominance Test is >50%
8.		2 - Dominance Test is >50% 3 - Prevalence Index is $\leq 3.0^{1}$
	Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
- 50% of total cover:	20% of total cover: 2	
Herb Stratum (Plot size: $\frac{70\times30+7}{10\times30+7}$)		¹ Indicators of hydric soil and wetland hydrology musi
1 Eupaionant capilinonant	I FFLM	be present, unless disturbed or problematic.
2. Arundinaria gigantea	20 Y FAC	Definitions of Four Vegetation Strata:
3. Lespedeza cuneata	20 Y FACH	
4		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) more in diameter at breast height (DBH), regardless
5		height.
6		Sapling/Shrub - Woody plants, excluding vines, les
7.		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardle
9		of size, and woody plants less than 3.28 ft tall.
10		
11		Woody vine – All woody vines greater than 3.28 ft in height.
12		
	55 = Total Cover	
50% of total cover:	27.5 20% of total cover: 11	
Woody Vine Stratum (Plot size: 30 X30F4)		
1		
2.		
3		
4		
5		Hudrophytic
	= Total Cover	Hydrophytic Vegetation
50% of total cover	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptation	s below).	

Mars Alla V

	escribe to the dest	h needed to document the	Indicator or confirm ti	he absons	of Indicators	int: <u>WSM00</u>]@
6.000 C	Matrix	Redox Feature		ne absence	of indicators.)	
nches) Color (m		Color (moist) %	Type ¹ Loc ²	Texture	Remark	the second s
-4 10 YR	3/2 100			15	> 30 %	in cover o a
• • • • •				۰.	gravel prese	nt
					3 1	
			·			
ne: C=Concentration	D=Depletion RM-i	Reduced Matrix, MS=Masked	d Sand Crains	² Location:	PL=Pore Lining, M=M	latriv
		RRs, unless otherwise not	and a search of the second		for Problematic Hydr	
Histosol (A1)		Polyvalue Below Surfa			Auck (A9) (LRR O)	
Histic Epipedon (A2)		Thin Dark Surface (S9			Auck (A10) (LRR S)	
Black Histic (A3)		Loamy Mucky Mineral			ed Vertic (F18) (outsid	de MLRA 150A, B)
Hydrogen Sulfide (A	4)	Loamy Gleyed Matrix (ont Floodplain Soils (F	
Stratified Layers (A5)	Depleted Matrix (F3)			alous Bright Loamy Sol	
Organic Bodies (A6)		Redox Dark Surface (F	-6)	(MLI	RA 153B)	
5 cm Mucky Mineral		Depleted Dark Surface			arent Material (TF2)	
Muck Presence (A8)		Redox Depressions (F	8)		hallow Dark Surface (TF12)
1 cm Muck (A9) (LR		Marl (F10) (LRR U)		Other	(Explain in Remarks)	
Depleted Below Dark		Depleted Ochric (F11)		31	steen of hudson hudio us	antalian and
Thick Dark Surface (Umbric Surface (F13)	es (F12) (LRR O, P, T)		ators of hydrophytic ve land hydrology must b	
Sandy Mucky Minera		Delta Ochric (F17) (ML			ess disturbed or proble	
Sandy Gleyed Matrix		Reduced Vertic (F18) (unit		mane.
Sandy Redox (S5)			oils (F19) (MLRA 149A	0		
Stripped Matrix (S6)			my Soils (F20) (MLRA		, 153D)	
Dark Surface (S7) (L	.RR P, S, T, U)					
strictive Layer (if obs						
Type: Bran						14
Depth (inches):	tinch.			Hydric Soll	Present? Yes	No
narks:		Lolara Air	ILC OVALU	01 0	ad ile	
all hat	anger	6010W 4111	nes, yrav	el. Ri	ag sige.	
		• • • • • •	/			
onia noi	- 1					
Fill note	rial					
Fill note	vial	below 4 inc				
Fill note	via					
Fill note	vial					
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Fill note	vial					
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Fill note	vial					



Upland data point wsuo018_u facing north.



Upland data point wsuo018_u facing south.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site ACP City/County Suffective Sampling Date: %/2/14/4 Applicant/Owner: COMINION State: VA Sampling Point: VSOO18_ Investigator(s): ESES_SIG14_PO_1K: NULL(PV/E4) Section. Township, Ranga: NA Subregion (LRR or MLRA): LCR_T Lea: Lea: Convext, none): CONVExt Slope (%): 2-4 Subregion (LRR or MLRA): LCR_T Lat: Convext, none): CONVExt Slope (%): 2-4 Are Solid Subregion (LRR or MLRA): LCR_T Lat: Convext, none): Convext, none): </th <th></th> <th>INATION DATA FORM - A</th> <th></th> <th></th>		INATION DATA FORM - A		
pplcant/Owner: QMI_01000	oject/Site: ACP	City/County:	SUPPOINC	Sampling Date: 0/0/10
Indiant (hillslope, tensoe, etc.): Stope (%): Zerr bregion (LRR or MLRA): LR CT Lat: 360,786244 Long: Toto Stope (%): Zerr in Map Unit Name: ODOM IRL (00/000) Ist 360,786244 Long: Toto Stope (%): Zerr in Map Unit Name: Soll or Hydrology significantly disturbed? Are Normal Circumstances' present? Yes No Ist he Sampled Area No (if needed, explain any answers in Remarks.) UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. No Ist he Sampled Area No Ves No No Ves No	Nontounar DOMINION		State: VH	Sampling Point: WSU0010_0
bit Region (LRR or MLRA): LRRT Lat: 36.786044 Long:	restigator(s): ESI-S, Bryan, 15.	Marphrey Section, Town	nship, Range:NT	105 2-4
bill Map Unit Name:	ndform (hillslope, terrace, etc.):	Local relief (c	concave, convex, none): <u>CO</u>	Slope (%): 2-1
re climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) re Vegetation Soll or Hydrology significantly disturbed? Are *Normal Circumstances* present? Yes No re Vegetation Soll or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) UMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Is the Sampled Area within a Wetland? Yes No Surface Soil Cracks (B6) Surface Volter (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Saturator Na3 Hydrogen Sulface Otro (C1) Dainage Patterns (B10) Dainage Patterns (B10)Dainage Patterns (B10)	bregion (LRR or MLRA): CR (<)	Lat: 36, 1862	t Long: -/6. 32	ao A Datum: <u>NGS 0</u>
re Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No re Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) UMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Hydrophytic Vogetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Indicators: Yes No Is the Sampled Area within a Wetland? Yes No Surface Water (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Sparsely Vegetated Concave Surface (B8) Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Surface Water (A1) Aquatic Fauna (B13) Mari Deposits (B15) (LR U) Mos Strim Lines (B16) Dry Season Water Table (C2) Craylish Burrows (C8) Sparsely Vegetated Concave Surface (B8) Dry Season Water Table (C2) Craylish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (C2) Graylish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (C2) Saturation Visible on A			And the second sec	
we vegatationSoilor Hydrologynaturally problematic? (If needed, explain any answers in Remarks.) UMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegatation Present? YesNo Hydrophytic Vegatation Present? YesNo Wetland Hydrology Present? YesNo Wetland Hydrology Indicators: Is the Sampled Area within a Wetland? Primary Indicators (minimum of one is required, check all that apply) Surface Water (A1) Surface Water (A1) Anali Deposits (B1) High Water Table (A2) Mari Deposits (B1) High Water Table (A2) Mari Deposits (B1) Surface Water (A1) Oxidized Rhizospheres along Living Roots (C3) Saturation (A3) Hydrogen Sulfde Odor (C1) Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Seliment Deposits (B3) Recent Iron Reduction In Tilled Solis (C6) Drift Deposits (B3) Recent Iron Reduction In Tilled Solis (C6) Hon Deposits (B3) Other (Explain In Remarks) In undation Visible on Aerial Imagery (B7) Shalaw Aquitard (03) Hydrophytic Vegatitation Present? Yes	e climatic / hydrologic conditions on the site typ	pical for this time of year? Yes		
Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Yes No Remarks: Wetland Hydrology Indicators: No Is the Sampled Area within a Wetland? Yes No Surface Vater (A1) Aquatic Fauna (B13) Surface Soil Cracks (B6) Surface Soil Cracks (B6) Drainage Patterns (B10) High Water Table (A2) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Drainage Patterns (B10) Water Marks (B1) Oxidized Rhizospherea along Living Roots (C3) Dray Season Water Table (C2) Carylish Burrows (C8) Sediment Deposits (B3) Recent Iron Reduction In Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Geomorptic Position (D2) In Deposits (B5) Other (Explain In Remarks) Sphagnum moss (D8) (LRR T, U) Sphagnum moss (D8) (LRR T, U) Field Observations: Surface Water Present? Yes No Sphagnum moss (D8) (LRR T, U) Field Observationes: Surface Water Present?<				
Hydrophytic Vegetation Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Yes No Remarks: Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Is the Sampled Area within a Wetland? Yes No Wetland Hydrology Indicators: Present? Yes No Is the Sampled Area within a Wetland? Yes No Primary Indicators (minimum of one is required: check all that apply Is surface Soil Cracks (Bi) Surface Soil Cracks (Bi) Surface Soil Cracks (Bi) Surface Soil Cracks (Bi) Surface (Bi) Drainage Patterns (B10) Moss Trin Lines (B16) Drainage Patterns (B10) Moss Trin Lines (B16) Dray Season Water Table (C2) CrayIsh Burrows (C8) Saturation (A3) Presence of Reduced Iron (C4) Presence of Reduced Iron (C4) Presence of Reduced Iron (C4) Drainage Patterns (B10) Moss Trin Lines (B16) Dray Season Water Table (C2) CrayIsh Burrows (C8) Saturation Visible on Aerial Imagery (C9) Ecomorphic Postion (02) Shallow Aquitard (03) Present? No Depth (inches): Sphagnum moss (D8) (LRR T,	e Vegetation, Soil, or Hydrology	/ naturally problematic?	(If needed, explain any an	swers in Remarks.)
Hydric Soil Present? Yes No Is the sampled Area within a Wetland? Yes No Wetland Hydrology Present? Yes No Wetland? Yes No Remarks: AyDROLOGY Wetland Hydrology Indicators: Surface Valer (Atla Surface Soil Cracks (B6) Surface Water (Atl) Aquatic Fauna (B13) Surface Soil Cracks (B6) Surface Water (Atl) Aquatic Fauna (B13) Surface Soil Cracks (B6) High Water Table (A2) Mard Deposits (B15) (LRR U) Surface Soil Cracks (B6) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Drainage Patterns (B10) Saturation Papersits (B3) Discrete Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Geomorphic Positin (C2) Iron Deposits (B3) Thin Muck Surface (C7) Geomorphic Positin (D2) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain In Remarks) Spanselv Zeesent? Spanselv Zeesent? Surface Water Present? Yes No Depth (inches): No Spanselv Zeesent? No Sufface Water Present? Yes No Depth (inches): Zac No <	JMMARY OF FINDINGS - Attach s	ite map showing sampling	point locations, transe	cts, important features, etc.
Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Aquatic Fauna (B13) High Water Table (A2) Marl Deposits (B15) (LRR U) Sparsely Vegetated Concave Surface (B3) Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16) Vater Marks (B1) Oxidized Rhizospheres along Living Roots (C3) Dry-Season Water Table (C2) Crayfish Burrows (C8) Presence of Reduced Iron (C4) Saturation Visible on Aerial Imagery (C9) Agal Mat or Crust (B4) Thin Muck Surface (C7) Geomorphic Position (D2) Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Depth (inches): Zac Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Surface Water Present? Yes No Depth (inches): Depth (inches): Zac Wetland Hydrology Present? Yes No Depth (inches): Zac Wetland Hydrology Present? Yes No <td>lydric Soil Present? Yes _ Vetland Hydrology Present? Yes _</td> <td>No within</td> <td></td> <td> No</td>	lydric Soil Present? Yes _ Vetland Hydrology Present? Yes _	No within		No
Field Observations: Surface Water Present? Yes No Depth (inches): Zac Water Table Present? Yes No Depth (inches): Zac Saturation Present? Yes No Depth (inches): Zac Saturation Present? Yes No Depth (inches): Zac Wetland Hydrology Present? Yes No Depth (inches): Zac Wetland Hydrology Present? Yes No Depth Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Vetland Hydrology Indicators: rimary Indicators (minimum of one is required: 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 Imagery (B7)	Aquatic Fauna (B13) Marl Deposits (B15) (LRR U) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres along Liv Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7)	ring Roots (C3)	Soil Cracks (B6) Vegetated Concave Surface (B8) a Pattems (B10) im Lines (B16) son Water Table (C2) Burrows (C8) on Visible on Aerial Imagery (C9) phic Position (D2) Aquitard (D3) utral Test (D5)
	ield Observations: urface Water Present? Yes No vater Table Present? Yes No aturation Present? Yes No ncludes capillary fringe)	Depth (inches): 720	tona dell'estimate all'alla della	esent? Yes No
Remarks:	escribe Recorded Data (sitearif gauge, monit	ning neil, denai protoc, pretiode in		
	emarks:	and the second		
			and the second second second	and the second second second second second

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

Sampling Point: WSucollg_u2

2-6-4 2.44	Absolute Dominant Indicator	Dominance Test worksheet:
1. ACEV VUSCUM	<u>% Cover</u> <u>Species?</u> <u>Status</u>	Number of Dominant Species H (A)
2. Liquidambor Styraciflua 3.	10 4 EAC	Total Number of Dominant Species Across All Strata: (B)
4 5		Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
6		Prevalence Index worksheet:
8.	And a second second second second second	Total % Cover of: Multiply by:
	20 = Total Cover	OBL species x 1 =
50% of total cover:(C	The second secon	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 308+X308+)		FAC species x 3 =
1. Liquidambor Styracistua	10 7 FAC	FACU species x 4 =
2		UPL species x 5 = (A) (B)
3		Column Totals: (A) (B)
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6.		1 - Rapid Test for Hydrophytic Vegetation
7	And the second s	2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0 ¹
5	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
Herb Stratum (Plot size: 3084 × 304)	20% of total cover:	
Herb Stratum (Plot size: 200 (200)		¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
		Definitions of Four Vegetation Strata:
2		
3	Editory of a cost for the starting form of the sectory derivation (1), the electronic large which and it	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5		height.
6		Sapling/Shrub - Woody plants, excluding vines, less
7.		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8.		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10.		Woody vine - All woody vines greater than 3.28 ft in
11.		height.
12.	the state of the state of the state	
	O = Total Cover	and well that is also been and any second
50% of total cover:	20% of total cover:	
Woody Vine Stratum (Plot size: 3054X3054)	15 10 505	
1. Smilex rotandisolia	15 9 FAC	
2. Parthenocissus quinque Eulia	5 y FITCH	
3	the second s	
4	An one cannot an enter factor and the contract of the contract	
5	20	Hydrophytic
10	_20_= Total Cover	Vegetation Present? Yes No No
50% of total cover:	20% of total cover:	
Remarks: (If observed, list morphological adaptations belo	w).	
	and the second	and the second
	a de la strad de cade en las de la constante en la constante de la constante de constante de la constante de t	· · · · · · · · · · · · · · · · · · ·

SOIL

Sampling Point: WSU0018-U2

Control Color (moish) % Creation Type: Local Type: Local Remarks Type: C-Concentration. D=Depletion. RM=Reduced Matix. MS=Masked Sand Grains.	Depth Matrix	the depth needed to document the indicato Redox Features		
Type: C=Concentration. D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. ydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ¹ : Histosol (A1) Polyrabue Below Surface (S9) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Polyrabue Below Surface (S9) (LRR S, T, U) 1 cm Muck (A9) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR S) Stratified Layers (A5) Depleted Matrix (F2) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F7) Redox Dark Surface (F7) 1 cm Muck (A9) (LRR P, T) Depleted Dark Surface (F7) Redox Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Depleted Obric (F11) (MLRA 151) Pelder of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4) Piedmont Floodplain Soils (F12) (MLRA 150A) Sandy Gleyed Matrix (S5) Delta Ochric (F13) (MLRA 150A, 150B) Piedmont Floodplain Soils (F12) (MLRA 149A) Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F12) (MLRA 149A) Storped Matrix (S6) Sandy Gleyed Matrix (S6) Piedmont Floodplain	inches) Color (moist)	the second s	Texture	Remarks
Processed (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) Histosol (A1) Thin Dark Surface (S9) (LRR S, T, U) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) Depleted Matrix (F3) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Muck Presence (A8) (LRR U) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Sandy Gleyed Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A) Striped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20)-20 104R3/1			
estrictive Layer (if observed): Type: Depth (inches): Weight (inches):	dric Soil Indicators: (Applica Histosol (A1) Histic Epipedon (A2) Black Histic (A3) Hydrogen Sulfide (A4) Stratified Layers (A5) Organic Bodies (A6) (LRR P, 5 cm Mucky Mineral (A7) (LR Muck Presence (A8) (LRR U) 1 cm Muck (A9) (LRR P, T) Depleted Below Dark Surface Thick Dark Surface (A12) Coast Prairie Redox (A16) (M Sandy Mucky Mineral (S1) (L Sandy Gleyed Matrix (S4) Sandy Redox (S5) Stripped Matrix (S6)	ble to all LRRs, unless otherwise noted.) Polyvalue Below Surface (S8) Thin Dark Surface (S9) (LRR S Loamy Mucky Mineral (F1) (LF Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) RP, T, U) CA11) Depleted Dark Surface (F1) Redox Depressions (F8) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA Iron-Manganese Masses (F12 LRA 150A) Delta Ochric (F17) (MLRA 15: Reduced Vertic (F18) (MLRA Piedmont Floodplain Soils (F1 Anomalous Bright Loamy Soils	Indicators for (LRR S, T, U) (LRR S, T, U) (LRR S, T, U) (LRR O) 1 cm Muck 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Red Paren Very Shall Other (Exp 151)) (LRR O, P, T) 3Indicator T, U) wetland 1) unless 150A, 150B) 9) (MLRA 149A)	Problematic Hydric Soils ³ : (A9) (LRR O) (A10) (LRR S) /ertic (F18) (outside MLRA 150A,I Floodplain Soils (F19) (LRR P, S, T s Bright Loamy Soils (F20) 153B) at Material (TF2) ow Dark Surface (TF12) olain in Remarks) rs of hydrophytic vegetation and d hydrology must be present, disturbed or problematic.
Deput (increa).	estrictive Layer (if observed): Type:		Hydric Soll Pre	esent? Yes No
	ALL AND ADDRESS AND ADDRESS AND ADDRESS ADDRES			



Upland data point wsuo018_u2 facing south.



Upland data point wsuo018_u2 facing west

Photo Sheet 2 of 2

WETLAND DETERMINATION DATA FOR	RM – Atlantic and Gulf Coastal Plain Region
14011010	County: SUFFOIK Sampling Date: 11/3/15
Applicant/Owner: DUMINION	State: VA Sampling Point: WSUD 019e-W
	ion, Township, Range: NA
	I relief (concave, convex, none): NOVO Slope (%): ()-2
Subregion (LRR or MLRA): LRRT Lat: 36.	784183 Long: -76 520541 Datum: WESPA
Soil Map Unit Name: Torhunta loam	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 distu	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing sam	npling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No
Remarks: POWERLINE EQSEMPTY.	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LR	
Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
Water Marks (B1)	
Sediment Deposits (B2) Presence of Reduced Iro	
Drift Deposits (B3) Recent Iron Reduction in	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	
Iron Deposits (B5) Other (Explain in Remark	
Water-Stained Leaves (B9)	X FAC-Neutral Test (D5) Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Korr Depth (inches):	N/A
Water Table Present? Yes No 🔀 Depth (inches): 💆	20
Saturation Present? Yes <u>Ves</u> No <u>Depth</u> (inches): <u>Calify</u>	B Wetland Hydrology Present? Yes No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), ir available:
Remarks:	

201831177		Dominant		Sampling Point:
ee Stratum (Plot size: 30 × 3077)				Number of Dominant Species (A)
				Total Number of Dominant (B)
				Percent of Dominant Species
				Prevalence Index worksheet: Total % Cover of: Multiply by:
	10 m			OBL species x1 =
		= Total Cov		FACW species x 2 =
50% of total cover; bling/Shrub Stratum (Plot size: 30X3077)	20% of	total cover		FAC species x 3 =
				FACU species x 4 =
none				UPL species x 5 =
				Column Totals: (A) (B)
				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
				3 - Prevalence Index is $\leq 3.0^{1}$
	0:	= Total Cov	rer	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of	total cover	:	
rb Stratum (Plot size: 30X 30FT	0.0	V	+00	¹ Indicators of hydric soil and wetland hydrology must
Panicum virgatum	30	<u> </u>	FAC	be present, unless disturbed or problematic.
Arundinaria gigantea	20		FACW	Definitions of Four Vegetation Strata:
Andropogon virginiour	20	-N-	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
Saccharum giganteum	-10-	N	FAC	more in diameter at breast height (DBH), regardless of height.
Eupatorium capillifolium	10	N	FACH	
Rubus argutus	5	N	FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
Rhexig sp.	5	N	EACW	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.
	The			
	100	= Total Cov	rer 1	
50% of total cover: <u> 50% of total cover</u> <u> 50% of total cover</u> <u></u>	2 20% of	total cover	21	
none				
				Hydrophytic
		= Total Cov	/er	Magatation
50% of total cover:	20% of	total cover	:	Present? Yes No
marks: (If observed, list morphological adaptations belo	ow).			

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SOIL

	cription: (Describe	to the depth				or confirm	the absence o	f Indicators.)
Depth (inches)	Color (moist)	%	Color (moist)	ox Features		1	Tautura	Demostra
0 0 0	IOVRGI				Type'	Loc	Texture	Remarks
0-20	INTROM	901	DYRGIU		<u> </u>	PL.	UL	
				-				
17								
	oncentration, D=Dep					ains.		L=Pore Lining, M=Matrix.
	Indicators: (Applic	able to all LF			•			or Problematic Hydric Solls ⁹ :
Histosol			Polyvalue B					ck (A9) (LRR O)
	pipedon (A2)		Thin Dark S					ck (A10) (LRR S)
	stic (A3)		Loamy Much			0)		Vertic (F18) (outside MLRA 150A,B)
	en Sulfide (A4) d Layers (A5)		Loamy Gley		F2)			t Floodplain Soils (F19) (LRR P, S, T)
	Bodies (A6) (LRR P	о т II)	Redox Dark		6)			ous Bright Loamy Soils (F20)
	icky Mineral (A7) (L1		Depleted Da					a 153B) ent Material (TF2)
	esence (A8) (LRR L		Redox Depr					allow Dark Surface (TF12)
	ick (A9) (LRR P, T)	,	Marl (F10) (I		-)		the second se	xplain in Remarks)
	d Below Dark Surfac	e (A11)	Depleted Oc		MLRA 1	51)		
	ark Surface (A12)		Iron-Mangar		•		T) ³ Indicat	ors of hydrophytic vegetation and
	rairie Redox (A16) (I	MLRA 150A)	Umbric Surfa					nd hydrology must be present,
Sandy N	Aucky Mineral (S1) (LRR O, S)	Delta Ochric					s disturbed or problematic.
	Bleyed Matrix (S4)		Reduced Ve	rtic (F18) (I	MLRA 15	0A, 150B)		North Constant Carlo Constant Agencies (• • • • • • • • • • • • • • • • • •
Sandy R	edox (S5)		Piedmont Fl	oodplain So	oils (F19)	(MLRA 149	9A)	
Stripped	Matrix (S6)		Anomalous I	Bright Loan	ny Soils (I	=20) (MLRA	A 149A, 153C, 1	53D)
	rface (S7) (LRR P, S							
Restrictive	Layer (if observed)	:						
Туре:			_					\checkmark
Depth (in	ches):		_				Hydric Soll P	resent? Yes 🔼 No
Remarks:								



Wetland data point wsuo019e_w facing east.



Wetland data point wsuo019e_w facing southeast.

WETLAND DETERMINATION DATA FORM -	Atlantic and Gulf Coastal Plain Region
Project/Site: ACP City/Count	y:
P T D FO	ownship, Range: N/A
Landform (hillslope, terrace, etc.): PUWOY INO GALEMENT Local relie	f (concave, convex, none): NONO Slope (%): 0-2
	4132 Long: -76 520 570 Datum: M6584
Soil Map Unit Name: Torhunta loan	NWI classification: PSS
Are climatic / hydrologic conditions on the site typical for this time of year? Yes _	No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significantly disturbed?	
Are Vegetation, Soil, or Hydrology significantly distributed in Are Vegetation, Soil, or Hydrology naturally problematic?	/
SUMMARY OF FINDINGS – Attach site map showing sampli	
	ing point locations, transcets, important locations, etc.
Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	he Sampled Area hin a Wetland? Yes <u>No</u>
Remarks: Silvi culture disturbances, i	powerline easement.
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	
Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16)
Water Marks (B1)Oxidized Rhizospheres along	
Sediment Deposits (B2) Presence of Reduced Iron (C- Drift Deposits (B3) Recent Iron Reduction in Tille	
Algal Mat or Crust (B4) Thin Muck Surface (C7)	Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations: Surface Water Present? Yes No X Depth (inches); N/	Δ
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes No No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	s inspections), if available:
Remarks:	
	A
2	

ZONDALA		Dominant		Dominance Test worksheet:
ree <u>Stratum</u> (Plot size: <u>30X30F+</u>) NONE				Number of Dominant Species (A)
				Total Number of Dominant Species Across All Strata:
				Percent of Dominant Species That Are OBL, FACW, or FAC:
				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
	0	= Total Cov	er	OBL species x 1 =
50% of total cover:	20% of	total cover:		FACW species x 2 =
apling/Shrub Stratum (Plot size: 30×30FT)	70	1	-110	FAC species x 3 =
Pinus taeda	10	<u> </u>	FAC	FACU species x 4 =
Magnoria virginidha	5	N	FACW	UPL species x 5 = (A)
				Column Totals: (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				1 - Rapid Test for Hydrophytic Vegetation
				✓ 2 - Dominance Test Is >50%
	76	= Total Cov		3 - Prevalence Index is $\leq 3.0^{1}$
50% of total cover: 31	5 20% of	total cover:	15	Problematic Hydrophytic Vegetation ¹ (Explain)
erb Stratum (Plot size: 30 X 30 ft	26	Y I	FACH	¹ Indicators of hydric soil and wetland hydrology must
Arundinaria gigantea	10		FICIU	be present, unless disturbed or problematic.
scinus arguntus	- 10		OBL	Definitions of Four Vegetation Strata:
	->	12	VBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
				more in diameter at breast height (DBH), regardless of height.
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
•				Woody vine - All woody vines greater than 3.28 ft in height.
77	45	= Total Cov	er 9	
50% of total cover: $\frac{22}{2}$	20% of	total cover:		
oody Vine Stratum (Plot size: 30 x 30 PL)				
none				
· · · · ·				
	0	= Total Cov		Hydrophytic Vegetation
50% of total cover:				Present? Yes No
emarks: (If observed, list morphological adaptations be		total cover.		Bendre Sale A Bendre Sale

Profile Description: (Description: (Description) Mark Redox Features Orby IDNR 211 IOO Sin Yuno' Testure Remarks Orby IDNR 211 IOO Sin Yuno' Testure Remarks Imple: IDNR 211 IOO Sin Yuno' Imple: Remarks Imple: Imple: Imple: Imple: Imple: Remarks Imple:	SOIL		Sampling Point:
Deptin Matrix Redox Features Q-V IONK 2/1 100 % Type ¹ Loc ² Texture Remarks Q-V IONK 2/1 100 % Type ¹ Loc ² Texture Remarks Q-V IONK 2/1 100 % Type ¹ Loc ² Texture Remarks Q-V IONK 2/1 9% IONK 9/4 2 C M (' Q-V IONK 2/1 9% IONK 9/4 2 C M (' Q-V IONK 9/4 2 C M (' Indicators: Remarks Uper: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. 'Locatrix: PL=Pore Lining, M=Matrix. Indicators: Pl=Pore Lining, M=Matrix. ydrie Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ² : Indicators for Problematic Hydric Soils ² : Histic Expection (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 em Muck (A10) (LRR S) Redvaced Vertic (F18) (unstide MLRA 150A, Loarny Wicky Mineral (F1) (LRR O) Redvaced Vertic (F18) (unstide MLRA 150A, Soil (K18) (K18) Redvaced Vertic (F10) (LRR V) Pledmont Floodplai	rolle Description: (Describe to the dept	h needed to document the indicator or conf	firm the absence of Indicators.)
O-V OVR 2/1 DO Costs (miss) w Type Loc Texture Remarks 2-20 IOVR 2/1 IOV	JeptnMatrix	Redox Features	_
Vpe: C C C Vpe: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ³ Location: PL=Pore Lining, M=Matrix. Vgric Soll Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ³ : Histos (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) 2 cm Muck (A0) (LRR S) Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, 150A) Stratified Layers (A5) C Piedmont Floodplain Soils (F19) (LRR P, S, T) Organic Bodies (A6) (LRR P, T, U) Redax Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T, U) Redax Dark Surface (F7) Red Parent Material (TF2) Muck Prisence (A8) (LRR P, T) Mart (F10) (LRR U) Other (Explain in Remarks) Depleted Ochric (F11) (MLRA 151) Depleted Ochric (F13) (LRR P, T, U) Sind (F10) (LRR O, S) Sandy Redox (S5) Delta Ochric (F17) (MLRA 150A, 150B) Sind Present(S1) (LR P, S, T, U) Sind Present(S1) (LR P, S, T, U) Stribed Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 1	D La Lavingal.	Color (moist) % Type1 Loc2	Texture Remarks
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ : Indicators for Problematic Hydric Soils ³ : I cm Muck (A9) (LRR 0) Stratified Layers (A5) Corpanic Bodies (A6) (LRR P, T, U) Sem Mucky Mineral (A7) (LRR P, T, U) Collected Matrix (F3) I cm Muck (A9) (LRR P, T, U) Redox Dark Surface (F7) I cm Muck (A9) (LRR P, T) Mard (F10) (LRR U) Cepteted Dark Surface (F7) I cm Muck (A9) (LRR P, T) Mard (F10) (LRR U) Cest Prairie Redox (A15) (LR U) Cest Prairie Redox (A15) Sandy Mucky Mineral (S1) (LRR 0, S) Sandy Mucky Mineral (S1) (LRR 0, S) Detta Ochric (F17) (MLRA 151) Sandy Mucky Mineral (S1) Sandy Gleyed Matrix (S6) Sandy Redox (S5) Pietmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Stripped Matrix (S6) Dark Surface (S7) (LRR P, S, T, U) Stripped Matrix (S6) Depth (inches): Depth (inches): Depth (inches): Dept	<u>10110111100</u>		L
drid: Soli Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) _ Histosol (A1)	-20 101R 911 98	NYR516 2 C M	0
drid: Soli Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) _ Histosol (A1)			
drid: Soli Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) _ Histosol (A1)			
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Addic Soft Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: Indicators: (Applicable to all LRRs, unless otherwise noted.) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR O) 2 cm Muck (A10) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A,			
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ydric Soli Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR O) Black Histic (A3) Loamy Micky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, Pietony Gieyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Depressions (F6)			
Anisotian Microbiols (Applicable to all LRRS, Unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : _ Histic Epipedon (A2)	ype: C=Concentration, D=Depletion, RM=F	Reduced Matrix, MS=Masked Sand Grains.	² Location: PL=Pore Lining, M=Matrix,
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, Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mart (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) 1 cm Auck (A9) (LRR O, S) Deleta Ochric (F13) (LRR O, F, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F18) (MLRA 150A, 150B) metuced Vertic (F18) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (ML	ydric Soll Indicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Soils ³ :
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Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T) Pepleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) 1 cm Aust Surface (A12) Umbric Surface (F13) (LRR P, T, U) "Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) No beplete Layer (If observed): Trype: Hydric Soil Present? Yes No		Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (E18) (outside MI RA 150A R)
Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Ox Depressions (F8) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T) Marl (F10) (LRR U) Red ox Depressions (F8) Very Shallow Dark Surface (TF12) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A		Loamy Gleyed Matrix (F2)	Piedmont Floodplain Soils (F19) (IRR P. S. T)
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) 1 ron-Manganese Masses (F12) (LRR O, P, T) Sandy Mucky Mineral (S1) (LRR O, S) Other (Explain in Remarks) Sandy Redox (S5) Delta Ochric (F13) (LRR 150A, 150B) Wetland hydrology must be present, unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Strictlive Layer (If observed): Type: Type: Hydric Soil Present? Yes No		Z Depleted Matrix (F3)	Anomalous Bright Loamy Soils (F19) (ERR P, S, T)
S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Network C(S5) Intersection of the present (F18) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Strictive Layer (If observed): Type: Hydric Soil Present? Yes No	_ Organic Bodies (A6) (LRR P, T, U)	Redox Dark Surface (F6)	
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) Indicators of hydrophytic vegetation and Thick 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) Indicators of hydrophytic vegetation and Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problematic. Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) strictive Layer (If observed): Type: Hydric Soil Present? Yes No	5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	
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) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Hydric Soil Present? Yes X No			
Depicted Below Dark Surface (A11)			
Inick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) thydric Soil Present? Type:	_ Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	
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Sandy Mileky Miletai (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed):	Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U)	
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)	Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U)	Sandy Gleyed Matrix (S4)	Reduced Vertic (F18) (MLRA 150A, 150E	B)
Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed): Type: Depth (inches):	Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 1	149A)
_ Dark Surface (S7) (LRR P, S, T, U) strictive Layer (if observed): Type: Depth (inches): Hydric Soll Present? Yes X No	_ Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (ML	RA 149A, 153C, 153D)
Type: Depth (inches): Hydric Soll Present? Yes X No			
Depth (inches): Hydric Soll Present? Yes X No	strictive Layer (if observed):		
Hydric Soil Present? Yes A No	Туре:	_	
	Depth (inches):		Hydric Soll Present? Yes X No
	marks:		
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Wetland data point wsuo019s_w facing south.



Wetland data point wsuo019s_w facing east.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Applicant/Owner: DOMINION Investigator(s): L. ROPER, S. IOSEFA Secti Landform (hillslope, terrace, etc.): <u>POWENTINE EASEMENT</u> Local	Are "Normal Circumstances" present? Yes No atic? (If needed, explain any answers in Remarks.)
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Image: Constraint of the constrain	Is the Sampled Area within a Wetland? Yes No
fill material for road	factorial and the second s
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	C1) Moss Trim Lines (B16) Ilong Living Roots (C3) Dry-Season Water Table (C2) in (C4) Crayfish Burrows (C8) Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
	Image: A marked black Image: A marked black Image: A marked black Image: A marked black

US Army Corps of Engineers

31122151		Dominant		Dominance Test worksheet:	
NONE (Plot size: 30×30Ff)				Number of Dominant Species That Are OBL, FACW, or FAC:	3(A)
				Total Number of Dominant Species Across All Strata;	<u>б</u> (в)
				Percent of Dominant Species That Are OBL, FACW, or FAC:	00% (A/B
				Prevalence Index worksheet:	
				Total % Cover of: Mult	
	:	= Total Cov	er	OBL species x 1 =	
50% of total cover:	20% of	total cover:		FACW species x 2 =	
ling/Shrub Stratum (Plot size: 30/30-ft)	C	V	TAO	FAC species x 3 =	
Liguidambar styracifius		1	TAC	FACU species x 4 =	
PINUS FUELA	0	<u> </u>	FAC	UPL species x 5 = Column Totals: (A)	Contraction of the second s
					(D)
				Prevalence Index = B/A =	
				Hydrophytic Vegetation Indicators:	
				1 - Rapid Test for Hydrophytic Veg	jetation
				2 - Dominance Test is >50%	
C.	10	= Total Cov	er	3 - Prevalence Index is ≤3.0 ¹	
50% of total cover:		total cover:		Problematic Hydrophytic Vegetatic	on (Explain)
<u>b Stratum</u> (Plot size: <u>30 X 30 FT</u>) Eupatorium capillifolium	15	X	FACH	¹ Indicators of hydric soil and wetland h be present, unless disturbed or probler	ydrology must
trundinaria gigantea	20	V	FAC	Definitions of Four Vegetation Strata	
espedeza cunerta	20	Y	FACU	Tree – Woody plants, excluding vines, more in diameter at breast height (DBF	3 in. (7.6 cm) or H), regardless of
				height. Sapling/Shrub – Woody plants, exclud	ding vines less
				than 3 in. DBH and greater than 3.28 ft	t (1 m) tall.
				Herb – All herbaceous (non-woody) pla of size, and woody plants less than 3.2	
				Woody vine - All woody vines greater height.	than 3.28 ft in
	55	= Total Cove			
50% of total cover: 27.5 ody Vine Stratum (Plot size: <u>30X 30(7</u>))	20% of	total cover:	<u> </u>		
None					
				Hydrophytic	
		= Total Cove	5.58 U	Vegetation	
50% of total cover:		total cover:			
narks: (If observed, list morphological adaptations below	v).				

SOIL

Color (moist) % Color (moist) % Type ¹ Loc ² Texture Remarks J-4 JOY k 3/2 IOD	Profile Description: (Describe to the depth needed to document the indicator or confirm	
Color (moist) % Color (moist) % Type ¹ Loc ² Texture Remarks LOY (R 2/2 (DD LS >30°/s Un cover Sand g rave Sand g rave ype: Correction LS >30°/s Un cover Sand g rave Sand g rave ype: Correction LS Sand g rave Sand g rave Sand g rave Sand g rave ype: Correction LS Sand g rave ype: Correction LS Sand g rave San		n the absence of Indicators.)
2-4 JOYK 3/2 JD 2-5 Schod g TCVpl Schod g TCVpl 2-7 JD JD 2-7	Depth Matrix Redox Features	
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 2 cm Muck (A0) (LRR P) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) Reduced Vertic (F18) (outside MLRA 150A, B Stratified Layers (A5) Depleted Matrix (F2) Pledmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F2) Anomalous Bright Loamy Soils (F20) Muck Presence (A8) (LRR P, T, U) Redox Dark Surface (F7) Red Parent Material (TF2) Muck (A9) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) I tarm Muck (A9) (LRR P, T, U) Depleted Ochric (F13) (LRR P, P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Muck Mineral (S1) Depleted Ochric (F13) (MLRA 150, LS0, LS0, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Muck Mineral (S1) Reduced Vertic (F18) (MLRA 150, 150B) Sendy Redox (S5) Delta Ochric (F17) (MLRA 150, 1	(inches) Color (moist) % Color (moist) % Type ¹ Loc ²	Texture Remarks
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ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. ² Location: PL=Pore Lining, M=Matrix. rdfic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histos (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) Loamy Gleyed Matrix (F2) Pietwent Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F7) Red Parent Material (TF2) Muck (A9) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck (A9) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Sindicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S6) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F12) (MLRA 149A) Sandy Mecky Mineral (S7) (LRR P, S, T, U) Siftped Matrix (S6) Anomalous Bright Loamy Soils (F12) (MLRA 149A) Sandy Gleyed Matrix (S6) Piedmont Floodp		
Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Solls ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histo Epipedon (A2) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Black Histic (A3) L coamy 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 Learny Soils (F20) organic Bodies (A6) (LRR P, T, U) Redox Depressions (F8) MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Other (Explain in Remarks) 2 bepleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) 2 bepleted Below Jark (S4) I con-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. 3 Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Incleaters of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. 3 Sandy Redox (S5)		sana grave
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Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) "unless disturbed or problematic." Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Very Shallow Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type: Hydric Soil Present? Yes No		2 cm Muck (A10) (LRR S)
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) "unless disturbed or problematic." Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Very Shallow Dark Surface (S7) (LRR P, S, T, U) estrictive Layer (If observed): Type: Hydric Soil Present? Yes No	Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O)	Reduced Vertic (F18) (outside MLRA 150A, E
Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) 1 ron-Manganese Masses (F12) (LRR O, P, T) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Extra Complexity of the sent? Yes No		
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) 5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Intro-Manganese Masses (F12) (LRR O, P, T) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed): Type: Hydric Soil Present? Yes No		
5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Mari (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) If observed): Type: 4 MWes Type: 4 MWes Hydric Soil Present? Yes No		
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1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A) Umbric Surface (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Leamy Soils (F20) (MLRA 149A, 153C, 153D) Stripped Matrix (S6) Anomalous Bright Leamy Soils (F20) (MLRA 149A, 153C, 153D) Mark Surface (S7) (LRR P, S, T, U) vestIntletive Layer (If observed): Type: 4 modes Hydric Soil Present? Yes No	5 cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7)	Red Parent Material (TF2)
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) If observed): Type: 4 modes Type: 4 modes Hydric Soil Present? Yes No	_ Muck Presence (A8) (LRR U) Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D) Derth (inches): 4 mutes		
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) stripted Matrix (S6) Hydric Soil Present? Yes No		
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) wetland hydrology must be present? Yes Strippet (inches): 4 100005		- 3
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Image: Comparison of the strictive Layer (If observed): Image: Comparison of the strictive Soil Present? Type: Image: Comparison of the strictive Soil Present? Yes No		
Sandy Gleyed Matrix (S4)	Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U)	wetland hydrology must be present,
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Learny Soils (F20) (MLRA 149A, 153C, 153D) Strictive Layer (If observed): Type: Hurries Hydric Soil Present? Yes No	Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Strictive Layer (If observed): Type: Hurres Hydric Soil Present? Yes No		
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed): Type:		and have get
Dark Surface (S7) (LRR P, S, T, U) strictive Layer (If observed): Type:		
strictive Layer (If observed): Type: <u>Gravel</u> Depth (inches): <u>4 in thes</u> Hydric Soil Present? Yes No		(A 149A, 153C, 153D)
Type: <u>GHANE</u> Depth (inches): <u>4 IN Ches</u> No K		
Depth (inches): 4 IN Ches No X	estrictive Layer (if observed):	
Depth (inches): 4 IN Ches No X	Type: THINK	V
marks: ould not auger below 4 inches, gravel. Road side.		
ould not auger below 4 inches, gravel. Road side.	Depth (inches).	Hydric Soil Present? Yes No
ould not auger below 4 inches, graver. Roug stab.	emarks:	Alternal bool ato
ould not auger below mures, o menandra.	in the inclusion of the inclusion	(Yruver Road sige
	olud not auger below thruce	5, 0 mon record of a.
		-

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Upland data point wsuo019_u facing north.



Upland data point wsuo019_u facing south.

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

NOR SIFFOL	K Sampling Date: 2/1/15
Project/Site: ACP City/County: SUBFOL	Sampling Date.
Applicant/Owner: DOMINIO O	State: VA Sampling Point: W Sup 020e W
Investigator(s): ESI- M. Smith, K. MURPhrey Section, Township, Range:	/V.A
Landform (hillslope, terrace, etc.): Arainageway Local relief (concave, conver	x, none): CONCAVE Slope (%): 0-1
Subrecion (LRR or MLRA): LRR T Lat: 36,77674 Long:	-76,53120 Datum: 126584
Soil Map Unit Name: TO (hunta loam	NWI classification: PEM
/	(If no, explain in Remarks.)
······································	al Circumstances" present? Yes No
	, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sampling point locat	
Hydrophytic Vegetation Present? Yes No Is the Sampled Area	
Hydric Soil Present? Yes No within a Wetland?	Yes No
Wetland Hydrology Present? Yes No No	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required, check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U)	Drainage Patterns (B10)
V Saturation (A3) Hydrogen Sulfide Odor (C1)	Moss Trim Lines (B16) Dry-Season Water Table (C2)
Water Marks (B1) Oxidized Rhizospheres along Living Roots (C3)	Crayfish Burrows (C8)
Sediment Deposits (B2) Presence of Reduced Iron (C4)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remarks)	Shallow Aquitard (D3)
Iron Deposits (B5) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7)	V FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inches); 1	/
Water Table Present? Yes No Depth (inches): Suv Face	
Water Table Present? Yes V No Depth (inches): Suv Eace Saturation Present? Yes V No Depth (inches): Suv Eace Wetland	Hydrology Present? Yes No
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	valiable:
Remarks:	

spi

Absolute Dominant Indicator	Dominance Test worksheet:
	Number of Dominant Species (A)
	Total Number of Dominant (B)
	Percent of Dominant Species
	. That are OBL, FACW, of FAC (A/B)
	Prevalence Index worksheet:
	Total % Cover of: Multiply by:
C = Total Cover	OBL species x 1 =
	FACW species x 2 =
	FAC species x 3 =
	FACU species x 4 =
	UPL species x 5 =
	Column Totals: (A) (B)
	Prevalence Index = B/A =
	Hydrophytic Vegetation Indicators:
	1 - Rapid Test for Hydrophytic Vegetation
	2 - Dominance Test is >50%
	$3 - Prevalence Index is \leq 3.0^{1}$
O = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
	¹ Indicators of hydric soil and wetland hydrology must
70 Y ZFACK	J be present, unless disturbed or problematic.
20 N FACW	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
	than 3 in. DBH and greater than 3.28 ft (1 m) tall.
	Harb – 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.
132 = Total Cover	
20% of total cover: 46.4	
1	
	Hudronbutio
C = Total Cover	- Hydrophytic Vegetation
20% of total cover:	Present? Yes No
2070 01 10101 00401.	·
	% Cover Species? Status

Atlantic and Gulf Coastal Plain Region -Vŧ SOIL

Sampling Point:	WSUP020e-W
Gamping i one.	

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Profile Description: (Describe to the depti	h 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
0-20 2.543/1 100		FSL
'Type: C=Concentration, D=Depletion, RM=I		² Location: PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L	RRs, unless otherwise noted.)	Indicators for Problematic Hydric Solls 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)	Redox Dark Surface (F6)	(MLRA 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface (F7)	Red Parent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F8)	Very Shallow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Mari (F10) (LRR U)	Other (Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11) (MLRA 151)	T) ³ Indicators of hydrophytic vegetation and
Thick Dark Surface (A12)	Iron-Manganese Masses (F12) (LRR O, P,	wetland hydrology must be present,
Coast Prairie Redox (A16) (MLRA 150A)	Umbric Surface (F13) (LRR P, T, U) Delta Ochric (F17) (MLRA 151)	unless disturbed or problematic.
Sandy Mucky Mineral (S1) (LRR O, S)	Reduced Vertic (F18) (MLRA 150A, 150B)	· · · · · · · · · · · · · · · · · · ·
Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Piedmont Floodplain Soils (F19) (MLRA 14	
Stripped Matrix (S6)	Anomalous Bright Loamy Soils (F20) (MLR	
Dark Surface (S7) (LRR P, S, T, U)		
Restrictive Layer (if observed):		
Туре:		
Depth (inches):		Hydric Soll Present? Yes No
Remarks:		



Wetland data point wsup020e_w facing south.



Wetland data point wsup020e_w facing north.

Photo Sheet 1 of 3

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: SUFFOLIS Sampling Date: 12/1/15
Applicant/Owner: Dominion	State: VA Sampling Point: WS4 p020F_
Investigator(s): ESI-M. Smith, K. Murphrey	Sastian Tawashia Banasi NA
Investigator(s): COL Investigator(s):	_ Section, Township, Range
Landform (hillslope, terrace, etc.): Of amage way	Local relief (concave, convex, none): $CONCOV - Slope (\%): O - 2$,77744 Long: <u>-76, 51438</u> Datum: WGS 8
Subregion (LRR or MLRA): LRK L	, /// TT Long: _/0, 0/130 Datum: 1003 D
Soil Map Unit Name: TOY hunta 1000	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of	fyear? Yes No (If no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology significan	ntly disturbed? Are "Norma! Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showi	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that appl	
Surface Water (A1) Aquatic Fauna (
Surface Water (A1) Addate Patha (High Water Table (A2) Mari Deposits (E	
V Saturation (A3)	
	spheres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Rec	
	duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfa	
Iron Deposits (B5) Other (Explain in	—
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No Depth (inch	nes): NA
Water Table Present? Yes No Depth (inch	nes): [6"
Saturation Present? Yes No Depth (inch	nes): 10 ¹¹ Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial ph	notos, previous inspections), if available:
Remarks:	

. US Army Corps of Engineers

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VEGETATION	Four Strata	- Use scientific na	mes of plants	
VEGETATION	rour Strata	- Obe berenund ne	inco or planto.	

Sampling Point. Vos op o	Sampling Point:	WSUP	020f.w
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	Abcoluto	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 3054 X1 5 84)		Species?			
1. Liquidambar Styvacifina	15	V	FAC	Number of Dominant Species (A	
	2	61	FACIN		"
2. Americas Iduritation	-	11	FICU	Total Number of Dominant	
3				Species Across All Strata: (E	3)
4				Percent of Dominant Species	
5.					VB)
					,
6				Prevalence Index worksheet:	
7				Total % Cover of: Multiply by:	- 1
8				OBL species x 1 =	
	1/	= Total Cov	er		
50% of total cover: 5.5	20% of	total cover	3.4	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30F+ XI SE+)				FAC species x 3 =	
1. Liquidampar Styraciflua	20	V	FAC	FACU species x 4 =	
2. Liridendrun tullpifera	<	N	FACU	UPL species x 5 =	
2. Litioanaton turitie				Column Totals: (A) ((B)
3. Magnelia virginiana	2	N	FACW		
4				Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	
6.					
7				2 - Dominance Test is >50%	
8	07			3 - Prevalence Index is ≤3.0 ¹	
	21	= Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover: 13.	5 20% of	total cover	5.4		
Herb Stratum (Plot size: 305+ X 1 SE+)				¹ Indicators of hydric soil and wetland hydrology mus	st
1. Arundinaria gigonteo	60	Y	FACW	be present, unless disturbed or problematic.	^
2. Naccinium Corymbosum			FACW	Definitions of Four Vegetation Strata:	
2. MACCINIAM CONGILODSONIA	10		The	Deminions of Four Vegetation offata.	
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm	
4				more in diameter at breast height (DBH), regardless	sof
5				height.	
6				Sapling/Shrub - Woody plants, excluding vines, le	
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
7					
8				Herb - All herbaceous (non-woody) plants, regardle	ess
9				of size, and woody plants less than 3.28 ft tall.	
10				Woody vine - All woody vines greater than 3.28 ft	in
11				height.	~
		1			- 1
12	70				
74		= Total Cov			
50% of total cover: 35	20% of	total cover	107		
Woody Vine Stratum (Plot size: 30 Ft X15 Ft)					
1. Smildx rotandifolia	10	4	FAC		
2		- /			
2			-		
3					
4					
5		-		Hydrophytic	
	10	= Total Cov	rer	Vegetation	
50% of total cover: 5	20% of	total cover	2	Present? Yes No No	
		total option			
Remarks: (If observed, list morphological adaptations belo	w).				

ches)	Matrix Color (moist)		Red	ox Features				
		%	Color (moist)	% Typ	e' Loc ²	Texture	Remarks	
	2,542.5/1	100				ML		
- 15	104R3/1	70	IUGRS/1	30 0	M	SCL		
- 20	104.03/1	50	104R5/8	20	PL	CL		
NU	IVGR STI	00	10918 -7 -	010				
					0	21 analian: Dia	Pore Lining, M=Matr	iv
pe: C=Co	oncentration, D=Dep Indicators: (Applic	able to all	EReduced Matrix, N	S=Masked Sand	Grains.	Indicators for	Problematic Hydric	Solls ³ :
Histosol			Polyvalue B	elow Surface (S8) (LRR S, T, U	I) 1 cm Muck		
	pipedon (A2)		Thin Dark S	Surface (S9) (LRF	S, T, U)	2 cm Muck	(A10) (LRR S)	
	istic (A3)			ky Mineral (F1) (.RR O)	Reduced V	ertic (F18) (outside loodplain Soils (F19)	MLRA 150A,B)
	en Sulfide (A4) d Layers (A5)		Loamy Gley Depleted M	ved Matrix (F2) atrix (F3)			Bright Loamy Soils	
	Bodies (A6) (LRR F	P, T, U)		Surface (F6)		(MLRA 1		
	ucky Mineral (A7) (LI		Depleted Da	ark Surface (F7)			t Material (TF2)	12)
	resence (A8) (LRR L	(ו	Redox Depr				ow Dark Surface (TF lain in Remarks)	12)
	uck (A9) (LRR P, T) d Below Dark Surfac	e (A11)	Marl (F10) (Depleted O	chric (F11) (MLR	A 151)		ian in Kennarks)	
Thick Da	ark Surface (A12)		Iron-Manga	nese Masses (F1	2) (LRR O, P,		s of hydrophytic vege	
	rairie Redox (A16) (I						hydrology must be p	
	Mucky Mineral (S1) (LRR O, S)		c (F17) (MLRA 1 ertic (F18) (MLR/			disturbed or problem	auc.
	Gleyed Matrix (S4) Redox (S5)			loodplain Soils (F				
	d Matrix (S6)		Anomalous	Bright Loamy So	ils (F20) (MLR	A 149A, 153C, 15	3D)	
	Inface (S7) (LRR P, S					1		
	Layer (If observed)	:						
Type:	iches):					Hydric Soll Pre	sent? Yes	No
marks:								
marks.								
	2							



Wetland data point wsup020f_w facing east.



Wetland data point wsup020f_w facing south.

Photo Sheet 2 of 3

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

NCQ.		UFFOIK Sam	1 Data 12/1/13
Project/Site: ACP	City/County:	Samp	sting Date: 10/10/020
Applicant/Owner: DOMINION	101 (0	State: VA Samp	ling Point: Wan po 2000
Investigator(s): ESI- M. Smith, IS, MU	Section, Township	, Range: NA	11 6
Landform (hillslope, terrace, etc.): hill510Pe	Local relief (conca	ve, convex, none): CONVEA	Slope (%):G
Landform (hillslope, terrace, etc.): hillslope Subregion (LRR or MLRA): LRR T	Lat:36,77737	Long: -76, 51447	Datum: W65 Str
Soil Map Unit Name: Torhunta loar	n	NWI classification:	NA
Are climatic / hydrologic conditions on the site typical for	this time of year? Yes	No (If no, explain in Remark	.s.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances" presen	Yes No
Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology	_ significantly distributive	(If needed, explain any answers in R	emarks.)
SUMMARY OF FINDINGS - Attach site ma		•	
. /]
Hydrophytic Vegetation Present? Yes	No Is the Sam	pled Area	
Hydric Soil Present? Yes	No Is the Sam within a W	etland? Yes	No
Wetland Hydrology Present? Tes	No Within a W		
Remarks: fill material			
fill material			
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soil Crack	s (B6)
	atic Fauna (B13)	Sparsely Vegetate	d Concave Surface (B8)
	Deposits (B15) (LRR U)	Drainage Patterns	
	rogen Sulfide Odor (C1)	Moss Trim Lines (E	316)
	ized Rhizospheres along Living F	Roots (C3) Dry-Season Water	Table (C2)
	ence of Reduced Iron (C4)	Crayfish Burrows (
	ent Iron Reduction in Tilled Soils	(C6) Saturation Visible	on Aerial Imagery (C9)
	Muck Surface (C7)	Geomorphic Positi	cn (D2)
	er (Explain in Remarks)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutral Test	
Water-Stained Leaves (B9)		Sphagnum moss (D8) (LRR T, U)
Field Observations:	. 1 8		
Surface Water Present? Yes No	Depth (inches): <u>NA</u>		
Water Table Present? Yes No	Depth (inches): 720		-
Saturation Present? Yes No	Depth (inches): 720	Wetland Hydrology Present?	Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring w		tions) if available:	
Describe Recorded Data (stream gauge, monitoring w	en, aenai priotos, previous inspec		
Remarks:			

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Sampling Point: WSUP020_0

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

26.44	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ++ X 1 SF+) 1. 4 (er rubrum		Species?		Number of Dominant Species (A)
2. Liliodenarun turipiFeron	20	7_	FACO	Total Number of Dominant(B)
3				Species Across Air Strata.
4				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	30	= Total Cov	rer	OBL species x 1 =
50% of total cover:15	20% of	total cover	6	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30F+X15F+	_ 2070 01			FAC species x 3 =
1 Lividendon tuipifera	10	V	FACU	FACU species x 4 =
	-10	N	FAC	UPL species x 5 =
2. FIEX OPACA				Column Totals: (A) (B)
3. QUERCUS NIGRA	2	N	FAC	
4. FROMS Grondifolia	10	Y	FACU	Prevalence Index = B/A =
5. Cletura alniforia	15	4	FACW	Hydrophytic Vegetation Indicators:
6.		,		1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 22.5	20% of	total cover:	4	
Herb Stratum (Plot size: 3/8+×158+)	20	V	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Arundinaria gigantea	5	Ň	FAC	Definitions of Four Vegetation Strata:
2 VIOLO SOFOFIA	-			Definitions of Four Vegetation Strata.
3. EUNONGMOUS AMERICONAS	5	N	FAC	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4. Allium canadense	10	<u> </u>	FACU	more in diameter at breast height (DBH), regardless of
5. Chasmonthium laxum	2	N	FACW	height.
6.				Sapling/Shrub – Woody plants, excluding vines, less
				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12		Jane - Marrie and		
	42	= Total Cov	/er	
50% of total cover: 21		total cover	e 1.	
	20%0	total cover		
Woody Vine Stratum (Plot size: 305+ X, 15F+)	15	V	FAC	
1. Smilak notundiplion	15		FAC	2
2. Gelsemium sempervivens	5	<u> </u>	FAC	
3.		/		
4.	-			
	-			Hudeen butte
5	20	Tatal Ca		Hydrophytic Vegetation
1/2		= Total Cov	()	Present? Yes No
50% of total cover: 10		total cover		
Remarks: (If observed, list morphological adaptations below	w).			

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	cription: (Describe	to the dep	th needed to docu	ment the	indicator	or confirm	the absence of	indicators.)	WSup 02
	Matrix		the second se	ox Feature		Loc ²	Texture	Remarks	
5)	Color (moist)	<u>%</u>	Color (moist)	%	Type	LOC	FSL	Nomarka	
0	2.54 5/4	100	10 06/1	10					
6	104R3/1	50	104R6/1	40			SCL		
			NyR6/6	10					
0	104R3/1	100	1				CL		
			Deduced Methics M		d Sand Cr	ainc	² Location: Pl	=Pore Lining, M=Mat	-ix
C=C Soil	Concentration, D=De Indicators: (Appli	cable to all	LRRs. unless othe	rwise not	ted.)	ams.		Problematic Hydric	
	(A1)		Polyvalue B			RR S. T. U		k (A9) (LRR O)	
	pipedon (A2)		Thin Dark S				2 cm Muc	k (A10) (LRR S)	
	listic (A3)		Loamy Muc				Reduced	Vertic (F18) (outside	MLRA 150A,B)
	en Sulfide (A4)		Loamy Gley	ed Matrix	(F2)			Floodplain Soils (F19	
	d Layers (A5)		Depleted Ma					IS Bright Loamy Soils	(F20)
	Bodies (A6) (LRR		Kedox Dark				(MLRA Red Pare	153B) nt Material (TF2)	
	ucky Mineral (A7) (L		Depleted Da Redox Depr					low Dark Surface (TF	12)
	uck (A9) (LRR P, T)		Marl (F10) (0)			plain in Remarks)	
	d Below Dark Surfa		Depleted Or		(MLRA 1	51)			
•	ark Surface (A12)		Iron-Mangai					rs of hydrophytic veg	
	Prairie Redox (A16)					; U)		d hydrology must be p disturbed or problem	
	Mucky Mineral (S1)	(LRR O, S)	Delta Ochrid			(0A 150B)		disturbed of problem	allo.
-	Gleyed Matrix (S4) Redox (S5)		Piedmont Fl	loodplain S	Soils (F19)	(MLRA 14	(A9		
-	d Matrix (S6)		Anomalous	Bright Loa	my Soils (F20) (MLR	A 149A, 153C, 1	53D)	
	urface (S7) (LRR P,	S, T, U)							
ctive	Layer (if observed	l):							
e:									No
th (in	nches):						Hydric Soll Pr	esent? Yes	No
ks:									
1	material	plese	ont (bir	ches)					
,									



Upland data point wsup020_u facing east.



Upland data point wsup020_u facing west.

Photo Sheet 3 of 3

	M – Atlantic and Gulf Coastal Plain Region
Project/Site: ACP City/C	ounty: <u>Suffolk</u> Sampling Date: 7/21//5 State: VA Sampling Point: Wsuo 011f_W
Applicant/Owner: DOMENEO	State: Vit Sampling Date: <u>// - / /</u>
Investigator(s): ESI-T. Miller, K. MURPhrey Section	
Subregion (LRR or MLRA): LRRT Lat: 36.770	relief (concave, convex, none): $\frac{F107}{92}$ Slope (%): $\frac{O-2}{W6584}$ Detum: W6584
Soil Map Unit Name: Torhunta loam	NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problema	
SUMMARY OF FINDINGS Attach site map showing sam	iping point locations, transects, important teatures, etc.
Hydrophytic Vegetation Present? Yes <u>No</u>	Is the Sampled Area
Hydric Soil Present? Yes No	within a Wetland? Yes No
Wetland Hydrology Present? Yes V No	
Remarks:	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2)	
L Saturation (A3) Hydrogen Sulfide Odor (
U Water Marks (B1) U Oxidized Rhizospheres I Sediment Deposits (B2) Presence of Reduced Ir	
Drift Deposits (B2)	
Algal Mat or Crust (B4)	
Iron Deposits (B5) Other (Explain in Remain	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	N/ h
Surface Water Present? Yes No Depth (inches): Water Table Present? Yes No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Demode	
Remarks:	

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

Sampling Point: WSUOØ [18. w

2/6//2/61	Absolute			Dominance Test worksheet:
<u>ee Stratum</u> (Plot size: 308+X 308+7) Pinus taeda	<u>% Cover</u> 40	Species?	FAC	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
			<u> </u>	Total Number of Dominant
				Species Across All Strata: (B)
				Percent of Dominant Species That Are OBL, FACW, or FAC: 86% (A/B)
	·			Prevalence Index worksheet: Total % Cover of:Multiply by:
	40			OBL species x1 =
		= Total Co	ver 🗹	FACW species x 2 =
50% of total cover: $2c$ pling/Shrub Stratum (Plot size: 3084×30^{6}	20% 0	f total cover	r:	FAC species x 3 =
Piners tacda	30	\bigvee	FAC	FACU species x 4 =
Acer rubrum	30	· <u> </u>	FAC	UPL species x 5 =
Taxodium distichum	15	Ň	OBL	Column Totals: (A) (B)
Liguidonnow Styrocificia	20	$\overline{\mathbf{V}}$	FAC	
Sallx nigra	え	N	OBL	Prevalence Index = B/A =
				Rapid Test for Hydrophytic Vegetation
				2 - Dominance Test is >50%
	-			$\boxed{1} 3 - \text{Prevalence Index is } \leq 3.0^{1}$
(. <i></i> .	97	= Total Co	over	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 48	<u>•• </u>	of total cove	ar: 19.4	
erb Stratum (Plot size: 308+X308-5 TOXICOLENTION VOLCOOS	5	\mathbf{v}	FAC	¹ Indicators of hydric soil and wetland hydrology must
				be present, unless disturbed or problematic.
·				Definitions of Four Vegetation Strata:
•				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
•				more in diameter at breast height (DBH), regardless of height.
·				Sapling/Shrub – Woody plants, excluding vines, less
· · · · · · · · · · · · · · · · · · ·				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
),				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
0				
1				Woody vine – All woody vines greater than 3.28 ft in height.
2			<u> </u>	
-		_ = Total C	over	
50% of total cover:	<u> </u>	of total cov	rer: <u>\</u>	
Noody Vine Stratum (Plot size: 306+ X 305+	. 5	1/	TACI	
AMPETOPSis anoteo	<u> </u>	<u> </u>	-FAC	<u>}</u>
2 Annetorsis areated			_ <u>PRC</u>	-
3				-
4				-
5				- Hydrophytic Vegetation
50% of total cover: <u>3</u>	5 20%	= Total (of total co	14	Present? Yes No
				-
Remarks: (If observed, list morphological adaptations b	elow).			
				· · ·

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SOIL

5

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Profile Description: (Describe to the depth	needed to docu	ment the indicato	r or confirm t	he absence of ind	icators.)
Depth <u>Matrix</u>	Redo	ox Features			
(inches) Color (moist) %	Color (moist)	% <u>Type¹</u>	Loc ²	Texture	Remarks
	UNR THE	20		<u> </u>	
8-20 104R6/1 70 1	OUR7/6	30		LS	
······································	1				
					· · · · · · · · ·
·			_ <u></u> _		
¹ Type: C=Concentration, D=Depletion, RM=R					
Hydric Soil Indicators: (Applicable to all LF	Rs unless othe	rwise noted)		Location: PL=P	ore Lining, M=Matrix. oblematic Hydric Soils ³ :
Histosol (A1)			() DD C T ())		-
Histic Epipedon (A2)		elow Surface (S8) urface (S9) (LRR S			49) (LRR 0) A10) (LRR S)
Black Histic (A3)		ky Mineral (F1) (LF			dic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)		red Matrix (F2)			podplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma				Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)		Surface (F6)		(MLRA 15:	
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da	ark Surface (F7)		Red Parent I	Material (TF2)
Muck Presence (A8) (LRR U)		ressions (F8)			v Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (🔟 Other (Expla	in in Remarks)
Depleted Below Dark Surface (A11)		chric (F11) (MLRA			
Thick Dark Surface (A12)		nese Masses (F12)			of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)		face (F13) (LRR P, c (F17) (MLRA 151			hydrology must be present,
Sandy Gleyed Matrix (S4)		ertic (F18) (MLRA		uniess an	sturbed or problematic.
Sandy Redox (S5)		loodplain Soils (F1		20	
Stripped Matrix (S6)				A 149A, 153C, 153I	0)
Dark Surface (S7) (LRR P, S, T, U)					- ,
Restrictive Layer (if observed):		- 1 •			
Туре:					
Depth (inches):	·			Hydric Soil Pres	ent? Yes No
Remarks:	··				
		· · · · · · · · · · · · · · · · · · ·			



Wetland data point wsuo011f_w facing northeast



Wetland data point wsuo011f_w facing south

Photo Sheet 1 of 2

WETLAND DETERMINATION DA	TA FORM – Atlantic and	Gulf Coastal Pl	ain Region
Project/Site: <u>ACP</u>	City/County:SuFfst	۷	Sampling Date: 7/2///5
Applicant/Owner: Dominin		State: VA	Sampling Point: WS40011e-W
Investigator(s): Hunhow C. McFach	Section, Township, Range:		
Landform (hillslope, terrace, etc.): Flat	Local relief (concave, conv	ex. none): how	Slope (%): <u>∠ Ə</u>
Subregion (LRR or MLRA): Lat: 3	5.77045 Long	-76.465	78 Datum: W65 84
Soil Map Unit Name: Techunta loam		NWI classifi	
Are climatic / hydrologic conditions on the site typical for this time		(If no, explain in F	
Are Vegetation, Soil, or Hydrology signific			present? Yes No
Are Vegetation, Soil, or Hydrology natural		ed, explain any answe	
SUMMARY OF FINDINGS - Attach site map show	wing sampling point loca	ations, transects	s, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Slectric line easement			No
[
HYDROLOGY			
Wetland Hydrology Indicators:			cators (minimum of two required)
Primary Indicators (minimum of one is required: check all that a			il Cracks (B6)
Image: Surface Water (A1) Image: Aquatic Fauntier Table (A2) Image: High Water Table (A2) Image: Aquatic Fauntier Table (A2)	ia (813) s (B15) (LRR U)		egetated Concave Surface (B8) atterns (B10)
	lfide Odor (C1)		Lines (B16)
	zospheres along Living Roots (C		n Water Table (C2)
	Reduced Iron (C4)		JITOWS (C8)
Drift Deposits (B3)	Reduction in Tilled Soils (C6)		Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4)	· ·		ic Position (D2)
	in in Remarks)		uitard (D3)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)			al Test (D5)
Field Observations:		Spnagnum	1 moss (D8) (LRR T, U)
Surface Water Present? Yes No Depth (i	inches) NA		
	inches):		
Saturation Present? Yes Ves No Depth (and Hydrology Pres	ent? Yes <u>V</u> No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous inspections).	if available:	
Remarks:			

٩.

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

Sampling Point: WSUD OILe . W

Tree Stratum (Plot size: 30A, x 30A)		ninant Indicator	Dominance Test worksheet:	
	<u>% Cover Spe</u>	ecles? Status	Number of Dominant Species	
1. None			That Are OBL, FACW, or FAC:	_ (A)
2				
3			Total Number of Dominant	(7)
			Species Across All Strata:	_ (B)
4			Percent of Dominant Species	
5			That Are OBL, FACW, or FAC: _/0.0	(A/B)
6	. <u></u>			
7			Prevalence Index worksheet:	1
8			Total % Cover of: Multiply by:	
·			OBL species x 1 =	
	= Tot		FACW species x 2 =	
50% of total cover:	20% of total	cover:		
Sapling/Shrub Stratum (Plot size: 3091. x 3091.)			FAC species x 3 =	
1. none			FACU species x 4 =	_
2			UPL species x 5 =	
			Column Totals: (A)	
3				_/
4			Prevalence Index = B/A =	
5	<u>. </u>		Hydrophytic Vegetation Indicators:	
6			i i i i i i i i i i i i i i i i i i i	Ì
7			Rapid Test for Hydrophytic Vegetation	
			2 - Dominance Test is >50%	ļ
8			3 - Prevalence Index is ≤3.0 ¹	1
	= To	tal Cover	Problematic Hydrophytic Vegetation ¹ (Exp	plain)
50% of total cover:	20% of tota	cover:		,
Herb Stratum (Plot size: 30 Pt. x 30 Pt.)				
1. Scirpus ruphinus	35 1	DBL	¹ Indicators of hydric soil and wetland hydrolog be present, unless disturbed or problematic.	y must
T TOTAL CC				
2. Juncus offusus	$-\frac{73}{5}$	¥	Definitions of Four Vegetation Strata:	
3. Rhexia Alifanus			Tree – Woody plants, excluding vines, 3 in. (7	6 cm) or
4. Eleocharis sp	<u> 10 n</u>) <u>>FACW</u>	more in diameter at breast height (DBH), rega	rdless of
5			height.	
6			Sapling/Shrub - Woody plants, excluding vir	nes, less
7			than 3 in. DBH and greater than 3.28 ft (1 m)	tall.
8			Herb - All herbaceous (non-woody) plants, re	enardless
9			of size, and woody plants less than 3.28 ft tal), .
10				
			Woody vine - All woody vines greater than 3	3.28 ft in
11			height.	
12				
		otal Cover		
50% of total cover: 32	≤ 20% of tota	al cover: いろ		
Woody Vine Stratum (Plot size: 30A. x 30 PL)				
1. None				
2				
3				
4				
			•	
5			- Hydrophytic	
	<u> </u>	otal Cover	Vegetation	
50% of total cover:	20% of tot	al cover:	Present? Yes V No	-
Remarks: (If observed, list morphological adaptations b				
internet (in observed, list morphological bachterions b	ciow).			
· · ·				
1				

SOIL

	ription: (Describe	e to the dep	oth needed to docu	ment the	indicator	or confirm	m the absence of indicators.)				
Depth (inches)	Matrix		Redo	ox Feature	is t		Tartas				
(inches)	Color (moist)	<u>%</u>	Color (moist)		Type'						
0-20	104R4/1	8D	IDYR 5/6	<u> </u>	<u> </u>	<u></u>	Souchy /sem				
			· · · · · · · · · · · · · · · · · · ·		•						
		<u>. </u>	·	<u>.</u>		<u> </u>					
	· · · · · · · · · · · · · · · · · · ·										
·	<u> </u>						· · · · · · · · · · · · · · · · · · ·				
1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1						·					
			=Reduced Matrix, M LRRs, unless othe			rains.	² Location: PL=Pore Lining, M=Matrix. Indicators for Problematic Hydric Soils ³ :				
Histosol			Polyvalue B		•	DDCT					
	pipedon (A2)		Thin Dark S				2 cm Muck (A10) (LRR S)				
	istic (A3)		Loamy Muc				Reduced Vertic (F18) (outside MLRA 150A,B)				
	en Sulfide (A4)		Loamy Gley		(F2)		Piedmont Floodplain Soils (F19) (LRR P, S, T)				
	d Layers (A5)	-	Depleted Ma		7 • 1		L Anomalous Bright Loamy Soils (F20)				
	Bodies (A6) (LRR Jcky Mineral (A7) (L		│ Redox Dark)		•		(MLRA 153B)				
	resence (A8) (LRR		Redox Depr		• •		Very Shallow Dark Surface (TF12)				
	uck (A9) (LRR P, T)		🔲 Marl (F10) (,		Other (Explain in Remarks)				
	d Below Dark Surfa	ice (A11)	Depleted O								
	ark Surface (A12)	(64) 15 4 4 5 0	Iron-Manga								
	rairie Redox (A16) Mucky Mineral (S1)						wetland hydrology must be present, unless disturbed or problematic.				
	Gleved Matrix (S4)	(21010)	Reduced Ve								
	Redox (S5)		Piedmont F	loodplain -	Soils (F19) (MLRA 1	149A)				
	Matrix (S6)		Anomalous	Bright Loa	amy Soils	(F20) (ML	.RA 149A, 153C, 153D)				
	ufface (S7) (LRR P, Layer (if observed										
Type:	Layer (il observed	·/•									
	iches):										
Remarks:						_	Hydric Soil Present? Yes No				
			•								
				`			1				
							ř				
							· · · · · · · · · · · · · · · · · · ·				
						-					
	-					•					
1											
.											
1											

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Wetland data point wsuo011e_w facing northwest



Wetland data point wsuo011e_w facing southeast

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

)

Project/Site: ACP	City/County: SUFFORK Sampling Date: 7/21/15
Applicant/Owner: Dominidn	State: VA Sampling Point: WSUOOII-4
Investigator(s) ESI-T, Miller, K, Marphree	Section Township Range: NA
Landform (hillstope, terrace, etc.): FIA+	Local relief (concave, convey, none): FIAT Slope (%): 2-4
Subregion (LRR or MLRA): LRRT Lat: 36,	Local relief (concave, convex, none): $\frac{F(A+)}{77095}$ Slope (%): $\frac{2-4}{277.46795}$ Datum: W65 $\frac{2}{24}$
Soil Map Unit Name: TOY hanta (Jom	
	NWI classification:
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significant	·
Are Vegetation, Soil, or Hydrology naturally p	roblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showin	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area
Hydric Soil Present? Yes Ves No	within a Wetland? Yes No
Wetland Hydrology Present? Yes No	
Remarks:	
'	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply	/) Surface Soil Cracks (B6)
Surface Water (A1)	313)
High Water Table (A2)	
Saturation (A3)	
Water Marks (B1) Oxidized Rhizos Sediment Deposits (B2) Presence of Red	pheres along Living Roots (C3) luced Iron (C4) Crayfish Burrows (C8)
	uction in Tilled Soils (C6)
Algal Mat or Crust (B4)	
Iron Deposits (B5)	
L Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	· Ala
	$\frac{220}{1000}$ Wetland Hydrology Present? Yes No $\frac{220}{1000}$
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial ph	iotos, previous inspections), if available:
Remarks:	
	•
	· · · · · · · · · · · · · · · · · · ·
1	

EGETATION (Four Strata) – Use scientific nan	•	Dominant	Indicator	Sampling Point: WSUO 011
	<u>% Cover</u>	<u>Species?</u>	Status	Number of Dominant Species O That Are OBL, FACW, or FAC: (A)
2,				
3		<u> </u>		Total Number of Dominant (B)
				Percent of Dominant Species
				That Are OBL, FACW, or FAC:
)				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
···	Ô	= Total Cov		OBL species $5 \times 1 = 5$
50% of total cover:		total cover:		FACW species $10 \times 2 = 20$
Sapling/Shrub Stratum (Plot size; 305+X305+				FAC species x 3 = 12
none present				FACU species $40 \times 4 = 160$
2				UPL species X 5 = 0
3				Column Totals: <u>59</u> (A) <u>197</u> (B)
				Prevalence Index = B/A = 3.34
5				Hydrophytic Vegetation Indicators:
3				1 - Rapid Test for Hydrophytic Vegetation
7			<u> </u>	2 - Dominance Test is >50%
3				3 - Prevalence Index is ≤3.0 ¹
		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
	20% of	f total cover	;	
terb Stratum (Plot size: 3084, 3084)	ſ	N	FAC	¹ Indicators of hydric soil and wetland hydrology must
1. Taki cubenarun radicons			<u> </u>	be present, unless disturbed or problematic.
2. <u>A Mundinaria glaostea</u> 3. Trifolium Platense	20		FACH	Definitions of Four Vegetation Strata:
ATribolium repeas	20		<u>FA(4</u> FAC4	Tree – Woody plants, excluding vines, 3 in. (7.6 cm)
5. Sabatia angularis	- 5	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	FACW	more in diameter at breast height (DBH), regardless of height.
6. Panicum hemitomun	5	N	OBL	The grade and the second s
7. Microstegium vineoium		$\frac{N}{N}$	FAC	Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		· · · · · · · · · · · · · · · · · · ·	·	
8 9				Herb – All herbaceous (non-woody) plants, regardles of size, and woody plants less than 3.28 ft tall.
10			- <u></u>	Woody vine – All woody vines greater than 3.28 ft in
11				height.
12			·	
20	21	_ = Total Co	ver 🗸 🗸	
50% of total cover: <u>29.</u>	<u>></u> 20% c	of total cove	r: (<u>), o</u>	
Woody Vine Stratum (Plot size: 308-1 × 308+1)				
1. <u>none</u>				
2				
3				
4				
5				- Hydrophytic
		_ = Total Co		Vegetation Present? Yes No
50% of total cover:		of total cove	er:	NO
Remarks: (If observed, list morphological adaptations bel	low).			

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INSUDOIL_U

SOIL

Profile Description: (Describe to the depth	needed to docu	nent the indicat	or or confirm	the absence of in	dicators.)
Depth <u>Matrix</u>		x Features			
(inches) Color (moist) %	Color (moist)	<u></u>	<u>a Loc²</u>	Texture	Remarks
0-20109R5/1 70 1	UMR 5/6	30		<u> </u>	
/					
······································				<u> </u>	
					······································
				·	
				·	
	_ ·				·
¹ Type: C=Concentration, D=Depletion, RM=F			Grains.		Pore Lining, M≃Matrix.
Hydric Soll Indicators: (Applicable to all L	· ^	•			Problematic Hydric Solls ³ :
Histosol (A1)		elow Surface (S8		J) 📙 1 cm Muck	(A9) (LRR O)
Histic Epipedon (A2)		urface (S9) (LRF		2 cm Muck	(A10) (LRR S)
Black Histic (A3)		ky Mineral (F1) (I	_RR 0}		ertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)		ed Matrix (F2)		Piedmont F	loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma				Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)		Surface (F6)		(MLRA 1	53B)
5 cm Mucky Mineral (A7) (LRR P, T, U)		ark Surface (F7)			Material (TF2)
Muck Presence (A8) (LRR U)		essions (F8)			w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (•		Uther (Expl	ain in Remarks)
Depleted Below Dark Surface (A11)		chric (F11) (MLR			
Thick Dark Surface (A12)		nese Masses (F1		-	s of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)		ace (F13) (LRR			hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)		c (F17) (MLRA 1			isturbed or problematic.
Sandy Gleyed Matrix (S4)		ertic (F18) (MLR		•	
Sandy Redox (S5)		loodplain Soils (F			
Stripped Matrix (S6)	L Anomaious	Bright Loamy So	oils (F20) (MLI	RA 149A, 153C, 153	3D)
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):					
Type:	<u></u>				
Depth (inches):				Hydric Soil Pre	sent? Yes No
Remarks:					
1					
-					
					



Upland data point wsuo011_u facing north-northeast



Upland data point wsuo011_u facing south southwest

Photo Sheet 3 of 2

WETLAND DETERMINATION DATA FOR	M Atlantic and G	ulf Coastal Plain	Region
Project/Site: ACPCity/	county: Chesa Per	rke	30 July 2015
Applicant/Owner: Oominion			npling Date: <u>0051192015</u> npling Point: WChrow2f-W
Investigator(s): EST-A, Miller, C.M. Eachern sect		NA Sal	npling Point: VVCA PARA
		~	2 (1) 2-2
	I relief (concave, convex,		
			<u>Datum:</u> <u>W6584</u>
Soil Map Unit Name: <u>Arapaho mucky fine sandy lo</u>			
Are climatic / hydrologic conditions on the site typical for this time of year?			
Are Vegetation, Soll, or Hydrology significantly distu			ent? Yes <u>X</u> No
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If needed, e	explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing sa	mpling point location	ons, transects, in	nportant features, etc.
Hydrophytic Vegetation Present? Yes No		1	
Hydric Soil Present? Yes No	Is the Sampled Area		
Wetland Hydrology Present? , Yes 🖄 No	within a Wetland?	Yes	No
Remarks:	I		
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicators	(minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cra	cks (B6)
Surface Water (A1) Aqualic Fauna (B13)		Sparsely Vegeta	ited Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (Lf	RR U)	Drainage Patter	ns (B10)
Saturation (A3) Hydrogen Sulfide Odor		Moss Trim Lines	
	along Living Roots (C3)	Dry-Season Wa	
Sediment Deposits (B2) Presence of Reduced II	• •	Crayfish Burrow	1
Drift Deposits (B3) End Control Contr	• •	Geomorphic Po	le on Aerial Imagery (C9)
Iron Deposits (85) Other (Explain in Rema		Shallow Aquitar	
Inundation Visible on Aerial Imagery (B7)	····-,	FAC-Neutral Te	
Water-Stained Leaves (B9)		Sphagnum mos	s (D8) (LRR T, U)
Field Observations:	•		· · · · · · · · · · · · · · · · · · ·
Surface Water Present? Yes X No Depth (inches):	2		
Water Table Present? Yes A No Depth (inches);	and		×
Saturation Present? Yes X. No Depth (inches): Saturation Present?	Wrface Wetland	Hydrology Present?	Yes // No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if av	ailable:	
· · · · · · · · · · · · · · · · · · ·			
Remarks:			
		:	
· · · · · · · · · · · · · · · · · · ·			

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

Sampling Point: WChr # 2 -W

Rev 20Ch	Absolute	Dominant	Indicator	Dominance Test worksheet:
Iree Stratum (Plot size: 30×30F.+)		<u>Species?</u>	Status	Number of Dominant Species
1. Acer rubrum	50	<u> </u>	1 fc	That Are OBL, FACW, or FAC:(A)
2. Liquidambar Styracifiua	50	<u> </u>	FRC	Total Number of Dominant
3				Species Across All Strata: (2) (B)
4		<u> </u>		Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (00/13) (A/B)
6			•	
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by:
	IN	= Total Cov	rer	OBL species $1/0$ $x_1 = 1/0$
50% of total cover:	 20% of	total cover	20	FACW species 20 x 2 = 40
Sapling/Shrub Stratum (Plot size: 30×30A)		i .	·	FAC species $200 \times 3 = 600$
1. Taxodium ascendens	50	y y	OBL	FACU species x 4 =
2. Acer rubrum	50	-t-	FAC	UPL species O x 5 = O
3. Lighidambar Styraciflun	50		FAC	Column Totals: 330 (A) 750 (B)
			<u></u>	
4			<u> </u>	Prevalence Index = $B/A = \frac{2:27}{2}$
5	·			Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				<u>↓</u> 2 - Dominance Test is >50%
8			<u> </u>	S - Prevalence Index is ≤3.0 ¹
		= Total Co		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 75	20% of	total cover	: <u>30</u>	
Herb Stratum (Plot size: 30×30FF)				³ Indicators of hydric soil and wetland hydrology must
1. Cladium effusum	50	<u> </u>	OBL	be present, unless disturbed or problematic.
2. JUNCUS EFLUSUS	10	_ <u>/\</u>	OBL	Definitions of Four Vegetation Strata:
3. Arundinaria gigantea	10	$-\lambda$	FACW	
4. Clethra Alnapolia	10	$\overline{\mathcal{D}}$	FACW	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
5				height.
6				
				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3,28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				or size, and woody plants less than 5.20 h tail.
10				Woody vine - All woody vines greater than 3.28 ft in
11			·	height.
12	100	• •••••	· •••••	
		= Total Co		
50% of total cover: 40	<u> </u>	of total cove	r. <u>20</u>	
Woody Vine Stratum (Plot size: BOX304)				
1. None				
2				
3				
4.				
5.				Undrankußa
	<u>ر ان ا</u>	= Total Co		- Hydrophytic Vegetation
50% of total power:	2006	of total cove		Present? Yes No
50% of total cover:	2070		st	
Remarks: (If observed, list morphological adaptations be	low).		, n	1 D. +Taxodium
Remarks: (If observed, list morphological adaptations be Clethra is growing on (have been in a rest	a hu	mmuc	k, C	ladium appears to
have been in a resi	Toral	tion	are	ea, None present
				•
within Riecent PFC				

SOIL

Profile Desc	ription: (Describe	to the depth	needed to docu	ment the l	ndicator	or confirm	the absence of in	idicators.)
Depth	Depth Matrix Redox Features							
(inches)	Color (moist)	%	Color (moist)		Type ¹	<u></u> .	<u>Texture</u>	Remarks
<u>U-13</u>	10 YR 4/2	50	10YR 5/8	50	<u> </u>		<u> </u>	
12-20	pyr 7/1	100				•	SL_	
						·		
	·				·		·	
	<u></u>		· · · ·		·		· · · · · · · · · · · · · · · · · · ·	
	oncentration, D=De				Cand Co	·	21 and Kerne [21	
	ndicators: (Appli					ams.		Pore Lining, M=Matrix. Problematic Hydric Solls ³ :
Histosol								-
	pipedon (A2)		Polyvalue B					
	stic (A3)		Thin Dark S Loamy Muck					(A10) (LRR S)
	n Sulfide (A4)		Loamy Gley			(0)		ertic (F18) (outside MLRA 150A,B) floodplain Soils (F19) (LRR P, S, T)
	Layers (A5)				(12)			Bright Loamy Soils (F20)
	Bodies (A6) (LRR I	P, T, U)	Redox Dark		-6)		(MLRA 1	
	icky Mineral (A7) (L		Depleted Da					t Material (TF2)
	esence (A8) (LRR		Redox Depr				-	w Dark Surface (TF12)
	ick (A9) (LRR P, T)		Mari (F10) (•	•			lain in Remarks)
Depleted	d Below Dark Surfa	ce (A11)	Depleted Od	chric (F11)	(MLRA 1	51)		
	ark Surface (A12)		Iron-Mangai	nese Mass	es (F12)	(LRR O, P, '	T) ³ Indicators	s of hydrophytic vegetation and
	rairie Redox (A16) (wetland	hydrology must be present,
	lucky Mineral (S1)	(LRR O, S)	Delta Ochrid				unless o	disturbed or problematic.
	Sleyed Matrix (S4)		Reduced Ve					
	ledox (S5)		Piedmont Fi					
	Matrix (S6)	o = 10	Anomalous	Bright Loa	my Soils	(F20) (MLR/	A 149A, 153C, 153	3D)
	rface (S7) (LRR P, Layer (If observed						· · · · · · · · · · · · · · · · · · ·	
_	Layer (il observed	J .						
Type:			<u> </u>					
	ches):						Hydric Soll Pre	sent? Yes <u>K</u> No
Remarks:								
ļ								
1								



Wetland data point wchr002f_w facing north



Wetland data point wchr002f_w facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	City/County: Chesapeake Sampling Date: 1/21/16
Applicant/Owner: Dominion	State: VA Sampling Point: wchr 002f-w2
	Section, Township, Range: MA
Landform (hillslope, terrace, etc.): Flort	Local relief (concave, convex, none): <u>Mone</u> Slope (%): <u>D-1</u>
Landrorm (nillslope, terrace, etc.):	76836 Long: -76.432-78 Datum: WGS84
Soil Map Unit Name: TOMOHley-Deloss Compt-	
Are climatic / hydrologic conditions on the site typical for this time of year	
	disturbed? Are "Normal Circumstances" present? Yes Xen No
Are Vegetation, Soil, or Hydrology naturally pro	oblematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Yes No	Is the Sampled Area within a Wetland? Yes <u>Y</u> No
NCWAM : Hard wood Flat	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13 High Water Table (A2) Marl Deposits (B15)	등은 방법을 한 것 위에서 사람이 있는 것이 있는 것이 있는 것이 있었다. 또한 것은 400000000000000000000000000000000000
High Water Table (A2) Marl Deposits (B15) Saturation (A3) Hydrogen Sulfide O	
	eres along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduct	
	tion in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface	에는 것 같은 것은 것 같은 것
Iron Deposits (B5) Other (Explain in Re	emarks) Shallow Aquitard (D3) X FAC-Neutral Test (D5)
Inundation Visible on Aerial Imagery (B7) Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	
Surface Water Present? Yes No 🔀 Depth (inches)	NA NA
Water Table Present? Yes X No Depth (inches)	
Saturation Present? Yes X No Depth (inches) (includes capillary fringe)	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photo	is, previous inspections), if available:
Remarks:	

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

Sampling Point: Wchr0024.w2

	Absoluto	Dominan	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 X30)	and the same of the state of the state of the	Species		
1. Liguidambar StyrociFina	40	V	FAC	Number of Dominant Species
				That Are OBL, FACW, or FAC: (A)
2. Ruercus nigra	10	N	FAC	Total Number of Dominant 2
3. Acer rubrum	10	N	FAC	Total Number of Dominant Species Across All Strata: 3 (B)
1		THE REAL PROPERTY.	C. State Contra	
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: /DD (A/B)
6				
7				Prevalence Index worksheet:
8.		AND CONTRACT	I CONTRACTOR	Total % Cover of: Multiply by:
D	10			OBL species x 1 =
20		= Total Co	· · · · · · · · · · · · · · · · · · ·	FACW species x 2 =
50% of total cover: 30	_ 20% of	total cover	10-	The second s
Sapling/Shrub Stratum (Plot size: 30 × 30)				FAC species x 3 =
1. Liquidambar Styracifua	20	Y	FAC	FACU species x 4 =
				UPL species x 5 =
2		Contraction of the second		Column Totals: (A) (B)
3		1		
4				Prevalence Index = B/A =
		No. of Contraction	A REAL PROPERTY OF	a construction of the second state of a state of a second product of the second state of the second state of the
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7	A Contraction			2 - Dominance Test is >50%
8.	A STATE OF A STATE			
u	20	= Total Co	ANTER TRANSPORT	3 - Prevalence Index is ≤3.0 ¹
13				Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:/ 1	_ 20% of	total cover		
Herb Stratum (Plot size: 30 X3D)				¹ Indicators of hydric soil and wetland hydrology must
1. Arundinavia gigantea	50	Y	FACW	be present, unless disturbed or problematic.
	Territoria de la composición d			
2	CALMAN TRANSPORT	1		Definitions of Four Vegetation Strata:
3	here all the set	and station in the	and a started	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
where the second second is a ready of the second				
6				Sapling/Shrub - Woody plants, excluding vines, less
7		Pristant in		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
SUSPECTIVE And A SECTION AND ADDRESS AND ADDRESS AND ADDRESS ADDRESS ADDRESS ADDRESS ADDRES ADDRESS ADDRESS				of size, and woody plants less than 3.28 ft tall.
9			anna micra v	of size, and troody plants loss that o zo it tail
10	- Provide Providence			Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				
	50	= Total Co	ior	
20				
50% of total cover:	20% of	total cover		
Woody Vine Stratum (Plot size: 30 ×30)	-			
1. Smilax laurifolia	3	N	FACW	
	W. W. W. T.			
2				
3				
4				
5				Hudsonbutic
	3	Tatal Ca	Conter Mark Mark	Hydrophytic Vegetation
1 6		= Total Co		Present? Yes V No
50% of total cover: 1 - 5	20% of	total cover	0.0	
Remarks: (If observed, list morphological adaptations below	w).			

SOIL

Sampling Point: Wchr002f.w2

Profile Desc	ription: (De	escribe to	o the depth	n needed to docu	ment the in	ndicator	or confirm	the absence of indica	tors.)	
Depth	the second se	Matrix			ox Features		1 2	Tautura	Demode	
(inches)	Color (m	2/1	<u>%</u>	Color (moist)	%	Type	_Loc ² .	Texture	Remarks	
0-6	IBYK	071	100					SCL		
620	IDYR	41	90	10/R 5/2	10	C	M	SCL	The design of the	
	A CONTRACTOR	1.308								
A MARKAGE AND A				STATISTICS STATISTICS	Service Contract	10 C 10 C	State of the	Contraction of the second		
					-					
				n de selation and	_			Sector and the sector of the		
									alan sahara	
¹ Type: C=Co	ncentration	D=Deple	tion. RM=F	Reduced Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=Pore	Lining, M=Matrix.	
				RRs, unless othe				Indicators for Prob		ils ³ :
Histosol				Polyvalue B			RR S. T. U)			
Contraction of the second second second	ipedon (A2)			Thin Dark S				2 cm Muck (A10		
Black His				Loamy Muck					(F18) (outside ML	
Hydroge	n Sulfide (A	4)		Loamy Gley	ed Matrix (F	=2)			plain Soils (F19) (L	
Stratified	Layers (A5)		Depleted Ma				Contraction of the second state of the second	ht Loamy Soils (F2	D)
	Bodies (A6)			Redox Dark				(MLRA 153B)		
A second seco	cky Mineral		R P, T, U)	Depleted Da				Red Parent Mat		
the second second second second second	esence (A8)			Redox Depr	ANALY CONTRACT OF STREET	5)		Other (Explain in	ark Surface (TF12)	
	ck (A9) (LRI Below Dari		(A11)	Marl (F10) (I		MI PA 15	(1)		TRemarks)	
7 4	rk Surface ((411)	Iron-Mangar				³ Indicators of h	ydrophytic vegetati	on and
the second se	airie Redox		LRA 150A)	Contraction of the second s				이 같은 것 같은	ology must be pres	
Street of the Antistation And States	ucky Minera	A REAL PROPERTY AND A REAL PROPERTY.		Delta Ochric				VOCUMENTS AND A STOCK STOCK AND AND AND AND AND A DECK	bed or problematic.	Charles and a second second second second
and the second sec	leyed Matrix			Reduced Ve			0A, 150B)			
Sandy R	edox (S5)			Piedmont Fl						
	Matrix (S6)			Anomalous	Bright Loan	ny Soils (F	20) (MLRA	149A, 153C, 153D)		
	face (S7) (L		T, U)			1.2.5 1914			and the second second second	
Restrictive L	ayer (if obs	served):								
Type:									X	
Depth (inc	:hes):							Hydric Soil Present?	Yes <u></u>	No
Remarks:										
16.000										
1.22										



Wetland data point wchr002f_w2 facing east.



Wetland data point wchr002f_w2 facing west.

Photo Sheet 3 of 4

WETLAND DETERMINATION DATA FO	ORM – Atlantic and Gulf Coastal Plain Region
AIP	ity/County: Chesapeake Sampling Date: 1/21/16
8- 10-0	ity/County: Charles County Sampling Date: 1141(16
Applicant/Owner: Dominion	State: VA Sampling Point: Wchr002f-w3
Investigator(s): C.Jacobs, C.McEachern St	ection, Township, Range: N/A
Landform (hillslope, terrace, etc.): Flat	ocal relief (concave, convex, none): <u>none</u> Slope (%): <u>D-45</u>
Subregion (LRR or MLRA): LRRT Lat: 36. 7	76879 Long: -76,45735 Datum: WGS84
Soil Map Unit Name: Udorthents-Urban Land	Complex NWI classification: PFO
Are climatic / hydrologic conditions on the site typical for this time of year	
Are Vegetation, Soil, or Hydrology significantly di	
Are Vegetation, Soil, or Hydrology naturally probl	
SUMMARY OF FINDINGS – Attach site map showing s	sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No Remarks: Yes No	Is the Sampled Area within a Wetland? Yes <u>Yes</u> No
Remarks.	
NE NAM ELECTRE	MAMP FOR CASE OF STREET
The	COM CONTRACTOR CONTRACTOR
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) ((LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Sulfide Odd	or (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosphere	es along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced	
Drift Deposits (B3) Recent Iron Reduction	
Algal Mat or Crust (B4) Thin Muck Surface (C	
Iron Deposits (B5) Other (Explain in Ren	방법은 가지 않는 것 같은 것 같아요. 그는 것 같아요. 그는 것 같아요. 그는 것 같아요. ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ? ?
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	NA
Surface Water Present? Yes No Depth (inches): _	
Water Table Present? Yes X No Depth (inches): _	8 Wetland Hydrology Present? Yes V No
Saturation Present? Yes <u>X</u> No <u>Depth</u> (inches): _ (includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos,	previous inspections), if available:
Remarks:	

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

Sampling Point: Wchr 002f-w3

	Abashda Deminent Indiantes	Device and Treat workshowst
Tree Stratum (Plot size: 30×30)	Absolute Dominant Indicator % Cover Species? Status	Dominance Test worksheet:
Tree Stratum (Plot size: 20 190)		Number of Dominant Species
1. LIquidambar Styraciflua	30 Y FAC	That Are OBL, FACW, or FAC: (A)
2. Pinus tarda	X N FAC	Tablahumbar of Deminant
3. ALER RUDRUM	4 N FAC	Total Number of Dominant Species Across All Strata: Q (B)
		Species Across All Strata: (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC:OD/_ (A/B)
6		
		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		The second
	42 = Total Cover_	OBL species x 1 =
21		FACW species x 2 =
50% of total cover: 2	20% of total cover: 8,1	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30×30)	0 11	
1 ALER INDRUM	SD Y AC	FACU species x 4 =
2 Aralia SAnosa	8 N FAC	UPL species x 5 =
		Column Totals: (A) (B)
3. Liquid Ambar Styracifina	5 N FAC	
4		Provalence Index = P/A =
	and the second se	Prevalence Index = B/A =
5	만은 가슴 방송에서 이렇게 다른 것이 것이다. 이렇게 다른 가정한 것은 것이 없을까? 다 같은 것이다.	Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
The second se		
8	7+	3 - Prevalence Index is ≤3.0 ¹
21	<u>43</u> = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 21.	5 20% of total cover: 8.6	
Herb Stratum (Plot size: 30 × 30)		
		¹ Indicators of hydric soil and wetland hydrology must
1. None		be present, unless disturbed or problematic.
2		Definitions of Four Vegetation Strata:
이 같은 것은 수가에 이 것 같은 것이 있는 것이 가지 않는 것이 있는 것이 같은 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 않은 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없이 없이 없이 없이 없이 없다. 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없다. 것이 없는 것이 있 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없다. 것이 없는 것이 없는 것이 없이 않이 않이 않이 않이 않이 없 않이		
3		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4.		more in diameter at breast height (DBH), regardless of
5.		height.
5		height.
6		height. Sapling/Shrub – Woody plants, excluding vines, less
The second se		height.
6		height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
6 7 8		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
6 7 8 9		height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
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6 7 8 9 10		height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
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6 7 8 9 10		 height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6 7 8 9 10 11 12		 height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
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6		 height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in
6		height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic Vegetation
6	O = Total Cover 20% of total cover: 3 N FAC	height. Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height. Hydrophytic
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SOIL

Prome Desc	iption. (Describe t	o uno dope	n needed t	o uocume	ent the i	ndicator	or confirm	the absence of in	laicators.)
Depth	Matrix				Feature		1 = -2	Testure	Domestra
(inches)	Color (moist)	_%	Color (m	oist)	%	_Type ¹	_Loc ²		Remarks
0-4	7.54R41	management of	1 5110		E		11	SCL_	
0.20	7.57Rd. 1/1	95 7	SYR	5/2	5	<u>c</u>	M	SCL	
					and the second se	Sec. Man		Total and the	
Store and some						11151/15	37.2762		
			E						
	ncentration, D=Depl						ains.		Pore Lining, M=Matrix.
	ndicators: (Applica	ible to all L							Problematic Hydric Soils ³ :
Histosol							RR S, T, U		
Histic Ep Black His	ipedon (A2)			Dark Surfa ny Mucky I					(A10) (LRR S) ertic (F18) (outside MLRA 150A,E
	n Sulfide (A4)			ny Gleyed			0)		loodplain Soils (F19) (LRR P, S, T
	Layers (A5)		and the second s	eted Matri		-,			Bright Loamy Soils (F20)
	Bodies (A6) (LRR P,	T, U)	X Red	ox Dark Su	urface (F	6)		(MLRA 1	
5 cm Mu	cky Mineral (A7) (LR	R P, T, U)		eted Dark					Material (TF2)
	esence (A8) (LRR U)			ox Depress		3)			w Dark Surface (TF12)
Contraction of the state of the	ck (A9) (LRR P, T)			(F10) (LR			41	Other (Expl	ain in Remarks)
Contractory Provides and Statistical Statistics	Below Dark Surface rk Surface (A12)	(A11)		eted Ochri Manganes			LRR O, P,	T) ³ Indicators	of hydrophytic vegetation and
	airie Redox (A16) (M	LRA 150A		ric Surface					hydrology must be present,
The second secon	ucky Mineral (S1) (L			Ochric (F					isturbed or problematic.
and the second se	leyed Matrix (S4)						0A, 150B)		
Sandy Re	edox (S5)						(MLRA 149		
the second state of the second state where	Matrix (S6)		Anor	nalous Bri	ght Loar	ny Soils (I	=20) (MLR/	A 149A, 153C, 153	D)
	face (S7) (LRR P, S,	, T, U)		Sector Sector					
Restrictive L	ayer (if observed):	, T, U)							
Restrictive L Type:	ayer (if observed):	, T, U)	<u></u>					Hydric Soil Pres	sent? Yes <u>×</u> No
Restrictive L	ayer (if observed):	, T, U)			•			Hydric Soil Pres	sent? Yes <u>/</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	, T, U)			•			Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	, T, U)	<u> </u>		•			Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	, T , U)			<u>*</u>			Hydric Soil Pres	sent? Yes <u> </u>
Restrictive L Type: Depth (inc	ayer (if observed):	, T, U)			•			Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	, T , U)						Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	. T, U)						Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	. T, U)						Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	. T, U)						Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):				<u>.</u>			Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	. T, U)						Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	. , , , , , , , , , , , , , , , , , , ,			·			Hydric Soil Pres	sent? Yes X No
Restrictive L Type: Depth (inc	ayer (if observed):	. , , U)						Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	. , , U)						Hydric Soil Pres	sent? Yes <u>No</u>
Restrictive L Type: Depth (inc	ayer (if observed):				-			Hydric Soil Pres	sent? Yes X No
Restrictive L Type: Depth (inc	ayer (if observed):	, T , U)						Hydric Soil Pres	sent? Yes X No
Restrictive L Type: Depth (inc	ayer (if observed):	, T , U)			·			Hydric Soil Pres	sent? Yes X No
Restrictive L Type: Depth (inc	ayer (if observed):	, T , U)	-					Hydric Soil Pres	sent? Yes X No
Restrictive L Type: Depth (inc	ayer (if observed):							Hydric Soil Pres	sent? Yes X No
Restrictive L Type: Depth (inc	ayer (if observed):		-					Hydric Soil Pres	sent? Yes <u>X</u> No
Restrictive L Type: Depth (inc	ayer (if observed):	, T , U)						Hydric Soil Pres	sent? Yes X No
Restrictive L Type: Depth (inc	ayer (if observed):	, T , U)			·			Hydric Soil Pres	sent? Yes X No



Wetland data point wchr002f_w3 facing northeast.



Wetland data point wchr002f_w3 facing south.

Photo Sheet 4 of 4

	WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region
	Project/Site: ACP City/County: Chesapeake Sampling Date: 7/3//15
	Applicant/Owner: Dominicon
	Investigator(s): ESI-A, MILLEY, C. M'Eacher Section, Township, Range: NA
	$\sum_{i=1}^{n} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{i$
	Soil Map Unit Name: TOMOHEG-DELOSS COMPLEX NWI classification: PEM
13. 14 m	Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
No. of State	Are Vegetation K. Soil K. or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
e.	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 K No
	Hydric Soil Present? Yes X No
s	Wetland Hydrology Present? Yes No
	Remarks:
	Powerline. Maintained corridor PER on both sides. Vegis moved & sprayed To eliminate
	Sides Vegis moved + spraved To alivering To
	HYDROLOGY JEQ. 7 IVE ruls Throughout,
	Wetland Hydrology indicators: Secondary Indicators (minimum of two required)* Primary Indicators (minimum of one is required: check all that apply) Surface Soil Cracks (B6)
	Primary Indicators (minimum of one is required: check all that apply) Surface Water (A1) Aquatic Fauna (B13) Sparsely Vegetated Concave Surface (B8)
	High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10)
	Saturation (A3) Hydrogen Sulfide Odor (C1) Moss Trim Lines (B16)
	Water Marks (B1) Qxidized Rhizospheres along Living Roots (C3)
	Sediment Deposits (B2) Presence of Reduced Iron (C4) Crayfish Burrows (C8) Prift Deposits (B3) Recent Iron Reduction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
	Algal Mat or Crust (B4)
	Iron Deposits (B5) Other (Explain in Remarks) Shallow Aquitard (D3)
	Inundation Visible on Aerial Imagery (B7)
	Water-Stained Leaves (B9)
	Field Observations:
	Surface Water Present? Yes No Depth (inches): 37.
	Water Table Present? Yes No Depth (inches): OT Surface C Saturation Present? Yes No Depth (inches): OT Surface Wetland Hydrology Present? Yes No
	(includes capillary fringe)
	Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
	Remarks:
	$^{\prime}$ $^{\prime}$ $^{\prime}$ $^{\prime}$ $^{\prime}$

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2061 12064	Absolute	Dominant	Indicator	Sampling Point:WChY
estratum (Plot size: 30F+ X30F+	<u>% Cover</u>	<u>Species?</u>	<u>Status</u>	Number of Dominant Species
Pone				That Are OBL, FACW, or FAC: (A)
				Total Number of Dominant
		. <u> </u>		Species Across All Strata; (B)
•				Percent of Dominant Species 100% (A/B)
				That Are OBL, FACW, or FAC: 10070 (A/B)
			<u> </u>	Prevalence Index worksheet:
		,		Total % Cover of: Multiply by:
		= Total Cov		OBL species x 1 = FACW species x 2 =
50% of total cover:	20% of	total cover	;	FAC species x2 =
bling/Shrub Stratum (Plot size: 3084 × 3057	-		CAI	
Acer rubrum	D		THE	FACU species x 4 =
Lyvikambar styraciflue	20	<u></u>	FAC	UPL species x 5 =
0				Column Totals: <u></u> (A) (B)
				Prevalence Index = B/A =
				Hydrophytic Vegetation Indicators:
				Rapid Test for Hydrophytic Vegetation
		·		2 - Dominance Test is >50%
	- 170-			3 - Prevalence Index is $\leq 3.0^1$
1		= Total Co	\sim	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: _2	<u>20%</u> 01	f total cover	: <u>0</u>	
<u>rb Stratum</u> (Plot size: <u>30 € + X 30 €</u>) ⁺		1		¹ Indicators of hydric soil and wetland hydrology must
Eleocharis SPP.		\.	. <u> </u>	be present, unless disturbed or problematic.
Rhexin marina	50	<u> </u>	FALL	Definitions of Four Vegetation Strata:
Anunhimaria acoanter	50	Ý	FACU	-
JUNCUS 2 FUSUS	\$0	Ý	OBL	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
Scirpus cyperinus	- 20	1	DRI.	height.
			000	· .
		·	· ·	Sapling/Shrub – Woody plants, excluding vines, less
	<u>·</u>			than 3 in. DBH and greater than 3.28 ft (1 m) tall.
		·		- Herb - All herbaceous (non-woody) plants, regardless
		·		of size, and woody plants less than 3.28 ft tall.
·				Woody vine – All woody vines greater than 3.28 ft in
				height.
	290	= Total Co	ver	· · · · · · · · · · · · · · · · · · ·
50% of total cover: <u>/ (</u>	+0 200%	f total cove		
<u>oody Vine Stratum</u> (Plot size: 30所+人図)	<u> </u>	H TOTAL COVE		-
body vine Stratum (Plot size: 500 (A 2001)				
				- · ·
				_ 1
				_

0

50% of total cover: _

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

_ = Total Cover

Shrub layer controlled by spraying & mowing under power lines a All shrub plants less than 2 ft Tall.

20% of total cover:

US Army Corps of Engineers

5.

Yes _____ No _____

Hydrophytic

Vegetation Present?

1

sc	าม											t WChroo
		ription: (Desc	ribe to the c	depth need	led to docum	onf fho ir	ndicator	or confir	m the absence		. –	<u>encing</u>
) Depth	Mat				Features		or comm	a the absence	ormaicau	515.)	
<u>_0</u>	inches)	Color (mois			or (moist)	%	_Type'	Loc ²			Remarks	·
	<u>2-8</u>	10 YR 2/	<u></u>					·	Sandy Loan		<u> </u>	. <u></u>
12	3-20	5YR I	90	<u> 0\</u>	1R 5/B	<u> D</u>	2	\underline{N}	Sandyclay	/		
												-
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-						<u> </u>			•			
-	• • • • •					<u> </u>			•			
1-		oncentration, D	-Dopiotion		and Matrix MC		Sand Cr		21		latan M. M.	4-1
		Indicators: (A						ans.			<u>ining, M=Ma</u> matic Hydri	
1	_ Histosol	-			Polyvalue Bei		•	LRR S, T,		Muck (A9) (-	/
Ž		oipedon (A2)			Thin Dark Su					Muck (A10)		
17		istic (A3)			Loamy Mucky			R O)				MLRA 150A,B)
=		en Sulfide (A4) d Layers (A5)		님	Loamy Gleye Depleted Mat		F2)					9) (LRR P, S, T)
]•		Bodies (A6) (L	RR P, T, U)	┝┥	Redox Dark S		6)			alous Brign RA 153B)	t Loamy Soil:	s (FZU)
<u>ן</u> ן] 5 cm Mi	ucky Mineral (A	7) (LRR P, T		Depleted Dar	k Surface	(F7)			arent Mate	rial (TF2)	
ļļ		resence (A8) (L		Ē	Redox Depre		8)		Uery §	Shallow Dar	rk Surface (T	F12)
		uck (A9) (LRR I d Below Dark S			Marl (F10) (L Depleted Oct			E41	L Other	(Explain in	Remarks)	
ê j		ark Surface (A1		′ ⊣	Iron-Mangani			•	P. Tì ³ Indi	cators of hy	drophytic ve	setation and
1 I F		rairie Redox (A	•	45041	Umbric Surfa						logy must be	
14	_ Coast P	Tame Redux (A			ombrie ound				110	aana nyaro	nogy maot be	present,
	Sandy N	Aucky Mineral (S1) (LRR O,		Delta Ochric	(F17) (ML	-	E E	นก		ed or probler	
1= 4= 4= 4= 4=	Sandy M	Mucky Mineral (Gleyed Matrix (S1) (LRR O,		Delta Ochric Reduced Ver	(F17) (ML tic (F18) (MLRA 1	50A, 150E	un 3)			
	Sandy M Sandy (Sandy F	Mucky Mineral (Gleyed Matrix (Redox (S5)	S1) (LRR O,		Delta Ochric Reduced Ver Piedmont.Flo	(F17) (ML tic (F18) (odplain S	MLRA 1 oils (F19	50A, 150E) (MLRA 1	un 3) 149A)	less disturb		
	Sandy M Sandy (Sandy F Stripped Dark St	Mucky Mineral (Gleyed Matrix (S Redox (S5) d Matrix (S6) Irface (S7) (LR	(S1) (LRR O, S4) R P, S, T, U)	, s)	Delta Ochric Reduced Ver Piedmont.Flo	(F17) (ML tic (F18) (odplain S	MLRA 1 oils (F19	50A, 150E) (MLRA 1	un 3)	less disturb		
	Sandy M Sandy (Sandy F Stripped Dark St	Mucky Mineral (Gleyed Matrix (S Redox (S5) d Matrix (S6)	(S1) (LRR O, S4) R P, S, T, U)	, s)	Delta Ochric Reduced Ver Piedmont.Flo	(F17) (ML tic (F18) (odplain S	MLRA 1 oils (F19	50A, 150E) (MLRA 1	un 3) 149A)	less disturb		
	Sandy M Sandy C Sandy F Stripped Dark St Restrictive	Mucky Mineral (Gleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obse	(S1) (LRR O, S4) R P, S, T, U)	, s)	Delta Ochric Reduced Ver Piedmont.Flo	(F17) (ML tic (F18) (odplain S	MLRA 1 oils (F19	50A, 150E) (MLRA 1	un 3) 149A) RA 149A, 1530	less disturb C, 153D)	ed or probler	
	Sandy M Sandy (Sandy F Stripped Dark Su Restrictive Type: Depth (ir	Mucky Mineral (Gleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obse	(S1) (LRR O, S4) R P, S, T, U)	, s)	Delta Ochric Reduced Ver Piedmont.Flo	(F17) (ML tic (F18) (odplain S	MLRA 1 oils (F19	50A, 150E) (MLRA 1	un 3) 149A)	less disturb C, 153D)	ed or probler	
	Sandy M Sandy G Sandy G Stripped Dark St Cestrictive Type: Depth (ir Cemarks:	Mucky Mineral (Gleyed Matrix (S Redox (S5) I Matrix (S6) Inface (S7) (LR Layer (if obsein Inches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s) 	Delta Ochric Reduced Ver Piedmont.Flo Anomalous E	(F17) (ML tic (F18) (odplain S Bright Loar	MLRA 1 colls (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic.
	Sandy M Sandy G Sandy G Stripped Dark St Cestrictive Type: Depth (ir Cemarks:	Mucky Mineral (Gleyed Matrix (S Redox (S5) I Matrix (S6) Inface (S7) (LR Layer (if obsein Inches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s) 	Delta Ochric Reduced Ver Piedmont.Flo Anomalous E	(F17) (ML tic (F18) (odplain S Bright Loar	MLRA 1 colls (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530	less disturb C, 153D) I Present?	Yes	natic.
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	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
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	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
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	Sandy M Sandy G Sandy G Stripped Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No
	Sandy M Sandy G Sandy G Stripper Dark St Restrictive Type: Depth (ir Remarks:	Mucky Mineral (Bleyed Matrix (S Redox (S5) d Matrix (S6) Inface (S7) (LR Layer (if obser- aches):	(S1) (LRR O, S4) R P, S, T, U) rved):	, s)	Delta Ochric Reduced Ver Piedmont Fic Anomalous E	(F17) (ML tic (F18) (odplain S tright Loar	(MLRA 1 toils (F19 my Soils	50A, 150E) (MLRA 1 (F20) (ML	un 3) 149A) RA 149A, 1530 Hydric Soi	less disturb C, 153D) I Present?	Yes	natic. No

US Army Co ngineers . .

Atlantic and Gulf Coastal Plain Region - Version 2.0



Wetland data point wchr002e_w facing east



Wetland data point wchr002e_w facing west

Photo Sheet 2 of 3

Project/Site: ACP Applicant/Owner: DDMINION Investigator(s): C.Jacobs, C.McEachern Landform (hillslope, terrace, etc.): Flat	FORM – Atlantic and Gulf Coastal Plain Region City/County: Chesapeake Sampling Date: 1/21/16 State: VA Sampling Date: 1/21/16 State: VA Sampling Point: WchrObae.wa Section, Township, Range: N/A Local relief (concave, convex, none): None
Subregion (LRR or MLRA): LRPT Lat: Lat:	Determine the sampled Area within a Wetland? Yes No
HYDROLOGY Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) X Surface Water (A1) Y High Water Table (A2) X Saturation (A3) Water Marks (B1) Oxidized Rhizosph Sediment Deposits (B2) Presence of Reduct	INSTALIGNON Secondary Indicators (minimum of two required)
Field Observations: Surface Water Present? Yes X No Depth (inchess Water Table Present? Yes X No Depth (inchess Saturation Present? Yes X No Depth (inchess (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot Remarks: Frozen Surface Water	s): s): wetland Hydrology Present? Yes No

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

Sampling Point: WChr002e_w2

2- V2-14	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 X304) 1. None	<u>% Cover</u> <u>Species?</u> <u>Status</u>	Number of Dominant Species 2 (A)
23		Total Number of Dominant (B)
4		Percent of Dominant Species 100 (A/B)
6		
7		Prevalence Index worksheet:
8		Total % Cover of: Multiply by:
	= Total Cover	OBL species x 1 =
50% of total cover:	20% of total cover:	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 30 X30A)		FAC species x 3 =
1. None		FACU species x 4 =
2		UPL species x 5 =
	The second s	Column Totals: (A) (B)
3	A STATE OF A	Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6.		
7	The state of the	1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50%
8		
0	= Total Cover	3 - Prevalence Index is ≤3.0 ¹
		Problematic Hydrophytic Vegetation ¹ (Explain)
	20% of total cover:	
Herb Stratum (Plot size: 30 X30A) 1. JUNUS EFUSUS	15 Y OBL	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. Andropogon virginicus	10 Y FAC	Definitions of Four Vegetation Strata:
		Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4.		more in diameter at breast height (DBH), regardless of
5.	the second s	height.
6		Sapling/Shrub - Woody plants, excluding vines, less
7.		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		
		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		of size, and woody plants less than o.zo it tall.
10		Woody vine - All woody vines greater than 3.28 ft in
11		height.
12		
12	25 = Total Cover	
	5 20% of total cover: 5	
Woody Vine Stratum (Plot size: 3D X3DH		
1. None		
2.		
3.		
4.		
5		Underschutte
·	O = Total Cover	Hydrophytic Vegetation
50% of total cover:	20% of total cover:	Present? Yes <u>No</u> No
Remarks: (If observed, list morphological adaptations be	 Charter Frank, Annald State State (1986) 	
Mayority of Plants of	ormant for h	linter

SOIL

Sampling Point: Wchr002e.w2

 Solar Balance Methods at Subsections http:///www.solar.html 	ription: (Describe	to the depth	needed to docu	inone eno i		or commit	the absence of ir	idicators.)	
Depth	Matrix			ox Features		1 - 2	Testure	Remarks	
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture	Remarks	
0-14	/OYR3/1	100					<u> </u>		
14-20	IDYK 4	160					CL	Millare Charles	Sand I.
					100200				
	· ·		ter transfer and the second	-					
100		Sa da				20012000	and the second second		
¹ Type: C=C	oncentration, D=De	pletion, RM=R	educed Matrix, M	S=Masked	Sand Gra	ains.	² Location: PL=	Pore Lining, M=Matrix.	
	Indicators: (Appli	the second se	NAMES OF TAXABLE PARTY OF TAXABLE PARTY OF TAXABLE PARTY.	and the second se				Problematic Hydric Soils	3:
Histosol	(A1)		Polyvalue Be	elow Surfac	ce (S8) (L	RR S, T, U)	1 cm Muck	(A9) (LRR O)	
in the second second second second	pipedon (A2)		Thin Dark St				2 cm Muck		
Black H	istic (A3)		Loamy Muck	ky Mineral ((F1) (LRR	0)		ertic (F18) (outside MLRA	
and the second sec	en Sulfide (A4)		Loamy Gleye		F2)			loodplain Soils (F19) (LRF	(P, S, T)
and the second se	d Layers (A5)		Depleted Ma	and the second			and the second se	Bright Loamy Soils (F20)	
and the second second second second second	Bodies (A6) (LRR		Redox Dark		Sector and the sector of the s		(MLRA 1		
	ucky Mineral (A7) (L		Depleted Da					t Material (TF2) ow Dark Surface (TF12)	
and the second sec	esence (A8) (LRR uck (A9) (LRR P, T)		Marl (F10) (I		5)		and the second s	lain in Remarks)	
Comments and a second second second second	d Below Dark Surfa		Depleted Oc		MLRA 1	51)	(,	
The second distance is a physical second		Contraction of the second	2000 CO. 24 CHARLES AND) ³ Indicators	s of hydrophytic vegetation	and
Coast P	ark Surface (A12) rairie Redox (A16)	(MLRA 150A)	X Umbric Surfa	ace (F13) (LRR P, T	, U)	wetland	hydrology must be presen	t,
Sandy M	lucky Mineral (S1)	(LRR O, S)	Delta Ochric				unless d	listurbed or problematic.	
Contraction of the second s	Gleyed Matrix (S4)		Reduced Ve						
and the second se	Redox (S5)		Piedmont Flo						
the state of the s	Matrix (S6)	C T 10	Anomalous I	Bright Loar	ny Solls (I	-20) (MLRA	149A, 153C, 153	30)	
	rface (S7) (LRR P, Layer (if observed								
	Layer (II observed	<i>,</i> .							
Type: Depth (in	ches):						Hydric Soil Pres	sent? Yes 🔀 No	
Remarks:		ESPECTIC PROPERTY AND DE		•					CTUS 10 71 51 70
A State of the state of the						1.6	7 . 1 .		
Dist	urbed s	oil for	n unde	evaron	ind	util	ity line	2	
	permeter			0.			0		
1.4.1									
NOT THE REAL PROPERTY.									



Wetland data point wchr002e_w2 facing east.



Wetland data point wchr002e_w2 facing west.

Photo Sheet 1 of 4

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
AP	County: Chesapeake Sampling Date: 1/21/16
Project/Site: ALF City/C	State: VA Sampling Point: Wchr DD2e.w3
Applicant/Owner: Dominion Investigator(s): C.Jacobs, C.McEachern Section	
Investigator(s): C.Vacues, C. Necessaria Section	on, Township, Range: <u>NA</u>
	relief (concave, convex, none): <u>Concave</u> Slope (%): <u>0-2</u>
	10851 Long: -76, 45744 Datum: WGS84 NWI classification: PEM
soil Map Unit Name: 11 dorthents-Urban Lond Com	NWI classification: PENC
Are climatic / hydrologic conditions on the site typical for this time of year? Y	
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally problems	atic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing san	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present? Remarks: POWERLINE RASEMENT	Is the Sampled Area within a Wetland? Yes <u>Yes</u> No
HYDROLOGY	Secondary Indicators (minimum of two required)
Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRI	
Saturation (A3) Hydrogen Sulfide Odor (6	C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizospheres a	
Sediment Deposits (B2) Presence of Reduced Iro	
Drift Deposits (B3) Recent Iron Reduction in This Muck Surface (C7)	Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9) Geomorphic Position (D2)
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remark	사이는 것을 잘 하는 것 같은 것 같이 있는 것 것
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 K No Depth (inches):	
Water Table Present? Yes X No Depth (inches):	
Saturation Present? Yes <u>Ves</u> No Depth (inches):	Wetland Hydrology Present? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pre	vious inspections), if available:
Remarks:	

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

Sampling Point: Wchr 002-W3

2-420 [1	Absolute Dominant Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30 ×30 Ft)	% Cover Species? Status	Number of Dominant Species
1. None		That Are OBL, FACW, or FAC: (A)
	The state of the second se	
2		Total Number of Dominant
3		Species Across All Strata: (B)
4		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: 100/ (A/B)
6		
· 你们的你们的你们,我们就是你的你?"你们的你们的你们,你们还是你们的你?""你们你们你们的你们,你们你不能能不能。"		Prevalence Index worksheet:
7		Total % Cover of: Multiply by:
8		
	. O = Total Cover	OBL species x 1 =
50% of total cover:	The second s	FACW species x 2 =
	_ 20% bi total cover	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30×30 P+)		FACU species x 4 =
1. None	And the first of the second second second	
2		UPL species x 5 =
「「「「「「「」」」「「「」」」」「「」」」」「「」」」」」」」」」」」」		Column Totals: (A) (B)
3		
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
的复数 化物理物 化合金 化分析物 化分析物 化合物物 化合物化合物化合物 化合物化合物 化合物化合物 化合物化合物 网络白垩 网络白垩 化合物化合物 化合物分析		
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0 ¹
	C = Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of total cover:	
Herb Stratum (Plot size: 30×30 ft)		
1. Dichanthelium acuminatum	50 Y FAC	¹ Indicators of hydric soil and wetland hydrology must
	and the second se	be present, unless disturbed or problematic.
2. Arundinaria gigantea	10 N FACW	Definitions of Four Vegetation Strata:
3. JUNCUS EFFUSUS	10 N GBL	
4. Andropogon Virginicus	5 N FAC	Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
	10 N FACW	more in diameter at breast height (DBH), regardless of height.
5. Saccharum giganteum	10 14 FACO	neight.
6		Sapling/Shrub - Woody plants, excluding vines, less
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8		Herb – All herbaceous (non-woody) plants, regardless
9		of size, and woody plants less than 3.28 ft tall.
10	Station and states and states	Woody vine - All woody vines greater than 3.28 ft in
11		height.
	and the second second second second	noight.
12	95	
110-	85 = Total Cover	
50% of total cover: 42,5	20% of total cover: 1T	
Woody Vine Stratum (Plot size: 3DX3D ++)		
1. None		
2		
3		
4		
5	the second se	Hydrophytic
	= Total Cover	Vegetation
50% of total cover:	20% of total cover:	Present? Yes No
Remarks: (If observed, list morphological adaptations below	/).	

SOIL

Sampling Point: WchrU02e-w3

Profile Description: (Describe to the depth	needed to docur	ment the i	ndicator	or confirm	the absence of in	dicators.)
Depth Matrix		x Features		1 - 2	Testure	Demerke
(inches) Color (moist) %	Color (moist)		_Type ¹	_Loc ²	ScL	Remarks
0-12 10YK 3/1 100						
1220 7.54R4/2100					SCL_	
				0.00		
			1222			
		-				
¹ Type: C=Concentration, D=Depletion, RM=F				ains.		Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all L						Problematic Hydric Soils ³ :
Histosol (A1)	Polyvalue Be					(A9) (LRR O)
Histic Epipedon (A2)	Thin Dark Su Loamy Muck					(A10) (LRR S) ertic (F18) (outside MLRA 150A,B)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Gleye			0,		loodplain Soils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma		/			Bright Loamy Soils (F20)
Organic Bodies (A6) (LRR P, T, U)	Redox Dark		6)		(MLRA 1	다는 바늘에서 그는 사람들이 다 아름이 있다. 이렇게 다 있는 것은 것은 것을 가지 않는 것을 하는 것을 수 있다. 것을 수 있는 것을 가지 않는 것을 수 있다. 이렇게 다 나는 것을 가지 않는 것을
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Da					Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depre		B)			w Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (L				Other (Expl	ain in Remarks)
Depleted Below Dark Surface (A11) Thick Dark Surface (A12)	Depleted Oc Iron-Mangan				T) ³ Indicators	of hydrophytic vegetation and
Coast Prairie Redox (A16) (MLRA 150A)						hydrology must be present,
Sandy Mucky Mineral (S1) (LRR O, S)	Delta Ochric	and the state of the second				isturbed or problematic.
Sandy Gleyed Matrix (S4)	Reduced Ver	rtic (F18) (MLRA 15	0A, 150B)		
Sandy Redox (S5)	Piedmont Flo					
Stripped Matrix (S6)	Anomalous E	Bright Loar	ny Soils (I	20) (MLR	A 149A, 153C, 153	D)
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):				a sala sala da Contrango das		
Type:						
Depth (inches):					Hydric Soil Pres	sent? Yes No
Remarks:						
itemano.						



Wetland data point wchr002e_w3 facing northwest



Wetland data point wchr002e_w3 facing southeast

WETLAND DETERMINATION DATA FOR	M – Atlantic and Gulf Coastal Plain Region
Project/Site: <u>ACP</u> City/C	County: <u>Chesapcake</u> Sampling Date: <u>30 JULY</u> 201
Applicant/Owner: Dominion	State: VA Sampling Point: WChr002-4
Investigator(s): ESJ-A, MILLEY, C. M'Eachern Section	on Township Range: NIA
Landform (hillslope, terrace, etc.): Filled Road Local	relief (concave, convex, none): 1/20VCK Slope (%): 2-4
Subregion (LRR or MLRA): 153R Lat: 3(0,75	100°N Long: 740.40581°W Datum: 106584
Soil Map Unit Name: Arapaho muchy fine candy /	100°N Long: 76, 40581°W Datum: 106-584 Joan, 0-1% 5000 NWI classification: NOV
Are climatic / hydrologic conditions on the site typical for this time of year?	(es X No (If no explain in Remarks)
Are Vegetation Soil or Hydrology significantly distur	
Are Vegetation, Soil, or Hydrology naturally problem	
SUMMARY OF FINDINGS – Attach site map showing san	
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland? Yes No <u>X</u>
Remarks: Filled Field Road	
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) I Marl Deposits (B15) (LF	
	along Living Roots (C3)
Sediment Deposits (B2)	
Drift Deposits (B3)	
Algal Mat or Crust (B4) Thin Muck Surface (C7) Iron Deposits (B5) Other (Explain in Remaining R	
Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U) '
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches):	
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	revious inspections), if available:
Remarks:	· · · · · · · / ·
	-

.

Sampling Point: wchr 002-4

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

Trop Stratum (Diataina) DV & DUT + 1	Absolute Dominant Indicator	Dominance Test worksheet:			
Tree Stratum (Plot size: <u>30 x 30F1</u>)	<u>% Cover Species? Status</u>	Number of Dominant Species			
1. None present		That Are OBL, FACW, or FAC: (A)			
2		Total Number of Developent			
3		Total Number of Dominant 3 (B)			
4					
		Percent of Dominant Species 7 2 0			
5		That Are OBL, FACW, or FAC: <u>3310</u> (A/B)			
6		Prevalence Index worksheet:			
7		4			
8	<u> </u>	Total % Cover of: Multiply by:			
	O = Total Cover	OBL species $50 \times 1 = 50$			
50% of total cover	20% of total cover:	FACW species \mathcal{O} x 2 = \mathcal{O}			
Sapling/Shrub Stratum (Plot size: 30 X 30 F1)	20,001 (0101 001011	FAC species $low x 3 = low $			
Norach		FACU species $180 \times 4 = 720$			
		UPL species $O_{x5} = O'$			
2		0//0 760			
3		Column Totals: 270 (A) 780 (B)			
4		Prevalence index = $B/A = 3.25$			
5					
6		Hydrophytic Vegetation Indicators:			
		1 - Rapid Test for Hydrophytic Vegetation			
7		2 - Dominance Test is >50%			
8		3 - Prevalence Index is ≤3.0 ¹			
	= Total Cover	Problematic Hydrophytic Vegetation ¹ (Explain)			
50% of total cover:	20% of total cover:				
Herb Stratum (Plot size: 30X 30(+))		¹ Indicators of hydric soil and wetland hydrology must			
1. Helchillm 'amariumin	50 V FACU	be present, unless disturbed or problematic.			
2. Paspalum notatum	100 V FACL				
3. Kummerówia striata	30 N FACU	· · · · · · · · · · · · · · · · · · ·			
		Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or			
4. Solidago rugosa		more in diameter at breast height (DBH), regardless of			
5. Eleocharis baldwinji	50 Y OBL	height.			
6		Sapling/Shrub - Woody plants, excluding vines, less			
7		than 3 in. DBH and greater than 3.28 ft (1 m) tall.			
8		•			
		 Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. 			
9					
10		Woody vine – All woody vines greater than 3.28 ft in			
11		_ height.			
12		_			
	$\underline{240}$ = Total Cover				
50% of total cover:	20 20% of total cover: 48				
50% of total cover: \underline{I}_{A}	20 20% of total cover: <u>48</u>	_			
Woody Vine Stratum (Plot size: 373071)	2.0 20% of total cover: <u>48</u>	_			
Nonl Present	2.0 20% of total cover: <u>48</u>	_			
Woody Vine Stratum (Plot size: 307.301-1)	20 20% of total cover: <u>48</u>	-			
Nonl Present					
Woody Vine Stratum (Plot size: 307301) 1. NONL PIPSENT 2.					
Woody Vine Stratum (Plot size: 30 V 3001:1) 1. NONL PIPSENT 2 3					
Woody Vine Stratum (Plot size: 30 V 306:1) 1. NONL PRESENT 2 3		- Hydrophytic			
Woody Vine Stratum (Plot size: 3073061) 1. NONL ISPENT 2		- Hydrophytic Vegetation Present? Yes No			
Woody Vine Stratum (Plot size: 30 7 306.1) 1. NONL Present 2	= Total Cover 20% of total cover:	Vegetation			
Woody Vine Stratum (Plot size: 3073067) 1. NONL PREAT 2	= Total Cover 20% of total cover:	Vegetation			
Woody Vine Stratum (Plot size: 30 7 306.1) 1. NONL Present 2	= Total Cover 20% of total cover:	Vegetation			
Woody Vine Stratum (Plot size: 30 7 306.1) 1. NONL Present 2	= Total Cover 20% of total cover:	Vegetation			
Woody Vine Stratum (Plot size: 30 7 306.1) 1. NONL Present 2	= Total Cover 20% of total cover:	Vegetation			
Woody Vine Stratum (Plot size: 30 7 306.1) 1. NONL Present 2	= Total Cover 20% of total cover:	Vegetation			
Woody Vine Stratum (Plot size: 30 V 306.1) 1. NONL Present 2.	= Total Cover 20% of total cover:	Vegetation			

SOIL

Sampling Point: wchr 002-u

Profile Description: (Describe to the dep	oth needed to docum	nent the indicate	or or confirm	the absence	•	
Depth Matrix		x Features			·	
(inches) <u>Color (moist)</u> <u>%</u>	Color (moist)	<u>%</u> <u>Type</u>	¹ Loc ²	Texture	R	emarks
<u>- 0 10 10 10 100</u>		·	<u> </u>	LS	Loamy	sand
6-12 10YR 3/2 100		·		LS	Loomy	sand
12-14 10YR 2/1 100				_CL	Clay	
				2.	·	
¹ Type: C=Concentration, D=Depletion, RM Hydric Soil Indicators: (Applicable to al			Grains.		PL=Pore Lining for Problemati	
Histosol (A1)		Noted.)				-
Histic Epipedon (A2)		urface (S9) (LRR			Muck (A9) (LRR Muck (A10) (LRF	
Black Histic (A3)		y Mineral (F1) (L				outside MLRA 150A,B)
Y 🛄 Hydrogen Sulfide (A4)	Loamy Gleye	ed Matrix (F2)				oils (F19) (LRR P, S, T)
Stratified Layers (A5)	Depleted Ma				alous Bright Loa	my Soils (F20)
Organic Bodies (A6) (LRR P, T, U) 5 cm Mucky Mineral (A7) (LRR P, T, U		Surface (F6) rk Surface (F7)			.RA 153B) Parent Material (1	-E-0)
Muck Presence (A8) (LRR U)	Redox Depre				Shallow Dark Su	
1 cm Muck (A9) (LRR P, T)	Mari (F10) (I				(Explain in Rem	· · ·
Depleted Below Dark Surface (A11)		hric (F11) (MLRA	-	-		
Thick Dark Surface (A12)		nese Masses (F1)				nytic vegetation and
Coast Prairie Redox (A16) (MLRA 150		ace (F13) (LRR F : (F17) (MLRA 15			etland hydrology iless disturbed or	
Sandy Gleyed Matrix (S4)		rtic (F18) (MLRA	-			,
Sandy Redox (S5)		oodplain Soils (F		•		
Stripped Matrix (S6)	Anomalous	Bright Loamy Soi	ils (F20) (MLI	RA 149A, 153	C, 153D)	
Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed):				<u> </u>		
Type:						
Depth (inches):				 Hydric So	il Present? Y	
	 					<u> </u>
Remarks: Heavily compac	ted Soil	in fie	id ri	Dad		
nucrity of				Ŭ,		
		`				
		`				
		`				
		`				
		`				
		~				
		~				



Upland data point wchr002_u facing north



Upland data point wchr002_u facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: ACP	_ City/County: Chesapeake Sampling Date: 3-17-16
Applicant/Owner: Dominion	_ City/County: <u>Chesapeake</u> Sampling Date: <u>3-17-16</u> State: <u>VA</u> Sampling Point: <u>Wchr 002-u</u> 3
Investigator(s): ESI (L. Roper, W. Vaughan)	Section, Township, Range: None
	Local relief (concave, convex, none): Convex Slope (%): 5-7
	.76877 Long: -76.45760 Datum: WGS 84
Sublegion (ERR of MERA). <u>Delete</u> Catalon Col	% slopes NWI classification: NA
Soli Map Unit Name: Ismotie, Deloss Complex Cort	
Are climatic / hydrologic conditions on the site typical for this time o	
	ntly disturbed? Are "Normal Circumstances" present? Yes No
Are Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS – Attach site map show	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	- Is the Sampled Area
Hydric Soil Present? Yes No X	
Wetland Hydrology Present? Yes No	
point in junk yord	
HYDROLOGY	and a second secon
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: check all that app	
Surface Water (A1) Aquatic Fauna High Water Table (A2) Marl Deposits (I	
Saturation (A3)	방법 수상 방법 방법을 통하는 것 같은 것 같은 것 :
	spheres along Living Roots (C3) 🔲 Dry-Season Water Table (C2)
19 이번 Market	duced Iron (C4) Crayfish Burrows (C8)
· · · · · · · · · · · · · · · · ·	duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Suff	다 이번 것이다. 그는 것이 있는 것이 없는 것이 없
Iron Deposits (B5) Deposits (B5) Inundation Visible on Aerial Imagery (B7)	FAC-Neutral Test (D5)
Water-Stained Leaves (B9)	Sphagnum moss (D8) (LRR T, U)
Field Observations:	e de la construction de la c
Surface Water Present? Yes No 🧩 Depth (incl	nes): <u>NA</u>
Water Table Present? Yes No Depth (incl	\mathbf{V}
Saturation Present? Yes No Depth (includes capillant fringe)	hes): <u>>G makes</u> Wetland Hydrology Present? Yes <u>No X</u>
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos, previous inspections), if available:
Remarks:	
Remarks: augur refusal at Ginches	
J .	
	이 집에 집에 집에 집에 가지 않는 것이 없습니다. 이 집에 집에 들어나 다 나라 다
	그는 그는 것은 것을 하는 것을 다시 가락을 다니 것을 수 있다.
19 11월 11일 - 11	

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

Sampling Point: Wchr002-u3

2.2.2.	Absolute	Dominant Indicator	30 The Construction of	NIG GAR	
Tree Stratum (Plot size: <u>3Df+ x 3of+</u>)		Species? Status Ves FAC	- Number of Dominant Species	3	(A)
1. Lipuidanber Styraciflue 2. Acer rubrum	-3	ves FAC			
3. Quereus nigra	5	ves FAC		4	(B)
4		and the second s	 Percent of Dominant Species 	75	
5			- That Are OBL, FACW, or FAC:	75	(A/B)
6			- Received and an unable bast		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
7			Prevalence Index worksheet:	Multiply bur	
8			Total % Cover of:	Multiply by:	
	15	= Total Cover	OBL species x 1		
50% of total cover: 7.3	5 20% of	total cover:	FACW species x 2		
Sapling/Shrub Stratum (Plot size: 30P4 × 30F4)			FAC species x 3		
1. None			FACU species X4		
2		a an anna an Albanteria	UPL species x		
3			Column Totals: (A)		- (B)
4.			Prevalence Index = B/A =		
5					
6					
7					
8			$ 3$ - Prevalence Index is $\leq 3.0^{1}$		
		= Total Cover	Problematic Hydrophytic Veg		in)
50% of total cover:	· · · · · · · · · · · · · · · · · · ·			joidiloir (LApio	,
Herb Stratum (Plot size: 30Ft x 30Ft)			Indicators of hydric soil and wetl	and hydrology	must
1. None			be present, unless disturbed or p		indo.
2			Definitions of Four Vegetation	Strata:	an langunga
3					
4			 Tree – Woody plants, excluding ware in diameter at breast height 	t (DBH), regard	less of
5			height.		
6			 Sapling/Shrub – Woody plants, 	excluding vines	e less
7			than 3 in. DBH and greater than	3.28 ft (1 m) tal	1.
8					
9				an 3.28 ft tall.	lidiess
10					
이 같은 것은 것은 것을 만나 잘 들었다. 것은 것은 것은 것을 많은 것을 것을 것을 것 같이 같이 없는 것을 것 같이 없다. 것은 것은 것은 것은 것은 것은 것은 것은 것을 것 같이 없는 것을 했다. 것은			 Woody vine – All woody vines g height. 	reater than 3.2	Bittin
11 12.	·				
12	0	= Total Cover	-	arrest Janeiro	Should Day
FOW of total anyon	10000000000000000	f total cover:			
50% of total cover: Woody Vine Stratum (Plot size: 30ft × 30ft)	20% 0		-		
The set of	10	Ves FACU	V		
1. Lonticera japonica		-yes_ 11100			
2			-		
3	•		-		
4		The second s	-		
5	10		 Hydrophytic Vegetation 		
e	A REAL PROPERTY AND A REAL PROPERTY.	= Total Cover	Present? Yes	No	
50% of total cover: <u>S</u>		f total cover:	- NETRONA	Marca Marca	S. COM
Remarks: (If observed, list morphological adaptations below	ow).				
같은 것은 것은 것은 것은 것이 같아요. 이 것은 것이 같아요.					
이번 경험 집에 집에 걸렸다. 그는 것이 아니는 것이 같아					
	and second second				

SOIL

Sampling Point: wchr002.43

% Color (mois		1 2 -	dura Domarka	
100	st)		dure Remarks	
able to all LRRs, unless Polyval Thin Di Loamy Deplete RR P, T, U) Deplete Redox Marl (F Deplete MLRA 150A) LRR O, S) Delta O Reduct Piedma S, T, U)	otherwise noted.) lue Below Surface (S8) (L ark Surface (S9) (LRR S, Mucky Mineral (F1) (LRF Gleyed Matrix (F2) ed Matrix (F3) Dark Surface (F6) ed Dark Surface (F7) Depressions (F8) 10) (LRR U) ed Ochric (F11) (MLRA 1 anganese Masses (F12) (Surface (F13) (LRR P, T Dchric (F17) (MLRA 151) ed Vertic (F18) (MLRA 15 ont Floodplain Soils (F19)	RR S, T, U) T, U) CO) 51) LRR O, P, T) ; U) 50A, 150B) (MLRA 149A) F20) (MLRA 149	 licators for Problematic Hydric Sol 1 cm Muck (A9) (LRR O) 2 cm Muck (A10) (LRR S) Reduced Vertic (F18) (outside MLF Piedmont Floodplain Soils (F19) (LI Anomalous Bright Loamy Soils (F20) (MLRA 153B) Red Parent Material (TF2) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) ³Indicators of hydrophytic vegetati wetland hydrology must be presunless disturbed or problematic. (A, 153C, 153D) 	RA 150A RR P, S,)) on and ent,
S, T, U) :		Нус	dric Soil Present? Yes	No <u>×</u>
	able to all LRRs, unless Polyval Thin Di Loamy Deplete RR P, T, U) Pelete (A11) MLRA 150A) Umbric LRR O, S) Delta C Reduc Piedma Anoma S, T, U)	able to all LRRs, unless otherwise noted.) Polyvalue Below Surface (S8) (L Thin Dark Surface (S9) (LRR S, Loamy Mucky Mineral (F1) (LRR Loamy Gleyed Matrix (F2) Depleted Matrix (F3) Redox Dark Surface (F6) RR P, T, U) Redox Depressions (F8) Marl (F10) (LRR U) e (A11) Depleted Ochric (F11) (MLRA 11 Iron-Manganese Masses (F12) (MLRA 150A) Umbric Surface (F13) (LRR P, T LRR O, S) Delta Ochric (F17) (MLRA 151) Reduced Vertic (F18) (MLRA 151) Reduced Vertic (F18) (MLRA 151) Reduced Vertic (F18) (MLRA 151) S, T, U) :	able to all LRRs, unless otherwise noted.) Polyvalue Below Surface (S8) (LRR S, T, U) Thin Dark Surface (S9) (LRR S, T, U) Loamy Mucky Mineral (F1) (LRR O) Loamy Gleyed Matrix (F2) Depleted Matrix (F3) , T, U) Redox Dark Surface (F6) RR P, T, U) Depleted Dark Surface (F7) Redox Depressions (F8) Marl (F10) (LRR U) e (A11) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) MLRA 150A) Delta Ochric (F13) (LRR P, T, U) LRR O, S) Delta Ochric (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Hyd	able to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soil Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Thin Dark Surface (S9) (LRR S, T, U) 2 cm Muck (A10) (LRR S) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR S) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LI Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) RR P, T, U) Depleted Dark Surface (F6) RR P, T, U) Depleted Ochric (F11) (MLRA 151) Iron-Manganese Masses (F12) (LRR O, P, T) Red Parent Material (TF2) Very Shallow Dark Surface (F13) (LRR P, T, U) Other (Explain in Remarks) Iron-Manganese Masses (F12) (LRR O, P, T) 3 Indicators of hydrophytic vegetatin wetland hydrology must be press unless disturbed or problematic. Reduced Vertic (F13) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) S, T, U) :



Upland data point wchr002_u3 facing north.



Upland data point wchr002_u3 facing west.

Photo Sheet 1 of 2

WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: Atlantic Coast Pipeline	City/County: City of Chesapeake	Sampling Date: 2/22/2016
Applicant/Owner: DOMINION	State: VA	Sampling Point: wchc003s_w
Investigator(s):	Section, Township, Range: No PLSS in this a	area
	ocal relief (concave, convex, none): <u>concave</u>	_
Subregion (LRR or MLRA): <u>T</u> Lat: <u>36.76310486</u>	Long:76.40725502	Datum: WGS 1984
Soil Map Unit Name: Tomotley-Deloss complex, 0 to 1 percent slopes	NWI clas	sification: None
Are climatic / hydrologic conditions on the site typical for this time of ye	ear? Yes 🖌 No (If no, explain	in Remarks.)
Are Vegetation, Soil, or Hydrology significantly	v disturbed? Are "Normal Circumstance	es" present? Yes No _
Are Vegetation, Soil, or Hydrology naturally pr	oblematic? (If needed, explain any and	swers in Remarks.)

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

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

HYDROLOGY

Wetland Hydrology Indicato	ors:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum	of one is required; cl	heck all that apply)	Surface Soil Cracks (B6)
Primary Indicators (minimum of 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 Aeri Water-Stained Leaves (B Year-Stained Leaves (B	ial Imagery (B7)	heck all that apply) True Aquatic Plants (B14) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled S Thin Muck Surface (C7) Other (Explain in Remarks)	 Sparsely Vegetated Concave Surface (B8) Drainage Patterns (B10) Moss Trim Lines (B16) Dry-Season Water Table (C2)
Aquatic Fauna (B13)	9)		✓ FAC-Neutral Test (D5)
Field Observations:			
Surface Water Present? Water Table Present? Saturation Present? (includes capillary fringe) Describe Recorded Data (stre	Yes 🖌 No Yes 🖌 No	 ✓ Depth (inches): Depth (inches): 0 Depth (inches): 0 	Wetland Hydrology Present? Yes <u>V</u> No
Remarks: Wetland hydrology present			

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

Sampling Point: wchc003s_w

· · · · · · · · · · · · · · · · · · ·		P			
Tree Stratum (Plot size: <u>30</u>)		Dominant Ir Species?		Dominance Test worksheet:	
				Number of Dominant Species	
1				That Are OBL, FACW, or FAC: (A))
2				Total Number of Deminent	
3				Total Number of Dominant Species Across All Strata: 3 (B)	`
0	-	·			,
4		· <u> </u>	<u> </u>	Percent of Dominant Species	
5		·		That Are OBL, FACW, or FAC: 66.66666666 (A/	/B)
6					,
		·		Prevalence Index worksheet:	
7	0	·		Total % Cover of: Multiply by:	
		= Total Cover			
50% of total cover: 0	20% of	total cover:	0		
Sapling/Shrub Stratum (Plot size:15)				FACW species $x^2 = 100$	
				FAC species $0 x 3 = 0$	
1				FACU species $\frac{25}{x 4} = \frac{100}{x 4}$	
2		·			
3				UPL species x 5 =	
				Column Totals:(A)(A)(E	B)
4					
5		·		Prevalence Index = B/A = 2.5	
6				Hydrophytic Vegetation Indicators:	
7					
				1 - Rapid Test for Hydrophytic Vegetation	
8		·		2 - Dominance Test is >50%	
9				✓ 3 - Prevalence Index is $\leq 3.0^1$	
	0	= Total Cover			• • •
50% of total cover: 0		total cover:	0	4 - Morphological Adaptations ¹ (Provide supporti	ing
				data in Remarks or on a separate sheet)	
	40	N/		Problematic Hydrophytic Vegetation ¹ (Explain)	
1. Juncus effusus	40	Yes	FACW		
2. Scirpus cyperinus	35	Yes	FACW	4	
3. Andropogon virginicus	25	Yes	FACU	¹ Indicators of hydric soil and wetland hydrology must	1
		·		be present, unless disturbed or problematic.	
4		·		Definitions of Four Vegetation Strata:	
5					
6				Tree – Woody plants, excluding vines, 3 in. (7.6 cm)	
				more in diameter at breast height (DBH), regardless	of
7		·		height.	
8		. <u> </u>		Conting/Chrub Mandy plants avaluding vince los	
9				Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than or equal to 3.28 ft (1	
		·		m) tall.	
10		·			
11		·		Herb - All herbaceous (non-woody) plants, regardles	SS
	100	= Total Cover		of size, and woody plants less than 3.28 ft tall.	
50% of total cover: 50		total cover:			
				Woody vine – All woody vines greater than 3.28 ft in	۱
Woody Vine Stratum (Plot size: 30)				height.	
1		·			
2					
3		·			
4				Hydrophytic	
5				Vegetation	
	-	= Total Cover		Present? Yes <u>V</u> No	
500 (- () - () - ()					
50% of total cover: 0	20% 01	total cover:	•		
Remarks: (Include photo numbers here or on a separate s	heet.)				
	,				
1					

	cription: (Describe	to the de				or confirn	the absence of indicators.)	
Depth	Matrix			x Feature	4	. 2		
(inches)	Color (moist)	%	Color (moist)	%	Type'	Loc ²	Texture Remarks	
0-8	10 YR 2/2	100					SL	
8-12	10 YR 2/1	98	10 HR 3/6	2	С	PL	SL	
12-18	10 YR 4/2	95	10 YR 4/6	5	С	PL	SL	
		-						
	·							
					<u> </u>		·	
		oletion, RM	I=Reduced Matrix, M	S=Maske	d Sand Gra	ains.	² Location: PL=Pore Lining, M=Matrix.	
Hydric Soil	Indicators:						Indicators for Problematic Hy	/dric Soils ³ :
Histoso	l (A1)		Dark Surface	e (S7)			2 cm Muck (A10) (MLRA 1	47)
Histic E	pipedon (A2)		Polyvalue Be	low Surfa	ace (S8) (N	ILRA 147.	148) Coast Prairie Redox (A16)	
	listic (A3)		Thin Dark Su				(MLRA 147, 148)	
Hvdroa	en Sulfide (A4)		Loamy Gleye		, .		Piedmont Floodplain Soils	(F19)
	d Layers (A5)		Depleted Ma		()		(MLRA 136, 147)	
	uck (A10) (LRR N)		Redox Dark	. ,	F6)		Very Shallow Dark Surface	(TF12)
	ed Below Dark Surfac	ο (Δ11)	Depleted Da	•	,		Other (Explain in Remarks	· · · ·
·	ark Surface (A12)		Redox Depre		. ,)
	Mucky Mineral (S1) (Iron-Mangan		,			
	A 147, 148)	LKK N,	MLRA 13		5es (F12) (LKK N,		
	Gleyed Matrix (S4)		Umbric Surfa		/MI DA 12	6 122)	³ Indicators of hydrophytic veg	notation and
	Redox (S5)		Piedmont Flo	, ,	•			
				•	. ,	•		
	d Matrix (S6) Layer (if observed)		Red Parent N	viateriai (r		A 127, 14	unless disturbed of problem	alic.
Type:	Layer (in observed)	•						
Depth (ir	iches):						Hydric Soil Present? Yes	No
Remarks:								
	raaant							
Hydric soil pr	esent							



Photo 1 Wetland data point WCHC003s_w facing southwest



Photo 2 Wetland data point WCHC003s_w facing northwest

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline	City/County:	City of Chesapeake	Sampling Date: 2/22/2016
Applicant/Owner: DOMINION		State: VA	Sampling Point: wchc003_u
Investigator(s):	Section, Towr	nship, Range: <u>No PLSS in this</u> a	area
Landform (hillslope, terrace, etc.): Slight slope		oncave, convex, none): <u>none</u>	Slope (%): 2
Subregion (LRR or MLRA): T L	at: <u>36.76291632</u>	Long: <u>-76.40711993</u>	Datum: WGS 1984
Soil Map Unit Name: Tomotley-Deloss complex, 0 to 1 perc	ent slopes	NWI class	ification: None
Are climatic / hydrologic conditions on the site typical for this	s time of year? Yes	No (If no, explain in	n Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed?	Are "Normal Circumstances	s" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology n	aturally problematic?	(If needed, explain any ans	wers in Remarks.)
		• • • • •	

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

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

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (L	
Saturation (A3) Hydrogen Sulfide Odo	r (C1) Moss Trim Lines (B16)
Water Marks (B1) Oxidized Rhizosphere	s along Living Roots (C3) Dry-Season Water Table (C2)
Sediment Deposits (B2) Presence of Reduced	Iron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction	n in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surface (C	7) Geomorphic Position (D2)
Iron Deposits (B5) Other (Explain in Rem	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 No _ 🖌 Depth (inches):	Wetland Hydrology Present? Yes No 🗸
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	
(includes capillary fringe)	
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos,	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	
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(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	
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(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, Remarks:	

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

Sampling Point: <u>wchc003_u</u>

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)		Species?	Status	Number of Dominant Species
1. Quercus falcata	25	Yes	FACU	That Are OBL, FACW, or FAC: (A)
2. Acer rubrum	10	Yes	FAC	Tatal Number of Deminent
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				
				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	35	= Total Cove	-r	OBL species $0 x 1 = 0$
50% of total cover:17.5				FACW species x 2 =0
	20% 0	total cover.		FAC species 40 x 3 = 120
Sapling/Shrub Stratum (Plot size: 15)				FACU species $55 \times 4 = 220$
1				
2				UPL species $0 \times 5 = 0$
3				Column Totals: (A) (B)
4				Prevalence Index = B/A = 3.57
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	^	= Total Cove	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:0	20% of	total cover:	0	
Г	207001			
Herb Stratum (Plot size:5)	30	Vee	FAC	¹ Indicators of hydric soil and wetland hydrology must
		Yes		be present, unless disturbed or problematic.
2. Lonicera japonica	30	Yes	FACU	Definitions of Four Vegetation Strata:
3				Tree Weedy plants evoluting vince 2 in (7.6 cm) or
4				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of
				height.
5				
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in height.
		<u> </u>		neight.
12				
		= Total Cove		
50% of total cover:30	20% of	total cover:	12	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
	0	= Total Cove	er	Vegetation
50% of total cover: 0	20% of	total cover:	0	Present? Yes No V
Remarks: (If observed, list morphological adaptations belo				
Remarks. (in observed, list morphological adaptations belo	vv).			

SOIL

Profile Desc	cription: (Describe to	o the depth	needed to docum	nent the i	ndicator	or confirm	the absence of indicators.)	
Depth	Matrix		Redo	x Features	6			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-3	10 YR 2/2	100					LS	
3-18	10 YR4/2	100		·			S	
				·			· · · · · · · · · · _ /	—
	. <u> </u>							
	·			·			· · · · · · · · · · · · · · · · · · ·	—
	oncentration, D=Deple	tion RM=R	educed Matrix M	S=Masked	Sand Gr	ains	² Location: PL=Pore Lining, M=Matrix.	
	Indicators: (Applica					ams.	Indicators for Problematic Hydric Soils ³ :	
							•	
Histosol	· ,		Polyvalue Be		• • •			
· ·	pipedon (A2)		Thin Dark Su				2 cm Muck (A10) (LRR S)	(D)
	istic (A3)		Loamy Mucky		• • •	0)	Reduced Vertic (F18) (outside MLRA 150A	
	en Sulfide (A4)		Loamy Gleye		FZ)		Piedmont Floodplain Soils (F19) (LRR P, S,	1)
	d Layers (A5)	T 11	Depleted Ma	. ,			Anomalous Bright Loamy Soils (F20)	
	Bodies (A6) (LRR P,		Redox Dark		,		(MLRA 153B)	
	ucky Mineral (A7) (LR		Depleted Dar		• •		Red Parent Material (TF2)	
	esence (A8) (LRR U)		Redox Depre		5)		Very Shallow Dark Surface (TF12)	
	uck (A9) (LRR P, T)	(11)	Marl (F10) (L			E4)	Other (Explain in Remarks)	
·	d Below Dark Surface	(ATT)	Depleted Oct	. ,	•		T) ³ Indicators of hydrophytic vegetation and	
	ark Surface (A12)	DA 450A)	Iron-Mangan		· · ·		, , , , ,	
	rairie Redox (A16) (M			· / ·	•	, U)	wetland hydrology must be present,	
-	Nucky Mineral (S1) (L	KR 0, 5)	Delta Ochric			04 4500)	unless disturbed or problematic.	
	Bleyed Matrix (S4)		Reduced Ver	• • •				
	Redox (S5)		Piedmont Flo	•	. ,	•	•	
	Matrix (S6)	T 11		angni Loan	ny Solis (F20) (IVILKA	A 149A, 153C, 153D)	
	rface (S7) (LRR P, S,	1,0)						
_	Layer (if observed):							
Туре:								
Depth (in	ches):						Hydric Soil Present? Yes No	_
Remarks:							·	
No hydric soil	present							
-								



Photo 1 Upland data point WCHC003_u facing north



Photo 2 Upland data point WCHC003_u facing south

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region	-
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Project/Site:ACP	_ City/County: Chesapeake Sampling Date: 7/29/15
Applicant/Owner: Dominion	
nvestigator(s): ESI-A.Miller, C.MC Fachern	
andform (hillslope, terrace, etc.): <u>fla T</u>	Local relief (concave, convex, none): <u>flat</u> Slope (%): <u>0-1</u> %
	6, 75706°N Long: _76,405/6°W Datum: WG586
oil Map Unit Name: Arapaho= mucky fine 3	
re climatic / hydrologic conditions on the site typical for this time of	
re Vegetation, Soil, or Hydrology significan	
re Vegetation, Soil, or Hydrology naturally	problematic? (If needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site map showing	ng sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soil Present? Yes No Wetland Hydrology Present? Yes No	- Is the Sampled Area No
Remarks:	
YDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that app	
Surface Water (A1) Aquatic Fauna ((B13) Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LRR U) Drainage Patterns (B10)
Saturation (A3) Hydrogen Suific	
	spheres along Living Roots (C3) Dry-Season Water Table (C2)
	duced iron (C4) Crayfish Burrows (C8)
	duction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck Surfa Iron Deposits (B5) Other (Explain i	
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 (inc	hes): <u>NA</u>
Water Table Present? Yes No Depth (inc	hes): <u>>20</u>
Saturation Present? Yes No K Depth (inc	hes): Wetland Hydrology Present? Yes No
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial p	hotos previous inspections) if available:
Remarks:	
Proceeding of the	

 $^{\prime}$

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

Sampling Point: whr-DO/f_w

2/15/1/2/15/	Absolute [Dominance Test worksheet:
<u>Iree Stratum</u> (Plot size: 308+X308+) 1. <u>Liquilambar: Styraciflua</u>	<u>% Cover</u> _ 100		<u>Status</u>	Number of Dominant Species That Are OBL, FACW, or FAC:(A)
2. Acer pubrum	70	<u> </u>	FAC	Total Number of Dominant Species Across All Strata:
4 5				Percent of Dominant Species That Are OBL, FACW, or FAC: (A/B)
6				Prevalence Index worksheet:
7				Total % Cover of:Multiply by:
8	120			$\frac{1}{OBL \text{ species } \mathcal{O}} = \frac{1}{x + 1} = 0$
50% of total cover: <u>85</u>	$\frac{170}{170} =$	I otal Cov	"24	FACW species 105 x2= 210
Sapling/Shrub Stratum (Plot size: 304 X 3044)	<u>20%</u> 01 to	otal cover:	<u> </u>	FAC species $270 \times 3 = 810$
1 MOCELLA (P.S. 1 FRCG	IDD	Y	FAC	FACU species $55 \times 4 = 220$
1. Morella Cerifera 2. Manola Virginiana	- 75 -	-'y	FACID	UPL species $O_{x5} = O_{x5}$
3		-(<u></u>	Column Totals: <u>430</u> (A) <u>1240</u> (B)
4	·		·· '	Prevalence index = $B/A = \underline{2'88}$
5				
6	· ·			Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation
7,				2 - Dominance Test is >50%
8				3 - Prevalence Index is ≤3.0 ¹
	<u>705</u> =	Total Cov	er	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover:	20% of t	otal cover:	. <u> </u>	
Herb Stratum (Plot size: 3087×3087) 1. MYUNAMANIA algantia	BD	V	FA(1)	¹ Indicators of hydric soil and wetland hydrology must
2. Rúbyz Trivialis	$\frac{1}{5}$	-(FAID	be present, unless disturbed or problematic. Definitions of Four Vegetation Strata:
3		_ <u>//</u>	17100	-
	· <u></u> -			Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
45			<u> </u>	more in diameter at breast height (DBH), regardless of height.
5				
6¥ 7				Sapling/Shrub – Woody plants, excluding vines, less then 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
9				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
10				Woody vine – All woody vines greater than 3.28 ft in
11				height.
12				
4.0		= Total Co	ver , -	
50% of total cover: 42.	<u>5</u> 20% of	total cover	: <u>[]</u>	
Woody Vine Stratum, (Plot size: 305+X306+)	10	v	1 Ma	
1. Parithenocissus quinquefolia	<u> 40</u>		-THE	
2. Lonicera japonica	10	¥	FAC	
3/				
4				
5				Hydrophytic
	4	= Total Co		Vegetation Present? Yes No No
50% of total cover:	5 20% of	total cove	r: <u> 10 </u>	Present? Yes No
Remarks: (If observed, list morphological adaptations be	low).			
1				٨
				-
			•	

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Atlantic and Gulf Coastal Plain Region - Version 2.0

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Profile Desc	iperent (Bessenbe	to the depu	n needed to docum	ent the it	ndicator	or confiri	m the abse	ance of Inc	iicato(3.)		
Depth	Matrix			Features							
(inches)	Color (molst)	<u>%</u>	Color (moist)	%	Type'	Loc ²				Remarks	
0-3	101R2/1	100		·•			No	ck			
2-11	INVESTI	80	CONDILL.	20		M	1	1.1/-	~		
210	JUINLII.	· - 💭	10454/6	<u></u>	<u> </u>	_11/	Loan	Y SI []		· .	
<u>16-20</u>	10 YK3/1	80	_10YK611	_		_					
_							· · · · · · · · · · · · · · · · · · ·				•
				<u> </u>							
									·		
¹ Type: C=Co	ncentration. D=Dep	letion, RM=	Reduced Matrix, MS	=Masked	d Sand Gr	ains.	² Loca	tion: PL=F	Pore Lining	g, M≕Matrix	
			RRs, unless other				Indica	tors for P	roblemat	le Hydric S	nlls ³
Histosol			•			DDOT				-	
<u> </u>			Polyvalue Bel				N 7	cm Muck (
	ipedon (A2)		Thin Dark Sur					cm Muck (
Black His		HA HANNE	Loamy Mucky			(0)					ILRA 150A,E
	n Sulfide (A4)		Loamy Gleyed		(F2)		P	iedmont Fl	oodplain S	Soils (F19)	(LRR P, S, T
	Layers (A5)		Repeted Matr				A	nomalous i	Bright Loa	imy Soils (F	20)
	Bodies (A6) (LRR P		Redo, Jark S					(MLRA 15	3B)		
5 cm Mu	cky Mineral (A7) (Ll	RR P, T, U)	Depleted Dari				R	ed Parent	Material (TF2)	
	esence (A8) (LRR L		Redox Depres							rface (TF1	2)
	ck (A9) (LRR P, T)		Mari (F10) (LI					ther (Expla			
			Depleted Och		(MLRA 1	51)	- 0				
	irk Surface (A12)	V	Mangane				р т) —	³ Indicators	of hudron	hytic voort	ation and
		MI DA 4504	wangane	20 111255	/ 20 (⊏ 12) (/ 20 ⊡ 7		11			hytic veget	
	airie Redox (A16) (I									must be pr	
	lucky Mineral (S1) (Delta Ochric (uniess di	sturbed o	r problemai	iiC.
Sandy	jeyed Matrix (S4)	- * . #	Reduced Vert	uc (F18) ((MLRA 1	DUA, 150E	3)				
Sandy R	edox (S5)		Piedmont Floo				149A)				
Stripped	Matrix (S6)	÷'	Piedmont Floo				149A)	153C, 153I	D)		
Stripped	édox (S5) Matrix (S6) ñace (S7) (LRR P, ∜	َّ چ S, T, U)					149A)	153C, 1531	D)	ý	
Stripped	Matrix (S6)						149A)	153C, 153		ة	
Stripped	Matrix (S6) nace (S7) (LRR P, S						149A)			Å	
Siripped Dark Su Restrictive I Type:	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			. A	
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es_K	No
Siripped Dark Su Restrictive I Type:	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es_k	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es_k	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es_k	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es_k	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	<u>No</u>
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es_k	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es K	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es L	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es K	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es L	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es <u>k</u>	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es k	No
Stripped Dark Sur Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es L	No
Stripped Dark Su Restrictive I Type: Depth (inc	Matrix (S6) face (S7) (LRR P, S Layer (If observed)						149A) .RA 149A,			es L	No

US Army Corps of Engineers

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Wetland data point wchr001f_w facing north



Wetland data point wchr001f_w facing south

Photo Sheet 1 of 2

Project/Site:	City/Co	uniy: chesape	ate :	Sampling Date: 7/29/1
Applicant/Owner: Dominion				Sampling Point: WChY De
nvestigator(s): EST-A.M. LIEY, C.N	Eachern Section	, Township, Range:		
andform (hillslope, terrace, etc.):Fii1/e		elief (concave, convex, n		ノ 仁 大 Slope (%): <u>の</u> ースム
Subregion (LRR or MLRA): MLRA 15		7040 Long: -		18°W Datum: WGSBO
Soll Map Unit Name: Arapahoe m				
ve climatic / hydrologic conditions on the site ty			f no, explain in Re	
	gy significantly disturbe	•	Circumstances" pr	· · · · · · · · · · · · · · · · · · ·
ve Vegetation, Soil, or Hydrolo			cplain any answers	
				•
SUMMARY OF FINDINGS - Attach	are map showing samp	sing point location	ns, transects,	important features, etc.
Hydrophylic Vegetation Present? Yes	No <u>X</u>	Is the Sampled Area		
Hydric Soil Present? Yes	Nn A	within a Wetland?	Yes	No X
Wetland Hydrology Present? Yes				
Remarks:				
HYDROLOGY		· · · · · · · · · · · · · · · · · · ·		
Wetland Hydrology Indicators:			Secondary Indiant	ors (minimum of two required)
Primary Indicators (minimum of one is require	d: check all that apply)		Surface Soil (
Surface Water (A1)	Aqualic Fauna (B13)			etated Concave Surface (B8)
High Water Table (A2)	Marl Deposits (B15) (LRR	. U)	Drainage Pati	
Saturation (A3)	Hydrogen Sulfide Odor (C		Moss Trim Lir	nes (B16)
Water Marks (B1)	Oxidized Rhizospheres al		Dry-Season V	Vater Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iron		Crayfish Burr	• •
Drift Deposits (B3) Algal Mat or Crust (B4)	Recent Iron Reduction in Thin Muck Surface (C7)	Theo Sons (Cb)	Geomorphic I	sible on Aerial Imagery (C9)
Iron Deposits (B5)	Other (Explain in Remarks	(2	Shallow Aquit	
Inundation Visible on Aerial Imagery (B7)		-,	FAC-Neutral	
Water-Stained Leaves (B9)			Sphagnum m	oss/(D8) (LRR T, U)
Field Observations:	<u>у</u> ((
Surface Water Present? Yes N	o $\underline{\times}$ Depth (inches): <u>N</u>	<u></u>		i
	o $\underline{\times}$ Depth (inches): $\underline{\nearrow}$			\checkmark
Saturation Present? Yes N (includes capillary fringe)	o 🖄 Depth (inches): 📝	Wetland H	iydrology Presen	t? Yes No <u>X</u>
Describe Recorded Data (stream gauge, mor	itoring well, aerial photos, prev	vious inspections), if ave	ilable:	·····
•				
Remarks:				
				•••

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

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Sampling Point: wchr DOL-4

30 x 30 Ff	Absolute Dominant Indicator	Dominance Test worksheet:
Iree Stratum (Plot size: 30 x 30 ff)	<u>% Cover Species? Status</u>	Number of Dominant Species
1. None: Plesent	· ·····	That Are OBL, FACW, or FAC: (A)
2		Total Number of Dominant
3		Species Across All Strata; Z (B)
4		
		Percent of Dominant Species
5		That Are OBL, FACW, or FAC: (A/B)
6		Prevalence index worksheet:
7		Total % Cover of: Multiply by:
8		$\frac{1}{OBL \text{ species}} \qquad 0 \text{ where } \frac{1}{x_1} = 0$
	= Total Cover	
50% of total cover:	20% of total cover:	1 Now species x2=
Sapling/Shrub Stratum (Plot size: 30 x 30 F4)		FAC species $O = x_3 = O$
, Manie Drocont		FACU species $llO = x4 = 440$
		UPL species $O_{x5} = O_{x5}$
2		Column Totals: <u>(10</u> (A) <u>440</u> (B)
3		
4		Prevalence Index = B/A =
5		Hydrophytic Vegetation Indicators:
6		1 - Rapid Test for Hydrophytic Vegetation
7		2 - Dominance Test is >50%
8		3 - Prevalence Index is ≤3.0 ¹
	O = Total Cover	
50% of total source	20% of total cover:	Problematic Hydrophytic Vegetation' (Explain)
Herb Stratum (Plot size: 30×30 P4)	20% of local cover	
Herb Stratum (Plot size:)	89 Y FACU	¹ Indicators of hydric soil and wetland hydrology must
1. Digitaria sanguinalis		· · · · · · · · · · · · · · · · · · ·
2. Kummerowia striata	20 N FACU	Definitions of Four Vegetation Strata:
3. Rubhs trivialis	10 N FACU	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4	· · · · · · · · · · · · · · · · · · ·	more in diameter at breast height (DBH), regardless of
5		height.
6		
		Sapling/Shrub – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7		
8		
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		
	110 = Total Cover	·
50% of total cover: 5	5 20% of total cover: 22	
Woody Vine Stratum (Plot size: 30 X 3044)	2070 Of Iolar Soviet.	•
1. None Resent		
1. None gresent		-
2		-
3		_]
4		
5		Hydrophytia
	O = Total Cover	- Hydrophytic Vegetation
		Present? Yes No
50% of total cover:		
Remarks: (If observed, list morphological adaptations be	elow).	
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SOIL

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Sampling Point: 6Khrob1-4

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Profile Description:	(Describe	to the dept	h needed to docur	nent the in	dicator o	or confirm	the absence o	of Indicators.)	
	Matrix pr (moist)	%	Redo Color (moist)	x Features %	Type ¹	Loc ²	Texture	R	emarks
0-3 104	24/3	<u> 100</u> .			<u> </u>		5(·	
· ,					,	<u> </u>	,		
			<u> </u>						
<u> </u>						_			
¹ Type: C=Concentra						uns.	² Location:	PL=Pore Lining,	M=Matrix.
Hydric Soil Indicato	rs: (Applic	able to all 1	•		-			for Problematic	Hydric Solls ⁹ :
Histosol (A1) Histic Epipedion	(47)		Polyvalue Be Thin Dark Su					uck (A9) (LRR C	
Black Histic (A3)			Loamy Muck					uck (A10) (LRR d Vertic (F18) (r	S) outside MLRA 150A, B)
Hydrogen Sulfid	e (A4)		Loamy Gleye			-,			oils (F19) (LRR P, S, T)
Stratified Layers			Depleted Ma				Anomai	lous Bright Loan	
Organic Bodies 5 cm Mucky Min			Redox Dark Depleted Da	•	-			A 153B) read Material (TI	50)
Muck Presence			Redox Depre		• •			rent Material (Ti hallow Dark Surf	
1 cm Muck (A9)	(LRR P, T)		Mari (F10) (I	-	•			Explain in Rema	
Depleted Below		æ (A11)	Depleted Oc			•	2		
Thick Dark Surfa Coast Prairie Re	• •	MI RA 150A	Iron-Mangar) Umbric Surfe				,		ytic vegetation and
Sandy Mucky M			Delta Ochric			, 0)		and hydrology n ss disturbed or j	
Sandy Gleyed N	latrix (S4)		Reduced Ve	rtic (F18) (I	MLRA 15				`
Sandy Redox (S			Piedmont Fl						
Stripped Matrix Dark Surface (S		S T IN	Anomalous I	Bright Loan	ny Soils (I	-20) (MER	A 149A, 153C,	153D)	
Restrictive Layer (i									
Туре:									
Depth (inches): _							Hydric Soll	Present? Yes	s No
Remarks: -Sbil Wi -CNA Pa	·и · -	Cul			0		actes		
-S611 WI	1hin	ticid	1000 6	SAVE	regy	Carry	, money	i.	
	AS1. 0	.11			•				
-CINH CO	NF 3	>							
								1	
								1	A Standard B
									A NAME OF
								5. (
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Upland data point wchr001_u facing north



Upland data point wchr001_u facing south

	WETLAND D	ETERMINATION	DATA FORM	A – Atlantic and	Gulf Coastal	Plain Region	
Project/Site:	ACP		Citv/C	ounty: Chesa	peake	Sampling Date:	9/29/19
Applicant/Owner: _	Dominio	n	0.1.1.0		State: \A	Sampling Point: V	vcho OOIFN
Investigator(s):	Jacobs		Sectio	n, Township, Range			<u> </u>
Landform (hillslope	e, terrace, etc.): _FI	atwoods		relief (concave, conv		1P Slope	(%): 2-3
Subracion /I BB or	MIDAY IRRT	Lat	. 30.1614	6 Long	-76.3749	8 Datu	Im: WGS84
Soil Man Unit Nam	Partolus	IDamy fine	sand	Long		fication: PFO)
				No X	(If no, explain in		
		the site typical for this t					N
-		Hydrology sig				"present? Yes	NO
		Hydrology nat			ed, explain any answ		
SUMMARY OF	FINDINGS - A	ttach site map sh	nowing sam	pling point loca	ations, transec	ts, important fea	atures, etc.
Hydrophytic Vege	etation Present?	Yes X No		Is the Sampled Are			
Hydric Soil Prese	int?	Yes V No.		within a Wetland?		No	
Wetland Hydrolog	gy Present?	Yes No					
Remarks:	who who	conditions	(Based	on sept.	22 Droy	ght moni-	tor).
- Raih	Within 24	hours.			Hardwa	od Flat	
					1100000		
HYDROLOGY	11.12 == 2				- 18		
Wetland Hydrold	Colores a Martin Colores and Colores					cators (minimum of ty	wo required)
and the particular	statistics and a second second second	required; check all that				oil Cracks (B6)	
Surface Wate		Aquatic Fa				egetated Concave S	urface (B8)
High Water T Saturation (A			sits (B15) (LRR Sulfide Odor (C			atterns (B10) Lines (B16)	
Water Marks				ong Living Roots (C3		n Water Table (C2)	
Sediment De			of Reduced Iron			urrows (C8)	
Drift Deposits		Recent Iro	n Reduction in	Filled Soils (C6)	Saturation	Visible on Aerial Imag	gery (C9)
Algal Mat or (Surface (C7)			ic Position (D2)	
Iron Deposits	s (B5) isible on Aerial Image		lain in Remarks	5)	5	uitard (D3)	
Water-Staine		зу (вл)			FAC-Neutr Sphannum	moss (D8) (LRR T, I	n
Field Observatio				10	opinginiti		
Surface Water Pro	esent? Yes_	No X Depth	(inches):	ALL			
Water Table Pres	ent? Yes_		(inches):	20		\mathbf{Y}	
Saturation Presen		🗶 No Depth	(inches): 11	Wetlan	d Hydrology Prese	ent? Yes <u></u>	No
(includes capillary Describe Recorde		ge, monitoring well, aer	ial photos, prev	ious inspections), if a	available:		
					•		
Remarks:							

Sampling Point: _____

VEGETATION (Four Strata) - Use scientific na	mes of pl	ants.		Sampli	ng Point:	
Tree Stratum (Plot size: 30x3Df+)	Absolute % Cover	Dominant Species?	Status	Dominance Test worksheet: Number of Dominant Species	Langer	
1. Avercus nigra 2. Acer rubrum	20		FAC	That Are OBL, FACW, or FAC:	(A	.)
3. Fraxinus pennsylvanica	5	N	FACW	Total Number of Dominant Species Across All Strata:	6 (В	1)
4. Taxadium distichum	5	N	OBL	Percent of Dominant Species	100 %	
5 6		and the first stands		That Are OBL, FACW, or FAC:	(A	VB)
7			a contractor	Prevalence Index worksheet:	Mullinhahan	
8			<u></u>	Total % Cover of: X 1 OBL species X 1		
20	100	= Total Cov		FACW species x 2		
50% of total cover: <u>30</u> Sapling/Shrub Stratum (Plot size: <u>30X30</u> f.L)	20% of	f total cover	NT YEAR OF	FAC species x 3	i =	
1. Acer rubrum	15	Y	FAC	FACU species x 4		
2. Fraxinus pennsylvanica	10	Y	FACW	UPL species x 5		
3				Column Totals: (A)		, Б)
4		and the second second		Prevalence Index = B/A =		
5 6			-	Hydrophytic Vegetation Indicat 1 - Rapid Test for Hydrophyti		
7				× 2 - Dominance Test is >50%	e vegetador	
8.				3 - Prevalence Index is ≤3.0 ¹		
50% of total cover: 12-	25	= Total Co	ver G	Problematic Hydrophytic Veg	etation ¹ (Explain)	
Herb Stratum (Plot size: 30 × 30 ft)	20% of	f total cover			Augusta Street	
1. Woodwardia areplata	20	Y	DBL	¹ Indicators of hydric soil and wetle be present, unless disturbed or p	and hydrology mus roblematic.	st
2.			Construction and a state of the	Definitions of Four Vegetation		
3				Tree - Woody plants, excluding v	vines, 3 in. (7.6 cm)) or
4				more in diameter at breast height height.	(DBH), regardless	s of
5				and the second sec		
6 7.				Sapling/Shrub – Woody plants, than 3 in. DBH and greater than 3	3.28 ft (1 m) tall.	33
8			The second s	Herb - All herbaceous (non-woo	dy) plants, regardle	ess
9				of size, and woody plants less the	an 3.28 ft tall.	
10	•			Woody vine – All woody vines ge height.	reater than 3.28 ft i	in
11			geotic dis	Teight.		
12.	20	= Total Co	ver			
50% of total cover: 10	20% 0	f total cover	r. <u>4</u>	Margar Margar St.		
Woody Vine Stratum (Plot size: 30 x 30ff)	10	Y	FAC	The second states and the		
1. Smilax rotunditolia	- 10		140			
2	-	-				
4	1.5.7.7.4	2010				
5				Hydrophytic		
G	10	= Total Co	0	Vegetation Xes	No	
50% of total cover:	A CONTRACTOR OF A CONTRACT	f total cove	r:	North Party	and the second	
Remarks: (If observed, list morphological adaptations bel	ow).					
				•		
and the second s	and the second second		in the second second			ili (se ing

-	-		•
5	n		
5	-	٠	-

epth nches)	ulburn (mennen	to the dol	oru neede	a to docu	ment the	Indicator	or confirm	n the absence	of indication	JI 5.)	
iches)	Matrix	0/	Calar	Redo (moist)	ox Feature %	Type'	Loc ²	Texture		Remarks	
-10	Color (moist)	100		(moist)		Type	LOC	CL	A CONTRACTOR	Remarks	
1A	1011-16 0 0 1 21.		AGY	412	10	7	101		-	1	
1-1-1	2.51 2/1	00	2001	112	20	0	PL	SCL	11 12 12 12 12 12 12 12 12 12 12 12 12 1		
1-20	2.51 53	100						2			
			S			N. I. Bien				all a second	diversities de
			11228								
107 107						N					
	The second second second	WE STREET OF	Sector Sector	121.09.25	-		1000				
					C Marke			21 exetion	DI -Doro I	ining. M=Matri	v
pe: C=C	oncentration, D=Dep Indicators: (Application)	able to al	RRS UP	less of he	S=Maske	a Sand Gr	ains.	and the second se	the second s	matic Hydric	
Histosol							RR S, T,		Muck (A9) (I		
Contractor Statements	pipedon (A2)			The second second second second	urface (S9				Muck (A10)		
Contraction and second	istic (A3)				cy Mineral					18) (outside N	ILRA 150A, B
the second second second second second	en Sulfide (A4)				ed Matrix			the second se	이 아내는 것을 것을 모으며 이미지 않는다.	ain Soils (F19)	A COMPANY OF DESIGNATION OF THE PARTY
The second s	d Layers (A5)			epleted Ma	and the state of the second					Loamy Soils (F20)
and the second sec	Bodies (A6) (LRR P	A CONTRACTOR OF THE OWNER OF THE			Surface (Contract of the second			RA 153B) Parent Mater		
 Consider and both both of all of 	Jcky Mineral (A7) (LF			 Conference of the American State 	essions (F					k Surface (TF1	2)
CARD STREAM CODE CO.	resence (A8) (LRR U Jck (A9) (LRR P, T))		arl (F10) (.0)			(Explain in		-/
and the state of the state of the	d Below Dark Surface	e (A11)			chric (F11)	(MLRA 1	51)	_ •	(
CONTROL OF BRIDE	ark Surface (A12)						LRR O, P	,T) ³ Indi	cators of hy	drophytic vegel	ation and
Coast P	rairie Redox (A16) (M	ILRA 150	A) Ur	nbric Surfa	ace (F13)	(LRR P, T	r, U)		Concernence of the second second second	ogy must be pr	
The search and search and the second	Mucky Mineral (S1) (L	RR O, S)	A CONTRACTOR OF A CONTRACT OF		: (F17) (M	5 4 1 4 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5			less disturbe	ed or problema	tic.
A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR AND A CONTRAC	Gleyed Matrix (S4)				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 3 4 4 5 M 1 4 M 1 4 7 4 7 1 1	50A, 150B				
The second second second second	Redox (S5) 1 Matrix (S6)						(MLRA 1	49A) RA 149A, 1530	. 153D)		
Supper			- ~	Iomaious	Digit Loa	ing cons (1 20) (1121	1407, 100	-, 1002,		
Dark Su	rface (S7) (LRR P. S	i. I. UI			a second a second	some and the starting			and and a second of the second s		
and the second se	rface (S7) (LRR P, S Layer (if observed):		and the second se								
	Layer (if observed):									10	
estrictive	Layer (if observed):							Hydric So	I Present?	Yes X	No
estrictive Type:	Layer (if observed):							Hydric So	I Present?	Yes	No
estrictive Type: Depth (in	Layer (if observed):							Hydric So	ll Present?	Yes	No
Type: Depth (in	Layer (if observed):				1920			Hydric So	I Present?	Yes	No
Type: Depth (in	Layer (if observed):							Hydric So	Il Present?	Yes	No
Type: Depth (in	Layer (if observed): ches):							Hydric So	ll Present?	Yes	No
Type: Depth (in	Layer (if observed):					4.1917 4.1917		Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (if observed): ches):					<u>k</u> ant		Hydric Sol	ll Present?	Yes X	No
Type: Depth (in	Layer (If observed): ches):					\$11) \$11)		Hydric So	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric So	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
astrictive Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No
Type: Depth (in	Layer (If observed): ches):							Hydric Sol	ll Present?	Yes	No



Wetland data point wcho001f_w facing southwest.



Wetland data point wcho001f_w facing west.

Photo Sheet 1 of 2

WETLAND D	ETERMINATION DATA FOR	M – Atlantic and Gu	ulf Coastal P	lain Region
roject/Site:ACP	Citv/C	county: Chesapec	ike	_ Sampling Date: 09/29/1
plicant/Owner: DOMINIO	7	CONTRACTOR AND	State: VA	Sampling Point: WCho.00
estigator(s): C. Jacobs	S TOSEFO Secti	on, Township, Range:		_ oumpining r oniti
	Occil			NE Slope (%): 3-5
ndform (hillslope, terrace, etc.):		relief (concave, convex, r	10 214a1	
pregion (LRR or MLRA):	Lut.	Long:	76.31991	Datum: W658
Map Unit Name: Pactolus	loamy tine sand		NWI classifi	cation: NA
climatic / hydrologic conditions on	the site typical for this time of year? Y	res NoX_ (If no, explain in I	Remarks.)
Vegetation X, Soil X, or	r Hydrology significantly distur	bed? Are "Normal	Circumstances"	present? Yes No
Vegetation, Soil, or	r Hydrology naturally problem	atic? (If needed, e	xplain any answ	ers in Remarks.)
JMMARY OF FINDINGS - A	Attach site map showing san	npling point locatio	ns, transect	s, important features, etc.
lydrophytic Vegetation Present? lydric Soil Present? Vetland Hydrology Present?	Yes No Yes No Yes No	Is the Sampled Area within a Wetland?		No
Abnormally Dry	conditions (Bass	ed on sept.	22 Drow	1ght Monitor)
Rain Within 24	hours			
DROLOGY	Cale Blott			
etland Hydrology Indicators:			Secondary Indic	ators (minimum of two required)
imary Indicators (minimum of one is	s required; check all that apply)		the second second second second second	I Cracks (B6)
Surface Water (A1)	Aquatic Fauna (B13)	and the second sec		egetated Concave Surface (B8)
_ High Water Table (A2)	Marl Deposits (B15) (LRI			atterns (B10)
_ Saturation (A3)	Hydrogen Sulfide Odor (Moss Trim L	
Water Marks (B1)	Oxidized Rhizospheres a		Charles of Production and Products	Water Table (C2)
Sediment Deposits (B2)	Presence of Reduced Iro		Crayfish Bu	
_ Drift Deposits (B3) _ Algal Mat or Crust (B4)	Recent Iron Reduction in Thin Muck Surface (C7)	Theo Sons (Co)		/isible on Aerial Imagery (C9) Position (D2)
_ Iron Deposits (B5)	Other (Explain in Remark	(2)	Shallow Aqu	
Inundation Visible on Aerial Imag			FAC-Neutra	
Water-Stained Leaves (B9)		and a second		moss (D8) (LRR T, U)
eld Observations:				
rface Water Present? Yes_	No Depth (inches):	A		
	No X Depth (inches):	20		11
turation Present? Yes _ cludes capillary fringe)	10		ydrology Prese	nt? Yes No
escribe Recorded Data (stream gau	ge, monitoring well, aerial photos, pre	vious inspections), if avail	lable:	
emarks:				- Annalise entre of the more than the
*				
Ц.				
				-

Sampling Point:

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

	Abcelute	Dominant	Indicator	Dominance Test worksheet:	
Tree Stratum (Plot size: 30X 30Ff)	% Cover	Dominant Species?	Status	Number of Dominant Species 4	
1. Pinus taeda	10	-1-	FAC	That Are OBL, FACW, or FAC: (A)	
2. Acer rubrum	20	<u> </u>	FAC	Total Number of Dominant	
3. Quercus michauxii	5	N	FACW	Species Across All Strata: (B)	
4	-			Percent of Dominant Species 1-7	
5				That Are OBL, FACW, or FAC: (A/B)
6				Providence Index worksheet:	-
7.	Same State	A Later 18	-	Prevalence Index worksheet:	
8.		The street		Total % Cover of: Multiply by:	
and the second s	35	= Total Co	ver	OBL species x 1 =	
50% of total cover: 17.0	20% of	f total cover	- 7	FACW species x 2 =	
Sapling/Shrub Stratum (Plot size: 30X30F1)	College and		(1000000)	FAC species x 3 =	
1. Acer rubrum	10	N	TAC	FACU species x 4 =	
2 Liquidambar styraciflua	20	V	FAC	UPL species x 5 =	
	40	1	TACIL	Column Totals: (A) (B)	
3. Callicarpa americana	- 70		THUM		
4	•			Prevalence Index = B/A =	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7	_			2 - Dominance Test is >50%	
8.	S.M.S.			3 - Prevalence Index is ≤3.0 ¹	
	70	= Total Co	ver	Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover: 30	20% 0	f total cove	- 14		
Herb Stratum (Plot size: 30X30FF)	20	N		¹ Indicators of hydric soil and wetland hydrology must	
1. Callicarpa americana	20	1	FACU	be present, unless disturbed or problematic.	
2.				Definitions of Four Vegetation Strata:	13
3.				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of	r
4.				more in diameter at breast height (DBH), regardless of	f
· · · · · · · · · · · · · · · · · · ·				height.	
5					
6				Sapling/Shrub – Woody plants, excluding vines, less than 3 in, DBH and greater than 3.28 ft (1 m) tall.	
7					
B	-		-	Herb - All herbaceous (non-woody) plants, regardles	5
9	-		-	of size, and woody plants less than 3.28 ft tall.	
10		11-15-20		Woody vine - All woody vines greater than 3.28 ft in	
11.				height.	
12	- Alexandre		a best fille	Real and the second	63
	20	= Total Co	ver		10000
50% of total cover: _ 10		f total cove	and the second se	A Charles and the second second	
Woody Vine Stratum (Plot size: 30X30 Pt)		Ň			
1. Smilax rotundifolia	5	Y	FAC		
1. Dmittax Totonorporta		A REAL PROPERTY		and the second	
2	•	The second second	TANKSTON		
3	Torrest and the second	Contraction of the second			
4	-	-	-		
5				Hydrophytic	
	5	= Total Co	wer	Vegetation Present? Yes No	
50% of total cover: 2	2 20% 0	of total cove	r:	Present? Yes <u>No</u>	
Remarks: (If observed, list morphological adaptations bel	ow).		SAL PESSEN		1116
Keinand: (in observed) int indepresed in a server					
					_

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)	
Depth Matrix Redox Features	
(inches) Color (moist) % Color (moist) % Type Loc ² Texture Remarks	
0-4 2.5/8/4 100 Sand	
4-20 2.54 6/3 100 Sand	C. C. Stranger
	AND IS
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 Soil	s 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 MLF	
Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Piedmont Floodplain Soils (F19) (LF	AV-10 32 Jack Acc. 7 1984
Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20 Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B)	")
Organic Boules (AB) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2)	
Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12)	
1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks)	
Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151)	
Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) ³ Indicators of hydrophytic vegetation	
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be prese	ent,
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic.	
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A)	dia ta in
Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)	
Dark Surface (S7) (LRR P, S, T, U)	
Restrictive Layer (if observed):	
Туре:	.1
Depth (inches): Hydric Soll Present? Yes N	Io X
Remarks:	Sector 7
철물 수 있는 것 같아요. 이 것 같아요. 이 것 같아요. 이 것 같아요. 이 것 같아요. 아이는 것 같아요. 이 것	
2011년 1728년 1721년 1847년 1847년 1871년 187 1971년 1871년 1871	
이 같은 것은 것은 것은 것은 것은 것은 것은 것을 것을 수 있다. 것은 것은 것은 것은 것은 것은 것은 것을 가지 않는 것을 하는 것이 같아. 것은 것은 것을 가지 않는 것은 것을 하는 것이 같아.	



Upland data point wcho001_u facing east.



Upland data point wcho001_u facing southwest.

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline	City/County: C	ity of Chesapeake	Sampling Date: 1/28/2016
Applicant/Owner: DOMINION		State: VA	_ Sampling Point: wchc002f_w
Investigator(s): Team C	Section, Towns	ship, Range: <u>No PLSS in this a</u>	
Landform (hillslope, terrace, etc.): Depression		ncave, convex, none): <u>concave</u>	
Subregion (LRR or MLRA): T	Lat: <u>36.76164263</u>	Long: <u>-76.37267927</u>	Datum: WGS 1984
Soil Map Unit Name: Wando loamy fine sand, 0 to 3 perce	ent slopes	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for the	his time of year? Yes	_ No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances'	" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology	_naturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINIDINCS Attach site mar	a abowing compling	aint logations transact	important factures ato

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

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

HYDROLOGY

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

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

Sampling Point: wchc002f_w

20	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)		Species?	Status	Number of Dominant Species
1. Pinus taeda	25	Yes	FAC	That Are OBL, FACW, or FAC:6 (A)
2. Nyssa sylvatica	15	Yes	FAC	Total Number of Dominant
3. Acer rubrum	10	No	FAC	Species Across All Strata:6 (B)
4. Liquidambar styraciflua	10	No	FAC	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
6				
7				Prevalence Index worksheet:
				Total % Cover of: Multiply by:
8	60	= Total Cov		OBL species x 1 =0
50% of total accord 30			12	FACW species 55 x 2 = 110
50% of total cover:	20% of	total cover:		FAC species $\frac{65}{x 3} = \frac{195}{x 3}$
Sapling/Shrub Stratum (Plot size: 15)	10	Vee		FACU species $0 x 4 = 0$
1. Cyrilla racemiflora		Yes	FACW	UPL species $0 \times 5 = 0$
2. <u>Ilex opaca</u>	5	Yes	FAC	120 305
3. Persea borbonia	5	Yes	FACW	Column Totals: (A) (B)
4				Prevalence Index = B/A =2.54
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				
8				∠ 2 - Dominance Test is >50%
0	20	= Total Cov		\checkmark 3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 10				Problematic Hydrophytic Vegetation ¹ (Explain)
	20% of	total cover:		
Herb Stratum (Plot size: 5)	40	Ma a		¹ Indicators of hydric soil and wetland hydrology must
1. Arundinaria gigantea		Yes	FACW	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9				
10		<u> </u>		Woody vine – All woody vines greater than 3.28 ft in
11				height.
12		<u> </u>		
		= Total Cov	•	
50% of total cover: 20	20% of	total cover:	8	
Woody Vine Stratum (Plot size: 30)				
1				
2				
3				
4				
5				Hydrophytic
0		= Total Cov		Vegetation Present? Yes Vo
50% of total cover:0	20% of	total cover:		
Remarks: (If observed, list morphological adaptations below	w).			

0-8 10Y 8-14 10Y 14-20 2.5Y	R 4/1 11 6/2 8 tration, D=Depletion	00 00 10YR 5/6	Type ¹	 	Texture	Remarks	
8-14 10Yi 14-20 2.5Y 14-20 2.5Y Image: C=Concent Image: C=Concent Indica Soil Indica	R 4/1 11 6/2 8 tration, D=Depletion	00 10YR 5/6	C	M	LS		
14-20 2.5Y	ration, D=Depletion	0 10YR 5/6	C	M			
Type: C=Concen Hydric Soil Indica	iration, D=Depletion		с 	M			
Hydric Soil Indica	/ /			·			
Hydric Soil Indica	/ /						
-				ains.		Pore Lining, M=Matrix.	
Histosol (A1)	tors: (Applicable)	to all LRRs, unless other	r wise noted.) elow Surface (S8) (I			Problematic Hydric Soils ³ :	:
5 cm Mucky M Muck Presence 1 cm Muck (As Depleted Belo Thick Dark Su Coast Prairie I Sandy Mucky Sandy Gleyed Sandy Redox Stripped Matri	3) ide (A4) rs (A5) s (A6) (LRR P, T, U ineral (A7) (LRR P, e (A8) (LRR U) e) (LRR P, T) w Dark Surface (A1 fface (A12) Redox (A16) (MLRA Mineral (S1) (LRR C Matrix (S4) (S5) x (S6) S7) (LRR P, S, T, U	Loamy Muck Loamy Gleye Depleted Ma Redox Dark Redox Dark Redox Depre Marl (F10) (L Depleted Ocl Iron-Mangan Umbric Surfa O, S) Delta Ochric Reduced Vel Piedmont Flo Anomalous E	Surface (F6) rk Surface (F7) essions (F8)	51) (LRR O, P, (, U) 50A, 150B) (MLRA 14	 Reduced V/ Piedmont F Anomalous (MLRA 1! Red Parent Very Shallo Other (Expl T) ³ Indicators wetland unless d	t Material (TF2) bw Dark Surface (TF12) lain in Remarks) s of hydrophytic vegetation a hydrology must be present, listurbed or problematic.	P, S, T and
	(If observed):						
Type: Depth (inches):					Hydric Soil Pres	sent? Yes 🖌 No	
Remarks:	-				,	····	
ydric soil present							



Photo 1 Wetland data point wchc002f_w facing south



Photo 2 Wetland data point wchc002f_w facing north

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline	City/County: C	City of Chesapeake	Sampling Date: 1/28/2016
Applicant/Owner: DOMINION		State: VA	Sampling Point: wchc002_u
Investigator(s): Team C	Section, Town	ship, Range: <u>No PLSS in this a</u>	
Landform (hillslope, terrace, etc.): Slight rise		oncave, convex, none): <u>convex</u>	
Subregion (LRR or MLRA): T La	t: <u>36.76161773</u>	Long: <u>-76.37292004</u>	Datum: WGS 1984
Soil Map Unit Name: Wando loamy fine sand, 0 to 3 percent	slopes	NWI class	ification: None
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes	No (If no, explain ir	n Remarks.)
Are Vegetation, Soil, or Hydrology 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 a	howing compling	noint locations transpo	to important factures ato

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

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

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

Sampling Point: wchc002_u

Trop Stratum (Plat aiza: 30)	Absolute			Dominance Test worksheet:	
<u>Tree Stratum</u> (Plot size:) 1. Fagus grandifolia	<u>% Cover</u> 60	<u>Species?</u> Yes	<u>Status</u> FACU	Number of Dominant Species That Are OBL EACW or EAC: 4 (A)	
1. <u>1 agus grandinna</u> 2 Liquidambar styraciflua	20	Yes	FAC	That Are OBL, FACW, or FAC:4 (A)	
2. <u>Pinus taeda</u>	10			Total Number of Dominant	
3. Philos taeda	10	No	FAC	Species Across All Strata: 5 (B)	
4				Percent of Dominant Species	
5				That Are OBL, FACW, or FAC: 80 (A/B	5)
6					
7				Prevalence Index worksheet:	
8				$\begin{array}{c c} \hline Total \% Cover of: \\ \hline OPL appealon \\ \hline 0 \\ \hline y 1 = 0 \\ \hline 0 \\ \hline y 1 = 0 \\ \hline \end{array}$	
	90	= Total Cover		OBL species $x_1 = 0$	
50% of total cover: 45	20% of	total cover:	18	FACW species $x^2 = \frac{20}{105}$	
Sapling/Shrub Stratum (Plot size: 15)				FAC species $x_3 = 240$	
1. Quercus nigra	25	Yes	FAC	FACU species60 x 4 =240	
2		·		UPL species $0 \times 5 = 0$	
3.				Column Totals: (A) (B)	1
				2.27	
4				Prevalence Index = B/A =3.37	
5				Hydrophytic Vegetation Indicators:	
6				1 - Rapid Test for Hydrophytic Vegetation	
7		· ·			
8	25	<u> </u>		3 - Prevalence Index is ≤3.0 ¹	
40 5		= Total Cover		Problematic Hydrophytic Vegetation ¹ (Explain)	
50% of total cover:12.5	20% of	total cover:	5		
Herb Stratum (Plot size: 5)				¹ Indicators of hydric soil and wetland hydrology must	
1. Smilax rotundifolia	10	Yes	FAC	be present, unless disturbed or problematic.	
2. Eubotrys racemosa	10	Yes	FACW	Definitions of Four Vegetation Strata:	
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) of	r
4				more in diameter at breast height (DBH), regardless of	f
5				height.	
6				Sapling/Shrub – Woody plants, excluding vines, less	
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.	
8					
				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.	;
9					
10				Woody vine – All woody vines greater than 3.28 ft in	
11		· ·		height.	
12	20				
10		= Total Cover			
50% of total cover: 10	20% of	total cover:	4		
Woody Vine Stratum (Plot size: 30)					
1					
2					
3					
4					
5				Hydrophytic	
		= Total Cover		Vegetation	
50% of total cover:0				Present? Yes <u>V</u> No	
Remarks: (If observed, list morphological adaptations below					
Remarks. (If observed, list morphological adaptations belo	vv).				

Depth	Matrix		Redo	ox Features						
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks		
0-10	10YR 3/4	100					LS			
10-14	10YR 3/2	100					LS			
14-20	2.5Y 5/3	100					FS			
		·								
	Concentration, D=De					ains.		Pore Lining, M=Matrix. Problematic Hydric Soils ³ :		
Black H Hydrog Stratifie Organi 5 cm M Muck F 1 cm M Deplete Thick I Coast I Sandy Sandy Sandy Sandy Dark S	ol (A1) Epipedon (A2) Histic (A3) gen Sulfide (A4) ed Layers (A5) c Bodies (A6) (LRR I Mucky Mineral (A7) (L Presence (A8) (LRR P, T) ed Below Dark Surfa Dark Surface (A12) Prairie Redox (A16) (Mucky Mineral (S1) (Gleyed Matrix (S4) Redox (S5) ed Matrix (S6) urface (S7) (LRR P, Layer (if observed	RR P, T, U) U) ce (A11) (MLRA 150A (LRR O, S) S, T, U)	Iron-Mangar Umbric Surfa Delta Ochric Reduced Ve Piedmont Flo	urface (S9) (L cy Mineral (F ² ed Matrix (F2) atrix (F3) Surface (F6) rk Surface (F6) rk Surface (F6) LRR U) chric (F11) (M bese Masses ace (F13) (LF (F17) (MLR) rtic (F18) (MI codplain Soils	RR S, (LRA 15 (F12) (L RR P, T, A 151) LRA 15(S (F19)	T, U) O) LRR O, P, U) DA, 150B) (MLRA 14	T) 2 cm Muck Reduced V Piedmont F Anomalous (MLRA 1 Red Parent Very Shallo Other (Exp 3Indicators wetland unless c	(A10) (LRR S) ertic (F18) (outside MLRA 15 floodplain Soils (F19) (LRR P, Bright Loamy Soils (F20) 53B) t Material (TF2) ow Dark Surface (TF12) lain in Remarks) s of hydrophytic vegetation and hydrology must be present, disturbed or problematic.	, S, T	
Type:	nches):						Hydric Soil Pres	sent? Yes No	~	
Remarks:										
	oil present									



Photo 1 Upland data point wchc002_u facing north



Photo 2 Upland data point wchc002_u facing south

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline	City/County: C	City of Chesapeake	Sampling Date: 1/28/2016
Applicant/Owner: DOMINION		State: VA	_ Sampling Point: wchc001f_w
Investigator(s): Team C	Section, Town	ship, Range: <u>No PLSS in this a</u>	
Landform (hillslope, terrace, etc.): depression		oncave, convex, none): <u>concave</u>	
Subregion (LRR or MLRA): T L	at: <u>36.76184764</u>	Long: <u>-76.37060205</u>	Datum: WGS 1984
Soil Map Unit Name: Wando loamy fine sand, 0 to 3 percen	t slopes	NWI classi	fication: None
Are climatic / hydrologic conditions on the site typical for this	time of year? Yes	No (If no, explain in	Remarks.)
Are Vegetation, Soil, or Hydrologys	ignificantly disturbed?	Are "Normal Circumstances"	" present? Yes 🔽 No
Are Vegetation, Soil, or Hydrology n	aturally problematic?	(If needed, explain any answ	vers in Remarks.)
SUMMARY OF FINDINGS Attach site man	showing compling	naint locations transport	important factures ato

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

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

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
	Crayfish Burrows (C8)
Field Observations:	
Surface Water Present? Yes No 🖌 Depth (inches):	
Water Table Present? Yes <u>/</u> No Depth (inches): 0	
Saturation Present? Yes <u>Ves</u> No Depth (inches): 0 (includes capillary fringe)	Wetland Hydrology Present? Yes <u>✓</u> No
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspec	tions), if available:
Remarks:	
Wetland hydrology present	

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

Sampling Point: wchc001f_w

Trop Stratum (Plot cizo: 30)	Absolute			Dominance Test worksheet:
	<u>% Cover</u> 50	<u>Species?</u> Yes	<u>Status</u>	Number of Dominant Species
1. Pinus taeda	10		FAC	That Are OBL, FACW, or FAC:4 (A)
2. <u>Acer rubrum</u>	10	No	FAC	Total Number of Dominant
3. Quercus nigra		No	FAC	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: 100 (A/B)
6				Descelance in descuentels est.
7				Prevalence Index worksheet:
8				Total % Cover of: Multiply by: OPL appoint 0 V1 = 0
	70	= Total Cov		OBL species X I =
50% of total cover:35	20% of	total cover:	14	FACW species $x = 240$
Sapling/Shrub Stratum (Plot size: 15)				FAC species $3 = -70$
_{1.} Persea borbonia	30	Yes	FACW	FACU species $x 4 = 0$
2. Vaccinium corymbosum	10	Yes	FACW	UPL species $x_5 = $
3. Pinus taeda	5	No	FAC	Column Totals: (A) (B)
4	. <u> </u>			Prevalence index = $B/A = 2.66$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				∠ 2 - Dominance Test is >50%
8	4 -			\checkmark 3 - Prevalence Index is ≤3.0 ¹
22.5		= Total Cov		Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 22.5	<u>20% of</u>	total cover:		
Herb Stratum (Plot size: 5)	F		FAC	¹ Indicators of hydric soil and wetland hydrology must
1. Pinus taeda		Yes	FAC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				
11				Woody vine – All woody vines greater than 3.28 ft in height.
12.				noight.
12.	5	= Total Cov		
50% of total cover:2.5		f total cover:		
	20% 01			
,				
1				
2				
3				
4	·			
5				Hydrophytic
		= Total Cov		Vegetation Present? Yes <u>Ves</u> No
50% of total cover:0	20% of	total cover:	0	
Remarks: (If observed, list morphological adaptations belo	w).			

0-8 10Y 8-14 10Y 14-20 2.5Y	R 4/1 11 6/2 8 tration, D=Depletion	00 00 10YR 5/6	Type ¹	 	Texture	Remarks	
8-14 10Y 14-20 2.5Y 14-20 2.5Y Image: C=Concent Image: C=Concent Indica Soil Indica	R 4/1 11 6/2 8 tration, D=Depletion	00 10YR 5/6	C	M	LS		
14-20 2.5Y	ration, D=Depletion	0 10YR 5/6	C	M			
Type: C=Concen Hydric Soil Indica	iration, D=Depletion		с 	M			
Hydric Soil Indica	/ /			·			
Hydric Soil Indica	/ /						
-				ains.		Pore Lining, M=Matrix.	
Histosol (A1)	tors: (Applicable)	to all LRRs, unless other	r wise noted.) elow Surface (S8) (I			Problematic Hydric Soils ³ :	:
5 cm Mucky M Muck Presence 1 cm Muck (As Depleted Belo Thick Dark Su Coast Prairie I Sandy Mucky Sandy Gleyed Sandy Redox Stripped Matri	3) ide (A4) rs (A5) s (A6) (LRR P, T, U ineral (A7) (LRR P, e (A8) (LRR U) e) (LRR P, T) w Dark Surface (A1 fface (A12) Redox (A16) (MLRA Mineral (S1) (LRR C Matrix (S4) (S5) x (S6) S7) (LRR P, S, T, U	Loamy Muck Loamy Gleye Depleted Ma Redox Dark Redox Dark Redox Depre Marl (F10) (L Depleted Ocl Iron-Mangan Umbric Surfa O, S) Delta Ochric Reduced Vel Piedmont Flo Anomalous E	Surface (F6) rk Surface (F7) essions (F8)	51) (LRR O, P, (, U) 50A, 150B) (MLRA 14	 Reduced V/ Piedmont F Anomalous (MLRA 1! Red Parent Very Shallo Other (Expl T) ³ Indicators wetland unless d	t Material (TF2) bw Dark Surface (TF12) lain in Remarks) s of hydrophytic vegetation a hydrology must be present, listurbed or problematic.	P, S, T and
	(If observed):						
Type: Depth (inches):					Hydric Soil Pres	sent? Yes 🖌 No	
Remarks:	-				,	····	
ydric soil present							



Photo 1 Wetland data point wchc001f_w facing northeast



Photo 2 Wetland data point wchc001f_w facing southeast

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: Atlantic Coast Pipeline	City/County: Ci	ty of Chesapeake	Sampling Date: 1/28/2016
Applicant/Owner: DOMINION		State: VA	Sampling Point: wchc001_u
Investigator(s): Team C	Section, Towns	hip, Range: <u>No PLSS in this a</u>	
Landform (hillslope, terrace, etc.): Slight rise		ncave, convex, none): <u>convex</u>	
Subregion (LRR or MLRA): T	Lat: <u>36.76183837</u>	Long: <u>-76.3710385</u>	Datum: WGS 1984
Soil Map Unit Name: <u>Wando loamy fine sand, 0 to 3 p</u>	percent slopes	NWI class	sification: None
Are climatic / hydrologic conditions on the site typical	for this time of year? Yes	_ No (If no, explain in	n Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circumstances	s" present? Yes 🖌 No
Are Vegetation, Soil, or Hydrology	naturally problematic?	(If needed, explain any ans	wers in Remarks.)
SUMMARY OF FINDINGS - Attach site	man showing sampling r	oint locations transor	te important features etc

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

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

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

Sampling Point: wchc001_u

20	Absolute		Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: <u>30</u>)		Species?	<u>Status</u>	Number of Dominant Species
1. Fagus grandifolia	30	Yes	FACU	That Are OBL, FACW, or FAC:3 (A)
2. Liquidambar styraciflua	20	Yes	FAC	Total Number of Dominant
3. Quercus alba	10	No	FACU	Species Across All Strata:4 (B)
4				Demonstrat Deminant Creation
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 75 (A/B)
6				
7				Prevalence Index worksheet:
8		·		Total % Cover of: Multiply by:
0	60	= Total Cove		OBL species x 1 =0
500% of total accurate 30			12	FACW species $0 x 2 = 0$
50% of total cover:	20% 01	total cover:		FAC species $\frac{60}{x 3} = \frac{180}{x 3}$
Sapling/Shrub Stratum (Plot size: 15)	25	Vee	FAC	FACU species 40 x 4 = 160
1. Quercus nigra		Yes		UPL species $0 \times 5 = 0$
2. Ilex opaca	5	No	FAC	100 340
3. Pinus taeda	5	No	FAC	Column Totals: (A) (B)
4				Prevalence Index = $B/A = 3.4$
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				✓ 2 - Dominance Test is >50%
8				
0	35	= Total Cove	or	3 - Prevalence Index is ≤3.0 ¹
50% of total cover: 17.5				Problematic Hydrophytic Vegetation ¹ (Explain)
	20% 01	total cover.		
Herb Stratum (Plot size: 5)	5	Vee	EAC	¹ Indicators of hydric soil and wetland hydrology must
1. Smilax glauca	5	Yes	FAC	be present, unless disturbed or problematic.
2				Definitions of Four Vegetation Strata:
3				Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or
4				more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
7.				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
8				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
9		·		
10		<u> </u>		Woody vine – All woody vines greater than 3.28 ft in
11		<u> </u>		height.
12				
		= Total Cove	er	
50% of total cover: 2.5	20% of	total cover:	1	
Woody Vine Stratum (Plot size: 30)				
1,				
2				
3				
4				
5		·		Hydrophytic
		= Total Cove		Vegetation Present? Yes <u>No</u> No
50% of total cover:0	20% of	total cover:	0	
Remarks: (If observed, list morphological adaptations below	w).			

SOIL

Profile Desc	cription: (Describe to	o the depth	n needed to docur	nent the indi	icator o	r confirm t	the absence of indicators.)	
Depth	Matrix		Redo	x Features				
(inches)	Color (moist)	%	Color (moist)	<u>%</u> T	[ype ¹	Loc ²	Texture Remarks	
0-8	10YR 3/1	100					FSL	
8-20	10YR 3/2	100		·			SL	
				. <u> </u>				
								_
<u> </u>					<u> </u>	<u> </u>		—
¹ Type: C=C	oncentration, D=Deple	tion RM=F	Reduced Matrix MS	S=Masked Sa	and Grai	ins	² Location: PL=Pore Lining, M=Matrix.	
	Indicators: (Applica						Indicators for Problematic Hydric Soils ³ :	
Histosol			Polyvalue Be		•	RST III		
	pipedon (A2)		Thin Dark Su		. , .		2 cm Muck (A10) (LRR S)	
	istic (A3)		Loamy Muck	• • •			Reduced Vertic (F18) (outside MLRA 150A	B)
	en Sulfide (A4)		Loamy Gleye	•	, .	•,	Piedmont Floodplain Soils (F19) (LRR P, S,	
	d Layers (A5)		Depleted Ma	• • •	·		Anomalous Bright Loamy Soils (F20)	-,
	Bodies (A6) (LRR P,	T. U)	Redox Dark	()			(MLRA 153B)	
	ucky Mineral (A7) (LR		Depleted Da	()	7)		Red Parent Material (TF2)	
	resence (A8) (LRR U)		Redox Depre	essions (F8)	,		Very Shallow Dark Surface (TF12)	
	uck (A9) (LRR P, T)		Marl (F10) (L				Other (Explain in Remarks)	
	d Below Dark Surface	(A11)	Depleted Ocl		LRA 15 [,]	1)		
Thick Da	ark Surface (A12)		Iron-Mangan	ese Masses ((F12) (L	RR O, P, T	r) ³ Indicators of hydrophytic vegetation and	
Coast P	rairie Redox (A16) (M	LRA 150A)	Umbric Surfa	ice (F13) (LR	R P, T,	U)	wetland hydrology must be present,	
Sandy N	/lucky Mineral (S1) (Ll	RR O, S)	Delta Ochric	(F17) (MLRA	151)		unless disturbed or problematic.	
Sandy G	Gleyed Matrix (S4)		Reduced Ver	rtic (F18) (ML	.RA 150	A, 150B)		
Sandy F	Redox (S5)		Piedmont Flo	odplain Soils	s (F19) (MLRA 149	A)	
Stripped	I Matrix (S6)		Anomalous E	Bright Loamy	Soils (F	20) (MLRA	A 149A, 153C, 153D)	
Dark Su	rface (S7) (LRR P, S,	T, U)						
Restrictive	Layer (if observed):							
Туре:								
Depth (in	ches):						Hydric Soil Present? Yes No	_
Remarks:								
No hydric soil	present							



Photo 1 Upland data point wchc001_u facing west



Photo 2 Upland data point wchc001_u facing north

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

			and the lite
Project/Site: A CP	City/County: Chi	esapeake	_ Sampling Date: 09 30 10
Applicant/Owner:		State: VA	Sampling Point: WLhe0D24_
Investigator(s): C. Jacobs, S. Josefa	Section, Township,	Range: N/A	
Landform (hillslope, terrace, etc.): Depression		and the first sector of the first sector sector sector sector sector by the sector sector sector sector sector	ave slope (%): 0-3
Subregion (LRR or MLRA): LRRT Lat:			
Soil Map Unit Name: Wando loamy fine Si		NWI classifi	
Are climatic / hydrologic conditions on the site typical for this tir			A /
Are Vegetation, Soil, or Hydrology sign			present? Yes X No
Are Vegetation, Soil, or Hydrology natu	rally problematic? (I	f needed, explain any answ	ers in Remarks.)
SUMMARY OF FINDINGS – Attach site map sh	owing sampling poir	t locations, transect	s, important features, etc.
Hydric Soil Present? Yes No_ Wetland Hydrology Present? Yes V No	Is the Samp within a We	tland? Yes	No
Remarks: -Abnormally Dry Conditions Riverine Swamp Forest	(based on s	ept. 22 Drou	ght monitor)
HYDROLOGY		and the second sec	
Wetland Hydrology Indicators:			ators (minimum of two required)
Primary Indicators (minimum of one is required; check all that	An and the second s	Surface Soi	
Surface Water (A1) Aquatic Fat High Water Table (A2) Marl Depos			getated Concave Surface (B8)
	its (B15) (LRR U) Sulfide Odor (C1)	Moss Trim L	ines (B10)
	hizospheres along Living Ro		Water Table (C2)
	f Reduced Iron (C4)	Crayfish Bu	
	Reduction in Tilled Soils (C		lisible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Thin Muck S		Geomorphic	
Iron Deposits (B5) Other (Expl	ain in Remarks)	Shallow Aqu	iitard (D3)
Inundation Visible on Aerial Imagery (B7)		FAC-Neutra	Test (D5)
Water-Stained Leaves (B9)		Sphagnum i	noss (D8) (LRR T, U)
Field Observations:			
Surface Water Present? Yes No Depth	(inches): <u>NIA</u>		
Water Table Present? Yes No Depth	(inches): 0		\checkmark
Saturation Present? Yes X No Depth (includes capillary fringe)	(inches):	Wetland Hydrology Prese	nt? Yes X No
Describe Recorded Data (stream gauge, monitoring well, aeria	al photos, previous inspection	ons), if available:	A REPORT OF A DESCRIPTION
Remarks:	and a second second second second	a and a state of the	and the second
incinaino.			
			Salar States and States and
White the approximation of the second se	1. Notice that Will, it faithful to Astronomy to a first strength	A service of a service research of the service of t	AN A MUNICIPAL OF MANY AND

wcho002F_W

VEGETATION (Four Strata) - Use scientific na	mes of pl	Sampling Point:			
Tree Stratum (Plot size: 30×30ft) 1. Nyssa sylvatica	Absolute	Dominant Species?		Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC:	4 (A)
2. Aler rubrum 3. OULICUS michauxii	12	N	FAC	Total Number of Dominant Species Across All Strata:	<u> </u>
4				Percent of Dominant Species	100-1. (A/B)
5				That Are OBL, FACW, or FAC: Prevalence Index worksheet:	(A/B)
78				Total % Cover of:	1 =
50% of total cover: 4 %.	5 20% of	total cover	ver 101.4	and the second	
Sapling/Shrub Stratum (Plot size: 30130-F1)	10	N	FACIL	FAC species x : FACU species x :	
1. Carya glabra 2. Persea palastris	6	N	FACW	UPL species x	
3. Gordonia lasianthus	6	N	FACW	Column Totals: (A)	
4 Arundinaria aigantea	46	Y	FACW	Prevalence index = B/A =	
5				Hydrophytic Vegetation Indica	
6				1 - Rapid Test for Hydrophyt	
7	-			2 - Dominance Test is >50%	
820	100	= Total Cor f total cover	ver 12	3 - Prevalence Index is ≤3.0 Problematic Hydrophytic Veg	
Herb Stratum (Plot size: 30×30 FF)		√ v	FACW	¹ Indicators of hydric soil and wet	and hydrology must
1. Arundinaria gigantea			C. The Residence of the	be present, unless disturbed or p Definitions of Four Vegetation	
2	·			Tree – Woody plants, excluding more in diameter at breast heigh	vines, 3 in. (7.6 cm) or
4 5	·		-	height.	
6 7	No. 104 Intelling		-	Sapling/Shrub – Woody plants, than 3 in. DBH and greater than	3.28 ft (1 m) tall.
8 9			-	Herb – All herbaceous (non-woo of size, and woody plants less th	an 3.28 ft tall.
10				Woody vine – All woody vines g height.	reater than 3.28 ft in
12		= Total Co			Concernance Carrier
50% of total cover:	20% 0	f total cover	r. <u> </u>		
Woody Vine Stratum (Plot size: 30x30ft) 1. VITIS VOTUNG i folia	5	4	FAC		
23	-				
4	-	-	•	the days hadde	
5	5	= Total Co	ver	Hydrophytic Vegetation	
50% of total cover: 2	_	f total cove	Sector is the second second	Present? Yes <u></u>	No
Remarks: (If observed, list morphological adaptations bel	ow).				
				. Salar and	
the state of the second state of the second state of the					

US Army Corps of Engineers

Atlantic and Gulf Coastal Plain Region - Version 2.0

SOIL

Sampling Point: _____

Profile Desc	ription: (Describe	to the dept	h needed to docur	ment the l	ndicator	or confirm	the absence	of Indicati	ors.)	
Depth	Matrix			x Features		and the second				
(inches)	Color (moist)		Color (moist)		Type	Loc	Texture	-	Remarks	
0-0	2-6132	90	2.674/1	20	L	M	SUL	-		
0-20	104R 2/1	100					SOL			
			Sec. 1		AN ANTINA	The second				
										Contraction of the
-									ale an ini anna dhai	· · · · · · · · · · · · · · · · · · ·
and solution	State Weter				1000		State in		140304.200	and the state of the
	oncentration, D=Dep					ains.			ining. M=Matr	
Hydric Soil	Indicators: (Applic	cable to all L							matic Hydric	Solls ³ :
Histosol			Polyvalue Be					And the second second second	102 March and Children Children	
the second of the property of the second sec	bipedon (A2)		Thin Dark Su				2 cm N			
Contraction (Contraction (Contraction)	stic (A3) n Sulfide (A4)		Loamy Muck			(0)	A REAL PROPERTY AND A REAL PROPERTY.			(LRR P, S, T)
1.411	Layers (A5)		Depleted Ma		(2)				Loamy Soils (
and the second sec	Bodies (A6) (LRR F	P, T, U)	Redox Dark		6)		the second se	RA 153B)		
5 cm Mu	cky Mineral (A7) (L	RR P, T, U)	Depleted Da	rk Surface	(F7)			arent Mater	August a second s	
the second s	esence (A8) (LRR I	(ר	Redox Depre		3)				k Surface (TF1	2)
Contraction of the second s	ick (A9) (LRR P, T)	- /	Marl (F10) (L			E41)	Other	(Explain in	Remarks)	
Contraction of the second	d Below Dark Surfac ark Surface (A12)	e (ATT)	Depleted Oc Iron-Mangan		 Control (1998) 11-10-00 	and the second se	r) ³ India	ators of hy	drophytic vege	tation and
Concernence of Concerns and the Area	rairie Redox (A16) (MLRA 150A							ogy must be p	
and the second advantage of the	lucky Mineral (S1) (Delta Ochric				unie	ess disturbe	ed or problema	tic.
The second s	leyed Matrix (S4)		Reduced Ver							
 Contraction of the second secon	edox (S5)		Piedmont Flo					45201		
	Matrix (S6) rface (S7) (LRR P, S	e T IN	Anomalous E	Bright Loan	ny Soils (F20) (MLRA	A 149A, 153C	, 1530)		
	Layer (if observed)									
Type:									1.	
Depth (inc	ches):						Hydric Soll	Present?	Yes	No
Remarks:	and the second			Contraction of the second s						
Maria and										
1000000000							1			
Service Services										
Sec. 1987.3										
ALC: LOUG										

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho002f_w facing east.



Wetland data point wcho002f_w facing north.

Photo Sheet 1 of 2

	RM - Atlantic and Gulf Coastal Plain Region /County: Chesapeake Sampling Date: 09/30/15
Project/Site:City Applicant/Owner:DOMINION	State: VA Sampling Point: WCh0002_V
	tion, Township, Range: N(A
	al relief (concave, convex, none): <u>NONE</u> Slope (%): <u>0-3</u>
	232 Long: -76,36608 Datum: W6584
Soil Map Unit Name: Wando loamy fine san	
Are climatic / hydrologic conditions on the site typical for this time of year?	
Are Vegetation, Soil, or Hydrology significantly dist	urbed? Are "Normal Circumstances" present? Yes 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	Is the Sampled Area within a Wetland? Yes No X
- Abnormally Dry Conditions (Base	d on Sept. 22 Drought monitor).
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Aquatic Fauna (B13)	Sparsely Vegetated Concave Surface (B8)
High Water Table (A2) Marl Deposits (B15) (LI	
Saturation (A3) Hydrogen Sulfide Odor	
Water Marks (B1) Oxidized Rhizospheres Sediment Deposits (B2) Presence of Reduced I	along Living Roots (C3) Dry-Season Water Table (C2) ron (C4) Crayfish Burrows (C8)
Drift Deposits (B3) Recent Iron Reduction	그는 이 것을 수 있는 것을 하는 것을 하는 것을 하는 것을 하는 것을 수 있는 것을 하는 것을 하는 것을 하는 것을 수 있는 것을 수 있다. 않는 것을 것을 것을 것을 수 있는 것을 수 있다. 것을 것을 것을 것을 것을 것을 것을 수 있는 것을 것을 것을 것을 것을 것을 것을 수 있다. 것을 것을 것을 것을 것을 것을 것을 것 같이 같이 없다. 것을 것을 것 같이 없는 것을 것 같이 없다. 것을 것 같이 것 같이 없는 것 같이 없다. 것 같이 것 같이 없는 것 같이 없다. 것 같이 것 같이 없는 것 같이 없다. 것 같이 없 하는 것 같이 없다. 것 같이 것 같이 없는 것 같이 없다. 것 같이 없는 것 같이 없는 것 같이 없다. 것 같이 없는 것 같이 없 않이 없다. 않았다. 것 같이 것 같이 없는 것 같이 없다. 것 같이 없다. 것 같이 없는 것 같이 없다. 것 같이 것 같이 않았다. 것 같이 없는 것 같이 없다. 것 같이 없는 것 같이 없다. 것 같이 없다. 것 같이 것 같이 없다. 것 같이 것 같이 것 같이 없다. 것 같이 없다. 것 같이 없다. 것 같이 것 같이 없다. 것 같이 없다. 것 같이 없다. 것 같이 것 같이 없다. 것 같이 없다. 것 같이 것 않았다. 않았다. 것 같이 것 같이 없다. 것 같이 없다. 것 같이 않았다. 것 같이 것 같이 없다. 것 같이 않았다. 않았
Algal Mat or Crust (B4) Thin Muck Surface (C7	
Iron Deposits (B5) Other (Explain in Rema	
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 X Depth (inches):	N/A
	720
Water Table Present? Yes No Depth (inches): Saturation Present? Yes No Depth (inches): (includes capillary fringe) Yes No Depth (inches):	YZD Wetland Hydrology Present? Yes No X
Describe Recorded Data (stream gauge, monitoring well, aerial photos, pr	evious inspections), if available:
Remarks:	
	and the second

wchoodz_n

VEGETATION (Four Strata) – Use scientific nar	nes of pla	ints.		Sampling Point:
1. Fraxinus pennsylvanica 2. Liquidambar styraciflua 3. Acer rubrum	Absolute % Cover 2.0 10 10	Species?	Status FACW FAC FAC	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: Total Number of Dominant Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Species Across All Strata: Percent of Dominant Species That Are OBL, FACW, or FAC: Species Across All Strata
6 7 8 50% of total cover: 20 <u>Sapling/Shrub Stratum (Plot size: 30,00 ft)</u> 1. <u>CUMNUS FLOMICU</u> 2. <u>CUMVA 91abra</u> 3 4.	<u>40</u> 20% of 1 <u>30</u> <u>40</u>	Total Cov total cover	FACY FACY	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species x 1 =
5 6 7 8 Herb Stratum (Plot size: 30 × 30 +) 1 (Ary a glabra 2 Arundanana gigantea 3 4 5 6	70 20% of 20	Total Covers	er 14 FACU FACW	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.01 Problematic Hydrophytic Vegetation1 (Explain) 1Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Definitions of Four Vegetation Strata: Tree – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub – Woody plants, excluding vines, less
7	90	= Total Cov		than 3 in. DBH and greater than 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vine – All woody vines greater than 3.28 ft in height.
3 4 5 50% of total cover: Remarks: (If observed, list morphological adaptations belo	20% of	= Total Cov total cover		Hydrophytic Vegetation Present? Yes X No

Atlantic and Gulf Coastal Plain Region - Version 2.0

Sampling Point: WChoDDZ-w

A COMPANY OF A CONTRACT OF A C						or commin	the absence o			
Depth (inches)Co	Matrix olor (moist)	%	Color (moist)	ox Feature %		Loc ²	Texture		Remarks	
0-4 10	1R412	100					sand			
4-20 10	YR 671	100			11 128	- TRUE	sand			
	112-11					1.175				
			T TOP CON	a santa					2018	a construction of the
				-						
				-						
¹ Type: C=Concentr		tion DM-D	aduced Matrix M	S-Masker	Sand Gr	aine	21 ocation: E	Pl=Pore Li	ning. M=Matr	iv
Hydric Soil Indical	tors: (Applicat	ble to all LI	RRs, unless othe	rwise not	ed.)	ants.			natic Hydric	
Histosol (A1)			Polyvalue B			RR S, T, U	J) 1 cm Mu	ick (A9) (L	RR O)	
Histic Epipedor			Thin Dark S					ick (A10) (I		
Black Histic (A			Loamy Much			0)				MLRA 150A,B) (LRR P, S, T)
Hydrogen Sulfi Stratified Layer			Depleted Ma		F2)				Loamy Soils	
Organic Bodies		T, U)	Redox Dark	Second and the second second	6)		(MLR)	A 153B)		
5 cm Mucky Mi			Depleted Da					ent Materia		12)
Muck Presence 1 cm Muck (A9			Redox Depr Marl (F10) (8)		the second se	allow Dark Explain in R	Surface (TF	12)
Depleted Below		(A11)	Depleted Or		(MLRA 1	51)			,	
Thick Dark Sur	face (A12)		Iron-Mangar					A CONTRACT AND A CONTRACT OF A	rophytic vege	
Coast Prairie R			and the second se			, U)		contract in the second second second	gy must be p d or problema	
Sandy Mucky Mucky Mucky Mucky		(R 0, 5)	Delta Ochric Reduced Ve			0A. 150B)		s distuibet		100.
Sandy Redox (Piedmont FI	oodplain S	ioils (F19)	(MLRA 14	9A)			
Stripped Matrix			Anomalous	Bright Loan	my Soils (F20) (MLR	A 149A, 153C,	153D)		
Dark Surface (Restrictive Layer (T, U)					1	<u></u>		
Type:										1
Depth (inches):							Hydric Soll F	Present?	Yes	No
Remarks:	and the second second	the second		1					STOCK PROPERTY OF	
The second s								110.00		
							3			
			-				\$			
a south states							•			
a south states							1			
a south states			-				\$			
a south states							•			
a south states							3			
a south states							s			
a south states							•			
a south states							•			
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Environmental Field Surveys Wetland Photo Page



Upland data point wcho002_u facing east.



Upland data point wcho002_u facing south.

v	ETLAND DE	TERMINATION DATA F	ORM – Atlar	ntic and G	ulf Coastal P	lain Region	
Project/Site:	rCP	(City/County: ()	nesap	eake	Sampling Date: 09/30	0/15
Applicant/Owner:	ominic	in				Sampling Point: Wcho O	
Investigator(s):	acobs.	S. Dosefa	Section, Townsh				
Landform (hillslope, terr					none): hon	e Slope (%): 2	-3
Subregion (LRR or MLF	A) LRR	T 1st 3b.7	16180	Long: "	-76.3650	Datum: WG	
		-Tomotley com		Long	NWI classifi	DEA	001
	0		•	No X	(If no, explain in F		
		e site typical for this time of yea				present? Yes No	
		łydrology significantly o łydrology naturally prol			explain any answe		
							- 1 -
SUMMARY OF FIR	IDINGS – At	tach site map showing	sampling po	oint locatio	ons, transect	s, important reatures,	etc.
Hydrophytic Vegetatio Hydric Soll Present?	n Present?	Yes No Yes X No		npled Area		/	
Wetland Hydrology Pr	esent?	Yes X No	within a V	Vetland?	Yes	No	
Remarks:			high C	(prost)	od ha	ant or	
-Abnorr	nally	Dry Condi	TIONS	(1200)4	EN ONJ	epi, er	
1.0	-	9		$\mathcal{D}Y$	onghi	Monitor)	
Riverine Swam	p torest						
HYDROLOGY							
Wetland Hydrology I	idicators:				Secondary Indic	ators (minimum of two requi	red)
Primary Indicators (mi	nimum of one is r	equired; check all that apply)			Surface Soil	Cracks (B6)	
Surface Water (At		Aquatic Fauna (B13			Sparsely Ve	getated Concave Surface (E	38)
High Water Table	(A2)	Marl Deposits (B15)				atterns (B10)	
Saturation (A3)		Hydrogen Sulfide Od			Moss Trim L		
Water Marks (B1)		X Oxidized Rhizosphe		Roots (C3)		Water Table (C2)	
Sediment Deposit		Presence of Reduce		1001	Crayfish Bu		
Drift Deposits (B3)		Recent Iron Reducti		(C6)		isible on Aerial Imagery (C9	"
Algal Mat or Crust		Thin Muck Surface (Position (D2)	
Inundation Visible		Other (Explain in Re	marks)		FAC-Neutra		
Water-Stained Lea	-	y (11)				noss (D8) (LRR T, U)	
Field Observations:			1.15	1	Opnagnam		
Surface Water Present	? Yes	No Depth (inches):	NIA				
Water Table Present?	Yes	No K Depth (inches):	>20			\checkmark	
Saturation Present?	Yes			Wetland H	ydrology Prese	nt? Yes No	
(includes capillary fring Describe Recorded Da		e, monitoring well, aerial photos	, previous inspe	ctions), if avai	lable:		
					1		
Remarks:							

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Sampling	Point:
Sampling	Point.

VEGETATION (Four Strata) - Use scientific na	mes of pl	ants.		Sampling Point:
	Absolute	Dominant		Dominance Test worksheet:
Tree Stratum (Plot size: 30×30++)	<u>% Cover</u> 40	Species?	FAC	Number of Dominant Species (A)
2 Liriodendron tulipifera	18	Y	FACU	Total Number of Dominant
3. Nyssa sylvatica	10	N	FAC	Species Across All Strata: (B)
4				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: (A/E
6				Prevalence Index worksheet:
7				
8				Total % Cover of: Multiply by:
	10%	= Total Co	/er	OBL species x 1 =
50% of total cover: 3	1 20% 0	f total cover	13.6	FACW species x 2 =
Sapling/Shrub Stratum (Plot size: 20 x 30++)			1.00	FAC species X 3 =
1. Vallinium Corymbasum	5	V	FACH	FACU species x 4 =
1. VALCIMUM COLYMODUUM	13		FAL	UPL species x 5 =
2. Acer rubrum	IE		FIL	Column Totals: (A) (B
3				
4				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8.				2 - Dominance results > 50%
0		= Total Co	unr.	
50% of total cover: 8.	5 2006 0	- Total cover	3.4	Problematic Hydrophytic Vegetation ¹ (Explain)
20 v 21 v	20%0	i total cover		and a second second
Herb Stratum (Plot size: 30 X3044)	20	V	OBL	¹ Indicators of hydric soil and wetland hydrology must
1. Wood wardia areolata			Name of Column and Address of Column and Add	be present, unless disturbed or problematic.
2. Osmundastrum cinnamomeum	10	N	FACW	Definitions of Four Vegetation Strata:
3. Saururus cemuus		Y	OBL	Tree - Woody plants, excluding vines, 3 in. (7.6 cm) of
4. Arundinaria gigantea	10	Y	FACW	more in diameter at breast height (DBH), regardless of
5				height.
				Sapling/Shrub – Woody plants, excluding vines, less
6				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8		18.2.15		Herb - All herbaceous (non-woody) plants, regardles
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			1997 - D	
and the second	50	= Total Co	ver	
50% of total cover: 25	20% 0	f total cove	D	a 20 ² 11
		i total ooro		
Woody Vine Stratum (Plot size: 30 X30 ++)	3	Y	PAC	
1. <u>Smilax rotundifolia</u>			+AC	
2. Vitis rotundifolia	2	Y	FAL	
3	-			
4.	_			
5				Hydrophytic /
	92	= Total Co	ver	Vegetation
50% of total cover:		f total cove	1 10	Present? Yes <u>No</u>
		i total cove		
Remarks: (If observed, list morphological adaptations be	idw).			

US Army Corps of Engineers

Atlantic and Gulf Coastal Plain Region - Version 2.0

SOIL

Profile Description: (Describe to the depth ne	eeded to document the	Indicator o	r confirm	the absence o	of Indicators.)
Depth Matrix	Redox Feature		1 2	Tautura	Bamarka
	Color (moist) %	Type .	Loc ²	Texture	Remarks
0-6 2.573195 10	YR 1016 5	<u> </u>	FL	UL.	
6-20 101R +11 90 10	NRUL 10	_ <u>C_</u> .	PL	CL_	
1 1					
¹ Type: C=Concentration, D=Depletion, RM=Rec	duced Matrix, MS=Maske	d Sand Gra	ins.		PL=Pore Lining, M=Matrix.
Hydric Soil Indicators: (Applicable to all LRR	ls, unless otherwise not	ed.)		Indicators f	or Problematic Hydric Soils ³ :
Histosol (A1)	_ Polyvalue Below Surfa	ace (S8) (LF	RR S, T, U		uck (A9) (LRR O)
Histic Epipedon (A2)	_ Thin Dark Surface (S9				uck (A10) (LRR S)
Black Histic (A3)	_ Loamy Mucky Mineral		0)		d Vertic (F18) (outside MLRA 150A,B)
Hydrogen Sulfide (A4)	Loamy Gleyed Matrix Depleted Matrix (F3)	(F2)			nt Floodplain Soils (F19) (LRR P, S, T) ous Bright Loamy Soils (F20)
Stratified Layers (A5) Organic Bodies (A6) (LRR P, T, U)	_ Redox Dark Surface (E6)			A 153B)
5 cm Mucky Mineral (A7) (LRR P, T, U)	Depleted Dark Surface				rent Material (TF2)
Muck Presence (A8) (LRR U)	Redox Depressions (F				allow Dark Surface (TF12)
1 cm Muck (A9) (LRR P, T)	Marl (F10) (LRR U)			Other (E	Explain in Remarks)
Depleted Below Dark Surface (A11)	Depleted Ochric (F11)			2	
Thick Dark Surface (A12)	Iron-Manganese Mass				tors of hydrophytic vegetation and
	Umbric Surface (F13)		U)		and hydrology must be present, ss disturbed or problematic.
Sandy Mucky Mineral (S1) (LRR O, S) Sandy Gleyed Matrix (S4)	Delta Ochric (F17) (M Reduced Vertic (F18)		A 150B)		ss distance of problematic.
Sandy Redox (S5)	Piedmont Floodplain S				
Stripped Matrix (S6)	Anomalous Bright Loa				153D)
Dark Surface (S7) (LRR P, S, T, U)					
Restrictive Layer (if observed):					
Туре:	-				\checkmark
Depth (inches):	-			Hydric Soll F	Present? Yes <u>No</u> No
Remarks:					
					×
				3	
				ř.	
			- 6-		

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Environmental Field Surveys Wetland Photo Page



Wetland data point wcho004f_w facing north.



Wetland data point wcho004f_w facing west.

Photo Sheet 1 of 2

WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region

Project/Site: <u>ACP</u>	City/County: <u>Chesapeake</u> Sampling Date: 2/10/16
Applicant/Owner: Dominion	State: VA Sampling Point: with D 04f-w7
Investigator(s): L. Roper, M.Smith	Section, Township, Range: NONE
Landform (hillslope, terrace, etc.): drainage	Local relief (concave, convex, none): $flat$ Slope (%): $0-31/7$
Subregion (LRR or MLRA): LRR LAR Lat: 36	,76217 Long: -76,36504 Datum: W6589
Soil Map Unit Name: Pactolus loamy fine	sond NWI classification: PFD
Are climatic / hydrologic conditions on the site typical for this time of y	
Are Vegetation, Soil, or Hydrology significantly	그는 것 같아요. 그는 것 같아요. 같이 많은 것이 없는 것이 같아요. 같이 있는 것이 같아요. 같이 많이 많이 많이 많이 많이 없는 것 같아요. 그는 것 같아요. 그는 것 같아요. 그는 것 같아요.
Are Vegetation, Soil, or Hydrology naturally pr	
	g sampling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes X No	is the outpied Alea
Hydric Soil Present? Yes X No Wetland Hydrology Present? Yes X No	within a Wetland? Yes <u>No</u>
Wetland Hydrology Present? Yes No Remarks:	
Remarks.	
NCWAM: Headwater Fores	t
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	
High Water Table (A2) Marl Deposits (B1	5) (LRR U) Drainage Patterns (B10)
Saturation (A3)	Odor (C1) Moss Trim Lines (B16)
	neres along Living Roots (C3)
Sediment Deposits (B2)	
	ction in Tilled Soils (C6) Saturation Visible on Aerial Imagery (C9)
Algal Mat or Crust (B4) Iron Deposits (B5) Thin Muck Surface	
Iron Deposits (B5) U Other (Explain in F 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 X_ Depth (inches	s):NA
Water Table Present? Yes X No Depth (inches	
Saturation Present? Yes X No Depth (inches	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial phot	
Describe Recorded Data (stream gauge, monitoring weil, aenal prior	us, previous inspections), il available.
Remarks:	
Continue Constland warde	
portions of wetland inunda	TEC
	and the second

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

Sampling Point: withodo46.02

0 0.	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30f+ x 30f+)		Species?		Number of Dominant Species 7
1. Liquidambar styraciflua	40	Y	FAC	That Are OBL, FACW, or FAC: (A)
2. Auer rubrum	20	Y	FAC	
3. Platanus occidentalis	10	N	FACW	Total Number of Dominant
				Species Across All Strata:(B)
4. Quereus nigra		the second s	FAL	Percent of Dominant Species QQ'
5		187 54 10	100 C	That Are OBL, FACW, or FAC:
6				
7				Prevalence Index worksheet:
8			1222-02	Total % Cover of:Multiply by:
	80	= Total Cov		OBL species x 1 =
				FACW species x 2 =
50% of total cover: 40	_ 20% of	total cover	10	FAC species x 3 =
Sapling/Shrub Stratum (Plot size: 30f+x 30f+)	-	21		FACU species x 4 =
1. Aur rubrum	30	4	FAC	A CARL STREAM AND A C
1. Aur rubrum 2. Ligustrum sinense	30	1	FAC	UPL species x 5 =
3. Carpinus caroliniana	5	N	FAC	Column Totals: (A) (B)
4. 63.447.613		10046_0006	The second s	Provide the Provid
				Prevalence Index = B/A =
5				Hydrophytic Vegetation Indicators:
6				1 - Rapid Test for Hydrophytic Vegetation
7				2 - Dominance Test is >50%
8				□ 3 - Prevalence Index is $\leq 3.0^{1}$
	65	= Total Cov	ver	Problematic Hydrophytic Vegetation ¹ (Explain)
50% of total cover: 32.3	20% of	total cover	13	
Herb Stratum (Plot size: 30f+x30ft			A Design and	1
1. Phraymites australis	50	Y	FACW	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. Thragmines adorrans	- 10	-1-	the second se	A CARD A DATA A LOCATION COMPANY AND A DATA A CARD A DATA A DA
2. Arundinaria gigantea	10	N	FACW	Definitions of Four Vegetation Strata:
3				Tree - Woody plants, excluding vines, 3 in. (7.6 cm) or
4	1.0.1		- 10 A 10	more in diameter at breast height (DBH), regardless of
5				height.
6				Sapling/Shrub – Woody plants, excluding vines, less
CALLER THE THE AND THE THE TAXAGE AND A TAXAGE AND A TAXAGE AND A				than 3 in. DBH and greater than 3.28 ft (1 m) tall.
7				
8				Herb – All herbaceous (non-woody) plants, regardless
9				of size, and woody plants less than 3.28 ft tall.
10				Woody vine - All woody vines greater than 3.28 ft in
11				height.
12				254745 T
	60	= Total Cov	/er	
50% of total cover: 30		total cover		
	_ 20% 01	total cover		
Woody Vine Stratum (Plot size: 30ff x 30ff)		V	Engul	
1. Lonicera japonila	20	<u> </u>	FACU	
2. Berchemia scandens	30	<u> </u>	FAC	
3. Gelsemium sempervirens	30	<u> </u>	FAC	
4				
5.		1.000000		
5	80	= Total Cov		Hydrophytic Vegetation
4D				Present? Yes X No
50% of total cover:	_ 20% of	total cover	10	
Remarks: (If observed, list morphological adaptations below	N).	I. The		

SOIL

Sampling Point: wenoDO4 f-w 2

Depth Main Redor Features Tode Loc Cort (mobil) % Cort (mobil) % Tode Loc Cort (D) (D) (D) % Cort (mobil) % Tode Loc (c-1) (D)		iption: (Describe	to the dept	h needed to doci	ument the i	ndicator	or confirm	m the absence	of indicators.)
Image: Derived Structure Image: Derived							1002	Taxtura	Domarka
Image: C = 10 Image: P = 10 P = 5/6 Z C P = 10 P = 5/6				Color (moist)			LOC		Remarks
ID ID <td< td=""><td></td><td>IDVD21.</td><td></td><td>LOYD 54</td><td>7</td><td></td><td>PI</td><td></td><td></td></td<>		IDVD21.		LOYD 54	7		PI		
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 ¹ : Histosol (A1) Polyvalue Below Surface (S9) (LRR S, T, U) Indicators for Problematic Hydric Soils ¹ : Histosol (A2) Dony Mucky Mineral (F1) (LRR O) 2 cm Muck (A0) (LRR S) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A10) (LRR P, S, T) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Muck Presence (A8) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Red Parent Material (TF2) Muck Presence (A8) (LRR P, T) Marl (F10) (LRR U) Redox Cark (F11) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark (S4) Deta Ochric (F13) (MLRA 150A, 150B) anomalous Bright Loamy Soils (F20) Sandy Mucky Mineral (S1) (LRR O, S) Bandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Sandy Redox (S5) Depleted Ochric (F13) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A) Strippe	10 26	10121			17				
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) 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 O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A9) (LRR O) Yerige Sulfide (A4) Depleted Matrix (F2) Reduced Vertic (F18) (outside MLRA 150A, B) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) MLRA 153B) X 5 cm Muck (A9) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck (A9) (LRR P, T) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) D tom Muck (A9) (LRR P, T) Depleted Ochric (F11) (MLRA 151) Stratified Layers of A(A16) (MLRA 150A) D copted Below Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) 3Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bri	10-20	107K 11	90	101K-19		_ <u> </u>	_ FL	SCL	
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) 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 (A9) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A9) (LRR P, S, T) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F19) (LRR P, S, T) Muck Presence (A8) (LRR U) Redox Depressions (F6) McMark (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Worther (Explain in Remarks) Depleted Below Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loam							111 - St		
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) 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 (A9) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A9) (LRR P, S, T) Organic Bodies (A6) (LRR P, T, U) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F19) (LRR P, S, T) Muck Presence (A8) (LRR U) Redox Depressions (F6) McMark (F10) (LRR U) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Worther (Explain in Remarks) Depleted Below Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Anomalous Bright Loamy Soils (F20) Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loam						- Andrew	<u>- 2 () (12</u>		and the second
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Dolyvalue Below Surface (S9) (LRR S, T, U) 2 cm Muck (A9) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A9) (LRR P, S, T) Hydrogen Sulfide (A4) Dopleted Matrix (F2) Reduced Vertic (F18) (outside MLRA 150A, B) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Muck Presence (A8) (LRR U) Muck Presence (A8) (LRR U) Redox Depressions (F8) Red Parent Material (TF2) Very Shallow Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A)	<u></u>			1.		- 14-			
Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR S, T, U) 1 cm Muck (A9) (LRR O) Histosol (A1) Dolyvalue Below Surface (S9) (LRR S, T, U) 2 cm Muck (A9) (LRR O) Black Histic (A3) Loamy Mucky Mineral (F1) (LRR O) 2 cm Muck (A9) (LRR P, S, T) Hydrogen Sulfide (A4) Dopleted Matrix (F2) Reduced Vertic (F18) (outside MLRA 150A, B) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) Muck Presence (A8) (LRR U) Muck Presence (A8) (LRR U) Redox Depressions (F8) Red Parent Material (TF2) Very Shallow Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Very Shallow Dark Surface (TF12) Thick Dark Surface (A12) Iron-Manganese Masses (F12) (LRR O, P, T) 3 Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F20) (MLRA 149A) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A)	And America			and the second			2 march		
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Hydrogen Sulfide (A4) Loamy Gleved Matrix (F2) Piedmont Floodplain Soils (F19) (LRR P, S, T) Stratified Layers (A5) Depleted Matrix (F3) Anomalous Bright Loamy Soils (F20) Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) Muck Presence (A8) (LRR U) Depleted Dark Surface (F7) Redox Depressions (F8) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Redox Depressions (F1) Marl (F10) (LRR U) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) More (A3) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F13) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Model Present? Yes No Type: Depth (inches): No No									
Organic Bodies (A6) (LRR P, T, U) Redox Dark Surface (F6) (MLRA 153B) S cm Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Other (Explain in Remarks) Depleted Below Dark Surface (A12) Umbric Surface (F13) (LRR P, T, U) alndicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) nuless disturbed or problematic. Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) anomalous Bright Loamy Soils (F20) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Momenalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Muck Soil Present? Yes X No									
Sorgam Mucky Mineral (A7) (LRR P, T, U) Depleted Dark Surface (F7) Red Parent Material (TF2) Muck Presence (A8) (LRR U) Redox Depressions (F8) Very Shallow Dark Surface (TF12) 1 cm Muck (A9) (LRR P, T) Marl (F10) (LRR U) Other (Explain in Remarks) Depleted Below Dark Surface (A11) Depleted Ochric (F11) (MLRA 151) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F19) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (If observed): Type:									
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) Inon-Manganese Masses (F12) (LRR O, P, T) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Piedmont Floodplain Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type:					Contraction of the second s				
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) Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) vetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) unless disturbed or problematic. Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Type: No				and the second s					
Image: Construction of the construc						.,			
Coast Prairie Redox (A16) (MLRA 150A) Umbric Surface (F13) (LRR P, T, U) wetland hydrology must be present, unless disturbed or problematic. Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type:						(MLRA 1	51)		
Sandy Mucky Mineral (S1) (LRR O, S) Delta Ochric (F17) (MLRA 151) unless disturbed or problematic. Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Anomalous Bright Loarny Soils (F20) (MLRA 149A, 153C, 153D) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes X No									
Sandy Gleyed Matrix (S4) Reduced Vertic (F18) (MLRA 150A, 150B) Sandy Redox (S5) Piedmont Floodplain Soils (F19) (MLRA 149A) Stripped Matrix (S6) Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D) Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Hydric Soil Present? Yes No			And the second second second second second				, U)		
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Dark Surface (S7) (LRR P, S, T, U) Restrictive Layer (if observed): Type: Depth (inches): Hydric Soil Present? Yes X No									
Restrictive Layer (if observed):				Anomalous	Bright Loar	ny Soils (F20) (ML	RA 149A, 153C,	, 153D)
Type:						W. A.	- in the		
Depth (inches): No	And the second s	ayer (il observed)	,.						
Remarks:		hes):						Hydric Soil	Present? Yes X No
	Remarks:	59 8 8 8 10 T							

Environmental Field Surveys Wetland Photo Page



Wetland data point wcho004f_w2 facing northeast.



Wetland data point wcho004f_w2 facing southwest.

Photo Sheet 1 of 2